Code Review 2018 Changes to International Codes IPC - PLUMBING TAC

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Plumbing Code (IPC) Plumbing Technical Advisory Committee (TAC)

2018 International Plumbing Code - Plumbing TAC

IPC Code Change No.	IPC Section	Change Sum	nmary b/t 2015 IPC and 2018 IPC		ge Summary I7 FPC and PC	Staff comm		ents
		(Chapter 2 Definitions					
P3-15, Part I	202	Adds new definition " This definition encom appreciably restrict th Cost Impact: Will no proposal will not incre additional labor, mate	FULL-OPEN VALVE."	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. b. c. d. e. Others (Explain):	NO:	No Action Needed	TAC	Cmsn.	
P6-15	202	consistency with IMC Cost Impact: Will no	PRESS-CONNECT JOINT" for C. Increase the cost of construction on of a definition and has nothing to do	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Needed		Cmsn.	

P7-15	202	POOL." There is no n swimming pool within the few places in the handled in the same n is actually defined. A definition of a swimming Swimming Pool and S modified by public con pool as per the ISPSC Cost Impact: Will not proposal will not increa additional labor, mate	ution the definition for "SWIMMING eed for such a specific definition for a the context of how the term is used in IPC. Water from a swimming pool is manner no matter how a swimming pool nd this definition conflicts with the ng pool according to the International Spa Code. This code change was further mment to add definition for swimming C. t increase the cost of construction. This ease the cost of construction because no rials, equipment, appliances or devices d what is currently required by the code.	betwee	as change en 2015 IPC 018 IPC				
TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need:	NO:			TAC	Cmsn.	
a. b. c. o Others (Explain):	∟ def		YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions				
		Chapt	er 3 General Regulations						
P8-15	303.4	the IRC and to clarify are required to compl are to be third party c Cost Impact: Will not proposal will not increa additional labor, mate	rd-party certification" for consistency with that only those materials that y with a reference standard in the code, ertified. t increase the cost of construction. his ease the cost of construction because no rials, equipment, appliances or d beyond what is currently required by	betwee	as change en 2015 IPC)18 IPC				

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Net		Cmsn.	
					provisions			
P9-15	303.5	components" to provid compliance. Cost Impact: Will not Improved inspection locations will reduce t	3.5 "Cast iron soil pipe, fittings and de for inspection schemes to assure t increase the cost of construction. n procedures at the manufacturing the amount of defects on jobsites before un and reduce the amount of time n.	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Net		Cmsn.	
P11-15	305.1	<u>corrosion</u> for consisted does not occur. There proposed. Cost Impact: Will not proposal will not increa additional labor, mate	1 "Corrosion Protection against ency with the IRC and so that confusion e are no new requirements being t increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or d beyond what is currently required by	similar FPC. T expand of this provide	res related nite	Overlapping considered change proc	during ste	to be p 2 of the code

TAC Action Accommodate Florid	la Spacific Nood:		Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) a. b. c. d Others (Explain):		NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	ded		
					Overlapping provisions			
P12-15	305.6	simply reduce the se 1-1/4 inches, so that can be safely installe triggering the need for change is consistent specifies a 1-1/4 inch also consistent with t setback. This propos Cost Impact: Will no A typical 3" x 6" meta proposal would redu	6 "Protection against physical damage" to tback within stud wall from 1-1/2 inches to both 1/2-inch and 3/4-inch water lines ed in the center of the wall without or strike plates on both sides. This with the National Electrical Code, which a setback from the edge of a stud. It is the IRC, which also specifies a 1-1/4 inch al will bring consistency to the I-Codes. of increase the cost of construction al stud guard costs about 20 cents. This ce the quantity of stud guards on any ut 15-20%, depending on local	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
a. b. c. c	∟ Ief		YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	ded		
					Overlapping provisions			
P15-15 Part I	308.10	that expansion tank to installation and to pro- code change was fur reference thermal ex instructions.	a.10 "Thermal expansion tanks" to require be supported as per the manufacturer's obibit support via tank's piping's. This ther modified by the committee to pansion tank manufacturer's installation of increase the cost of construction. This	betwee	as change en 2015 IPC 18 IPC			

		additional labor, mate	ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.						
TAC Action Accommodate Flori	da Specific Need:		Commission Action Accommodate Florid <u>a Sp</u> ecific Need:				TAC	Cmsn.	
YES (Select Criteria) abc Others (Explain):		NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions				
P16-15	Table 308.5	hanger spacing for ne Cost Impact: Will no a simple change to a feet for larger PE-RT	5 "Hanger Spacing". Provides guidance for ew sizes of piping that can be used. ot increase the cost of construction. This is add support spacing requirements of 4 sizes and the change will result in less savings without compromising the ation.						
TAC Action Accommodate Flori	da Specific Need:		Commission Action Accommodate Florid <u>a Sp</u> ecific Need:				TAC	Cmsn.	
YES (Select Criteria) a. b. c. Others (Explain):				NO:	No Action Ne	eded			
					Overlapping provisions				
P18-15	Table 308.5	and greater can be stable to address this.	6 "Hanger Spacing". PE-RT 1-1/4 inches upported at 48 inches, modification to ot increase the cost of construction. This is						

TAC Action Accommodate Florie YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:	No Action Nee	TAC	Cmsn.	
a. b. c. o	df		abcdef Others (Explain):					
					Overlapping provisions			
P19-15 Part I	308.6	for drainage piping sy where pipes downstru Cost Impact: Will no proposal will not incre additional labor, mate	6 "Sway bracing" to require rigid bracing ystems necessary to control movement eam are no longer horizontal. t increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. b		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Nee	eded	Cmsn.	
Others (Explain):			Others (Explain):		Overlapping provisions			
			CHAPTER 4					
			AUCETS AND FIXTURE FITTINGS		-			
P26-15	401, 402, 403, 404, 405, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419,	fixtures in alphabetica the listing is the striki fittings. The section a There is no "other" fix	C C	betwee	as change en 2015 IPC 18 IPC			
	420, 421, 422, 423, 424, 425, 426, 427		t increase the cost of construction. act by renumbering code sections for					

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P30-15	Table 403.1 (IBC Table 2902.1)	OF REQUIRED PLUI count for casinos as a public comment, was casino gaming areas Cost Impact: Will no This proposal provide	(IBC Table 2902.1) "MINIMUM NUMBER MBING FIXTURES" to address fixture specific use. Code change modified by added to provide a fixture count for , not defined in the code. t increase the cost of construction es a more lenient fixture count for of construction would presumably	betwee	as change en 2015 C and 2018 C			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Ne	eded	Cmsn.	
			Others (Explain):		Overlapping provisions			

Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Net		Cmsn.	
P34-15	Table 403.1 (IBC Table 2902.1)	description. Further clarification only. Cost Impact: Will no proposal will not incre additional labor, mate	(IBC Table 2902.1) to clarify Group I modified by public comment, intended as at increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.	betwee	as change en 2015 IBC)18 IBC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Net		Cmsn.	
P36-15 Part I	Table 403.1 (IBC 2902.1),	plumbing fixtures for International Swimml modified by public co Table 403.1 Cost Impact: Will no Because this propose will result in a cost d	IBC 2902.1) to add footnote "f" to require outdoor public swimming pools as per the <i>ing Pool and Spa Code (ISPSC).</i> Further omment, modification to footnote f of at increase the cost of construction. al is not based on an occupant load, this ecrease as compared to the cost of the xtures based on IPC Table 403.1.	similar FPC. 1	hange is not to that of the The ISPCP is rt of the FBC.	ction ne P is no	eeded. t part of	the FBC

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	TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)			TAC	Cmsn.	
	a. b. c. c	∟ Ief		ab cd ef Others (Explain):	NO:	No Action Need	bed		
						Overlapping provisions			
	P40-15	403.1.2 (IBC 2902.1.2)	room fixtures" to allow will also address the individuals as identifi further modified by p occupant toilet rooms Cost Impact: Will no on the minimum num required for circula eliminated in large pa	ot increase the cost of construction. Based liber of toilets, the larger general area tion for multi-fixtured toilet rooms can be art because areas such as sight-blocking urinals for credit will be eliminated in	betwee and 20	as change en 2015 IBC)18 IBC			
	TAC Action Accommodate Florid YES (Select Criteria) abcc Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. Others (Explain):	NO:	No Action Need	ded	Cmsn.	
						provisions			
	P44-15	403.2	clarifying that separa occupancies with an change further modif to cover business oc Cost Impact: Will in This proposal will inc additional labor, mate are mandated beyon	 "Separate facilities" to add exception 4 te facilities are not required in business occupant load of 25 or fewer. Code ied by public comment, adds new item 4 cupancies. crease the cost of construction rease the cost of construction because erials, equipment, appliances or devices d what is currently required by the code. cantile occupancies having an occupant 	betwee	as change en 2015 IPC 018 IPC			

		facilities (for male and current code that rang Extra space and dupl materials and labor w	0 and less than 101, separate toilet d female) will be required whereas in the ge does not require separate facilities. icate fixtures, piping and associated ill increase the cost of construction for blishments in that range				
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Net	Cmsn.	
P45-15	403.3 (IBC 2902.3)	reorganize text for cla simply is to require pu applicable, for buildin Cost Impact: Will not proposal will not increadditional labor, mate	3 "Required public toilet facilities" to arity of the intent of the section which ublic and employee toilet facilities, as gs and tenant spaces. t increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.	betwee	as change en 2015 IBC 18 IBC		
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ner	Cmsn.	
P46-15 Part I	403.6	uneven distribution of two or more toilet faci Cost Impact: Will not	6 "Fixture distribution" to prevent the plumbing fixtures for each sex within lities. t increase the cost of construction. The res is required, so there is not an	betwee and 20 with re as 403	as change en 2015 IPC 18 IPC – numbering .7.		

TAC Action Accommodate Florid YES (Select Criteria)		NO:		NO:	No Action Ne	odod	TAC	Cmsn.	
a. b. c. o Others (Explain):	df		abcdef Others (Explain):			eueu			
					Overlapping provisions				
P46-15 Part II	2902.3.7 (IBC)	uneven distribution of two or more toilet fac Cost Impact: Will not increase the	2.3.7 "Fixture distribution" to prevent the f plumbing fixtures for each sex within ilities. cost of construction. The same number of o there is not an increase in cost.	betwee	as change en 2015 IBC)18 IBC				
TAC Action			Commission Action				TAC	Cmsn.	
Accommodate Florid YES (Select Criteria)		NO:	Accommodate Florida Specific Need: YES (Select Criteria)	NO:	No Action Ne	adad			
a. b. c. o	Jef		abcdef Others (Explain):			eueu			
					Overlapping provisions				
		Device a setion 405		0		These is		11- 1114	
			3.1 "Water closets, urinals, lavatories and eption for clearance specific to water closet.	betwee	as change en 2015 IPC)18 IPC	which t	falls ou	utside the	code change scope of this s needed.
P48-15	405.3.1		t increase the cost of construction. atement only and is already allowed referenced standard.						
TAC Action Accommodate Florid	la Specific Need		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):		NO:		NO:	No Action Ne	eded			
					Overlapping provisions				

P49-15	405.3.1, 405.3.5	bidets" to clarify that the width inches and the spacing betwee applicable where partitions will Cost Impact: Will not increase	en adjacent fixtures is only not be installed. the cost of construction. This cost of construction because no ipment, appliances or devices	betwee	as change en 2015 IPC 018 IPC			
TAC Action		Commissi				TAC	Cmsn.	
Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO: YES (Selection a. b. Control	cdef (plain):		No Action Ne			
P50-15	405.4.1	Revises section 405.4.1 "Floor a product "brass" to "copper all Cost Impact: Will not increase proposal will not impact the cos is only a clarification of the na	oy". the cost of construction. This st of construction as this change	betwee	as change en 2015 IPC)18 IPC			
TAC Action		Commissi				TAC	Cmsn.	
Accommodate Florid YES (Select Criteria) abcd Others (Explain):		NO: YES (Selec	c d e f	NO:	No Action Ne			
					Overlapping provisions			
P51-15 Part I	405.4.3	Revises section 405.4.3 "Secu bowls" to update the text by rel A112.6.1M since the requirement covered in A112.6.2. The A112 published by ASME. Cost Impact: Will not increase will not increase the cost of con	moving the reference to ASME ents from standard are now 2.6.1M standard is longer	betwee	as change en 2015 IPC)18 IPC			

		editorial/updating in	n nature.					
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne		Cmsn.	
P52-15	405.5	waste" to provide for requirements for said	5.5 "Plumbing fixtures with a pumped reference standard and installation l fixtures. t increase the cost of construction. Since ed waste is optional , there is no cost	betwee	as change en 2015 IPC)18 IPC			
TAC Action Accommodate Florid	da Specific Need:		Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):		NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne	eded		
					Overlapping provisions			
P56-15	Section: 409.1, Chapter 14	referenced standard t residential dishwashe Cost Impact: Will no	t increase the cost of construction. correct reference standard for	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Floric YES (Select Criteria) a. b. c. c.		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Nee	eded		Cmsn.	
Others (Explain):			Others (Explain):		Overlapping provisions				
P57-15	409.3, 409.4, 802.1.6	409.4 "Residential dis without substitution so machines" for the pur residential and comm requirements. Cost Impact: Will no This has no impact of	3 "Waste connection"; adds new section shwasher waste connection" and deletes ection 802.1.6 "Domestic dishwashing pose of providing separation between hercial dishwasher waste connection t increase the cost of construction n the cost of construction since the d for a residential dishwasher remain the		as change en 2015 IPC 18 IPC				
TAC Action	la Spacific Nood:		Commission Action				TAC	Cmsn.	
TAC Action Accommodate Floric YES (Select Criteria) abcc Others (Explain):		NO:	Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Net	eded		Cmsn.	
Accommodate Floric YES (Select Criteria) abcc		NO:	Accommodate Florida Specific Need: YES (Select Criteria)	NO:	No Action Nee				

TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:		TA	Cmsr	
a. b. c. Others (Explain):			a. b. c. d. e. f. Others (Explain):	NO.	No Action Ne	eded		
					Overlapping provisions			
P63-15	411.3	showers and eyewas controlled by a tempe with ASSE 1071. Mo where hot and cold w for a mixing valve. Cost Impact: Will no This merely adds the	1.3 "Water Supply" to require emergency sh stations to their water temperature erature actuated mixing valve complying dified by committee, to clarify that only vater supplies are mixed is there a need of increase the cost of construction e proper reference to the thermostatic d for an emergency shower.	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c.		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Net	eded	Cmsr	
Others (Explain):								
			Others (Explain):		Overlapping			
			Others (Explain):		Overlapping provisions			

Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

TAC Action Accommodate Florid YES (Select Criteria) abcc Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded	Cmsn.	
			2.1, 609.1, and 713.1 "Scope" to govern		as change			
P69-15	422.1, 609.1, 713.1	plumbing systems of to to the special devi maintained in Group care facilities, medica laboratories, and Gro pharmaceutical drug Cost Impact: Will no	ot increase the cost of construction. ification only; therefore, the cost of		en 2015 IPC 18 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Nee	eded	Cmsn.	
Others (Explain):			Others (Explain):		Overlapping provisions			
P70-15	422.10	substitution clinical n control valves, vacuu devices. Cost Impact: Will no This proposal remov requirement. There	10 "Special elevations" without eeds must determine the location of im outlets and other plumbing control of increase the cost of construction. Tes a potentially hazardous are many more options available; construction will not change.	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Flori YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P71-15	422.3	section is duplicative Cost Impact: Will no	³ "Protection" without substitution this and therefore not needed. t increase the cost of construction. ication, therefore, there is no change in	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. 0 Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P72-15	422.4	for therapy, special cl of smooth, imperviou phrase "combination in the list and not nee Cost Impact: Will no	t increase the cost of construction. fication only, therefore, the cost of	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Flori YES (Select Criteria) a. b. c. 0 Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne		Cmsn.	
					provisions			
P73-15	422.5, 422.9.1	without substitution. broad to be practicall Cost Impact: Will no	t increase the cost of construction. fication; therefore, the cost of	betwee	as change en 2015 IPC)18 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P75-15	422.8	require ice producing utility room. The plur storage of ice in any focusing code chang and drainage connect Cost Impact: Will no	t increase the cost of construction fication only, therefore, the cost of	betwee	as change en 2015 IPC 018 IPC			

YES (Select Criter	rida Specific Need:] d ef		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Nee	eded	Cmsn.	
P76-15	423.3, 424.10	require water temper 120°C (49°F) by a de B125.3. Also Adds n faucets" to require w faucets to be limited to ASSE 1070 or CS to prevent crossover connections. The hot head shampoo sinks inserted, along with f 423.3. Cost Impact: Will no Quality shampoo sin installed already inclu- be any increase in the	3 "Footbaths, and pedicure baths." to rature for foot baths to be limited to evice conforming to ASSE 1070 or CSA ew section 424.10 " Head shampoo sink ater temperature for head shampoo sink to 120°C (49°F) by a device conforming A B125.3 as well as having check valves flow between hot and cold water t water temperature limit requirement for a was approved for the 2015 IPC and footbaths and pedicure chairs, in Section of increase the cost of construction. k faucets that are most commonly ude integral check valves so there won't be cost of construction. The new vents designers and installers from priate faucet type.	betwee	as change en 2015 IPC 18 IPC			
YES (Select Criter	rida Specific Need:] def		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Nee	eded	Cmsn.	

P83-15	424.7	devices for individual actuated flow devices approved method for Cost Impact: Will no	7 "Temperature-actuated, flow reduction fixture fittings " to allow temperature is installed on fixture fittings as an limiting water temperature. t increase the cost of construction. ase the cost of construction.	betwee	as change en 2015 IPC 18 IPC		
TAC Action Accommodate Floric YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. b. c. d. e. Others (Explain):	NO:	No Action Ne	Cmsn.	
P84-15	202, 425.3.4, 501.7, 712.3.2, 1103.4, 1113.1.2, 1302.5, 1302.8.1, 1302.9, 1303.8, 1303.12, 604.11	the IBC and provides 425.3.4, 501.7, 712.3 1302.9, 1303.8, 1303 Cost Impact: Will no This proposal will not because no additiona	e term 'accessible' for consistency with for editorial change for clarity to ss. 5.2, 1103.4, 1113.1.2, 1302.5, 1302.8.1, 5.12, 604.11 t increase the cost of construction. increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by	betwee	as change en 2015 IPC 118 IPC		
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne Overlapping provisions	Cmsn.	
P89-15	502.1 Chapter 14	water heaters conform Cost Impact: Will no The proposed change construction. Most so	1 "General" to include Solar thermal ning to the IMC and SRCC 300. t increase the cost of construction. es are not anticipated to raise the cost of lar thermal systems and collectors are	betwee and 20	as change en 2015 IPC 118 IPC		

		requirements, those of federal rebates, or to	is standard in order to meet state of the Internal Revenue Service for comply with the requirements of the no additional product certifications are						
TAC Action Accommodate Florid	la Spacific Noody		Commission Action Accommodate Florida <u>Specific Need</u> :				TAC	Cmsn.	
YES (Select Criteria) a. b. c. 0 Others (Explain):		NO:	YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Ne	eded			
			Others (Explain):		Overlapping provisions	;			
				-					
P93-15	504.6	ensure the discharge the size of the relief v modified by public co PE-RT tubing might r that can be installed v Cost Impact: Will no proposal will increase additional labor, mate	6 "Requirements for discharge piping" to piping be one nominal size larger than valve outlet. Code change further mment, to address concern that PEX and not be the only type of discharge piping with insert fittings. t increase the cost of construction. This the cost of construction because erials, equipment, appliances or devices d what is currently required by the code.	betwe	as change en 2015 IPC 018 IPC				
TAC Action Accommodate Florid	la Specific Need:		Commission Action Accommodate Florida <u>Specific Need</u> :				TAC	Cmsn.	
YES (Select Criteria) a. b. c. 0 Others (Explain):		NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions	:			
	1			-					
P97-15	504.7	type water heaters or consisting of galvaniz approved materials for Cost Impact: Will no	7 "Required pan." to require storage-tank thot water storage tanks to have a pan ted steel, aluminum, plastic or other or consistency with the IRC t increase the cost of construction. This ease the cost of construction because no	betwe	as change en 2015 IPC 018 IPC				

		erials, equipment, appliances or devices d what is currently required by the code.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne		Cmsn.	
P98-15 Part 1 602.3.1	supplies to be constru- the requirements set laws do not address a standard ANSI/NGW. Cost Impact: Will in proposal will increase additional labor, mate are mandated beyond Specifically, in situation for the construction of additional costs over constructed to a qual requires. Where a stat there could be ways to construction such as performing tests and	3.1 "Sources" to require individual water ucted and installed in accordance with forth in NGWA-01 where state and local such requirements. Also, adds new A-01-14. crease the cost of construction. This e the cost of construction because erials, equipment, appliances or devices d what is currently required by the code. ons where state or local laws don't exist f wells, these requirements could add those cost for a well that would be ity level less than what this standard andard for construction does not exist, to "cut corners" to lessen costs of not installing a well casing, not generally, expending less labor to might not be safe or provide a reliable	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:	No Action Ne	TAC	Cmsn.	
a. b. c. d. e. f. Others (Explain):		ab cd ef Others (Explain):		Overlapping provisions			

P112-15	Table 605.3, Table 605.3	Table 605.4 "water di standard for PE-RT to Cost Impact: Will no	t increase the cost of construction. standard for a piping material will not	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Florid			Commission Action Accommodate Florida Specific Need:			ТА	AC Cmsn.	
YES (Select Criteria) abco Others (Explain):	└def	NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne	eded		
					Overlapping provisions			-
P113-15 Part I	Table 605.3, Table 605.4	water distribution pipe both tables because a related. Cost Impact: Will no This proposal simply pipe or tubing related now covered by a diff is not deleting or add	"water service pipe" and table 605.4" e" to delete standard ASTM F877 from standard is no longer pipe or tubing t increase the cost of construction. deletes a standard that is no longer I from the code. The piping material is ferent standard, and as such, the option ing a material. Thus the code with this lot cause the cost of construction to	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne Overlapping provisions			
P114-15	Table 605.3	from the table becaus alloy is the term used	"water service pipe" to delete brass pipe se brass is a copper-alloy and copper- d to identify materials manufactured base metal and includes brass and	betwee	as change en 2015 IPC)18 IPC			

			t increase the cost of construction. impact the cost of construction as this is f a product name.				
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne	Cmsn. Cmsn.	
P115-15 Part I	605.4	"hot" and "cold" beca all water distributing p committee, to remove Cost Impact: Will no proposal has absolut	4 "Water distribution pipe" to remove use they are unnecessary, as the intent is piping must comply. Modified by e terms "hot" and "cold". t increase the cost of construction. This ely no impact on the cost of construction address a technicality which has existed	betwe	as change en 2015 IPC 018 IPC		
TAC Action Accommodate Flori YES (Select Criteria) abc Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne	Cmsn.	
P118-15	Table 605.4	pipe from the table and copper-alloy pipe bed alloy is the term used where copper is the t bronze. Cost Impact: Will no	"water distribution pipe" to delete brass and add ASTM B 43 under Copper or cause brass is a copper-alloy and copper- to identify materials manufactured base metal and includes brass and t increase the cost of construction.	betwe	as change en 2015 IPC)18 IPC		

		change is only to upc already in the code.	late the name of a material that is						
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. 0 Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Net	eded		Cmsn.	
					Overlapping provisions				
P119-15	Table 605.5	1061-2011 to the tabl RT to the list of tubing those fittings can be u	"Pipe Fittings" to add standard ASSE le because ASSE 1061-2011 added PE- g's in this edition of the standard so that used for PE-RT tubing. t increase the cost of construction. the cost of construction as it only adds he installer.	betwee	as change en 2015 IPC 18 IPC				
TAC Action Accommodate Flori YES (Select Criteria)			Commission Action Accommodate Florida Specific Need:	NO:			TAC	Cmsn.	
a. b. c. Others (Explain):	∟ def		YES (Select Criteria)	NO	No Action Net	eded			
					Overlapping provisions				

TAC Action Accommodate Florie YES (Select Criteria) a. b. c. 0 Others (Explain):	 ∮ e,f		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. dl. e. others (Explain):	NO:	No Action Need	ded	Cmsn.	
P123-15	Table 605.7, Chapter 14	to the table which is t ball valves. Cost Impact: Will no	"Valves" to add IAPMO Z1157 he new national consensus standard for t increase the cost of construction. act since the use of ball valves meeting onal.	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Need	ded	Cmsn.	
P124-15 Part I	Table 605.7	SP-138-9 to table be valves that should be Cost Impact: Will no	Valves" to add MSS SP-122 and MSS cause these are additional standards for considered in the valve table. t increase the cost of construction. ptions will not increase the cost of	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):	NO:	No Action Need	ded	Cmsn.	

P126-15	Table 605.8	brass and add coppe brass is a copper-allo identify materials man metal. Cost Impact: Will no This proposal will not	"Manufactured pipe nipples" to remove r alloy to the table. This is because by and copper-alloy is the term used to nufactured where copper is the base t increase the cost of construction. increase the cost of construction as this date the name of a material that is already	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid	la Specific Need:		Commission Action Accommodate Florida Specific Need:			TAC	C Cmsn.	
YES (Select Criteria) abcc Others (Explain):		NO:		NO:	No Action Ne	eded		
					Overlapping provisions			
P127-15	Table 608.1	add standard CSA Be Cost Impact: Will not There is no cost impa	Application of backflow preventers" to 64.1.3 for clarity and consistency . t increase the cost of construction. act with the existing cross reference e section and the table.	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid			Commission Action Accommodate Florid <u>a Sp</u> ecific Need:			TAC	C Cmsn.	
YES (Select Criteria) abcc Others (Explain):		NO:	YES (Select Criteria)	NO:	No Action Ne	eded		
					Overlapping provisions			
P129-15	605.11, 605.11.1, 605.11.2, 605.11.3, 605.11.4	605.11.4 without subs and is covered in Sec Cost Impact: Will no This proposal will not	.11, 605.11.1, 605.11.2, 605.11.3, and stitution because brass is a copper alloy ction 605.13. t increase the cost of construction. increase the cost of construction as this date the name of a material that is	betwee	as change en 2015 IPC 18 IPC			

		already in the code						
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P132-15 Part I	605.14.7 (New), 605.15.4 (New), 605.17.3 (New)	joints" to add the star for push-fittings is AS Cost Impact: Will no proposal will not incre additional labor, mate	05.14.7, 605.15.4, and 605.17.3 "Push-fit indard ASSE 1061 because the standard SE 1061. It increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.	betwe	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. b.		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Ne	eded	Cmsn.	
Others (Explain):			Others (Explain):		Overlapping provisions			
P134-15	605.24.1	to galvanized steel pi brass is a copper allo identify materials mai metal. Cost Impact: Will no proposal will not incre	24.1 "Copper pipe or copper alloy tubing pe" to remove "brass fitting" because by and copper-alloy is the term used to nufactured where copper is the base t increase the cost of construction. This ease the cost of construction as this date the name of a material that is	betwe	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne		Cmsn.	
P141-15	607.3	"tanks" so that all pro designers and contra expansion tanks. Cost Impact: Will no By providing addition	3 "Thermal expansion control" to remove ven technologies are recognized and ctors are not limited solely to thermal t increase the cost of construction. onal choices, the designer can select the st effective solution depending on the	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. b. c. d. Others (Explain):	NO:	No Action Ne		Cmsn.	
P149-15	608.3 608.4(New)	and apparatus" to rer softeners, tanks and 608.4 "Potable water require that this equip prevents contaminati language concerning Cost Impact: Will no This proposal will not because no additional	3 "Devices, appurtenances, appliances nove references to water pumps filters, other appliances. Also adds section handling and treatment equipment" to oment be installed in a location that on. Modified by committee, to remove manufacturer's installation instructions. t increase the cost of construction. increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Florida Specific YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded	Cmsn.	
P150-15 Part I 6	grade" to make edito that Freezeproof yar ground are permitted water supply to such Section 608.13.2 or from the backflow pr accordance with Sec08.7Cost Impact: Will in This proposal will ind additional labor, mat are mandated beyon Specifically, where of backflow preventer f higher cost for the cu and materials for eit prevention assembly the device occurs) of	.7 "Valves and outlets prohibited below orial changes and to add the exception of hydrants that drain the riser into the d to be installed provided that the potable in hydrants is protected in accordance with 608.13.5 and the hydrants and the piping reventer to the hydrant are identified in otion 608.8. Acrease the cost of construction. Crease the cost of construction because terials, equipment, appliances or devices and what is currently required by the code. Scode officials were not requiring the correct for these applications, there will be a correct backflow preventer plus added labor her placing the required backflow y in a place where leakage (when failure of r for providing a drain for the assembly for ens (when failure of the device occurs).	betwee and 20	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florida Specific YES (Select Criteria) a. b. c. d. others (Explain):	NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded	Cmsn.	

P151-15	608.9	water used for heating discharged through a nonpotable purposes. Cost Impact: Will not is no cost increase wi clarification . There is This is simply a clarifi piping has not been a cross connections. The language because the unsafe condition to ou Combined heating ho can still be used, The	t increase the cost of construction. There th this code change. This is simply a s no cost increase with this code change. cation. Combined system with open illowed in the current code because of his code change is just clarifying the e language is not clear it has allowed an ccur where it has been misinterpreted. t water and domestic hot water systems re just needs to be a closed loops for the prevent contamination, stagnant water,	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Floric YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded	Cmsn.	
P152-15	608.11	which come in contact NSF 61 standard. Cost Impact: Will not Because there are ma	11 "Potable water tanks" to require tanks at with potable water to conform to the t increase the cost of construction. any certified tanks, tank liners, and et, this is not expected to increase the	betwee	as change en 2015 IPC 18 IPC			

Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

TAC Action Accommodate Florid	—·		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) a. b. c. d Others (Explain):		NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions				
D450.45	000.40.4	incorrectly located wi	ection 608.13.1. Section 608.13.9 is th and greatly confused by the various eventers within Section 608.13.		I				
P153-15	608.13.1		t increase the cost of construction. proper use of dispenser equipment would costs.						
TAC Action Accommodate Florid	a Specific Need:		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) a. b. c. o Others (Explain):	Ldf	NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions				
		Madifies text of COR 1							
P155-15	608.13.5, 608.13.8	assemblies". Deletes pressure vacuum bre confusing language a installation requireme installations. Cost Impact: Will no	 13.5 "Pressure vacuum breaker as section 608.13.8 "Spill-resistant eaker assemblies". The deletion of and addition of language to clarify the ents and inspection criteria for applicable t increase the cost of construction ease with proper planning and installation. 						

TAC Action			Commission Action			TAC	Cmsn.	
Accommodate Florid YES (Select Criteria)			Accommodate Florida Specific Need: YES (Select Criteria)	NO:		TAC	Chish.	
a. b. c. d Others (Explain):	⊔. e. f		a. b. c. d. e. f. Others (Explain):	NO	No Action Need	ded		
					Overlapping provisions			
P159-15	608.16.1, 608.16.1 (New), 608.16.1.2 (New)	608.16.1.2 "Coffee m dispensers". Revises beverage dispensers into two categories o and one for noncarbo Cost Impact: Will no There is no cost incre	t increase the cost of construction ease but actually less cost in many e price difference between the backflow					
TAC Action			Commission Action			TAC	Cmsn.	
Accommodate Florid YES (Select Criteria) abcd Others (Explain):		NO:	Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Need	ded		
					Overlapping provisions			
		Madiffaa Oadiaa 000		0				
P160-15	608.16.1, 608.16.10, 608.16.9	608.16.9 "Dental pun "Coffee machines an Per reasoning Each ' backflow from the oth backflow preventer d open the possibility th contaminate an adjac Cost Impact: Will in This proposal will inc additional labor, mate	.16.1 "Beverage dispensers," Section nping equipment," Section 608.16.10 d noncarbonated beverage dispensers." 'unit" needs to be protected from ner "unit". For example, installing one evice to serve multiple "units" leaves nat contamination in one "unit" could cent "unit". crease the cost of construction. rease the cost of construction because erials, equipment, appliances or devices d what is currently required by the code.	betwee	as change en 2015 IPC)18 IPC			

		manner, yes, there m	s that were not enforcing the code in this ight need to be extra backflow prevention hose situations there will be an increased abor.						
TAC Action Accommodate Flori			Commission Action Accommodate Florid <u>a Sp</u> ecific Need:				TAC	Cmsn.	
YES (Select Criteria) abc Others (Explain):	∟ def	NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions	5			
		Revises section 608.	16.1 "Beverage dispensers."	Same	as change				
P161-15	608.16.1, 608.16.1.1 (New), 608.16.1.2 (New), 608.16.10	Adds new sections 60 dispensers" and 608. noncarbonated bever Delete without substit machines and noncar The modification provise suitable for a potable carbonated beverage noncarbonated bever 1022 device is constr dioxide gas and carbo Cost Impact: Will no This proposal will not because no additionar	08.16.1.1 "Carbonated beverage 16.1.2 "Coffee machines and age dispensers." Aution section 608.16.10 "Coffee rbonated beverage dispensers." Vides for backflow prevention device that be water supply connection to a dispenser and coffee machines and age dispensers. The ASSE ucted especially for exposure to carbon	betwee	en 2015 IPC 18 IPC				
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Nee	eded		Cmsn.	
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					provisions				
P162-15, Part I	608.16.11 (New), 801.1, 801.2, 802.1	801.1 Scope, 801.2 F codes are silent on th connection to humidi serviced, can be a so water supply. The ins such pieces of equip This simple addition to need to have a backf equipment in the list comment, modification reference to CSA B6 Cost Impact: Will in This proposal will inc additional labor, mate are mandated beyond	crease the cost of construction. rease the cost of construction because erials, equipment, appliances or devices d what is currently required by the code. I be the added cost of a backflow	betwee	as change en 2015 IPC 18 IPC				
TAC Action Accommodate Florid	la Specific Need:	_	Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):		NO:		NO:	No Action Nee				
					Overlapping provisions				
P164-15	611.2	reverse osmosis (RO commonly used in kit etc. Adds reference t	se osmosis systems." Point-of-use) drinking water treatment units are chens, day care centers, breakrooms, o NSF58 or CSA B483.1 to ensure the ealth from these units from a		hange is not to that of the		ered d		to be o 2 of the code

		aspect. Cost Impact: Will not Because a majority of already meet the requ	I safety and contaminant reduction t increase the cost of construction. f point of use products sold in the US uirements of NSF/ANSI 58, this code ed to increase the cost of construction.					
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. b. c. d. Others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P166-15, Part I	701.2	Adds Exception to 70 because many jurisdia regulating private sew cannot use the IPSDC not have state and loc therefore in those cas waste disposal. Cost Impact: Will not This proposal will not because no additiona	01.2 "Connection to sewer required." 1.2. The section is being re-written ctions have state and local laws vage disposal systems and do not and C. There are some jurisdictions that do cal laws for private sewage disposal, ses, the IPSDC provide regulations for t increase the cost of construction increase the cost of construction I labor, materials, equipment, appliances ated beyond what is currently required by		hange is not to that of the	Overlapping considered change pro	during ste	n to be p 2 of the code
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	

P167-15	701.8	 Deletes Section 701.8 "Drainage piping in food service a Per reasoning this section is vague and should be removing from the code. Cost Impact: Will not increase the cost of construction. The proposal will not increase the cost of construction because additional labor, materials, equipment, appliances or deviare mandated beyond what is currently required by the construction of the cost of construction. 	ed between 2015 IPC and 2018 IPC This e no ces	
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO: Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO: No Action N	
P168-15, Part I	Table 702.1	 Modifies TABLE 702.1 "ABOVE-GROUND DRAINAGE A VENT PIPE." Brass is a copper alloy and I relocated the standard to the Copper and Copper Alloy Pipe line to cleather table. Cost Impact: Will not increase the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, applia or devices are mandated beyond what is currently require the code. 	anup between 2015 IPC and 2018 IPC	
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO: No Action N	
P170-15, Part I	Table 702.2	Modifies TABLE 702.2 "UNDERGROUND BUILDING DRAINAGE AND VENT PIPE." ASTM F714 polyethylene is sometimes used to rehabilitate piping sewers under buildings. Currently the code does not list the product for use.	and 2018 IPC	

		This proposal allows under buildings. The chosen. Thus the coo	for an optional pipe material to be used option is not requiring that this method be de with this proposal added will not cause ion to increase, and the material may other options.					
TAC Action Accommodate Florid			Commission Action Accommodate Florida Specific Need:			TA	C Cmsn.	
YES (Select Criteria) a. b. c. d Others (Explain):		NO:	YES (Select Criteria) abcdef Others (Explain):	NO:	No Action Ne	eded		
					Overlapping provisions			
		Modifies TABLE 702.	2.3 (702.3) "BUILDING SEWER PIPE."	Same	as change			
P171-15	Table 702.3, 703.2, 705.16 (New)	Adds Section 705.16 Standards "ASTM F2 30 in (152 to 762 mm Single Wall Pipe And F2764/F2764M-11ae (750 to 1500 mm) Po Fittings for Non-Press B181.0-11 Definitions testing for thermoplas 11 Profile polypropyle proof sewer application This code change is a ASTM and CSA stan sewer pipe into the IF pipe technology.	proposed to incorporate the current ndards for Polypropylene (PP) sanitary PC code to bring it current with accepted of increase the cost of construction roven to be a lower cost alternative to		en 2015 IPC 018 IPC			

TAC Action Accommodate Florin YES (Select Criteria) a. b. c. b. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Neede	ed	Cmsn.	
					Overlapping provisions			
P173-15	Table 702.4	sanitary drainage cha should be deleted. T would not be suitable would not ready flow fittings has not been the IRC for many edit Cost Impact: Will no proposal will not incre additional labor, mate	.4 "PIPE FITTINGS." Chapter 7 is the apter of the code. The malleable iron row These are not drainage pattern fittings and e for venting systems as the condensate back to the drain system. Malleable iron in the sanitary drainage fittings table of tions. of increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.					
TAC Action Accommodate Florid YES (Select Criteria)	—	NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:		TAC	Cmsn.	
abc Others (Explain):			abcdef Others (Explain):		No Action Neede	ed 🗌		
					Overlapping provisions			
P174-15, Part I	Table 702.4	polyethylene pipe wh Sewer Pipe. Cost Impact: Will no This proposal will not because no additiona	.4 "PIPE FITTINGS" to add reference to hich is already in IPC table for Building of increase the cost of construction t increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded	Cmsn.	
					provisions			-
P176-15	703.4	drains." This proposa regarding the re-use when a building is ra: Cost Impact: Will no This proposal will not because no additiona	.4 "Existing building sewers and building It is to coordinate the IPC with the IRC of existing plumbing drainage system zed or damaged. It increase the cost of construction increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria)			Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:		TAC	Cmsn.	
a. b. c. d Others (Explain):	l. e. f.		abcdef Others (Explain):		No Action Nee	eded		
					Overlapping provisions			-
P177-15	704.1, Table 704.1	Modifies text of TABL DRAINAGE PIPE." A laden waste to compl committee, increasing Cost Impact: Will no	.1 "slope of horizontal drainage piping." LE 704.1 "SLOPE OF HORIZONTAL dds requirement for slope for grease ly with Section 704.1. Modified by the g greater minimum pipe slope. t increase the cost of construction additional materials required to apply this	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Flori YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Nee		Cmsn.	
P178-15, Part I	704.2	concerning water clos Code change per put "approved" per PMG Cost Impact: Will no This proposal will not because no additiona	nge in size." Addition of language set bend fitting and offset closet flange. olic comment, removing language for CAC. t increase the cost of construction increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by	betwee	as change en 2015 IPC)18 IPC			
TAC Action Accommodate Florid			Commission Action Accommodate Florid <u>a Sp</u> ecific Need:			TAC	Cmsn.	
YES (Select Criteria) a. b. c.		NO:	abcdef	NO:	No Action Nee	eded		
Others (Explain):			Others (Explain):		Overlapping provisions			
					provisions			
P179-15	705.3, 705.3.1, 705.3.2, 705.3.3, 705.3.4	because brass is a co 706.6 and Section 70 Cost Impact: Will no This proposal will not	3 Brass. The proposal removes brass opper alloy and is covered in Section 15.7 t increase the cost of construction increase the cost of construction as this date the name of a material that is	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Flori	da Specific Need:		Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abc Others (Explain):		NO:	YES (Select Criteria)	NO:	No Action Neede	ed		
					Overlapping provisions			
P180-15	705.16.1, 705.16.2, 705.16.3, 705.19	tubing to cast-iron hu copper-alloy pipe or f 705.16.3 "Cast-iron p "Soldering bushings." This proposal cleans intent. Copper-alloy is manufactured where brass and bronze. Th use in fuel gas piping Cost Impact: Will not	up the section and does not change the s the term used to identify materials copper is the base metal and it includes ne term brass convertor fitting is typical	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Flori	da Specific Need:		Commission Action Accommodate Florid <u>a Sp</u> ecific Need:			TAC	Cmsn.	
YES (Select Criteria) a. b. c. Others (Explain):		NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Neede	ed		
					Overlapping provisions			
P181-15, Part I	705.16.1	Modification to remove Cost Impact: Will not This proposal will not	opper pipe or tubing to cast-iron hub pipe." ve copper-alloy from text of section. It increase the cost of construction increase the cost of construction as this date the name of a material that is	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:		TAC	Cmsn.	
a. b. c. d Others (Explain):	lef		a. b. c. d. e. f. Others (Explain):	NO.	No Action Neede	ed 🗌		
					Overlapping provisions			
P184-15, Part I	705.16.4, 707.1, Chapter 14	material." Adds new s Standard Specification Joints Between Acryl Poly(Vinyl Chloride) (Modification to enable this application. Cost Impact: Will no This proposal allows elsewhere, but not in this method be chose	astic pipe or tubing to other piping standard "ASTM D3138-04(2011) , on for Solvent Cements for Transition onitrile-Butadiene-Styrene (ABS) and (PVC) Non-Pressure Piping Component." e the use of special transition cement for ot increase the cost of construction for an optional method of joining used this code. The option is not requiring that en. Thus the code with this proposal the cost of construction to increase.	betwee and 20	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Floric YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Neede	ed	Cmsn.	
P185-15	705.18	the term used to iden copper is the base m Cost Impact: Will no This proposal will not	A 18 "Caulking ferrules." Copper alloy is attify materials manufactured where etal and it includes brass and bronze. At increase the cost of construction t increase the cost of construction as this date the name of a material that is	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Florid		NO:	Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abcc Others (Explain):	└ ef		YES (Select Criteria)	NO:	No Action Need	ded		
					Overlapping provisions			
P186-15	705.18	editorial clarification v Cost Impact: Will not	t increase the cost of construction torial change to clarify the type of ferrule	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid YES (Select Criteria) abcd Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Need	ded	Cmsn.	
P191-15, Part I	708.1.6	alloy is the term used where copper is the b and bronze. Cost Impact: Will not This proposal will not	on 708.1.6 "Cleanout plugs." Copper to identify materials manufactured base metal and it includes brass t increase the cost of construction increase the cost of construction as this date the name of a material that is	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. b. c. d. e. Others (Explain): d. f.	NO:	No Action Need	ded	Cmsn.	

P192-15	709.3	values." Modification section and does not Cost Impact: Will no proposal will not incre additional labor, mate	3 "Conversion of gpm flow into dfu to wording clarify intent of the existing add any new requirements t increase the cost of construction. This ease the cost of construction because no erials, equipment, appliances or devices d what is currently required by the code.		as change en 2015 IPC 18 IPC			
TAC Action Accommodate Floric			Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) a. b. c. c.		NO:	abcdef	NO:	No Action Ne	eded		
Others (Explain):			Others (Explain):		Overlapping provisions			
		Madifiaa taxt of Saati	on 712.3.2 "Sump pit." The purpose of	Sama	as change			
P194-15, Part I	712.3.2	this code change is to where the sump cover below grade. Cost Impact: Will no When unable to insta finished surface, corre- in excess of \$200. Th	t increase the cost of construction ll cover flush with grade, or to allow for a ecting the problem could potentially cost perefore, this code change could construction in certain circumstances.		en 2015 IPC			
TAC Action Accommodate Floric			Commission Action Accommodate Florid <u>a Sp</u> ecific Need:			TAC	Cmsn.	
YES (Select Criteria) abcc Others (Explain):	⊥f	NO:	YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Net	eded		-
					Overlapping provisions			
P195-15, Part I	712.3.3	reasoning Subsection enough guidance to t selection of discharge	.3.3 "Discharge pipe and fittings." Per ns 712.3.3.1 and 712.3.3.1 provide he designer and installer for proper e piping components such that there is de official to further approve the		as change en 2015 IPC 18 IPC			

		This proposal will not because no additiona	ot increase the cost of construction t increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by				
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne	Cmsn.	-
P196-15	712.3.3.1	identify materials ma metal and it includes Cost Impact: Will no This proposal will not	aterials." Copper alloy is the term used to nufactured where copper is the base brass and bronze. It increase the cost of construction t increase the cost of construction as this bodate the name of a material that is	betwee	as change en 2015 IPC)18 IPC		
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Ne	Cmsn.	
P197-15, Part I	712.4.2	not comply with the 1 smaller pump system pantry sinks, etc. Mo Cost Impact: Will no	on 712.4.2 "Capacity." Many pumps do inch minimum requirement, especially as used for individual fixtures such as dification to address this. In the cost of construction naller pump will not increase the cost of	betwee	as change en 2015 IPC)18 IPC		

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee		Cmsn.	
					Overlapping provisions			
P200-15	713.4	reasoning the proper conflict to both require The inlets cannot be a connect with patient e Cost Impact: Will not This proposal remove	t increase the cost of construction es a potentially hazardous are many more options available,	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:		 TAC	Cmsn.	
a. b. c. o Others (Explain):	d. e. f		abcdef Others (Explain):		No Action Nee			
					Overlapping provisions			
P201-15	713.5, 713.6, 713.7, 713.7.1, 713.7.2	Sections 713.6, 713.6 some of the incomple references NFPA 99, national standard for much more appropria component of the pipi installation.	5 "Medical vacuum system". Deletes 6, 713.7.1, 713.7.2. This proposal deletes te requirements in this section and which is broadly accepted as the medical gas and vacuum systems. It is te to send the medical vacuum ing system to NFPA 99 for design and t increase the cost of construction ed in Section 1202.1, therefore, there in construction cost	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Nee	eded	Cmsn.	
					provisions			
P203-15, Part I	715.2, 715.3, 715.4, 715.5	715.3 and 715.4. Re change cleans up the Cost Impact: Will no There are no change	ection 715.2 "Material." Deletes Section vises section 715.3 "Location." This e language in the section. t increase the cost of construction s to the mandatory requirements. This ement with greater reliance on the	betwe	as change en 2015 IPC)18 IPC			
TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:	No Action Nee	TAC	Cmsn.	
a. b. c. o Others (Explain):	J ef		abcdef Others (Explain):		Overlapping			
					provisions			
P204-15, Part I	717.4, 717.5	ASTM F714, Standar Plastic Pipe (DR-PR) to pipe, not fittings. F out resin designation a companion change match this language. Cost Impact: Will no This proposal is modi other in multiple code	4 "Pipe" and Section 717.5 "Pipe fittings." d Specification for Polyethylene (PE) Based on Outside Diameter, only refers ittings are not made in SDR's. And calling codes is not necessary. This change has in the IRC to get the requirements to t increase the cost of construction ifying language to coordinate with each e sections and does not impact costs. his proposal added will not cause the cost rease.	betwee and 20	as change en 2015 IPC)18 IPC			

TAC Action Accommodate Florid YES (Select Criteria)		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:		TAC	Cmsn.	
a. b. c. d Others (Explain):			abcdef Others (Explain):		No Action Nee	eded		
					Overlapping provisions			
P206-15	802.1	language resolves a Section 301.6 with re Cost Impact: Will no This proposal will not because no additiona	.1 "Where required." The revised conflict that existed in the code with gard to connection of floor drains. t increase the cost of construction increase the cost of construction al labor, materials, equipment, appliances ated beyond what is currently required by	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Florid	a Specific Need:		Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):	□. lef	NO:		NO:	No Action Nee	ded		
					Overlapping provisions			
P207-15	802.1	deletes the requiremend discharge through an Cost Impact: Will no	t increase the cost of construction larification, therefore, there will be not	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded	Cmsn.	
					provisions			-
P208-15	202, 422, 713, 802.1	"HEALTH CARE FIX 713 "HEALTH CARE This proposal deletes value to the text. The broad to be enforcea direction; or otherwis Cost Impact: Will no These items are alrea	definition for "STERILIZER", section 422 TURES AND EQUIPMENT", and section PLUMBING"; and revises 802.1. a section that provides no practical requirements in this section are too ble; too generic to provide any clear e covered in the text of this code. t increase the cost of construction. ady addressed in the IPC, therefore, the rease the cost of construction.	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Florid	— ·		Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) a. b. c. d Others (Explain):		NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded		
					Overlapping provisions			
		Adds now Section 80	2 3 3 1 "Connection of loundry tray to	Samo	as change			
P212-15	802.3.3.1	standpipe." Alternativ use in multi-family hig Cost Impact : Will no This proposal will not decrease costs by p the residential Code.	2.3.3.1 "Connection of laundry tray to re method added to the code to allow for gh-rise constructions. t increase the cost of construction. increase costs and may actually permitting a practice that is recognized in The savings could be realized as not at, trap and waste line for a laundry tub.	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Florid			Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):	ief	NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions				
P213-15	804, 804.1	connections." Deletes into 802.2. The text I and connections, as Cost Impact: Will no There is no increase	1 into 802.2 "Material, joints, and s section 804. Deleted Section is moved has been cleaned up to address joints well as, materials. t increase the cost of construction. in the cost of construction when the code take it easier to understand.	betwee	l as change en 2015 IPC)18 IPC				
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne Overlapping provisions	eded		Cmsn.	
P226-15, Part I	Section 918.8	attempts to circumve against its' intended u mechanical devices t Cost Impact: Will no is no additional cost t non-code compliant in circumvent the install	8 "Prohibited installations." This proposal nt the installation of Air admittance valves use as air admittance valves are a hat will eventually fail. t increase the cost of construction. There hat would normally occur to correct a nstallation. This proposal attempts to ation of a product against its' intended e valves are a mechanical devices that	betwee	as change en 2015 IPC 018 IPC				

TAC Action Accommodate Flori YES (Select Criteria) a. b. c. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Nee	eded	Cmsn.	
P227-15	P918.8	made to text of Section valves. Cost Impact: Will no proposal will not increa additional labor, mate	.8 "Prohibited installations." Clarification on 918.8 concerning Air admittance t increase the cost of construction. This ease the cost of construction because erials, equipment, appliances or devices d what is currently required by the code.	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Net	eded	Cmsn.	
P230-15	1003.3	reference to text to in language failed to inc grease interceptors ir Cost Impact: Will no There is no cost impa	on 1003.3 "Grease interceptors." Modifies clude new Sections 1003.3.7. The 2015 clude all of the relevant sections for in the requirements for grease interceptors t increase the cost of construction. act, since this only clarifies y in the code but which are confusing as	betwee and 20	as change en 2015 IPC 918 IPC			

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. 0 Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Neede	rac	Cmsn.	
					Overlapping provisions			
P233-15	1003.3.2	So that a food disposinterceptor. Cost Impact: Will no This identifies a limita disposers through gree	3.3.2 "Food waste disposers restriction." er shall not discharge to a grease t increase the cost of construction. ation on the discharge of food waste ease interceptor. By properly connecting ser, the cost will be less because of	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Neede	rac	Cmsn.	
Others (Explain):			Others (Explain):		Overlapping provisions			
P234-15	1003.3.2, 1003.3.3	1003.3.3 "Additives to systems that dispense grease interceptors s systems dispense mi bio remediation of great inhibiting growth of part methods. Cost Impact: Will no The microbe dispens there is no additional section simply allows	2 "Food waste disposers." Adds section o grease interceptors." Dispensing e interceptor performance additives to hall not be installed except where such crobes for the enhancement of aerobic ease and other organic material, or for athogenic organisms by anaerobic t increase the cost of construction. ing systems are optional and therefore, cost of material or labor. The new these optional systems to be installed by with the requirements indicated by the	betwee	as change en 2015 IPC 018 IPC			

TAC Action Accommodate Florid YES (Select Criteria)	—	NO:	Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
a. b. c. Others (Explain):			YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Net	eded		
					Overlapping provisions			
		Adds new section "CS (PP) Sewer Pipe And	2.4 "BUILDING STORM SEWER PIPE," SA B182.13-2011 Profile Polypropylene Fittings For Leak-Proof Sewer e to table to add standard for	betwee	as change en 2015 IPC)18 IPC			
P236-15	Table 1102.4, Chapter 14	Polypropylene (PP) P Cost Impact: Will in Using PP will slightly						
TAC Action Accommodate Florid			Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):	└def	NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded		
					Overlapping provisions			
P237-15	Table 1102.4, Chapter 14	Adds new standard "A for 3 through 24 in. C Fittings." Update to A sizes 3" to 24" as F23 Cost Impact: Will not The addition of this	2.4 "BUILDING STORM SEWER PIPE." ASTM F667 - 12 "Standard Specification orrugated Polyethylene Pipe and ASTM F667 is needed as it covers pipe 306 only has a range of 12' to 60." t increase the cost of construction. standard will allow more appropriately E to be used, thus optimizing cost.	betwee	as change en 2015 IPC 018 IPC			

TAC Action	1. C		Commission Action				TAC	Cmsn.	
Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):		NO:	Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded			
					Overlapping provisions				
			L 2.4 "BUILDING STORM SEWER PIPE." ASTM F2648/F2648M-13 Standard		as change en 2015 IPC				
P238-15	Table 1102.4, Chapter 14	Corrugated Profile W for Land Drainage Ap proposed because A materials to be used Polyethyene pipe Cost Impact: Will no	60 inch [50 to 1500 mm] Annular (all Polyethylene (PE) Pipe and Fittings oplications." This code change is STM F2648 allows the use of recycled in the manufacture of High Density ot increase the cost of construction. materials in our products in most cases a cost effective.	and 20	018 IPC				
TAC Action Accommodate Florid	la Specific Need:		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) a. b. c. d Others (Explain):		NO:	YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Nee	eded			
					Overlapping provisions				
P239-15	Table 1102.4, Chapter 14	PIPE." Adds new sta Specification for 12 to (PP) Dual Wall Pipe Sewer Applications."	LE 1102.4 "BUILDING STORM SEWER ndard "ASTM F2881-11 "Standard o 60 in. [300 to 1500 mm] Polypropylene and Fittings for Non-Pressure Storm This code change is proposed because ASTM Standard Specification for this pipe	betwee and 20	as change en 2015 IPC)18 IPC				

TAC Action Accommodate Florie YES (Select Criteria) a. b. c. 0 Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Net	eded		Cmsn.	
					Overlapping provisions				
P240-15	TABLE 1102.4	SEWER PIPE." ASTM deletes. Adds ASTM Cost Impact: Will not This proposal simply into the code and corr not requiring that this	E 1102.4 (1102.4) "BUILDING STORM A D2751 has been withdrawn in 2014 F1488 found in Table 702.2. t increase the cost of construction. adds another option for piping material rects others, and as such, the option is material be chosen. Thus the code with vill not cause the cost of construction to	betwee	as change en 2015 IPC 018 IPC				
TAC Action			Commission Action				TAC	Cmsn.	
Accommodate Florid YES (Select Criteria) abcd Others (Explain):		NO:	Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne	eded			
					Overlapping provisions				
P241-15	Table 1102.5, Chapter 14	new standard "ASTM through 24 in. Corrug This code change pro- listed ASTM F405 is I pipe. The proposed A pipe sizes 3" to 24" di Cost Impact: Will not The addition of this	E 1102.5 "SUBSOIL DRAIN PIPE." Adds F667 - 12 Standard Specification for 3 ated Polyethylene Pipe and Fittings." oposal is proposed because the currently imited in size to only 3" to 6" diameter STM F667-06 is needed as it covers iameters. t increase the cost of construction. standard will allow more appropriately to be used, thus optimizing cost	betwee	as change en 2015 IPC 018 IPC				

TAC Action Accommodate Floric YES (Select Criteria) abcc Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. others (Explain):	NO:	No Action Nee	eded	c]	Cmsn.	
					Overlapping provisions]		
P246-15	1106.5, 1108.3	1108.3 "Sizing of sec used for primary syst the code required dra Modification to addre Cost Impact: Will no This proposal will not because additional la	 6.5 "Parapet wall suppers," and Section ondary drains." Where scuppers are em, there needs to be method to equate ain size to a scupper opening width. ss this. t increase the cost of construction. increase the cost of construction bor, materials, equipment, appliances or d beyond what is currently required by 	betwee	as change en 2015 IPC 18 IPC				
TAC Action Accommodate Floric	a Specific Need:		Commission Action Accommodate Florida Specific Need:			TA	с	Cmsn.	
YES (Select Criteria) abcc Others (Explain):]. Ief	NO:	YES (Select Criteria)	NO:	No Action Net	eded]		
					Overlapping provisions]		
P247-15	1301.1.1	proposal is to insert t International Plumbin that use of these systexamination and des Cost Impact: Will no The reference to the	01.1.1 "Fire Protection Systems." This ext to remind designers and users of the og Code for nonpotable water systems tems in fire protection warrant further ign considerations. t increase the cost of construction. IFC and the appropriate installation increase the cost of construction	betwee	as change en 2015 IPC 18 IPC				

TAC Action Accommodate Florid YES (Select Criteria) a. b. c.		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Nee	ded	Cmsn.	
Others (Explain):			others (Explain):		Overlapping provisions			
P251-15	1301.6	"Components and m "material approved b application." Cost Impact: Will no This code change is	01.6 "Approved components" to aterials." Modifies language to read y the manufacturer for the intended of increase the cost of construction. for clarification only and does not provisions addressed in the code section	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Floris YES (Select Criteria) a. b. c. 0 Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Need	ded	Cmsn.	
P253-15	1301.9.1	absence of providing should be eliminated Cost Impact: Will no	ot increase the cost of construction. ection does not add more restrictive	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Action Need	ded	Cmsn.	

P255-15	1301.9.2	sentence and revises sunlight into a list forr Cost Impact: Will not	1.9.2 "Location." Removal of initial methods used for protection from nat as opposed to a single paragraph. t increase the cost of construction. erely reorganizes the section without y existing provisions.	betwee	as change en 2015 IPC 18 IPC			
TAC Action Accommodate Floric	la Specific Need:		Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abcc Others (Explain):	1ef	NO:	YES (Select Criteria)	NO:	No Action Ne	eded		
					Overlapping provisions			
P258-15	1301.9.7	storage tanks should manhole access). The treated water storage Cost Impact: Will not This code change cla water tanks. Such tan	Section 1301.9.7 "Access." Raw water have an easy access for cleaning (i.e. e exception more appropriately applies to tanks. t increase the cost of construction. rifies the appropriate access for treated is are typically smaller than water re water prior to treatment.	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Floric			Commission Action Accommodate Florida Specific Need:			TAC	Cmsn.	
YES (Select Criteria) abcc Others (Explain):	1ef	NO:	YES (Select Criteria) a. b. c. d. e. f.	NO:	No Action Ne	eded		
					Overlapping provisions			
P259-15	1301.9.9.	tanks need to have a for maintenance purp health and safety of u Cost Impact: Will not	1.9.9 " Draining of tanks." Water storage means for draining or emptying the tank oses and cleaning in order to protect the sers. t increase the cost of construction. rifies the methods for draining or	betwee	as change en 2015 IPC 18 IPC			

		emptying tanks, but of provisions for such.	loes not add or increase any additional					
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. d Others (Explain):	Π.	NO: .	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Ne Overlapping provisions		Cmsn.	
P261-15	1302.1, 1304.3	"Reclaimed water sys coordinate the scope IgCC, with the reorga IPC Chapter 13 Ref ended up in the wron Cost Impact: Will no	t increase the cost of construction. are identified so there is not a change in	betwee	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Flori YES (Select Criteria) a. b. c. Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Action Ne		Cmsn.	
P262-15	1302.2	sources of reuse wate unnecessary to provie 2. The list of alternati sources of reusable w Cost Impact: Will no The elimination of an water sources will no the intent of the sector	 2.2 "Sources." As approval of alternative er is required by the Code Section, it is de an example list of alternative sources. ve sources is not exhaustive, and other vater could be considered. t increase the cost of construction. example list of alternative non-potable thave a cost impact, and does not affect on to recognize that jurisdictions may ppropriate sources of non-potable water. 	betwee	as change en 2015 IPC)18 IPC			

TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. Others (Explain):	NO:	No Action Need	ded	Cmsn.	
P267-15	1302.7.2	1301.9 as referenced specific design and or references given to the 1302.7.2 leave out monpotable water and Cost Impact: Will not By removing the reference to comply with the specific design of the specif	2.7.2 "Design and construction." Section d under section 1302.7 already gives construction information for tanks. The he specific standards under section hany material and methods used to store d is very restrictive and cost prohibitive of increase the cost of construction. renced section the requirement for tanks becific listed standards is removed which s and methods to be used.	betwee	as change en 2015 IPC 118 IPC			
TAC Action Accommodate Florid YES (Select Criteria) abcd Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. Others (Explain):	NO:	No Action Need	ded	Cmsn.	
P269-15	1303.2	change is required in conservation techniq use. Cost Impact: Will no	on 1303.2 "Collection surface." The order to allow the use of modern ues in collecting rainwater for nonpotable of increase the cost of construction. ween 2015 IPC and 2018 IPC	betwee	as change en 2015 IPC 18 IPC			

TAC Action Accommodate Florin YES (Select Criteria) a. b. c. others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Action Needed	d	Cmsn.	
					Overlapping provisions			
P270-5	1303.15.2, 1303.3, 1303.4	1303.4 "First-flush di diverter test." The int to divert the initial run contaminants that ma it does not enter the diverter" will allow for standpipe application mechanical device. Cost Impact: Will no This code change re- diverters may be use	on "1303.3 Debris excluders." Section verter," Section 1303.15.2 First-flush ent of the provisions in these sections is noff of water from a roof with its ay build up during a non-rain event so that storage tank. Using the term "first-flush r both the typical non-mechanical n or an approved manufactured of increase the cost of construction. sults in clarifying where non-mechanical ed, and would actually decrease the cost potable reuse of rainwater.	betwee and 20	as change en 2015 IPC 018 IPC			
TAC Action Accommodate Florid YES (Select Criteria) abcd Others (Explain):		NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. others (Explain):	NO:	No Action Needer	d	Cmsn.	
P275-15	1303.15.8, 1303.15.9(New)	1303.15.9 "Collected 1303.15.8. The site of quality vary significan Directing the user to providing the table w the collected rainwat	Vater quality test." Adds new Section raw rainwater quality." Deletes Table conditions that affect collected rainwater htly and often from one place to another. the ASTM standard alone without ill result in a much better assessment of er quality and result in much better design nent and determination of suitability for an	betwee	as change en 2015 IPC 118 IPC			

		This code change me	t increase the cost of construction. erely describes what is involved in the loes not add additional testing				
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. c Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. Others (Explain):	NO:	No Action Ne	Cmsn.	
P276-15	1303.15.8	E 2727 does not add water quality. Reling jurisdiction's requiren Cost Impact: Will no Since jurisdictions ha regarding rainwater of	t increase the cost of construction. we different protocols and requirements quality, even using the data in ASTM E It is up to the permittee to obtain the	betwe	as change en 2015 IPC)18 IPC		
TAC Action Accommodate Florid YES (Select Criteria) a. b. c. d Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. b. c. d. e. Others (Explain):	NO:	No Action Ne	Cmsn.	
P278-15	1304.3.1.3	is not rainwater, mod Cost Impact: Will no	Labeling and marking." Reclaimed water ification to clarify the code requirement. It increase the cost of construction. It be referenced in the section - this is a	betwe	as change en 2015 IPC)18 IPC		

TAC Action Accommodate Florid	da Specific Need:		Commission Action Accommodate Florid <u>a Sp</u> ecific Need:				TAC	Cmsn.	
YES (Select Criteria) abco Others (Explain):		NO:	YES (Select Criteria)	NO:	No Action Ne	eded			
					Overlapping provisions				
P279-15, Part I	702.2, 717, 717.1, 717.2, 717.6	BUILDING SEWERS PIPEBURSTING ME General, 717.2 Applie 702.2 "UNDERGROU PIPE." The changes building drainage pip requirements under t the underground built the suitable material building drains. Cost Impact: Will no The addition of pipe a lead to repair/renova	"REPLACEMENT OF UNDERGROUND AND BUILDING DRAINS BY THODS." Modifies Section 717.1 cability, 717.6 Cleanouts. Modifies Table JND BUILDING DRAINAGE AND VENT will allow pipe bursting of underground ing meeting all of the other necessary hese sections. The addition of PE pipe to ding drain and vent piping table provides for pipe bursting sections of underground t increase the cost of construction. bursting of existing building drains will tion cost that will most likely be less than all pipe replacement methodology.	betwee	as change en 2015 IPC 18 IPC				
TAC Action Accommodate Florid YES (Select Criteria)	da Specific Need:	NO:	Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:			TAC	Cmsn.	
a. b. c. d Others (Explain):	d. e. f.		abcdef Others (Explain):		No Action Net	eded			
					Overlapping provisions				

Code Change No: P3-15, Part I

Original Proposal

Section: IPC: 202 (New)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new definition as follows:

SECTION 202 DEFINITIONS

FULL-OPEN VALVE. A water control or shut off component in the water supply system piping that, where adjusted for maximum flow, the flow path through the component's closure member is not a restriction in the component's through-flow area.

Reason: This phrase is used in various places in the code. In Section 606.1, there are a list of 7 locations where full-open valves are required. Many assumptions have been made as to what type of valve is intended. Many years ago before plastic water piping was installed, gate valves and ball valves were the only type that were available that were not globe valves. But many other types of valves for plastic piping are available that do not present a restriction when the valve is in the full-open position. This definition encompasses all type of valves that do not appreciably restrict the flow of water.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC 196.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: This definition is needed so that everyone understands what type of valve this is.

Assembly Action:

Final Action Results

P3-15, Part I

Approved as Submitted

None

AS

66

Code Change No: P3-15, Part II

Original Proposal

Section: IRC: 202 (New)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new definition as follows:

SECTION 202 DEFINITIONS

FULL-OPEN VALVE. A water control or shut off component in the water supply system piping that, where adjusted for maximum flow, the flow path through the component's closure member is not a restriction in the component's through-flow area.

Reason: This phrase is used in several places in the code. In Sections P2903.9.1 and P2903.9.2, full-open valves are required. Many assumptions have been made as to what type of valve is intended. Many years ago before plastic water piping was installed, gate valves and ball valves were the only type that were available that were not globe valves. But many other types of valves for plastic piping are available that do not present a restriction when the valve is in the full-open position. This definition encompasses all type of valves that do not appreciably restrict the flow of water.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC 196.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: This definition is needed so that everyone understands what type of valve this is.

Assembly Action:

Final Action Results

P3-15, Part II

Approved as Submitted

67

AS

BACK

Code Change No: P6-15

Original Proposal

Section: IRC: 202 (New)

Proponent: Curtis Dady, representing Viega, LLC (curtis.dady@viega.us)

Add new definition as follows:

SECTION 202 DEFINITIONS

PRESS-CONNECT JOINT. A permanent mechanical joint incorporating an elastomeric seal or an elastomeric seal and corrosion-resistant grip ring. The joint is made with a pressing tool and jaw or ring approved by the fitting manufacturer.

Reason: The IMC includes this definition but the IPC does not.

Cost Impact: Will not increase the cost of construction It is simply the addition of a definition and has nothing to do with cost.

Report of Committee Action Hearings

Committee Action:

Committee Reason: This definition is the same one that is currently in the IMC. As the IPC allows use of these same type of fittings, adding the definition will be useful for clarity.

Assembly Action:

Final Action Results

P6-15

None

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Approved as Submitted

AS

Code Change No: P7-15

Original Proposal

Section: 202

Proponent: Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Delete without substitution:

SWIMMING POOL. Any structure, basin, chamber or tank containing an artificial body of water for swimming, diving or recreational bathing having a depth of 2 feet (610 mm) or more at any point.

Reason: There is no need for such a specific definition for a swimming pool within the context of how the term is used in the few places in the IPC. Water from a swimming pool is handled in the same manner no matter how a swimming pool is actually defined. And this definition conflicts with the definition of a swimming pool according to the International Swimming Pool and Spa Code.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 85.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The IPC needs a definition for a pool. Perhaps the IPSPSC definition should be used instead of the current definition.

Assembly Action:

Public Comments

Public Comment 1:

Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as follows:

SWIMMING POOL A permanent or temporary structure that is intended to be used for swimming, bathing or wading and that is designed and manufactured or built to be connected to a circulation system. A swimming pool can be open to the public regardless of whether a fee is charged for its use or can be accessory to a residential setting where the pool is available only to the household and guests of the household.

Commenter's Reason: The Committee recommended that the IPC retain a definition for SWIMMING POOL and suggested that the definition in the ISPSC be used instead of the current definition. The ISPSC does not have a definition for SWIMMING POOL but does have the following definitions:



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Disapproved

None

PUBLIC SWIMMING POOL (Public Pool). A pool, other than a residential pool, that is intended to the used for swimming or bathing and is operated by an owner, lessee, operator, licensee or concessionaire, reagrdless of whether a fee is charged for use.

RESIDENTIAL SWIMMING POOL (Residential Pool). A pool intended for use which is accessory to a residential setting and available only to the household and its guests.

These ISPSC definitions are not very informative with respect to how the term SWIMMING POOL is used in the IPC (*swimming pool* is italicized and bolded in the following only for the purposes of this public comment statement):

423.1 Water connections. Baptisteries, ornamental and lily pools, aquariums, ornamental fountain basins, *swimming pools*, and similar constructions, where provided with water supplies, shall be protected against backflow in accordance with Section 608.

612.1 Solar systems. The construction, installation, alterations and repair of systems, equipment and appliances intended to utilize solar energy for space heating or cooling, domestic hot water heating, *swimming pool* heating or process heating shall be in accordance with the *International Mechanical Code*.

801.1 Scope. This chapter shall govern matters concerning indirect waste piping and special wastes. This chapter shall further control matters concerning food-handling establishments, sterilizers, clear-water wastes, *swimming pools*, methods of providing air breaks or air gaps, and neutralizing devices for corrosive wastes.

802.1.4 Swimming pools. Where waste water from *swimming pools*, backwash from filters and water from pool deck drains discharge to the building drainage system, the discharge shall be through an indirect waste pipe by means of an *air gap*.

1302.2 Sources. Onsite nonpotable water reuse systems shall collect waste discharge from only the following sources: bathtubs, showers, lavatories, clothes washers, and laundry trays. Water from other approved nonpotable sources including *swimming pool* backwash operations, air conditioner condensate, rainwater, cooling tower blow-down water, foundation drain water, steam system condensate, fluid cooler discharge water, food steamer discharge water, combination oven discharge water, industrial process water, and fire pump test water shall also be permitted to be collected for reuse by onsite nonpotable water reuse systems, as approved by the code official and as appropriate for the intended application.

The Scope of the ISPSC (Section 101.2) offers additional information about pools that can add clarity for a more meaningful SWIMMING POOL definition:

101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, renovation, replacement, repair and maintenance of aquatic recreation facilities, pools and spas. The pools and spas covered by this code are either permanent or temporary, and shall be only those that are designed and manufactured to be connected to a circulation system and that are intended for swimming, bathing or wading.

The proposed new IPC definition for SWIMMING POOL proposed in this Public Comment is derived from the ISPSC Scope section and the Public and Residential pool definitions. This definition is the best that the PMGCAC can do to comply with Committee's recommendation to replace the current definition with the "ISPSC definition" of *swimming pool*.

Note however, having this ISPSC-based definition might not add any clarity or insight into the meaning of the IPC sections using the defined term. This raises the question as to whether a definition for swimming pool is needed at all to clarify enforcement of the sections in the IPC. Does the new definition somehow *limit* the extent of coverage that the code sections are intended to cover?

If the voters want the proposed definition, then the PMGCAC does not see any immediate concerns with using the proposed definition.

However, if the voters do not want the proposed definition, the PMGCAC strongly recommends that a motion be made for As Submitted for removal of the current definition. The current definition is not appropriate nor is it in alignment with how the ISPSC covers pools, especially wading pools. ISPSC Section 405.4 limits wading pool depth to a maximum depth of 18 inches. The current IPC definition for *swimming pool* would prevent wading pools from being within the scope of the IPC sections that use the term *swimming pool*. The PMGCAC believes that is not the intent of the IPC sections. The IPC would be better off without a definition as opposed to an improper and a limiting definition.

Final Action Results

P7-15

AMPC1



Code Change No: P8-15

Original Proposal

Section: 303.4

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

303.4 Third-party certification. All plumbing products and materials <u>required by the code to be in</u> <u>compliance with a referenced standard</u> shall be listed by a third-party certification agency as complying with the referenced standards. Products and materials shall be identified in accordance with Section 303.1.

Reason: For the 2015 IRC, a proposal was submitted and approved that changed the IRC to clarify that only those materials that are required to comply with a reference standard in the code, are to be third party certified. When the change for required listing of components came about for the 2012 code cycle for both the IRC and the IPC, it was not discovered that there was a potential for misinterpretation of this section until after the proposals for Group A codes (the IPC) were underway. The issue could only be addressed in the IRC.

The need for the rewording is this: Some interpreted this section that all plumbing products and materials had to be listed. That is, a third party agency had to evaluate every item used in the installation of a plumbing system. The problem is that a number of common items such as steel shield plates, thread seal tape, hanger strap, brackets for supporting pipes and many other similar items are not made to a standard that is referenced in the code. Listing such plumbing products to unknown criteria that is not indicated in the code is unnecessary and would only serve to increase the cost of construction without an improvement in the quality of construction. Where the code does find a need for materials to be of controlled quality, standards are brought into the code for those items and are thus required to be third party listed to prove that the manufacturer has complied with the standard.

This proposal is needed for consistency with the IRC.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMCAC 144.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The code only needs to require third party certification for the items that the code specifies a standard for compliance.

Assembly Action:

Final Action Results

P8-15

AS



71

None

Approved as Submitted
Code Change No: P9-15

Original Proposal

Section: 303.5 (New)

Proponent: Bill LeVan, Cast iron Soil Pipe Institute, representing Cast Iron Soil Pipe Institute (blevan@mindspring.com)

Add new text as follows:

303.5 Cast iron soil pipe, fittings and components Cast iron soil pipes and fittings, and the couplings used to join these products together, shall be third party listed and labeled. Third party certifiers or inspectors shall comply wih the minimum inspection requirements of Annex A or Annex A1 of the ASTM and CISPI product standards indicated in the code for such products.

Reason: Third Party inspections of manufacturers of cast iron soil pipes and fittings and the couplings used to join theses products together are required however not all third party inspectors are familiar with these essential items which must be inspected to assure compliance. The ASTM and CISPI standards were modified adding the minimum requirements which are reasonable and to minimize manufacturing defects. The ASTM and CISPI committees worked closely wih third party certifiers to develop these inspection schemes.

Cost Impact: Will not increase the cost of construction

Improved inspection procedures at the manufacturing locations will reduce the amount of defects on jobsites before the installation is begun and reduce the amount of time needed for installation.

Report of Committee Action Hearings

Committee Action:

Committee Reason: There needs to be emphasis on ensuring quality of the these pipe materials. The Annex in the ASTM standards provides additional requirements to ensure a quality product.

Assembly Action:

Final Action Results

P9-15

AS

Approved as Submitted

None



Code Change No: P11-15

Original Proposal

Section: 305.1

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

305.1 Corrosion Protection against corrosion. Pipes passing through Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or einder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive material soil. Where sheathing is used to prevent direct contact, the sheathing shall be protected against external corrosion by have a protective sheathing or wrapping or other means that will withstand any reaction from the lime and acid of concrete, cinder or other corrosive material. Sheathing or wrapping shall allow for movement including expansion and contraction of piping. The wall thickness of the material shall be not less than 0.0250.008 inch (0.648 mil) (0.203 mm) and the sheathing shall be made of plastic. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

Reason: The 2015 IRC has this new language for this section. The IPC should be coordinated that confusion does not occur. There are no new requirements being proposed.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let m 152.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The IPC needs to be aligned with the IRC on this subject as the types of piping covered and the minimum sheathing thickness do not need to be different between the two codes.

Assembly Action:

None

Approved as Submitted

Final Action Results

P11-15

AS



FPC

305.1 Corrosion. Pipes passing through concrete or cinder walls and floors or other corrosive material shall be protected against external corrosion by a protective sheathing or wrapping or other means that will withstand any reaction from the lime and acid of concrete, cinder or other corrosive material. Sheathing or wrapping shall allow for movement including expansion and contraction of piping. Minimum wall thickness of material shall be 0.010 inch (0.25 mm).

Exception: Sleeving is not required for installation of CPVC into concrete or similar material.

Section 305.1.1 Penetration. Add text to read as follows:

305.1.1 Penetration. Protective sleeves around piping penetrating concrete slab-on-grade floors shall not be of cellulose-containing materials. If soil treatment is used for subterranean termite protection, the sleeve shall have a maximum wall thickness of 0.010 inch, and be sealed within the slab using a non-corrosive clamping device to eliminate the annular space between the pipe and the sleeve. No termiticides shall be applied inside the sleeve.

Code Change No: P12-15

Original Proposal

Section: 305.6

Proponent: Gary Kozan, CPD, Ridgeway Plumbing, representing Florida Association of Plumbing Heating Cooling Contractors (garyk@ridgewayplumbing.com)

Revise as follows:

305.6 Protection against physical damage. In concealed locations where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than $1\frac{1}{2}\frac{4}{2}$ inches ($\frac{38}{31.8}$ mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 gage). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend not less than 2 inches (51 mm) above sole plates and below top plates.

Reason: The safest place to install water piping is in the middle of the wall. But in a typical 3-1/2 inch stud wall, even a 1/2-inch pipe (5/8-inch o.d.) ends up slightly nearer than the requisite 1-1/2 inch setback from either edge. Depending on enforcement, installers are often required to put stud guards on *both* sides of the stud. This makes no sense. By simply reducing the setback from 1-1/2 inches to 1-1/4 inches, both 1/2-inch and 3/4-inch water lines can be safely installed in the center of the wall without triggering the need for strike plates on both sides. This encourages quality workmanship instead of penalizing it. The pipes are still safely out of range of drywall screws up to 1-1/2 inches long.

This proposal is consistent with the National Electrical Code, which specifies a 1-1/4 inch setback from the edge of a stud. It is also consistent with the IRC, which also specifies a 1-1/4 inch setback. The Uniform Plumbing Code requires only a 1-inch setback. This proposal will bring consistency to the I-Codes.

Cost Impact: Will not increase the cost of construction

A typical 3" x 6" metal stud guard costs about 20 cents. This proposal would reduce the quantity of stud guards on any given project by about 15-20%, depending on local enforcement.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The IRC was changed last cycle to allow a lesser dimension, One quarter inch less clearance is not going to make that much of a difference other than to allow slightly more latitude in placement of piping through wall stud or ceiling joist.

Assembly Action:

None

Approved as Submitted

Final Action Results

P12-15

INTERNATIONAL CODE COUNCIL®

AS

Code Change No: P15-15 Part I

Original Proposal

Section: 308.10 (New)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new text as follows:

308.10 Thermal expansion tanks. A thermal expansion tank shall be supported according to the manufacturer's instructions. Tanks shall not be supported by the piping that connects to the thermal expansion tank.

Reason: Too often, inspectors see thermal expansion tanks hanging on the piping that the tank connects to. Even the smallest size of tank could weigh up to 16 pounds when full of water. where these tanks are installed at the end of a horizontal rigid pipe from the side outlet of a tee, there is significant moment being applied to the piping. Larger tanks or longer pipes result in bigger moments. And perhaps a significant "moment" when the pipe cracks or breaks off. Although the this proposed section started off trying to identify where it was OK to support the tank from the piping, the realization was made that it would be easiest to just not have the piping support the tank. Strap the tank to the building structure or the water heater tank, or place the tank on top of the water heater where it will not be disturbed (and hopefully not exposed to heat from a nearby flue of a gas water heater.)

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 36.

Cost Impact:

Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify proposal as follows:

308.10 Thermal expansion tanks. A thermal expansion tank <u>shall be supported according to the manufacturer's instructions.</u> <u>Tanks</u> shall not be supported by the piping that connects to the thermal expansion tank.

Committee Reason:

For the Modification only:

Some thermal expansion tank manufacturer's instructions do have installation instructions and even though the code requires, in general, the following of installation instructions, this is a good reminder for these components.

For the proposal As Modified:

Some thermal expansion tank manufacturer's instructions do not state anything about support of the tank. As a minimum, piping should not be used to support these tanks.

Assembly Action:

None



Final Action Results

P15-15 Part I

INTERNATIONAL CODE COUNCIL®

Code Change No: P16-15

Original Proposal

Section: Table 308.5

Proponent: Michael Cudahy (mikec@cmservices.com)

Revise as follows:

TABLE 308.5 HANGER SPACING							
PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)					
Cross-linked polyethylene (PEX) pipe <u>1 inch and smaller</u>	2.67 (32 inches)	10 ^b					
<u>Cross-linked polyethylene</u> (PEX) pipe 1 1/4 inch and larger	4	10b					
Polyethylene of raised temperature (PE-RT) pipe <u>1 inch and smaller</u>	2.67 (32 inches)	10 ^b					
Polyethylene of raised temperature (PE-RT) pipe 1 1/4 inch and larger	<u>4</u>	<u>10b</u>					

(Portions of table not shown remain unchanged)

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.
- b. For sizes 2 inches and smaller, a guide shall be installed midway between required vertical supports. Such guides shall prevent pipe movement in a direction perpendicular to the axis of the pipe

Reason: The 2015 code cycle for the IRC included updates to the support spacing for both PEX and PE-RT tubing for sizes larger than 1". The IRC-P Table P2605.1 is current and correct and should be used as the base template for all other tables within the ICC codes as identified in this amendment proposal. The horizontal support spacing for both PEX and PE-RT tubing (piping) up to and including 1" size is 32" (2-2/3Ft) and 48" (4Ft) for sizes 1- 1/4" and larger. These dimensions are consistent with all published PEX literature and manufacture's installation instructions.

Cost Impact: Will not increase the cost of construction

This proposal modifies the spacing for piping material support into the code and thus the code with this proposal added will not cause the cost of construction to increase, and could decrease the cost as less support is required for larger pipe.

Report	of Committee	Action
-	Hearings	

Committee Action:

Approved as Submitted

Committee Reason: Provides guidance for hanger spacing for new sizes of piping that can be used.

Assembly Action:			None
	Final Action Res	ults	
	P16-15	AS	



Code Change No: P18-15

Original Proposal

Section: Table 308.5

Proponent: Larry Gill, representing IPEX USA LLC (larry.gill@ipexna.com)

Revise as follows:

HANGER SPACING								
PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)						
Polyethylene of raised temperature (PE- RT) pipe <u>1" and less</u>	2.67 (32 inches)	10 ^b						
Polyethylene of raised temperature (PE- RT) pipe 1 1/4" and greater	<u>4 (48 inches)</u>	<u>10</u> ^b						

TABLE 308.5

(Portions of table not shown remain unchanged)

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.

b. For sizes 2 inches and smaller, a guide shall be installed midway between required vertical supports. Such guides shall prevent pipe movement in a direction perpendicular to the axis of the pipe

Reason: PE-RT 1-1/4 inches and greater can be supported at 48 inches. The 48 inch support spacing is already in the 2015 IMC.

Cost Impact: Will not increase the cost of construction

This is a simple change to add support spacing requirements of 4 feet for larger PE-RT sizes and the change will result in less supports and a cost savings without compromising the integrity of the installation.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Committee wanted to be consistent with their action on P16-15.

Assembly Action:

None

Final Action Results

P18-15

Approved as Submitted

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AS

Code Change No: P19-15 Part I

Original Proposal

Section: 308.6

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

308.6 Sway bracing. Rigid support sway bracing shall be provided at Where horizontal pipes 4 inches (102 mm) and larger convey drainage or waste, and where a pipe fitting changes in the flow direction greater than 45 degrees (0.79 rad) for, rigid bracing or other rigid support arrangements shall be installed to resist movement of the upstream pipe sizes 4 inches (102 mm) and larger in a direction opposite the pipe flow. A change of flow direction into a vertical pipe shall not require the upstream pipe to be braced.

Reason: The requirements of this section are vague enough such that several contractors working large projects have been "caught" mid-project not knowing exactly what the code was requiring. This section is about preventing undue stress on the joints in a drainage piping system. It is known that drainage piping systems can be moved about by "slugs" of waste hitting 90 degree bends in the piping where the pipe downstream is "horizontal". Where the pipe downstream of the elbow is no longer "horizontal", that is, 45 degrees or greater from the horizontal plane, the waste is falling and is less likely to impact the inside of the elbow and therefore, not impart significant forces that would cause the piping system to move.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC letem 120.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: This section has not been clear to many as to what was necessary to prevent drain and waste piping sway. This new language provides sufficient direction.

Assembly Action:

None

Approved as Submitted

Final Action Results

P19-15 Part I

AS



Code Change No: P19-15 Part II

Original Proposal

Section: P2605.1

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P2605.1 General. Piping shall be supported in accordance with the following:

- 1. Piping shall be supported to ensure alignment and prevent sagging, and allow movement associated with the expansion and contraction of the piping system.
- 2. Piping in the ground shall be laid on a firm bed for its entire length, except where support is otherwise provided.
- 3. Hangers and anchors shall be of sufficient strength to maintain their proportional share of the weight of pipe and contents and of sufficient width to prevent distortion to the pipe. Hangers and strapping shall be of *approved* material that will not promote galvanic action. Rigid support sway bracing shall be provided at changes in direction greater than 45 degrees (0.79 rad) for pipe sizes 4 inches (102 mm) and larger.
- 4. Where horizontal pipes 4 inches (102 mm) and larger convey drainage or waste, and where a pipe fitting changes the flow direction greater than 45 degrees (0.79 rad), rigid bracing or other rigid support arrangements shall be installed to resist movement of the upstream pipe in a direction opposite the pipe flow. A change of flow direction into a vertical pipe shall not require the upstream pipe to be braced.
- 5. Piping shall be supported at distances not to exceed those indicated in Table P2605.1.

Reason: The requirements of this section are vague enough such that several contractors working large projects (under the IPC) have been "caught" mid-project not knowing exactly what the code was requiring. Certainly, the same situation could occur for contractors working on large IRC buildings. The same clarification proposal has been proposed for the IPC so for coordination, it is proposed to this code.

This section is about preventing undue stress on the joints in a drainage piping system. It is known that drainage piping systems can be moved about by "slugs" of waste hitting 90 degree bends in the piping where the pipe downstream is "horizontal". Where the pipe downstream of the elbow is no longer "horizontal", that is, 45 degrees or greater from the horizontal plane, the waste is falling and is less likely to impact the inside of the elbow and therefore, not impart significant forces that would cause the piping system to move.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC term 120.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement. **Assembly Action:**

None

Approved as Submitted

Final Action Results

P19-15 Part II

AS



Code Change No: P20-15 Part II

Original Proposal

Section: P2503.7

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P2503.7 Water-supply system testing. Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

Exception: For plastic piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by all of the manufacturer's instructions for the plastic pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws, or regulations outside of this code.

Reason: PPFA has a new air testing policy, which allows for some limited air testing of plastic piping systems, if a number of conditions are met.

Bibliography:

PLASTIC PIPE AND FITTINGS ASSOCIATION POLICY ON TESTING PLASTIC PIPE AND FITTINGS INSTALLATIONS WITH COMPRESSED GAS, PPFA, 2014, http://www.ppfahome.org/ub4.aspx

Compressed air or any other compressed gases should not be used for pressure testing plastic plumbing systems.

EXCEPTIONS:

- 1.) With trap seal pull testing, where a completed DWV system is vacuum tested with all of its traps filled with water, and the trap seals are tested with a vacuum typically between one and two inches of water column.
- 2.) For plastic piping systems specifically designed for use with compressed air or gasses;

Manufacturers' instructions must be strictly followed for installation, visual inspection, testing and use of the systems, (and)

• Compressed air or other gas testing is not prohibited by the authority having jurisdiction (AHJ).

3.) When compressed air or other gas pressure testing is specifically authorized by the applicable written instructions of the manufacturers of all plastic pipe and plastic pipe fittings products installed at the time the system is being tested and compressed air or other gas testing is not prohibited by the authority having jurisdiction (AHJ).

The manufacturer should be contacted if there is any doubt as to how a specific system should be tested.

Cost Impact:

Will not increase the cost of construction

This proposal simply adds another option for air testing some specific piping materials into the code and as such, the option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase.



Report of Committee Action Hearings

Committee Action:

Committee Reason: Air testing (of plastic piping) is not safe to do. This exception could be misunderstood to by inspectors to just allow air testing for plastic piping.

Assembly Action:

As Submitted

Disapproved



Public Comment 2:

Mary Kimlinger, representing Uponor (mary.kimlinger@uponor.com); Gary Morgan, representing Viega LLC (gary.morgan@viega.us) requests Approve as Modified by this Public Comment.

Modify as follows:

P2503.7 Water-supply system testing. Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

Exception: For plastic <u>PEX</u> piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by all of the manufacturer's instructions for the PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws, or regulations outside of this code.

Commenter's Reason:

[KIMLINGER]: During the CAH the commitee voted to disapprove the original change proposal because the term "plastic piping" was too vague to clearly define which piping materials should be allowed to be tested with air. This public comment addresses that concern by changing "plastic" to "PEX". This same change was made via a floor modification during the CAH for the IRC-M (Item #RM45-15) and was approved by that committee. Piping such as PEX will not shatter under pressure and poses no greater risk in an air pressure test than a metallic piping material. In addition, there are certain situations that make testing with water not feasible, such as below freezing temperatures and limited water access during install.

[MORGAN]: The intent of this proposal was to simply update the codes to allow for air testing of certain types of non-rigid plastic piping systems which are as safe to test with air as with metallic plumbing systems such as copper. The original proposal was lacking in that rather than specifically state the type of plastic pipe which can be safely tested, the proposal was "vague" and lacking definition that the technical committee was seeking and as a result this proposal was narrowly defeated by the residential plumbing committee with a vote of 5/4 for disapproval.

The same exact proposals (M150 & RM45) were made both in the residential mechanical and mechanical codes (which were heard after the plumbing codes) and with only one simple floor modification, both proposals passed unanimously by their respective technical committees._____

It is commonly known and understood that PEX, like other polyolefin materials, will NEVER burst in a brittle way and will NEVER shatter unlike the rigid plastic pipes such as CPVC and PVC. If PEX fails during pressure testing it is ALWAYS in a ductile way where no parts of the pipe break into pieces. Therefore the simple addition of "PEX" used in place of "plastic" in the proposed exception statement will make it abundantly clear that PEX can be air tested safely.

This proposed modification simply applies the same exact language to the proposal as done for M150 and RM45.

The opponents of the original proposal spoke of catastrophic failures of plastic pipe where the pipe shattered and caused bodily harm but these same opponents readily admitted that these failures were all those of rigid plastic piping and NOT that of PEX tubing. I urge the voting members to end this unnecessary and long standing prohibition of air testing PEX piping systems which is absolutely no more hazardous to air test than metallic piping systems such as copper. We urge acceptance of the original proposal as modified.

Final Action Results

P20-15 Part II

AMPC2



Code Change No: P26-15

Original Proposal

Section: 401, 402, 403, 404, 405, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427

Proponent: Julius Ballanco, representing JB Engineering and Code Consulting, P.C. (JBENGINEER@aol.com)

Revise as follows:

CHAPTER 4 FIXTURES, FAUCETS AND FIXTURE FITTINGS

> SECTION 401 GENERAL

SECTION 402 FIXTURE MATERIALS

SECTION 403 MINIMUM PLUMBING FACILITIES

SECTION 404 ACCESSIBLE PLUMBING FACILITIES

> SECTION 405 INSTALLATION OF FIXTURES

SECTION 407 BATHTUBS

SECTION 408 BIDETS

SECTION 409 DISHWASHING MACHINES

SECTION 410 DRINKING FOUNTAINS

SECTION 411 EMERGENCY SHOWERS AND EYEWASH STATIONS

SECTION 424-412 FAUCETS AND OTHER FIXTURE FITTINGS

> SECTION 4<u>12 413</u> FLOOR AND TRENCH DRAINS SECTION 4<u>27 414</u> FLOOR SINKS



SECTION 425 415 FLUSHING DEVICES FOR WATER CLOSETS AND URINALS

SECTION 413 416 FOOD WASTE DISPOSER UNITS

SECTION 414-417 GARBAGE CAN WASHERS

SECTION 422 418 HEALTH CARE FIXTURES AND EQUIPMENT

SECTION 415 419 LAUNDRY TRAYS

SECTION 416 420 LAVATORIES

SECTION 426 421 MANUAL FOOD AND BEVERAGE DISPENSING EQUIPMENT

SECTION 417 422 SHOWERS

SECTION 418 423 SINKS

SECTION 423 424 SPECIALTY PLUMBING FIXTURES

SECTION 419 425 URINALS

SECTION 420 426 WATER CLOSETS

SECTION 421 427 WHIRLPOOL BATHTUBS

Reason: When Chapter 4 was originally laid out, the concept was to have the fixture categories in alphabetical order after the section on Installation of Fixtures. This was simply to make the code easier to use. Someone not as familiar with the code could find the section on a particular fixture. Over the years, newer section were added and placed at the end of the chapter. This change merely reorganizes the chapter into a listing of fixtures in alphabetical order.

The only substantial change to the listing is the striking of the word "other" before fixture fittings. The section addresses faucets and fixture fittings. There is no "other" fixture fittings.

Cost Impact: Will not increase the cost of construction. There is no cost impact by renumbering code sections for clarity.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's reason statement.

Assembly Action:

None

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Γ	Final Action Results]
P26-	-15	AS

Code Change No: P30-15

Original Proposal

Section: Table 403.1 (IBC Table 2902.1)

Proponent: Stephen DiGiovanni, Clark County Building Department, representing Southern Nevada Chapter of ICC (sdigiovanni@clarkcountynv.gov)

Revise as follows:

	TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES® (See Sections 403.1.1 and 403.2)									
				WATER CLOSETS (URINALS: SEE SECTION 419.2)			ATORI ES	BATHTU BS/	DRINKI NG FOUNT AIN (SEE	
Ν	CLASSIFICA	OCCUPA	DESCRIPT		FEMAL	MA	FEMA	SHOWE	SECTIO	OTHE
О.	TION	NCY	ION	MALE	Е	LE	LE	RS	N 410)	R
		A-1 ^d	Theaters and other buildings for the performing arts and motion pictures	1 per 125	1 per 65	1 p	ər 200		1 per 500	1 service sink
1	Assembly	A-2 ^d	Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	1 per 40	1 p	er 75		1 per 500	1 service sink
			Restaurant s, banquet halls and food courts	1 per 75	1 per 75	1 p	er 200	_	1 per 500	1 service sink
			<u>Casinos</u>	<u>1 per</u>	<u>1 per</u>	<u>1 p</u>	er 250	_	<u>1 per</u>	1 servi

								I
			<u>100 for</u>	<u>50 for</u>	for the first		<u>1,000</u>	<u>ce sink</u>
			the first	the first	<u>750</u>			
			<u>400</u>	<u>400</u>	and 1 per			
			<u>and 1 p</u>	<u>and 1 p</u>	500 for the			
			<u>er 250</u>	<u>er 150</u>	<u>remainder</u>			
			for the	for the	exceeding			
			<u>remain</u>	remain	750			
			der	<u>der</u>				
			exceedi	exceedi				
			ng	ng 400				
			400	-				
	A-3 ^d	Auditorium s without perma- nent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasium s	1 per 125	1 per 65	1 per 200		1 per 500	1 service sink
		Passenger terminals and transportati on facilities	1 per 500	1 per 500	1 per 750	_	1 per 1,000	1 service sink
ions of table not s		Places of worship and other religious services	1 per 150	1 per 75	1 per 200	_	1 per 1,000	1 service sink

(Portions of table not shown remain unchanged)

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.



- The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum d. number of facilities required.
- For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required. e.

Reason: The Plumbing Fixture Count Table 403.1 (IBC [P] 2902.1) does not address casinos as a specific use. The building codes are beginning to recognize the unique nature of the use and occupancy for these structures; as an example the code recognizes an occupant load factor of 1:11 for gaming areas. Casinos have been constructed outside of Las Vegas for years and it appears that this trend is continuing nationally. A fixture count for this use is a necessary addition to the code.

As an A-2 occupancy, the code user is currently required to select either the Restaurants/Banquet Halls or Nightclubs/Bars uses under the A-2 occupancy in Table 403.1 (IBC [P] 2902.1) to set fixture counts, 1:75 and 1:40, respectively. The fixture counts provided in this amendment closely resemble the fixture count table used in the Southern Nevada, including the Las Vegas strip. There has been no history in Las Vegas of long lines at Casino restrooms. Casinos represent a unique place where restaurants, gaming, retail and shows are combined into one expansive building. However, even with large crowds on gaming floors, restroom facilities are not so overcrowded as to produce long lines.

Specifically, for a 30,000-ft² Casino, Table 403.1 (IBC [P] 2902.1) would require 152% of the number of fixtures that are currently required if Casinos are tabulated as large assembly space (nightclub/bar). As a restaurant or banquet hall, Table 403.1 (IBC [P] 2902.1) would require 238% of the number of fixtures required by Table 403.1 (IBC [P] 2902.1).

This amendment also accounts for increase usage and need for female restroom similar to A-4 and A-5 occupancies.

Cost Impact: Will not increase the cost of construction

This proposal provides a more lenient fixture count for casinos, so the cost of construction would presumably decrease.



Committee Action:

Disapproved

Committee Reason: Casinos can have numerous types of uses within the casino building. Putting all casinos under the same row doesn't seem to be what the proponent is intending to accomplish.

Assembly Action:

None

Public Comments

Public Comment 2:

Kevin McOsker, representing Southern Nevada Chapter of ICC (ktm@ClarkCountyNV.gov) requests Approve as Modified by this Public Comment.

Modify as follows:

	MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES ^a (See Sections 403.1.1 and 403.2)									
				WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVA	TORIES	BATHTUB S/	DRINKIN G FOUNTAI N (SEE	
NO	CLASSIFICATI	OCCUPAN	DESCRIPTI		FEMAL	MAL	FEMAL	SHOWER	SECTION	
	ON	CY	ON	MALE	Е	Е	Е	S	410)	OTHER
1	Assembly	A-1 ^d	Theaters and other buildings for the performing arts and	1 per 125	1 per 65	1 p	er 200	_	1 per 500	1 service sink

TABLE 403.1 (403.1)

								1	
			motion pictures						
			Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	1 per 40	1 per 75	_	1 per 500	1 service sink
		A-2 ^d	Restaurants, banquet halls and food courts	1 per 75	1 per 75	1 per 200	_	1 per 500	1 service sink
		A-2	Casino s <u>Gaming</u> <u>Areas</u>	1 per 100 for the first 400 and 1 pe r 250 for the remaind er exceedin g 400	1 per 50 for the first 400 and 1 pe r 150 for the remaind er exceedin g 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		1 per 1,000	1 servic e sink
	A-3 ^d	A-3 ^d	Auditoriums without perma- nent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	1 per 125	1 per 65	1 per 200		1 per 500	1 service sink
			Passenger terminals and transportatio n facilities	1 per 500	1 per 500	1 per 750	_	1 per 1,000	1 service sink
			Places of	1 per	1 per 75	1 per 200	—	1 per	1

		ship and	150		1,000	service
	othe	er				sink
	relig	ious				
	serv	rices				

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.

- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.

Commenter's Reason: A fixture count for a casino gaming area is not currently defined in the code. This proposal was added to provide a fixture count for this specific use. With the current proposal, the term "Casino" was modified to "Casino Gaming Areas" to provide more clarity to the proposed intent. The term "Gaming Area" was approved by the IBC – Egress Committee in code proposal E167-15. The Plumbing Committee disapproved the original proposal because the term "Casino" was inclusive of the gaming area and the other uses in a "Casino" (including: nightclubs, theaters, restaurants, convention areas, and retail establishments). The gaming areas is the primary use of a "Casino" and yet this use is not defined in Table 29-A. Currently, casino gaming is allowed in 48 of the 50 United States and the code user is not provided adequate direction with respect to the fixture count for this use. Clark County, including the Las Vegas strip, has locally amended the fixture count table, and this proposal is very similar to the Southern Nevada amendment which has been successful in the region for more than 20 years.



P30-15

AMPC2

Code Change No: P33-15

Original Proposal

Section: Table 403.1 (IBC Table 2902.1)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

TABLE 403.1

Revise as follows:

	MINIMUN	NUMBER OF	REQUIRED PLU	MBING	FIXTURES	Sª (See S	Sections 4	03.1.1 and 4	03.2)	1
				WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVATORIES		BATHTUBS	DRINKING FOUNTAIN (SEE SECTION	
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	MALE	FEMALE	SHOWERS	410)	OTHER
4	Factory and industrial		Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials					(see Section 4 11)		
8	Storage	S-1 S-2	Structures for the storage of goods, warehouses, store- house and freight depots. Low and Moderate Hazard.		<u>.</u>			See Section 411 —		

(Portions of table and notes not shown remain unchanged)

Reason: This proposal resolves long standing confusion about what Table 403.1 requires for Showers in Factory and Storage facilities. The Table never intended to require showers but was only directing readers to the safety shower section (Section 411) in case the building designer was going to use safety showers in the design of the building. The note has no purpose in this table. Such notes could be put in the table for every other type of fixture that doesn't indicate a ratio or quantity. The note needs removed.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or



portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 87.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

	Report of Committee Action Hearings]
Committee Action:		Approved as Submitted
Committee Reason: The committee agree	es with the proponent's reason statement.	
Assembly Action:		None
	Final Action Results	
Р	33-15	AS

Code Change No: P34-15

Original Proposal

Section: Table 403.1 (IBC Table 2902.1)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

	TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES® (See Sections 403.1.1 and 403.2)												
				WATER CLOSETS (URINALS: SEE		•			DRINKI NG FOUNT AIN (SEE				
N O.	CLASSIFICAT ION	OCCUPAN CY	DESCRIPTI ON	MAL E	FEMA LE	MAL E	FEMA LE	SHOWER S		OTHE R			
		A-1 ^e	Theaters and other buildings for the performing arts and motion pictures										
1	Assembly	A-2 ^d	Nightclubs, bars, taverns, dance halls and buildings for similar purposes										
			Restaurants , banquet halls and food courts										
		A-3 ^d	Auditoriums without perma- nent seating, art galleries, exhibition halls,										

museums, lecture halls, libraries, arcades and gymnasium s			
Passenger terminals and transportati on facilities			
Places of worship and other religious services			

				WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVATORI ES				
NO.	CLASSIFICAT ION	OCCUPAN CY	DESCRIPTI ON	MAL E	FEMA LE	MAL E	FEMA LE	SHOWER S	(SEE SECTIO N 410)	OTH ER
1		A-4	Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities							
(cont .)	Assembly	A-5	Stadiums, amusement parks, bleachers and grandstand s for outdoor sporting events and activities							
2	Business	₽	Buildings for the transaction							

		T	<u>г т</u>	r	r	
			of business, professional services, other services involving merchandis e, office buildings, banks, light industrial and similar uses			
3	Educational	E	Educational facilities			
4	Factory and industrial	F-1 and F- 2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials			
		I-1	Residential care			
			Hospitals, ambulatory nursing home care recipient			
		l-2	Employees, other than residential care ^b			
5	5 Institutional		Visitors, other than residential care			
		-3 -3	Prisons ^b Reformitori es, detention centers, and correctional centers ^b Employees ^b			

		1-4	Adult day care and child day care							
				CLC (URI SEC	ATER DSETS INALS: SEE CTION 19.2)	LAVA	ATORIE S	BATHTU BS/	DRINKI NG FOUNT AIN (SEE	
N O.	CLASSIFICAT ION	OCCUPAN CY	DESCRIPTI ON	MAL E	FEMA LE	MAL E	FEMA LE	SHOWER S	SECTIO N 410)	OTHE R
6	Mercantile	м	Retail stores, service stations, shops, salesrooms, markets and shopping centers							
		R-1	Hotels, motels, boarding houses (transient)							
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)							
7	Residential	R-2	Apartment house							
/	INESIDEI III AI	R-3	Congregate living facilities with 16 or fewer persons							
		R-3	One- and two-family dwellings and lodging houses with five or fewer guestrooms							
		R-4	Congregate	<u>1 р</u>	er 10	<u>1-р</u>	er 10	1 per 8	1 per	4

			l iving facilities with 16 or fewer persons		100	servic e sink
8	Storage	S-1 S-2	Structures for the storage of goods, warehouses , store- house and freight depots. Low and Moderate Hazard.			

(Portions of table not shown remain unchanged)

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile occupancies <u>classifications</u> with an occupant load of 15 or fewer, service sinks shall not be required.

Reason: Section 403.1 was revised for the 2015 IPC to direct the reader to the use of a building rather than its IBC occupancy classification (Group) for determining the number of plumbing fixtures. The occupancy column is Table 403.1 is now really confusing as Section 403.1 says to use the Description column but this Occupancy column implies that the IBC classification is to be used. This proposal removes the occupancy column for clarity and coordination with what Section 403.1 states.

Table 403.1 will still retain the classification column, although that column doesn't seem to add any clarification to the table as the IPC doesn't speak of "classifications" for various uses. However, as Table 403.1 is reprinted in the IBC (as Table [P] 2902.1), the classification column might incorrectly lead IBC readers to assume that the IBC occupancy classification (Group) has something to do with selection of an appropriate row for plumbing fixture requirements. IBC Section [P] 2902.1 is identical to Section 403.1 in the IPC but if the reader neglects reading the IBC section and jumps directly to the table, the existence of classification column could cause a misunderstanding.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 191.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



100

Report of Committee Action Hearings

Committee Action:

Committee Reason: Based on changes made to Section 403.1 for the 2012 IPC, the occupancy classification of a building space no longer impacts the selection of the row in Table 403.1 for determining the number of plumbing fixtures. The use description does, therefore, the occupancy classification column needs removed from the table to avoid confusion about how the table is to be used.

Public Comments

Assembly Action:

Public Comment 1:

Carl Baldassarra, P.E., FSFPA, representing Code Technologies Committee (CTC@iccsafe.org); John Williams, CBO, representing Adhoc Healthcare Committee (AHC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as follows:

	MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES [®] (See Sections 403.1.1 and 403.2)											
			WATER CLOSETS (URINALS: SEE SECTION 419.2)		LAVAT	ORIES		DRINKING FOUNTAIN (SEE				
NO.	CLASSIFICATION	DESCRIPTION	MALE	FEMALE	MALE	FEMALE	BATHTUBS/ SHOWERS	SECTION 410)	OTHER			
2	Business	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial, <u>ambulatory</u> <u>care</u> and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		first 80 per 80 rema	for the		1 per 100	1 service sink ^e			
		Residential careCustodial care facilities	1 p	er 10	1 pe	er 10	1 per 8	1 per 100	1 service sink			
5	Institutional	<u>Medical care</u> recipients inhospitals , ambulatory nursing homes care recipient	1 per room ^c 1 per 25		1 per room ^c		1 per 15	1 per 100	1 service sink per floor			
		Employees , in <u>hospitals and</u> <u>nursing</u> <u>homes</u> other than			1 pe	er 35	_	1 per 100	_			

TABLE 403.1 (403.1) MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections 403.1.1 and 403.2)

Disapproved

None

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	1				1	
	residential care ^b					
	Visitors <u>in</u> <u>hospitals and</u> <u>nursing homes, other than</u> residential care	1 per 75	1 per 100	_	1 per 500	
	Prisons ^b	1 per cell	1 per cell	1 per 15	1 per 100	1 service sink
	Reformitories, detention centers, and correctional centers ^b	1 per 15	1 per 15	1 per 15	1 per 100	1 service sink
	Employees in reformitories, detention centers and correctional centers ^b	1 per 25	1 per 35		1 per 100	_
	Adult day care and child day care	1 per 15	1 per 15	1	1 per 100	1 service sink

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the International Building Code.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.

- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile classifications with an occupant load of 15 or fewer, service sinks shall not be required.

Commenter's Reason: This is intended as clarification only. Without the distinction between the Group I requirements, which row to use for requirements is not clear. For example, two different rows are specified for 'employees'. The phases used are consistent with the defined terms for custodial care and medical care facilities.



P34-15

AMPC1



Code Change No: P36-15 Part I

Original Proposal

Section: 202 (New), Table 403.1 (IBC 2902.1), 403.1.1 (New) (IBC 2902.1.1 (New))

Proponent: Cornelia Orzescu, Town of Parker, representing Colorado Chapter of the ICC, Code Change Committee, representing Town of Parker (corzescu@parkeronline.org)

THIS IS A 2 PART CODE CHANGE. BOTH PARTS WERE HEARD BY THE IPC COMMITTEE.

Add new text as follows:

403.1.1 Outdoor public swimming pool fixtures Outdoor public swimming pools used for aquatic recreation and having a water area of less than 7500 ft² (697 m²) shall have not less than one water closet, one urinal, one lavatory and one shower for males and not less than two water closets, one lavatory and one shower for females.

Outdoor public swimming pools used for aquatic recreation having a water area of 7500 ft² (697 m2) or more shall have, for every 7500 ft² (697 m²) or portion thereof, not less than 0.7 water closets, one urinal, 0.85 lavatory and one shower for males and not less than two water closets, one lavatory and one shower for females. Where the result of a fixture calculation is a portion of a whole number, the result shall be rounded up to the nearest whole number.

Section 403.1.1 (Fixture calculations) shall not apply where complying with this section.

Add new definition as follows:

SECTION 202 DEFINITIONS

PUBLIC SWIMMING POOL A pool, other than a residential pool, that is intended to be used for swimming or bathing and is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use.

Revise as follows:

				WATER CLOSETS (URINALS: SEE SECTION 419.2)		EE LAVATORIE		BATHTUB		
NO.	CLASSIFICATI ON	OCCUPAN CY	DESCRIPTI ON	MALE	FEMALE		FEMAL E	S/ SHOWER S	N (SEE SECTION 410)	OTHE R
1 (cont .)	Assembly	A-4	skating rinks, pools and tennis courts for indoor sporting	1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainde	1 per 200	1 per 150	Ι	1 per 1,000	1 servic e sink

TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections 403.1.1 and 403.2)

		activities	remainde r exceedin g 1,500	exceedin					
	A-5	amusement parks, bleachers and grandstands for outdoor sporting events and activities ¹	and 1 per 120 for the remainde	1,520 and 1 per 60 for the	1 per 200	1 per 150	_	1 per 1,000	1 servic e sink

(Portions of table not shown remain unchanged)

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.
- f. For outdoor public swimming pools used for aquatic recreation, see Section 403.1.1

Reason: Trying to figure out a plumbing fixture count associated with outdoor public swimming pools when there is not a "building occupant load" is a doubting task. The proposed fixture count is based on the 2015 International Swimming Pool and Spa Code provisions Section 609 for Toilet rooms and bathrooms.

Note f is added to Table 403.1 to point the code user to this new section and to not attempt to use "building occupant load" numbers, Table 403.1 fixture ratios for A-5 and the calculation method of existing 403.1.1. That will result in far too many fixtures for an outdoor public swimming pool application.

This new section would not apply to buildings that might be associated with a public pool such as a club house. Instead of just referencing the 2015 ISPSC for the number of required plumbing fixtures, the verbage is included in the IPC for jurisdictions that otherwise will not adopt or have not adopted the 2015 ISPSC.

This proposed language for the IBC will hopefully be carried into Chapter 29 the 2018 IBC as it is integral to the information that is normally in IBC Chapter 29.

Bibliography:

Part I: Title of book- 2015 International Swimming Pool and Spa Code Year published-2014 Page #35

Cost Impact:

Will not increase the cost of construction

Because this proposal is not based on an occupant load, this will result in a cost decrease as compared to the cost of the number of required fixtures based on IPC Table 403.1.



Report of Committee Action Hearings

Committee Action:

Disapproved

Committee Reason: There is a terminology issue as "aquatic recreation" seems to be pointing to pools only in aquatic recreational facilities. The ISPSC already covers those requirements so this proposal isn't needed-the requirements already covered.

Assembly Action:

None



Public Comment 1:

Cornelia Orzescu, representing Colorado Chapter of the ICC, Code Development/Change Committee (corzescu@parkeronline.org) requests Approve as Modified by this Public Comment.

Modify as follows:

TABLE 403.1 (403.1)

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections 403.1.1 and 403.2)

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the *International Building Code*.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.
- f. For outdoor public swimming pools used for aquatic recreation, see Section 403.1.1. The required number and type of plumbing fixtures for outdoor public swimming pools shall be in accordance with Section 609 of the International Swimming Pool and Spa Code.

403.1.1 Outdoor public swimming pool fixtures. Outdoor public swimming pools used for aquatic recreation and having a water area of less than 7500 ft2 (697 m2) shall have not less than one water closet, one urinal, one lavatory and one shower for males and not less than two water closets, one lavatory and one shower for females.

Outdoor public swimming pools used for aquatic recreation having a water area of 7500 ft2 (697 m2) or more shall have, for every 7500 ft2 (697 m2) or portion thereof, not less than 0.7 water closets, one urinal, 0.85 lavatory and one shower for males and not less than two water closets, one lavatory and one shower for females. Where the result of a fixture calculation is a portion of a whole number, the result shall be rounded up to the nearest whole number.

Section 403.1.1 (Fixture calculations) shall not apply where complying with this section.

Commenter's Reason: The Committee did not agree with the term recreational aquatic facilities and felt that the fixture count is already addressed by the International Swimming Pool and Spa Code(ISPSC). Foot note f will direct the user to determine the fixture count as defined by the ISPSC based on the water area not pool occupant and deck occupant combined.

Outdoor public swimming pool fixtures Outdoor public swimming pools used for aquatic recreation and having a water area of less than 7500 ft2 (697 m2) shall have not less than one water closet, one urinal, one lavatory and one shower for males and not less than two water closets, one lavatory and one shower for females.

Outdoor public swimming pools used for aquatic recreation having a water area of 7500 ft2 (697 m2) or more shall have, for every 7500ft2 (697 m2) or portion thereof, not less than 0.7 water closets, one urinal, 0.85 lavatory and one

shower for males and not less than two water closets, one lavatory and one shower for females. Where the result of a fixture calculation is a portion of a whole number, the result shall be rounded up to the nearest whole number.

The code references other codes all the time. For example IRC refers to the International Swimming Pool and Spa code in Section R326. A new section 101.4.8 referencing the pool code will be submitted in Group B changes.

Analysis: The Disapproval of Part II of this proposal has no meaning as Chapter 29 of the IBC is entirely controlled by the Plumbing Code Development Committee. Approval of Part I of this Proposal or Approval of the Public Comment for this proposal will result in in the changes being *automatically* applied to Chapter 29 of the IBC.



P36-15 Part I

AMPC1



Code Change No: P40-15

Original Proposal

Section: 403.1.2 (IBC 2902.1.2)

Proponent: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

Revise as follows:

403.1.2 Family or assisted-use Single-user toilet facility and bath-bathing room fixtures. Fixtures The plumbing fixtures located within in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the International Building Code are permitted to be included in shall contribute towards the total number of required plumbing fixtures for either the male a building or female occupants in assembly tenant space. Single-user toilet facilities and mercantile occupancies bathing rooms, and family or assisted-use toilet and bathing rooms shall be identified for use by either sex.

Reason: The use of single-user toilets has become increasingly beneficial system of providing not only better facilities, but more user friendly facilities. A higher level of privacy is achieved, the facilities are typically better maintained by the users, and the efficiencies of having unisex facilities where the users are of a dominate sex are significantly increased.

Similarly, this code change removes the limitation of use for family or assisted-use facilities to mercantile and assembly occupancies. Families or persons requiring assisted-use can be found in various occupancies and should be allowed as providing required toilets. Currently, when there are multiple single-user toilets 50% of them are required to be accessible. If this is compared with the standard ganged toilet rooms where there are multiple toilet fixtures, the number of accessible toilets and thus a greater number of useful toilets by everyone will be increased by this change.

Cost Impact: Will not increase the cost of construction

The single-user toilet room will reduce the cost of construction. Based on the minimum number of toilets, the larger general area required for circulation for multi-fixtured toilet rooms can be eliminated in large part because areas such as sight-blocking and the multiplier for urinals for credit will be eliminated in multiple single-user toilet designs.

Report of Committee Action					
Hearings					

Committee Action:

Committee Reason: The proposed language results in not knowing how to calculate the number of males and females. If these new requirements result in a greater minimum number of plumbing fixtures, that will result in additional cost. More cost would conflict with the cost impact statement on the proposal.

Assembly Action:

None

Disapproved

Public Comments

Public Comment 2:

Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com) requests Approve as Modified by this Public Comment.

Modify as follows:

403.1.2 Single-user toilet facility and bathing room fixtures. The plumbing fixtures located in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the International Building Code, shall contribute towards the total number of required plumbing fixtures for a building or tenant space. Single-user



toilet facilities and bathing rooms, and family or assisted-use toilet and bathing rooms shall not be required to be identified for exclusive use by either sex.

Commenter's Reason: This is a good change and addresses many issues by allowing single occupant toilet rooms rather than grouped toilet rooms. This should be allowed as a designer option. The same number of fixtures are provided and waiting can be reduced by allowing either sex to use the toilet room. This will also addresses the concerns regarding transgender individuals as identified in Code Change P43.

P40-15 AMPC2



Code Change No: P44-15

Original Proposal

Section: 403.2 (IBC 2902.2)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

- 1. Separate facilities shall not be required for dwelling units and sleeping units.
- 2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
- 3. Separate facilities shall not be required in mercantile <u>occupancies in which the maximum</u> <u>occupant load is 100 or fewer.</u>
- Separate facilities shall not be required in mercantile <u>business</u> occupancies in which the maximum occupant load is <u>100-25</u> or fewer.

Reason: It has been long standing practice in the codes to group business and mercantile occupancies in regards to plumbing fixtures. It was not clear why the number was changed from 50 to 100 in the 2012 IPC for mercantile with the IBC occupant load remaining the same. These revisions are made to allow for small business occupancies to provide a single toilet facility for up to 50 occupants and reduce the number to the previous value of 50 for mercantile occupancies.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 98.

Cost Impact: Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, for mercantile occupancies having an occupant load of greater than 50 and less than 101, separate toilet facilities (for male and female) will be required whereas in the current code that range does not require separate facilities. Extra space and duplicate fixtures, piping and associated materials and labor will increase the cost of construction for those mercantile establishments in that range

Report of Committee Action							
Hearings							

Committee Action:

Committee Reason: There is no real technical justification to change mercantile back to 50 when it was just changed to 100 in the 2012 edition. A 100 person occupant load is a 6000 square foot tenant space which is still fairly small as far as typical mercantile tenant spaces are today. Requiring separate male/female toilet rooms for those spaces would be a undue hardship.

Assembly Action:

As Submitted

Disapproved

INTERNATIONAL CODE COUNCIL®
Public Comments

Public Comment 1:

Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Committee (PMGCAC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as follows:

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

- 1. Separate facilities shall not be required for dwelling units and sleeping units.
- 2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
- Separate facilities shall not be required in mercantile and business occupancies in which the maximum occupant load is 50 100 or fewer.
- 4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.

Commenter's Reason: The main intent of the original proposal was to address business occupancies. Therefore, this public comment returns Item 3 to what is currently in the code and adds a new Item 4 to cover business occupancies only. The toilet facility arrangements in some small business tenant spaces have male and female toilet rooms on opposite ends of the tenant space, typically creating unnecessary travel from the employee work area for one of the sexes. Labeling the toilet facilities (for each sex) is unnecessary in this type of small business environment.



P44-15

AMPC1



Code Change No: P45-15

Original Proposal

Section: 403.3 (IBC 2902.3)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

403.3 Required public toilet facilities. Customers For structures and tenant spaces intended for *public* utilization, customers, patrons and visitors shall be provided with *public* toilet facilities in. Employees associated with structures and tenant spaces intended for public utilization shall be provided with toilet facilities. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 403 for all users. Employees shall be provided with toilet facilities in all occupancies. Employee toilet facilities shall be either separate or combined employee and *public* toilet facilities.

Exception: Public toilet facilities shall not be required in for:

- 1. Open or enclosed parking garages where there are no parking attendants.
- 2. Structures and tenant spaces intended for quick transactions, including takeout, pickup and dropoff, having a public access area less than or equal to 300 square feet (28 m²).

Reason: This section is being reorganized for clarity of the intent of the section which simply is to require public and employee toilet facilities, as applicable, for buildings and tenant spaces. The location of the required toilet facilities is covered by Sections 403.3.1 through 403.3.4. This reorganization eliminates the word "in" in the first sentence of the existing language and in the Exceptions lead-in sentence because this simple term has frequently been interpreted to mean that toilet facilities had to be within the building or tenant space that created the plumbing fixture demand. However, this interpretation is contrary to many past and current practices of toilet facilities being located in buildings other than the building generating the requirement for plumbing fixtures.

Examples are:

- An amusement park with numerous buildings served by several centralized toilet facility buildings.
- An open mall building having multiple tenant spaces, served by one central toilet facility.
- A covered mall building having numerous tenant spaces, served by several centralized toilet facilities.
- A factory outlet "mall" area with several strip buildings where the toilet facilities to serve all of the buildings are located in only one of the strip buildings.

Note that Section 403.3.1 states "Access to the required facilities shall be from within the building or from the exterior of the building."

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 90.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



	Report of Committee Action Hearings	
Committee Action:		Approved as Submitted
Committee Reason: The committee agrees	with the proponent's reason statement.	
Assembly Action:		None
	Final Action Results	
P4	5-15	AS

Code Change No: P46-15 Part I

Original Proposal

Section: 403.6 (New)

Proponent: Ronald Geren, RLGA Technical Services, LLC, representing Self (ron@specsandcodes.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IBC-GENERAL COMMITTEE.

Add new text as follows:

403.6 Fixture distribution. Where two or more toilet rooms are provided for each sex, the required number of lavatories shall be distributed proportionately to the required number of water closets.

Reason: The proposed addition is intended to prevent the uneven distribution of plumbing fixtures for each sex within two or more toilet facilities. For example, if 6 water closets and 3 lavatories are required for males, they cannot be distributed as follows:

- Male Toilet Facility 1: 4 water closets and 1 lavatory
- Male Toilet Facility 2: 2 water closets and 2 lavatories

The correct distribution shall be as follows:

- Male Toilet Facility 1: 4 water closets and 2 lavatories
- Male Toilet Facility 2: 2 water closets and 1 lavatory

Cost Impact:

Will not increase the cost of construction. The same number of fixtures is required, so there is not an increase in cost.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: This is a necessary code addition to make sure that fixtures other than water closets are proportionally distributed where multiple toilet facilities are in a building.

Assembly Action:

Final Action Results

P46-15 Part I

None

111

Approved as Submitted

AS

art I

Code Change No: P46-15 Part II

Original Proposal

Section: 2902.3.7 (New)

Proponent: Ronald Geren, RLGA Technical Services, LLC, representing Self (ron@specsandcodes.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IBC-GENERAL COMMITTEE.

Add new text as follows:

2902.3.7 Fixture distribution. Where two or more toilet rooms are provided for each sex, the required number of lavatories shall be distributed proportionately to the required number of water closets.

Reason: The proposed addition is intended to prevent the uneven distribution of plumbing fixtures for each sex within two or more toilet facilities. For example, if 6 water closets and 3 lavatories are required for males, they cannot be distributed as follows:

- Male Toilet Facility 1: 4 water closets and 1 lavatory
- Male Toilet Facility 2: 2 water closets and 2 lavatories

The correct distribution shall be as follows:

- Male Toilet Facility 1: 4 water closets and 2 lavatories
- Male Toilet Facility 2: 2 water closets and 1 lavatory

Cost Impact:

Will not increase the cost of construction. The same number of fixtures is required, so there is not an increase in cost.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee approved this proposal to be consistent with previous action by the IPC Committee on Part I of the proposal.

Assembly Action:

Final Action Results

P46-15 Part II

AS

None

112

Approved as Submitted

Code Change No: P48-15

Original Proposal

Section: 405.3.1

Proponent: David Beahm, Building Official, Warren County, representing Virginia Plumbing and Mechanical Inspectors Association, Virginia Building Code Officials Association and Warren County Virginia (dbeahm@warrencountyva.net)

Revise as follows:

405.3.1 Water closets, urinals, lavatories and bidets. A water closet, urinal, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition, vanity or other obstruction, or closer than 30 inches (762 mm) center to center between adjacent fixtures. There shall be not less than a 21-inch (533 mm) clearance in front of the water closet, urinal, lavatory or bidet to any wall, fixture or door. Water closet compartments shall be not less than 30 inches (762 mm) in width and not less than 60 inches (1524 mm) in depth for floormounted water closets and not less than 30 inches (762 mm) in width and 56 inches (1422 mm) in depth for wallhung water closets.

Exception: An accessible children's water closet shall be set not closer than 12 inches from its center to the required partition or to the wall on one side.

Reason: Both the 2003 and the 2009 ICC ANSI A117.1 indicate this reduced measurement and this exception allows the user to realize this allowance without having to go out of the IPC.

Cost Impact: Will not increase the cost of construction. This is a reference statement only and is already allowed within the associated referenced standard.



Committee Action:

Committee Reason: The committee agreed with the proponent's reason statement.

Assembly Action:

Final Action Results

P48-15

AS

Approved as Submitted

None



Code Change No: P49-15

Original Proposal

Section: 405.3.1, 405.3.5

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

405.3.1 Water closets, urinals, lavatories and bidets. A water closet, urinal, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition, vanity or other obstruction. Where partitions or other obstructions do not separate adjacent fixtures, or fixtures shall not be set closer than 30 inches (762 mm) center to center between adjacent fixtures. There shall be not less than a 21-inch (533 mm) clearance in front of the <u>a</u> water closet, urinal, lavatory or bidet to any wall, fixture or door. Water closet compartments shall be not less than 30 inches (1524 mm) in depth for floormounted water closets and not less than 30 inches (762 mm) in width and 56 inches (1422 mm) in depth for wallhung water closets.

405.3.5 Urinal partitions. Each urinal utilized by the *public* or employees shall occupy a separate area with walls or partitions to provide privacy. <u>The width between walls or partitions at each urinal shall be not</u> <u>less than 30 inches (762 mm)</u>. The walls or partitions shall begin at a height not greater than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

Exceptions:

- 1. Urinal partitions shall not be required in a single-occupant or family/assisted-use toilet room with a lockable door.
- 2. Toilet rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

Reason: Where partitions are required between adjacent fixtures, the spacing cannot be 30 inches center-to-center between fixtures. We have heard about contractors who have been caught off guard by this, not knowing about the thickness of a partition (because those items are typical not there "in the rough"), only to find out at final inspection that they have a violation because someone later came in and installed the required partitions. This happens frequently with multiple urinal layouts. The added text clarifies that the width between partitions must be 30 inches and the spacing between adjacent fixtures is only applicable where partitions will not be installed.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 140.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



	Report of Committee Action Hearings	
Committee Action:		Approved as Submitted
Committee Reason: The committee agreed	with the proponent's reason statement.	
Assembly Action:		None
	Final Action Results	
P45	9-15	AS

INTERNATIONAL CODE COUNCIL®

Code Change No: P50-15

Original Proposal

Section: 405.4.1

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

405.4.1 Floor flanges. Floor flanges for water closets or similar fixtures shall be not less than 0.125 inch (3.2 mm) thick for brass copper alloy, 0.25 inch (6.4 mm) thick for plastic and 0.25 inch (6.4 mm) thick and not less than a 2-inch (51 mm) caulking depth for cast iron or galvanized malleable iron.

Floor flanges of hard lead shall weigh not less than 1 pound, 9 ounces (0.7 kg) and shall be composed of lead alloy with not less than 7.75-percent antimony by weight. Closet screws and bolts shall be of brass copper alloy. Flanges shall be secured to the building structure with corrosion-resistant screws or bolts.

Reason: There are many different copper and copper-alloy compositions. Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

Cost Impact: Will not increase the cost of construction.

This proposal will not impact the cost of construction as this change is only a clarification of the name of a product.

Report of Committee Action		
Hearings		

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed with the proponent's published reason statement. Also, for consistency with the manufacturer's standards.

Assembly Action:

Final Action Results

P50-15

AS

Code Change No: P51-15 Part I

Original Proposal

Section: 405.4.3

Proponent: Angel Guzman Rodriguez, representing American Society of Mechanical Engineers

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

405.4.3 Securing wall-hung water closet bowls. Wallhung water closet bowls shall be supported by a concealed metal carrier that is attached to the building structural members so that strain is not transmitted to the closet connector or any other part of the plumbing system. The carrier shall conform to <u>ASME</u> A112.6.1M or ASME A112.6.2.

Reason: Update Section 405.4.3 by removing the reference to ASME A112.6.1M since the requirements from standard are now covered in A112.6.2. The A112.6.1M standard is longer published by ASME.

Standard ASME A112.6.1M–1997(R2008) Floor affixed Supports for Off-the-floor Plumbing Fixtures for Public Use will be automatically removed from Chapter 15 during processing of the 2018 IPC.

Cost Impact:

Will not increase the cost of construction. This will not increase the cost of construction since the proposal is editorial/updating in nature.

> Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P51-15 Part I

AS

Approved as Submitted

None

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Code Change No: P51-15 Part II

Original Proposal

Section: Table P2701.1, P2702.4

Proponent: Angel Guzman Rodriguez, representing American Society of Mechanical Engineers

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE P2701.1 PLUMBING FIXTURES, FAUCETS AND FIXTURE FITTINGS

MATERIAL	STANDARD
Floor-affixed supports for off-the-floor plumbing fixtures for public use	ASME A 112.6.1M
Framing-affixed supports for off-the-floor water closets with concealed tanks	ASME A 112.6.2

P2702.4 Carriers for wall-hung water closets. Carriers for wall-hung water closets shall conform to ASME A112.6.1 or ASME A112.6.2.

Reason: Update Section 405.4.3 by removing the reference to ASME A112.6.1M since the requirements from standard are now covered in A112.6.2. The A112.6.1M standard is longer published by ASME. Standard ASME A112.6.1M–1997(R2008) Floor affixed Supports for Off-the-floor Plumbing Fixtures for Public Use will be automatically removed from Chapter 15 during processing of the 2018 IPC.

Reason: Update Section 405.4.3 by removing the reference to ASME A112.6.1M since the requirements from standard are now covered in A112.6.2. The A112.6.1M standard is longer published by ASME.

Standard ASME A112.6.1M–1997(R2008) Floor affixed Supports for Off-the-floor Plumbing Fixtures for Public Use will be automatically removed from Chapter 15 during processing of the 2018 IPC.

Cost Impact:

Will not increase the cost of construction.

This will not increase the cost of construction since the proposal is editorial/updating in nature.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P51-15 Part II

AS



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Approved as Submitted

Code Change No: P52-15

Original Proposal

Section: 405.5 (New)

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com)

Add new text as follows:

405.5 Plumbing fixtures with a pumped waste Plumbing fixtures with a pumped waste shall comply with ASME A112.3.4/CSA B45.9. The plumbing fixture with a pumped waste shall be installed in accordance with the manufacturer's instructions.

Reason: ASME A112.3.4/CSA B45.9 was added to the code during the last revision. This standard covers macerating toilet systems and fixtures with a pumped waste. The requirements for pumped waste systems were added during the latest revision of the standard.

The fixtures with a pumped waste are typically installed during renovation or where pipe pitch cannot be achieved. Often times, plumbing fixtures with pumped waste are accessible fixture add for the physically challenged of for the aging in place. These fixtures must be installed in accordance with the manufacturer's instructions. There are limitation on the length of the pumped waste drain. There can also limitation on the location of the fixture.

This section will compliment Section 712.4.1.

Cost Impact: Will not increase the cost of construction. Since a fixture with a pumped waste is optional, there is no cost impact.

> Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P52-15

AS

Approved as Submitted

None

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Code Change No: P53-15 Part II

Original Proposal

Section: P2704, P2704.1, P3201.1

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

SECTION P2704 ACCESS TOSLIP JOINT CONNECTIONS

P2704.1 General Slip joints. Slip joints connections shall be installed only for tubular waste piping and only between the trap outlet of a fixture and the connection to the drainage piping. Slip joint connections shall be made with an *approved* elastomeric sealing gasket and shall be installed only on the trap outlet, trap inlet and within the trap seal. Fixtures with concealed slip-joint <u>Slip joint</u> connections shall be provided with accessible. Such access shall provide an access panel or utility space opening that is not less than 12 inches (305 mm<u>305mm</u></u>) in its smallest dimension or other *approved* arrangement so as to provide access to the slip connections for inspection and repair.

P3201.1 Design of traps. Traps shall be of standard design, shall have smooth uniform internal waterways, shall be self-cleaning and shall not have interior partitions except where integral with the fixture. Traps shall be constructed of lead, cast iron, copper or copper alloy or *approved* plastic. Copper or copper alloy traps shall be not less than No. 20 gage (0.8 mm) thickness. Solid connections, slip joints and couplings shall be permitted to be used on the trap inlet, trap outlet, or within the trap seal. Slip joints Trap having slip joint connections shall be accessible comply with Section P2704.1.

Reason: From the existing wording of this section, some inspectors have the misconception that the code doesn't allow slip joints to be installed upstream of a trap inlet nor at the connection of the trap "arm" to the drainage piping. For example, consider a typical lavatory where the drainage piping in the wall was roughed in at a fairly low elevation and the tailpiece from the fixture outlet is not very long. Normally, a slip joint end, tubular waste extension piece is installed to make the connection to the end of the fixture tailpiece to the inlet of the trap. However, if the existing wording is read literally, the code doesn't allow a slip joint above the trap inlet: *only at the trap inlet, outlet and within the trap seal.* Although it would be ideal to have the rough-in elevation of the drain in the wall "coordinate" with the elevation of the fixture outlet tailpiece piece, it is not realistic to make this happen every time. Sometimes the rough-in installer doesn't know the height of the cabinetry for the lavatory or the model of the drain assembly because neither have been chosen yet by the builder designer.

The revised wording allows for what is a common practice for fixture installation in the plumbing industry.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC ltem 1.

Cost Impact:

Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

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Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P53-15 Part II

AS

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Code Change No: P56-15

Original Proposal

Section: 409.1, Chapter 14

Proponent: Julius Ballanco, representing Self (JBENGINEER@aol.com)

Revise as follows:

409.1 Approval. Commercial dishwashing machines shall conform to ASSE 1004 and NSF 3. <u>Residential</u> dishwashers shall conform to NSF 184.

Reference standards type: Add new standard(s) as follows:

NSF 184-2014 Residential Dishwashers

Reason: NSF 184 is the standard that regulates the performance of a residential dishwasher. Some of the requirements in this standard include achieving a minimum 99.999 percent or 5-log reduction of bacteria and reaching a final rinse temperature of 150° F. The sanitization performance is verified when the unit is operated on the sanitizing cycle

There are hundreds of residential dishwashers that have been certified to this standard.

Cost Impact: Will not increase the cost of construction. This simply adds the correct reference standard for residential dishwashers.

Analysis: A review of the standard proposed for inclusion in the code, NSF 184-10, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee	Action		
Hearings			

Committee Action:

Committee Reason: Dishwashing machines made to this standard will sanitize dishes better as they generate 150 degree F water.

Assembly Action:

Final Action Results

P56-15

AS

Approved as Submitted

None



Code Change No: P57-15

Original Proposal

Section: 409.3, 409.4 (New), 802.1.6

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com)

Revise as follows:

409.3 Waste connection. The waste connection of a <u>commercial</u> dishwashing machine shall comply with Section 802.1.6 or 802.1.7, as applicable.

Add new text as follows:

409.4 Residential dishwasher waste connection. The waste connection of a residential dishwasher shall connect directly to a wye branch fitting on the tailpiece of the kitchen sink, directly to the dishwasher connection of a food waste disposer, or through an air break to a standpipe. The waste line of a residential dishwasher shall rise and be securely fastened to the underside of the sink rim or counter top.

Delete without substitution:

802.1.6 Domestic dishwashing machines. Domestic dishwashing machines shall discharge indirectly through an *air gap* or *air break* into a waste receptor in accordance with Section 802.2, or discharge into a wye branch fitting on the tailpiece of the kitchen sink or the dishwasher connection of a food waste disposer. The waste line of a domestic dishwashing machine discharging into a kitchen sink tailpiece or food waste disposer shall connect to a deck-mounted air gap or the waste line shall rise and be securely fastened to the underside of the sink rim or counter.

Reason: The dishwasher waste connection requirements must be separated between a residential unit and a commercial unit. Commercial dishwashing machines are required to discharge through an indirect connection. The change to 409.3 will identify the indirect waste connections as only applying to commercial units. There is no change to the discharge requirements of a commercial dishwashing machine.

Residential units are technically identified as "residential dishwashers" not "domestic dishwashing machines." The standard regulating residential dishwashers is entitled, "Residential Dishwashers." There, the change is made in the terminology. The connection of a residential dishwasher has always been permitted to be a direct connection to a kitchen sink tailpiece or a dishwasher connection of a food waste disposer. The indirect connection has always been optional. Therefore, the waste connection requirements belong in Section 409.4, not Chapter 8. Chapter 8 is reserved for indirect connections that are required. Section 802.1.6 does not belong under indirect waste. The section specifically allows a direct connection for dishwashers. This is the common type of connection, not an indirect connection.

The indirect connection is a hold-over from when dishwashers were first introduced. It was incorrectly assumed that an indirect connection was necessary. However, the plumbing profession recognized that an indirect connection is not necessary.

Cost Impact: Will not increase the cost of construction

This has no impact on the cost of construction since the connections permitted for a residential dishwasher remain the same.



Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement. This change will keep readers from going to Chapter 8 for drain connection information.

Assembly Action:

None

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	Final Action Results]
P5	7-15	AS

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Code Change No: P58-15

Original Proposal

Section: 410.1, Chapter 14

Proponent: John Watson, Elkay, representing Elkay (john.watson@elkay.com)

Revise as follows:

410.1 Approval. Drinking fountains shall conform to ASME A112.19.1/CSA B45.2 or ASME A112.19.2/CSA B45.1 and water coolers shall conform to AHRI 1010ASHRAE 18. Drinking fountains, water coolers and water coolers water dispensers shall conform to NSF 61, Section 9. Electrically operated, refrigerated drinking water coolers water coolers and water dispensers shall be listed and labeled in accordance with UL 399.

Reference standards type: Add new standard(s) as follows:

ASHRAE 18-2008 (RA 2013) Methods of Testing for Rating Drinking-Water Coolers with Self Contained Mechanical Refrigeration

Reason: Products/Devices that are installed to meet the requirements of drinking fountains need to comply to the same approval requirements as drinking fountains and water coolers. With the addition of water dispensers during the 2015 code cycle, we inadvertently failed to outline such requirements.

Cost Impact: Will not increase the cost of construction.

This is a product certification issue which should not impact the product itself; therefore, there should be no cost increase.

Analysis: A review of the standard proposed for inclusion in the code, ASHRAE 18-2008 (RA 2013), with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action			
Hearings			

Committee Action:

Committee Reason: The proposal aligns the standard to what is the current standard used in the industry.

Assembly Action:

None

Approved as Submitted

Final Action Results

P58-15

AS



Code Change No: P63-15

Original Proposal

Section: 411.3 (New), Chapter 14

Proponent: Billy Smith, American Society of Plumbing Engineers Legislative Committee, representing American Society of Plumbing Engineers Legislative Committee (bsmith@aspe.org)

Add new text as follows:

411.3 Water supply. Where hot and cold water is supplied to an emergency shower or eyewash station the temperature of the water supply shall only be controlled by a temperature actuated mixing valve complying with ASSE 1071.

Reference standards type: Add new standard(s) as follows:

ASSE 1071 - 2012 Performance Requirements for Temperature Actuated Mixing Valves for Plumbed Emergency Equipment

Reason: The temperature of the water to emergency fixtures is regulated by ASSE 1071 devices. These devices raise the temperature of the cold water by the introduction of hot water. The cold water flows freely through the device. This feature is imperative to prevent the water supply to an emergency fixture from shutting off. The most important requirement of an emergency fixture is the constant flow of high volumes of water.

Without this code requirement, the water supply could be regulated with an ASSE 1070 device. This would be dangerous in that such a device could shut off the flow of water if there is a loss of either hot or cold water. By listing that the "only" means of protection is an ASSE 1071 device, no other mixing valve can be used.

The use of these devices is also consistent with the OSHA requirements for emergency fixtures.

Cost Impact: Will not increase the cost of construction

This merely adds the proper reference to the thermostatic mixing valve required for an emergency shower. This is already a requirement of OSHA.

Analysis: A review of the standard proposed for inclusion in the code, ASSE 1071, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify proposal as follows:

411.3 Water supply. The temperature of the <u>Where hot and cold</u> water supply is supplied to an emergency shower or eyewash station the temperature of the water supply shall only be controlled by a temperature actuated mixing valve complying with ASSE 1071.

Committee Reason:

For the Modification only:

The correct water temperature to a safety shower can be supplied by mixed hot and cold water supply, storage tanks or tankless water heaters. Only where hot and cold water supplies are mixed is there a need for a mixing valve.

For the proposal As Modified:

The committee agreed with the proponent's published reason statement.

Assembly Action:

Disapproved

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	Final Action Results	
P63-15		АМ

Code Change No: P67-15

Original Proposal

Section: [BG] 419.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Delete without substitution:

[BG] 419.3 Surrounding material. Wall and floor space to a point 2 feet (610 mm) in front of a urinal lip and 4 feet (1219 mm) above the floor and at least 2 feet (610 mm) to each side of the urinal shall be waterproofed with a smooth, readily cleanable, nonabsorbent material.

Reason: IBC Section 1210 already covers wall and floor materials in toilet facilities. There is no longer a need for this information to be in the IPC as the IPC does not have control of the section (as indicated by the [B] prior to the section number). Many code editions ago, this section was only in the IPC. However, it was later placed in the IBC as the IBC is concerned with the construction of interior spaces, toilet facilities being an interior space.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 134.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action			
Hearings			

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement. The plumbing code should not be involved with interior finishes of the building or space.

Assembly Action:		None
	Final Action Results	
	P67-15	AS



Code Change No: P69-15

Original Proposal

Section: 422.1, 609.1, 713.1

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Revise as follows:

422.1 Scope. This section shall govern those aspects of health care plumbing systems that differ from plumbing systems in other structures. Health care plumbing systems shall conform to the requirements of this section in addition to the other requirements of this code. The provisions of this section shall apply to the special devices and equipment installed and maintained in the following *occupancies*: nursing homes Group I-1, homes for the aged Group I-2, orphanages, infirmaries, first aid stations, psychiatric Group B ambulatory care facilities, elinics, professional medical offices of dentists and doctors, mortuaries, educational facilities, surgery, dentistry, research and testing laboratories, establishments and Group F facilities manufacturing pharmaceutical drugs and medicines and other structures with similar apparatus and equipment classified as plumbing.

609.1 Scope. This section shall govern those aspects of health care plumbing systems that differ from plumbing systems in other structures. Health care plumbing systems shall conform to the requirements of this section in addition to the other requirements of this code. The provisions of this section shall apply to the special devices and equipment installed and maintained in the following occupancies: nursing homes Group I-1, homes for the aged-Group I-2, orphanages, infirmaries, first aid stations, psychiatric Group B ambulatory care facilities, elinics, professional medical offices of dentists and doctors, mortuaries, educational facilities, surgery, dentistry, research and testing laboratories, establishments and Group F facilities manufacturing pharmaceutical drugs and medicines and other structures with similar apparatus and equipment classified as plumbing.

713.1 Scope. This section shall govern those aspects of health care plumbing systems that differ from plumbing systems in other structures. Health care plumbing systems shall conform to this section in addition to the other requirements of this code. The provisions of this section shall apply to the special devices and equipment installed and maintained in the following occupancies: nursing homes; homes for the aged; orphanages; infirmaries; first aid stations; psychiatric Group I-1, Group I-2, Group B ambulatory care facilities; clinics; professional, medical offices of dentists and doctors; mortuaries; educational facilities; surgery, dentistry, research and testing laboratories; establishments, and Group F facilities manufacturing pharmaceutical drugs and medicines; and other structures with similar apparatus and equipment classified as plumbing.

Reason: This proposal replaces a laundry list of healthcare related facilities with the corresponding occupancy groups. These occupancy groups are the ones most likely to have healthcare related activity that might have an impact on the supply and waste systems.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction. This proposal is clarification only, therefore, the cost of construction will not change.

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Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Approved as Submitted

Final Action Results

AS

P69-15

Code Change No: P70-15

Original Proposal

Section: 422.10

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Delete without substitution:

422.10 Special elevations. Control valves, vacuum outlets and devices protruding from a wall of an operating, emergency, recovery, examining or delivery room, or in a corridor or other location where patients are transported on a wheeled stretcher, shall be located at an elevation that prevents bumping the patient or stretcher against the device.

Reason: Clinical needs must determine the location of control valves, vacuum outlets and other plumbing control devices. The chance that a patient or stretcher could accidentally bump them is too broad for consistent interpretation. Given the need for ready access to some of these devices this could cause conflicts with other codes and standards, such as NFPA 99. In addition, the language cannot be consistently interpreted and enforced.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction.

This proposal removes a potentially hazardous requirement. There are many more options available, therefore, the cost of construction will not change.

Report of Committee Act	tion
Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed with the proponent's published reason statement. There are other measures that the healthcare industry uses to reduce or eliminate the problems that the current code section was intended to cover.

Assembly Action:	

Final Action Results

P70-15

AS



Code Change No: P71-15

Original Proposal

Section: 422.3

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Delete without substitution:

422.3 Protection. All devices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, distillation, processing, cooling, or storage of ice or foods, and that connect to either the water supply or drainage system, shall be provided with protection against backflow, flooding, fouling, contamination of the water supply system and stoppage of the drain.

Reason: This section is duplicative and therefore not needed. The issue of backflow protection is handled broadly in section 608. The items on this list are repeated almost verbatim in Section 608.3. We recommend the committee delete this section and let Section 608 serve the purpose of backflow/ back siphonage protection.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction. This section is a duplication, therefore, there is no change in construction costs.

Report of Committee Action Hearings **Committee Action:** Approved as Submitted Committee Reason: The committee agreed with the proponent's published reason statement. **Assembly Action:** None **Final Action Results** P71-15 AS

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Code Change No: P72-15

Original Proposal

Section: 422.4

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Revise as follows:

422.4 Materials. Fixtures designed for therapy, special cleansing or disposal of waste materials, combinations of such purposes, or any other special purpose, shall be of smooth, impervious, corrosion-resistant materials-and, where subjected to temperatures in excess of 180°F (82°C), shall be capable of withstanding, without damage, higher temperatures.

Reason: The phrase "combination of such purposes" is already addressed in the list and not needed. The phrase "or any other special purpose" is too broad. There are hundreds of specialty sinks throughout health care facilities. The phrase "and, where subjected to temperatures in excess of 180°F (82°C), shall be capable of withstanding, without damage, higher temperatures" is also proposed to be deleted. It does not provide any limits on how high of a temperature the fixture has to be designed for. In addition, water in excess of 180 degrees would not be found in a fixture as described in the list of what this section is applicable to. Temperatures in excess of 180 degrees would burn skin, so this is only within sealed systems.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction. This proposal is clarification only, therefore, the cost of construction will not change.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Healthcare procedures have evolved where 180 degree F water is not used.

Assembly Action:

None

Approved as Submitted





Code Change No: P73-15

Original Proposal

Section: 422.5, 422.9.1

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Delete without substitution:

422.5 Access. Access shall be provided to concealed piping in connection with special fixtures where such piping contains steam traps, valves, relief valves, check valves, vacuum breakers or other similar items that require periodic inspection, servicing, maintenance or repair. Access shall be provided to concealed piping that requires periodic inspection, maintenance or repair.

422.9.1 Sterilizer piping. Access for the purposes of inspection and maintenance shall be provided to all sterilizer piping and devices necessary for the operation of sterilizers.

Reason: This proposal deletes language that is too broad to be practically enforceable. All plumbing is required to have access for inspections, maintenance and repairs, therefore, it does not need to be repeated here. The term "all sterilizer piping" could be construed to mean all supply and waste piping. Current language could be read to require the entire length of the supply and waste pipes to be exposed.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction.

This proposal is clarification, therefore, the cost of construction will not change.



Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P73-15



AS

Code Change No: P75-15

Original Proposal

Section: 422.8

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Revise as follows:

422.8 Ice prohibited in soiled utility room. Machines for manufacturing producing ice, or any device for the handling or storage of ice, shall not be located in a soiled utility room.

Reason: Manufacturing is too large of a scale for anything provided in a health care environment. "Handling" should be deleted because this could be read to not allow pitchers that hold ice to be brought to the soiled linen room to clean.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction This proposal is clarification only, therefore, the cost of construction will not change.

Report of Committee	Action
Hearings	

Committee Action:

Approved as Modified

Modify proposal as follows:

422.8 Ice prohibited in solled utility room. producing plumbing appliances Machines for <u>Ice</u> producing ice, or any device for the storage of ice, plumbing appliances shall not be located in a solled utility room.

Committee Reason:

For the Modification only:

The code need only to be concerned with ice producing plumbing appliances (providing the water supply and drainage connections for such appliances).

For the proposal As Modified: The plumbing code cannot control the handling or storage of ice in any room.

Assembly Action:

None

Final Action Results

P75-15

AM



Code Change No: P76-15

Original Proposal

Section: 423.3, 424.10 (New)

Proponent: Ronald George, Self; www.ScaldPrevention.org, representing Self (Ron@Plumb-TechLLC.com)

Revise as follows:

423.3 Footbaths, and pedicure baths and head shampoo sinks. The water supplied to specialty plumbing fixtures, such as pedicure chairs having an integral foot bathtub, footbaths, and head shampoo sinks, footbaths shall be limited to a maximum temperature of 120°F (49°C) by a water temperature limiting device that conforms to ASSE 1070 or CSA B125.3.

Add new text as follows:

424.10 Head shampoo sink faucets Head shampoo sink faucets shall be supplied with hot water that is limited to a maximum temperature of 120°F (49°C) by a water temperature limiting device that conforms to ASSE 1070 or CSA B125.3. Each faucet shall have integral check valves to prevent crossover flow between the hot and cold water supply connections.

Reason: The hot water temperature limit requirement for head shampoo sinks was approved for the 2015 IPC and inserted, along with footbaths and pedicure chairs, in Section 423.3. As the faucet is normally mounted on a plumbing fixture, a (shampoo) sink, the requirement for temperature limiting is better located with all of the other faucets and fixture fittings in Section 424 so the requirement doesn't go unnoticed.

This proposal leaves the footbath and pedicure bath water temperature limitation requirements in Section 423.3 (as those "baths" are not usually considered as "plumbing fixtures" but *specialty* fixtures.) This proposal moves the shampoo sink faucets requirement part of 423.3 to a new Section 424.10.

A new requirement was added for integral check valves in shampoo sink faucets to reduce the potential for thermal shock to the user. The scald hazard is abated by the tempering valve but there still could be the "thermal shock" issue (rapid change in temperature, usually going to cold). Where multiple shampoo sinks are installed but only served by one master ASSE 1070 (or CSA B125.3) tempering valve, there can be cross flow between the sink faucets such that the user-set water temperature can vary considerably, very quickly. The person getting their head shampooed is in a mostly prone position and reactively moves their head to the side (rather than up and out of the way), hitting their head hard on the side of the shampoo sink basin. In elderly persons, a bruise can easily happen, sometimes leading to a break in the skin. This is just an unnecessary injury.

Most quality shampoo faucets are already equipped with integral check valves so for the most part, this proposal doesn't change anything that is commonly being installed today. The proposal simply protects the user (the person getting their head shampooed) from thermal shock should a type of faucet without integral check valves is being considered for installation at a shampoo sink.

Cost Impact: Will not increase the cost of construction.

Quality shampoo sink faucets that are most commonly installed already include integral check valves so there won't be any increase in the cost of construction. The new requirement just prevents designers and installers from choosing an inappropriate faucet type.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: Requiring integral check valves for head shampoo sink faucets will eliminate thermal shock to a person having their head shampooed.

Assembly Action:			None
	Final Actio	on Results	
	P76-15	AS	



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Code Change No: P83-15

Original Proposal

Section: 424.7

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com)

Revise as follows:

424.7 Temperature-actuated, flow reduction valves devices for individual fixture

fittings. Temperature-actuated, flow reduction devices, where installed for individual fixture fittings, shall conform to ASSE 1062. <u>A temperature-actuated, flow reduction device shall be an *approved* method for limiting the water temperature to not greater than 120° F (49° C) at the outlet of a faucet or fixture fitting. Such valves devices shall not be used alone as a substitute for the balanced-pressure, thermostatic or combination shower valves required in Section 424.3 or as a substitute for bathtub or whirlpool tub water-temperature limiting valves required in Section 424.5.</u>

Reason: Temperature actuated flow reduction (TAFR) devices are extremely effective in protecting users from high temperatures, especially in a shower. The devices reduce the flow of water to a trickle, thus preventing water in excess of 120°F from hitting the user. When the code limits the maximum temperature of hot water, TAFR devices can provide this level of protection. The reason for not permitting these devices on a bathtub or whirlpool tub are because of the operation of the TAFR device. When the maximum temperature is met, these devices reduce the flow to a trickle. In a bathtub, this would still allow scalding water to accumulate in the bathtub. If a small child is placed in the bathtub, or falls into the bathtub, TAFR devices do not provide any protection from scalding.

Cost Impact: Will not increase the cost of construction. Options do not increase the cost of construction.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P83-15

AS

Approved as Submitted

None



Code Change No: P84-15

Original Proposal

Section: 202, 425.3.4, 501.7, 712.3.2, 1103.4, 1113.1.2, 1302.5, 1302.8.1, 1302.9, 1303.8, 1303.12, 604.11

Proponent: Janine Snyder (PMGCAC@iccsafe.org)

Add new definition as follows:

SECTION 202 DEFINITIONS

<u>ACCESSIBLE.</u> Describes a site, building, facility of portion thereof that complies with Chapter 11 of the *International Building Code*. **Revise as follows:**

SECTION 202 DEFINITIONS

Supply fitting. A fitting that controls the volume, direction of flow or both, of water and is either attached to or accessible is accessed from a fixture, or is used with an open or atmospheric discharge.

425.3.4 Access required. All parts in a flush tank shall be accessible provided with access for repair and replacement.

501.7 Pressure marking of storage tanks. Storage tanks and water heaters installed for domestic hot water shall have the maximum allowable working pressure clearly and indelibly stamped in the metal or marked on a plate welded thereto or otherwise permanently attached. Such markings shall be in an accessible <u>a</u> position with access on the outside of the tank so as to make inspection or reinspection readily possible.

712.3.2 Sump pit. The sump pit shall be not less than 18 inches (457 mm) in diameter and not less than 24 inches (610 mm) in depth, unless otherwise *approved*. The pit shall be <u>accessible provided with</u> <u>access</u> and <u>shall be</u> located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, concrete, steel, plastic or other *approved* materials. The pit bottom shall be solid and provide permanent support for the pump. The sump pit shall be fitted with a gastight removable cover that is installed flush with grade or floor level, or above grade or floor level. The cover shall be adequate to support anticipated loads in the area of use. The sump pit shall be vented in accordance with Chapter 9.

1103.4 Cleanout. An accessible <u>A</u> cleanout shall be installed on the building side of the trap and shall be provided with access.

1113.1.2 Sump pit. The sump pit shall be not less than 18 inches (457 mm) in diameter and not less than 24 inches (610 mm) in depth, unless otherwise *approved*. The pit shall be <u>accessible provided with</u> <u>access</u> and <u>shall be</u> located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast iron, concrete or other *approved* material, with a removable cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump.

1302.5 Filtration. Untreated water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible provided with access for inspection and maintenance. Filters shall utilize a pressure gauge or other *approved* method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance.



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1302.9 Pumping and control system. Mechanical equipment including pumps, valves and filters shall be easily accessible and removable provided with access that allows for removal in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section 604.

1303.8 Filtration. Collected rainwater shall be filtered as required for the intended end use. Filters shall be accessible provided with access for inspection and maintenance. Filters shall utilize a pressure gauge or other *approved* method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves installed immediately upstream and downstream to allow for isolation during maintenance.

1303.12 Pumping and control system. Mechanical equipment including pumps, valves and filters shall be easily accessible and removable provided with access that allows for removal in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section 604.

604.11 Individual pressure balancing in-line valves for individual fixture fittings. Where individual pressure balancing in-line valves for individual fixture fittings are installed, such valves shall comply with ASSE 1066. Such valves shall be installed in an accessible-location with access and shall not be utilized alone as a substitute for the balanced pressure, thermostatic or combination shower valves required in Section 424.3.

Reason: The purpose of this proposal is consistency between terminologies in the codes.=

The term 'accessible' is defined in the IBC. This same definition should appear in the IPC. It is used as defined in Sections 110.2, 403.3.1, 403.4, 403.5, 404.1, 404.2, 404.3, 417.4.2 and 1002.4. This proposal had revised language for other locations. The term 'Access (to)' is already defined in the IPC as follows:

[M] ACCESS (TO). That which enables a fixture, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door or similar obstruction (see "Ready access").

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is CTC/PMG Proposal Item 2.

In July/2014 the ICC Board decided to sunset the activities of the Code Technology Committee (CTC). This is being accomplished by re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). This proposal falls under the CTC Area of Study entitled Accessibly. Information on the CTC, including: the sunset plan; meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the CTC website.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

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Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Approved as Submitted

Final Action Results

AS

P84-15

Code Change No: P89-15

Original Proposal

Section: 502.1, Chapter 14

Proponent: Rex Gillespie (rex.gillespie@caleffi.com)

Revise as follows:

502.1 General. Water heaters shall be installed in accordance with the manufacturer's instructions. Oilfired water heaters shall conform to the requirements of this code and the *International Mechanical Code*. Electric water heaters shall conform to the requirements of this code and provisions of NFPA 70. Gasfired water heaters shall conform to the requirements of the *International Fuel Gas Code*. <u>Solar thermal</u> water heating systems shall conform to the requirements of the *International Mechanical Code* SRCC <u>300</u>.

Reference standards type: Add new standard(s) as follows:

<u>SRCC Standard 300, Minimum Standard for Solar Thermal Water Heating Systems, January 3, 2013,</u> Solar Rating and Certification Corporation.

Reason: This section of the IPC establishes the appropriate reference for the requirements for various types of water heaters, but omits solar thermal water heaters. These water heaters are covered in both the IRC and the IMC in Chapter 23 and Chapter 14, respectively. Additionally, the 2015 IRC references the SRCC 300 standard for these systems. This new language directs the user to the appropriate code and reference standard for this increasingly common type of water heater.

Bibliography:

SRCC Standard 300, Minimum Standard for Solar Thermal Water Heating Systems, January 3, 2013.

Cost Impact: Will not increase the cost of construction

The proposed changes are not anticipated to raise the cost of construction. Most solar thermal systems and collectors are already certified to this standard in order to meet state requirements, those of the Internal Revenue Service for federal rebates, or to comply with the requirements of the 2015 IRC. Therefore, no additional product certifications are required.

Analysis: A review of the standard proposed for inclusion in the code, SRCC Standard 300, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee	Action
Hearings	

Committee Action:

Committee Reason: Consistency with what the IRC recognizes as a solar water heater for potable water.

Assembly Action:

None

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Final Action Results

P89-15

AS



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Approved as Submitted

Code Change No: P93-15 Part I

Original Proposal

Section: 504.6

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an *air gap* located in the same room as the water heater.
- 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the *air gap*.
- 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
- 5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- 8. Not be trapped.
- 9. Be installed so as to flow by gravity.
- 10. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or *flood level rim* of the waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.
- 14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is constructed of PEX or PE-RT tubing installed with insert fittings. The outlet end of such tubing shall be fastened in place.

Reason: This revision was accepted to the IRC in the last cycle. The issue is simply this: In some cases (perhaps the majority of cases), PEX and PE-RT tubing is connected using insert fittings. Where an insert fitting is used to connect to a relief valve, the ID of the insert fitting is significantly smaller than the ID of PEX or PE-RT tubing of the same nominal size of the relief valve outlet. This smaller opening might create excessive restriction where the relief valve had a full trip event. Therefore, increasing the size of the tubing increases the size of the insert fitting to allow for less restriction.

Fastening the end of the tubing is a safety measure to keep the discharge of water at the intended location. PEX and PE-RT tubing can be "springy" and could easy dislodge from the intended discharge point.

Cost Impact:

Will not increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



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Report of Committee Action Hearings

Committee Action:

Committee Reason: Same size PEX pipe connected with insert fittings is not large enough inside diameter for proper T & P valve relief flow.

Assembly Action:

None

As Submitted

Public Comments

Public Comment 2:

Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Committee (PMGCAC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an *air gap* located in the same room as the water heater.
- 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
- 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
- 5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- 8. Not be trapped.
- 9. Be installed so as to flow by gravity.
- 10. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.
- 14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is constructed of PEX or PE RT tubing installed with insert fittings. The outlet end of such tubing shall be fastened in place.

Commenter's Reason: PEX and PE-RT tubing might not be the only types of T&P discharge piping that can be installed with insert fittings. There is no need to be this specific. Part II for the IRC was Approved as Modified by the IRC Committee. This proposal for the IPC needs to be AMPC for consistency between the two plumbing codes.



P93-15 Part I

AMPC2


Code Change No: P93-15 Part II

Original Proposal

Section: P2804.6.1.

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P2804.6.1 Requirements for discharge pipe. The discharge piping serving a pressure-relief valve, temperature-relief valve or combination valve shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an air gap located in the same room as the water heater.
- Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
- Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
- 5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- 8. Not be trapped.
- 9. Be installed to flow by gravity.
- 10. Terminate not more than 6 inches (152 mm) and not less than two times the discharge pipe diameter above the floor or waste receptor flood level rim.
- 11. Not have a threaded connection at the end of the piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials indicated in Section P2906.5 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.
- 14. Be one nominal size larger than the size of the relief-valve outlet, where the relief-valve discharge piping is constructed of PEX or PE-RT tubing installed with insert fittings. The outlet end of such tubing shall be fastened in place.

Reason: Item 14 was added to this section in the last cycle. The issue is simply this: In some cases (perhaps the majority of cases), PEX and PE-RT tubing is connected using insert fittings. Where an insert fitting is used to connect to a relief valve, the ID of the insert fitting is significantly smaller than the ID of PEX or PE-RT tubing of the same nominal size of the relief valve outlet. This smaller opening might create excessive restriction where the relief valve had a full trip event. Therefore, increasing the size of the tubing increases the size of the insert fitting to allow for less restriction. What was forgotten is that there are fittings that fit on the outside diameter of this type of tubing such that the inside area would not be restricted. This added phrase allows for same size (as the relief valve outlet) tubing to be used where these "outside connect fittings" are used.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC 147.

Cost Impact:

Will not increase the cost of construction



This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify proposal as follows:

P2804.6.1 Requirements for discharge pipe. The discharge piping serving a pressure-relief valve, temperature-relief valve or combination valve shall:

1. through 13. Remain unchanged.

14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is constructed of PEX or PE-RT tubing installed with insert fittings.

Committee Reason:

For the Modification only:

There is no need to be specific about PEX and PE-RT; any type of piping that is connected using an insert fitting needs to be upsized.

For the proposal As Modified:

Insert fittings into "same size as the valve outlet" piping will cause a restriction in flow from the relief valve which could affect the safety of the equipment.

Assembly Action:

None

Final Action Results

P93-15 Part II

AM



Code Change No: P97-15

Original Proposal

Section: 504.7

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

504.7 Required pan. Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a galvanized pan constructed of one of the following:

- Galvanized steel pan having a material thickness or aluminum of not less than 0.0236 inch 1. (0.6010 mm) in thickness.
- Plastic not less than 0.036 inch (0.9 mm) in thickness. 2.
- Other approved materials. 3.

A plastic pan shall not be installed beneath a gas-fired water heater. (No. 24 gage), or other pans approved for such use.

Reason: It would be very rare for a large commercial water heater installation to be requiring a pan. Those installations are well thought out and provisions are made for floor drains in the area of the water heater or the location of such large units are in areas where leakage will not cause damage. Thus, the existing section never comes into play for those installations. Where this section is primarily used is in multi-family residential construction where each unit has its own water heater. Because the proposed language was approved for the 2015 IRC, there should be any reason to allow this revision for the IPC. Factory-made pans are widely available and have been used for decades. Use of such pans keeps the installed costs low as compared to what a sheet metal shop would charge to make custom, galvanized sheet steel pan. It is just not necessary.

As stated in the IRC proposal, another reason for allowing these factory-made aluminum and plastic pans is that they have smooth edges. In a residential environment, some water heaters are in a laundry room where people, including children, move about. A slip or fall against the top edge or corner of a galvanized steel pan would be unpleasant. Galvanized steel can also begin to look unsightly after many years.

This proposal is needed for consistency with the IRC. This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 146.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:		
	Final Action Results	
	P97-15	AS



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Approved as Submitted

None

Code Change No: P98-15 Part I

Original Proposal

Section: 602.3.1, Chapter 14

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

602.3.1 Sources. Dependent on geological and soil conditions and the amount of rainfall, individual water supplies are of the following types: drilled well, driven well, dug well, bored well, spring, stream or cistern. Surface bodies of water and land cisterns shall not be sources of individual water supply unless properly treated by *approved* means to prevent contamination. Individual water supplies shall be constructed and installed in accordance with the applicable state and local laws. Where such laws do not address all of the requirements set forth in NGWA-01, individual water supplies shall comply with NGWA-01 for those requirements not addressed by state and local laws.

Reference standards type: Add new standard(s) as follows:

ANSI/NGWA-01-14 Water Well Construction Standard

Reason: Many locations where wells will be constructed are covered by state and local laws for well construction. However, some areas in a jurisdiction might not be covered by those laws (or possibly, state or local laws don't exist). Adding this standard to the code is an important backstop to make sure that wells in those areas are safely constructed to be able to provide a reliable water supply for the building(s).

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 29.

Cost Impact:

Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, in situations where state or local laws don't exist for the construction of wells, these requirements could add additional costs over those cost for a well that would be constructed to a quality level less than what this standard requires. Where a standard for construction does not exist, there could be ways to "cut corners" to lessen costs of construction such as not installing a well casing, not performing tests and generally, expending less labor to construct a well that might not be safe or provide a reliable supply of water.

Analysis:

A review of the standard proposed for inclusion in the code, ANSI/NGWA-01, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.



Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None



Final Action F	Results
P98-15 Part I	AS

Code Change No: P98-15 Part II

Original Proposal

Section: P2602.1, Chapter 44

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P2602.1 General. The water-distribution and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public water supply or sewer system, respectively, if available. Where either a public water-supply or sewer system, or both, are not available, or connection to them is not feasible, an individual water supply or individual (private) sewage-disposal system, or both, shall be provided. Individual water supplies shall be constructed and installed in accordance with the applicable state and local laws. Where such laws do not address all of the requirements set forth in NGWA-01, individual water supplies shall comply with NGWA-01 for those requirements not addressed by state and local laws.

Reference standards type: Add new standard(s) as follows:

ANSI/NGWA-01-14 Water Well Construction Standard

Reason: Many locations where wells will be constructed are covered by state and local laws for well construction. However, some areas in a jurisdiction might not be covered by those laws (or possibly, state or local laws don't exist). Adding this standard to the code is an important backstop to make sure that wells in those areas are safely constructed to be able to provide a reliable water supply for the building(s).

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let 29.

Cost Impact:

Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, in situations where state or local laws don't exist for the construction of wells, these requirements could add additional costs over those cost for a well that would be constructed to a quality level less than what this standard requires. Where a standard for construction does not exist, there could be ways to "cut corners" to lessen costs of construction such as not installing a well casing, not performing tests and generally, expending less labor to construct a well that might not be safe or provide a reliable supply of water.

Analysis:

A review of the standard proposed for inclusion in the code, ANSI/NGWA-01, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

INTERNATIONAL CODE COUNCIL®

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P98-15 Part II

AS

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Approved as Submitted

None

Code Change No: P112-15

Original Proposal

Section: Table 605.3, Table 605.4

Proponent: Larry Gill, representing IPEX USA LLC (larry.gill@ipexna.com)

Revise as follows:

WATER SERVICE PIPE	
MATERIAL	STANDARD
Polyethylene of raised temperature (PE-RT) plastic tubing	ASTM F 2769; <u>CSA B137.18</u>

TABLE 605.3

(Portions of table not shown remain unchanged)

TABLE 605.4 WATER DISTRIBUTION PIPE

MATERIAL	STANDARD
Polyethylene of raised temperature (PE-RT) plastic tubing	ASTM F 2769 <u>: CSA B137.18</u>

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

CSA B137.18-13 Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications.

Reason: CSA B137.18 - Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications is a new consensus system standard (tubing and fittings). The scope includes the following: potable water distribution systems or other applications including, municipal water service lines, reclaimed water distribution, radiant panel heating and cooling systems, hydronic baseboard heating systems, snow and ice melting heating systems, building services piping, compressed air distribution, and ground source geothermal systems.

Cost Impact: Will not increase the cost of construction. Adding an alternate standard for a piping material will not affect the cost of an installation.

Analysis: A review of the standard proposed for inclusion in the code, CSA B137.18-13, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Approved as Submitted

None



P112-15

INTERNATIONAL CODE COUNCIL®

Code Change No: P113-15 Part I

Original Proposal

Section: Table 605.3, Table 605.4

Proponent: Michael Cudahy (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE 605.3 WATER SERVICE PIPE

MATERIAL	STANDARD
Cross-linked polyethylene (PEX) plastic pipe and	ASTM F 876; ASTM F 877; AWWA C904; CSA
tubing	B137.5

(Portions of table not shown remain unchanged)

TABLE 605.4 WATER DISTRIBUTION PIPE

MATERIAL	STANDARD
Cross-linked polyethylene (PEX) plastic tubing	ASTM F 876; ASTM F 877; CSA B137.5
(Portions of table not shown remain unchanged)	

(Portions of table not shown remain unchanged)

Reason: ASTM F877 has been revised a few years ago to remove redundant pipe/tubing dimensional and performance specifications which are otherwise specified in ASTM F876. F877 remains a PEX fitting and PEX system materials and performance standard exclusive for use with ASTM F876 piping/tubing. ASTM F877 is already in the code.

Cost Impact:

Will not increase the cost of construction.

This proposal simply deletes a standard that is no longer pipe or tubing related from the code. The piping material is now covered by a different standard, and as such, the option is not deleting or adding a material. Thus the code with this proposal added will not cause the cost of construction to increase.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P113-15 Part I

AS

Approved as Submitted

None

Code Change No: P113-15 Part II

Original Proposal

Section: Table P2906.4, Table P2906.5

Proponent: Michael Cudahy (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE P2906.4 WATER SERVICE PIPE

MATERIAL	STANDARD
Cross-linked polyethylene (PEX) plastic tubing	ASTM F 876; ASTM F 877; CSA B137.5
(Dentioner of table wat all any managing such as a soll)	

(Portions of table not shown remain unchanged)

TABLE P2906.5 WATER DISTRIBUTION PIPE

MATERIAL	STANDARD	
Cross-linked polyethylene (PEX) plastic tubing	ASTM F 876; ASTM F 877; CSA B137.5	
(Portions of table not shown remain unchanged)		

(Portions of table not shown remain unchanged)

Reason: ASTM F877 has been revised a few years ago to remove redundant pipe/tubing dimensional and performance specifications which are otherwise specified in ASTM F876. F877 remains a PEX fitting and PEX system materials and performance standard exclusive for use with ASTM F876 piping/tubing. ASTM F877 is already in the code.

Cost Impact:

Will not increase the cost of construction.

This proposal simply deletes a standard that is no longer pipe or tubing related from the code. The piping material is now covered by a different standard, and as such, the option is not deleting or adding a material. Thus the code with this proposal added will not cause the cost of construction to increase.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P113-15 Part II

AS

Approved as Submitted

None

Code Change No: P114-15

Original Proposal

Section: Table 605.3

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

TABLE 605.3 WATER SERVICE PIPE

MATERIAL	STANDARD
Brass pipe	ASTM B 43

(Portions of table not shown remain unchanged)

Reason: The proposal removes brass because brass is a copper-alloy and copper-alloy is the term used to identify materials manufactured where copper is the base metal and includes brass and bronze.

Cost Impact: Will not increase the cost of construction.

This proposal will not impact the cost of construction as this is only a clarification of a product name.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P114-15

AS

Approved as Submitted

None

Code Change No: P115-15 Part I

Original Proposal

Section: 605.4

Proponent: Gary Morgan, Viega LLC, representing Viega LLC (gary.morgan@viega.us)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

605.4 Water distribution pipe. Water distribution pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.4. Hot <u>and cold</u> water distribution pipe and tubing shall have a pressure rating of not less than 100 psi (690 kPa) at 180°F (82°C).

Reason: This code proposal is really only an attempt to address a subtle technicality that has existed for a very long time. The addition of "and cold" to this sentence makes it 100% clear that even cold water distribution piping needs to be temperature/pressure rated at 180F. Another possible way to address the issue is to simply remove "hot" from the same sentence. All of the piping standards listed in Table 605.4 for water distribution piping already meet this mandatory elevated temperature/pressure rating. The existing code language stating specifically "hot water distribution pipe and tubing" implies that pipes used for cold water distribution piping may not need to carry elevated temperature/pressure rating. Your support of this proposal would be most appreciated!

Cost Impact:

Will not increase the cost of construction

This proposal has absolutely no impact on the cost of construction and only attempts to address a technicality which has existed for many years.



Committee Action:

Approved as Modified

Modify proposal as follows:

605.4 Water distribution pipe. Water distribution pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.4. Hot and cold water distribution pipe and tubing shall have a pressure rating of not less than 100 psi (690 kPa) at 180°F (82°C).

Committee Reason:

For the Modification only: The terms "hot" and "cold" are unnecessary as the intent is that all water distribution piping must comply.

For the proposal As Modified: The committee agreed with the proponent's reason statement.

Assembly Action:

None

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Final Action Results

P115-15 Part I

AM



Code Change No: P115-15 Part II

Original Proposal

Section: P2906.5

Proponent: Gary Morgan, Viega LLC, representing Viega LLC (gary.morgan@viega.us)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P2906.5 Water-distribution pipe. Water-distribution piping within *dwelling units* shall conform to NSF 61 and shall conform to one of the standards indicated in Table P2906.5. Hot water-distribution Hot and cold water-distribution pipe and tubing shall have a pressure rating of not less than 100 psi at 180°F (689 kPa at 82°C).

Reason: This code proposal is really only an attempt to address a subtle technicality that has existed for a very long time. The addition of "and cold" to this sentence makes it 100% clear that even cold water distribution piping needs to be temperature/pressure rated at 180F. Another possible way to address the issue is to simply remove "hot" from the same sentence. All of the piping standards listed in Table 605.4 for water distribution piping already meet this mandatory elevated temperature/pressure rating. The existing code language stating specifically "hot water distribution pipe and tubing" implies that pipes used for cold water distribution piping may not need to carry elevated temperature/pressure rating. Your support of this proposal would be most appreciated!

Cost Impact:

Will not increase the cost of construction

This proposal has absolutely no impact on the cost of construction and only attempts to address a technicality which has existed for many years.



Committee Action:

Modify proposal as follows:

P2906.5 Water-distribution pipe. Water-distribution piping within dwelling units shall conform to NSF 61 and shall conform to one of the standards indicated in Table P2906.5. Hot and cold <u>W</u>ater-distribution pipe and tubing shall have a pressure rating of not less than 100 psi at 180°F (689 kPa at 82°C).

Committee Reason:

For the Modification only: The terms "hot" and "cold" are unnecessary as the intent is that all water distribution piping must comply.

For the proposal As Modified: The committee agreed with the proponent's reason statement.

Assembly Action:

INTERNATIONAL CODE COUNCIL®

Final Action Results

P115-15 Part II

AM



None

Approved as Modified

Code Change No: P118-15

Original Proposal

Section: Table 605.4

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

TABLE 605.4WATER DISTRIBUTION PIPE

MATERIAL	STANDARD	
Brass pipe	ASTM B 43	
Copper or copper-alloy pipe	ASTM B 42; <u>ASTM B 43;</u> ASTM B 302	

(Portions of table not shown remain unchanged)

Reason: There are many different copper and copper-alloy compositions. Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P118-15

AS

Approved as Submitted

None

BACK

Code Change No: P119-15

Original Proposal

Section: Table 605.5, Chapter 14

Proponent: William Chapin, representing Professional Code Consulting, LLC (bill@profcc.us)

Revise as follows:

TABLE 605.5 PIPE FITTINGS

MATERIAL	STANDARD
0 1 9 9	<u>ASSE 1061;</u> ASTM F 1807; ASTM F 2098; ASTM F 2159; ASTM F 2735; ASTM F 2769

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

ASSE 1061-2011 Peformance Requirements for Push-Fit Fittings (UPDATE of edition level only)

Reason: ASSE 1061-2011 added PE-RT to the list of tubings in this edition of the standard so that those fittings can be used for PE-RT tubing.

Cost Impact: Will not increase the cost of construction. This will not increase the cost of construction as it only adds another option for the installer.

Analysis: Successful action on this proposal will result in the update of Reference Standard ASSE 1061 to the 2011 edition level for only the change indicated in the table. A coordinating proposal for updating the standard for the entire code will be submitted to Group B for inclusion in the Reference Standards administrative update proposal.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The standard was omitted from table in last code cycle.

Assembly Action:

None

Approved as Submitted

Final Action Results

P119-15

INTERNATIONAL CODE COUNCIL®

BACK

Code Change No: P120-15

Original Proposal

Section: Table 605.5, Chapter 14

Proponent: Larry Gill, representing IPEX USA LLC (larry.gill@ipexna.com)

Revise as follows:

TABLE 605.5 PIPE FITTINGS

MATERIAL	STANDARD
Fittings for polyethylene of raised temperature (PE-RT) plastic tubing	ASTM F 1807; ASTM F 2098; ASTM F 2159; ASTM F 2735; ASTM F 2769; <u>ASTM D3261;</u> <u>CSA B137.18</u>

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

CSA B137.18-13 Polyethylene of raised temperature resistance (PE-RT) tubing systems

Reason: CSA B137.18 - Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications is a new consensus system standard for tubing and fittings. ASTM D3261 is a consensus standard for PE fusion and is also applicable for PE-RT.

Cost Impact: Will not increase the cost of construction. Adding another pipe material standard as an option does not impact the cost of construction.

Analysis: A review of the standard proposed for inclusion in the code, CSA B137.18-13, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P120-15



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P164 - 15 FPC

FPC

611.2 Reverse osmosis drinking water treatment systems shall meet the requirements of NSF 58, Reverse Osmosis Drinking Water Treatment Units, or Water Quality Association Standard S-300, Point-of-Use Low Pressure Reverse Osmosis Drinking Water Systems.

Code Change No: P123-15

Original Proposal

Section: Table 605.7, Chapter 14

Proponent: Julius Ballanco, representing Self (JBENGINEER@aol.com)

Revise as follows:

MATERIAL	VALVES STANDARD	
Chlorinated polyvinyl chloride (CPVC) plastic	ASME A112.4.14; ASME A112.18.1/CSA B125.1; ASTM F 1970; CSA B125.3 <u>, IAPMO Z1157</u>	
Copper or copper alloy	ASME A112.4.14; ASME A112.18.1/CSA B125.1; ASME B16.34; CSA B125.3; MSS SP-67; MSS SP-80; MSS SP-110 <u>,</u> IAPMO Z1157	
Cross-linked polyethylene (PEX) plastic	ASME A112.4.14; ASME A112.18.1/CSA B125.1; CSA B125.3; NSF 359 <u>, IAPMO Z1157</u>	
Gray iron and ductile iron	AWWA C500; AWWA C504; AWWA C507; MSS SP-67; MSS SP-70; MSS SP-71; MSS SP-72; MSS SP-78, <u>IAPMO Z1157</u>	
Polypropylene (PP) plastic	ASME A112.4.14; ASTM F 2389 <u>, IAPMO Z1157</u>	
Polyvinyl chloride (PVC) plastic	ASME A112.4.14; ASTM F 1970 <u>, IAPMO Z1157</u>	

TABLE 605.7 (605.7)

Reference standards type: Add new standard(s) as follows:

IAPMO/ANSI Z1157-2014 Ball Valves

Reason: This change will add the new national concensus standard for ball valves. The standard covers ball valves 1/8 through 4 NPS in size. It regulates both full port and reduced port ball valves.

This Standard was developed by the IAPMO Z1157 Technical Subcommittee and approved by the IAPMO Plumbing Standards Committee in accordance with the ANSI Essential Requirements: Due process requirements for American National Standards and the IAPMO Policies and Procedures for Consensus Development of American National Standards. This Standard was approved as an American National Standard on November 24, 2014.

Cost Impact: Will not increase the cost of construction. There is no cost impact since the use of ball valves meeting this standard is optional.

Analysis: A review of the standard proposed for inclusion in the code, IAPMO/ANSI Z1157-2014, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action
Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None



	Final Action Results		
P123-15		AS	

INTERNATIONAL CODE COUNCIL®

Code Change No: P124-15 Part I

Original Proposal

Section: 605.7, Chapter 14

Proponent: Jeremy Brown, NSF International, representing NSF International

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

MATERIAL	STANDARD
Chlorinated polyvinyl chloride (CPVC) plastic	ASME A112.4.14; ASME A112.18.1/CSA B125.1; ASTM F 1970; CSA B125.3; <u>MSS SP-122</u>
Copper or copper alloy	ASME A112.4.14; ASME A112.18.1/CSA B125.1; ASME B16.34; CSA B125.3; MSS SP-67; MSS SP-80; MSS SP- 110; <u>MSS SP-139</u>
Cross-linked polyethylene (PEX) plastic	ASME A112.4.14; ASME A112.18.1/CSA B125.1; CSA B125.3; NSF 359
Gray iron and ductile iron	AWWA C500; AWWA C504; AWWA C507; MSS SP-67; MSS SP-70; MSS SP-71; MSS SP-72; MSS SP-78
Polypropylene (PP) plastic	ASME A112.4.14; ASTM F 2389
Polyvinyl chloride (PVC) plastic	ASME A112.4.14; ASTM F 1970; MSS SP-122

TABLE 605.7 (605.7)

Reference standards type: Add new standard(s) as follows:

MSS SP-122-2012 Plastic Industrial Ball Valves MSS SP-139-2014 Copper Alloy Gate, Globe, Angle, and Check Valves for Low Pressure/Low Temperature Plumbing Applications

Reason: These are additional standards for valves that should be considered in the valve table.

Cost Impact:

Will not increase the cost of construction. Adding additional options will not increase the cost of construction

Analysis:

A review of the standard proposed for inclusion in the code, MSS SP-122 & MSS SP-139, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.



	Report of Committee A Hearings	ction	
Committee Action:			Approved as Submitted
Committee Reason: The new standard pro-	vides more options.		
Assembly Action:			None
	Final Action Result	S	
P1	24-15 Part I	AS	

INTERNATIONAL CODE COUNCIL®

Code Change No: P124-15 Part II

Original Proposal

Section: Table P2903.9.4, Chapter 44

Proponent: Jeremy Brown, NSF International, representing NSF International

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

MATERIAL	STANDARD
Chlorinated polyvinyl chloride (CPVC) plastic	ASME A112.4.14, ASME A112.18.1/CSA B125.1,ASTM F 1970, CSA B125.3 <u>; MSS SP-122</u>
Copper or copper alloy	ASME A112.4.14, ASME A112.18.1/CSA B125.1,ASME B16.34, CSA B125.3, MSS SP-67, MSS SP-80, MSS SP-110 <u>; MSS SP-139</u>
Gray and ductile iron	ASTM A126, AWWA C500, AWWA C504, AWWA C507, MSS SP-42, MSS SP-67, MSS SP-70, MSS SP-71, MSS SP-72, MSS SP-78
Cross-linked polyethylene (PEX) plastic	ASME A112.4.14, ASME A112.18.1/CSA B125.1, CSA B125.3,NSF 359
Polypropylene (PP) plastic	ASME A112.4.14, ASTM F 2389
Polyvinyl chloride (PVC) plastic	ASME A112.4.14, ASTM F 1970 <u>; MSS SP-122</u>

TABLE P2903.9.4

Reference standards type: Add new standard(s) as follows:

MSS SP-122-2012 Plastic Industrial Ball Valves MSS SP-139-2014 Copper Alloy Gate, Globe, Angle, and Check Valves for Low Pressure/Low Temperature Plumbing Applications

Reason: These are additional standards for valves that should be considered in the valve table.

Cost Impact:

Will not increase the cost of construction. Adding additional options will not increase the cost of construction

Analysis:

A review of the standard proposed for inclusion in the code, MSS SP-122 & MSS SP-139, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.



	Report of Committee Acti Hearings	on	
Committee Action:			Approved as Submitted
Committee Reason: The new standard prov	vides more options.		
Assembly Action:			None
	Final Action Results		
P1	24-15 Part II	AS	

INTERNATIONAL CODE COUNCIL®

Code Change No: P126-15

Original Proposal

Section: Table 605.8

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

TABLE 605.8 (605.8) MANUFACTURED PIPE NIPPLES

MATERIAL	STANDARD
Brass-, Copper or copper alloy, and chromium-plated	ASTM B 687
Steel	ASTM A 733

Reason: This standard establishes the requirements for copper and copper alloy pipe nipples within a specified size range. Chromium-plated pipe are copper and copper alloys nipples used in decorative applications.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P126-15

Approved as Submitted

None

Code Change No: P127-15

Original Proposal

Section: Table 608.1

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

TARI E 608 1

Revise as follows:

		CKFLOW PREVENTERS	
DEVICE	DEGREE OF HAZARD ^a		APPLICABLE STANDARDS
Backflow prevention assemblies:			
Spill-resistant vacuum	High or low	Backsiphonage only	ASSE 1056 <u>, CSA</u>
breaker assembly	hazard	Sizes ¹ / ₄ "-2"	<u>B64.1.3</u>
(Portions of table not shown rer	nain unchanged)		

For SI: 1 inch = 25.4 mm

a. Low hazard—See Pollution (Section 202).

High hazard—See Contamination (Section 202).

b. See Backpressure, low head (Section 202).

See Backsiphonage (Section 202).

Reason: The table did not contain the CSA standard reference for Spill-resistant vacuum breaker. The standard reference is already in Section 608.13.8. It simply needs to be added to the table for clarity and consistency.

Cost Impact: Will not increase the cost of construction.

There is no cost impact with the existing cross reference standard between the section and the table.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: This is a valid standard for the code. The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P127-15

Approved as Submitted

None

Code Change No: P129-15

Original Proposal

Section: 605.11, 605.11.1, 605.11.2, 605.11.3, 605.11.4

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Delete without substitution:

605.11 Brass. Joints between brass pipe and fittings shall comply with Sections 605.11.1 through 605.11.4.

605.11.1 Brazed joints. All joint surfaces shall be cleaned. An *approved* flux shall be applied where required. The joint shall be brazed with a filler metal conforming to AWS A5.8.

605.11.2 Mechanical joints. Mechanical joints shall be installed in accordance with the manufacturer's instructions.

605.11.3 Threaded joints. Threads shall conform to ASME B1.20.1. Pipe-joint compound or tape shall be applied on the male threads only.

605.11.4 Welded joints. All joint surfaces shall be cleaned. The joint shall be welded with an *approved* filler metal.

Reason: The proposal removes brass because brass is a copper alloy and is covered in Section 605.13.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P129-15



Code Change No: P132-15 Part I

Original Proposal

Section: 605.14.7 (New), 605.15.4 (New), 605.17.3 (New).

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new text as follows:

605.14.7 Push-fit joints Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

605.15.4 Push-fit joints. Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

605.17.3 Push-fit joints. Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

Reason: Push-fit fittings utilize a *type* of joining method (a connection) that is different than solvent cemented, soldered, brazed connections. And technically, this type of fitting doesn't strictly fit the Chapter 2 definition of a MECHANICAL JOINT. The use of these fittings has become very popular in recent years. These fittings are marketed with names that include such terms as "bite" or "grip" or "speed".

The standard for push-fit fittings is ASSE 1061. This standard was approved for the IPC several cycles ago for inclusion into the water pipe fitting table of the code. However, most readers of the code do not realize what this standard covers and where it is referenced in the code. Because these joints are a different connection method, they need to be indicated in the appropriate sections of the MATERIALS JOINTS AND CONNECTIONS section of the code.

This proposal is not adding this standard to the code but is only adding sections that should have been added several cycles ago when ASSE 1061 was added.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 32.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P132-15 Part I



Code Change No: P132-15 Part II

Original Proposal

Section: P2906.20 (New)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new text as follows:

P2906.20 Push-fit joints. Push-fit joints shall be used only on copper-tube-size outside diameter dimensioned CPVC, PEX and copper tubing. Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

Reason: Push-fit fittings utilize a *type* of joining method (a connection) that is different than solvent cemented, soldered, brazed connections. And technically, this type of fitting doesn't strictly fit the Chapter 2 definition of a MECHANICAL JOINT. The use of these fittings has become very popular in recent years. These fittings are marketed with names that include such terms as "bite" or "grip" or "speed".

The standard for push-fit fittings is ASSE 1061. This standard was approved for the IPC several cycles ago for inclusion into the water pipe fitting table of the code. However, most readers of the code do not realize what this standard covers and where it is referenced in the code. Because these joints are a different connection method, they need to be indicated in the appropriate sections of the MATERIALS JOINTS AND CONNECTIONS section of the code.

This proposal is not adding this standard to the code but is only adding sections that should have been added several cycles ago when ASSE 1061 was added.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC ltem 32.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P132-15 Part II

AS



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Approved as Submitted

None

Code Change No: P134-15

Original Proposal

Section: 605.24.1

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

605.24.1 Copper <u>pipe</u> or <u>copper-alloy</u> tubing to galvanized steel pipe. Joints between copper <u>pipe</u> or <u>copper-alloy</u> tubing and galvanized steel pipe shall be made with a <u>brass fitting copper-alloy</u> or dielectric fitting or a dielectric union conforming to ASSE 1079. The copper tubing shall be soldered to the fitting in an *approved* manner, and the fitting shall be screwed to the threaded pipe.

Reason: Because brass is a copper-alloy the sentence does not make sense. It's telling you to use a brass nipple when you are already using a brass nipple.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee	Action		
Hearings			

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P134-15

Approved as Submitted

None

INTERNATIONAL CODE COUNCIL®

Code Change No: P135-15 Part II

Original Proposal

Section: P2906.17.2 (New)

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new text as follows:

P2906.17.2 Joint between PVC water service and CPVC water distribution Where a PVC water service pipe connects to a CPVC pipe at the beginning of a water distribution system, the transition shall be by a mechanical fitting, an *approved* adapter fitting, a transition fitting or by a single solvent-cemented transition joint. A single, solvent cement transition joint shall be in compliance with ASTM F493 and the pipe, fitting, and solvent cement manufacturers' instructions. Solvent cement joint surfaces shall be clean, free from moisture and prepared with an approved primer. Solvent cement conforming to ASTM F493 shall be applied to the joint surfaces and the joint assembled while the cement is wet.

Reason: Transitions being made from PVC service to CPVC water distribution systems is common, and solvent cementing for this single transition application should be an option.

Cost Impact:

Will not increase the cost of construction.

This proposal allows for an optional method of joining not in this code. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase.



Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P135-15 Part II

AS





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Approved as Submitted

Code Change No: P141-15

Original Proposal

Section: 607.3

Proponent: Gary Kozan, CPD, Ridgeway Plumbing, representing Florida Association of Plumbing Heating Cooling Contractors (garyk@ridgewayplumbing.com)

Revise as follows:

607.3 Thermal expansion control. Where a storage water heater is supplied with cold water that passes through a check valve, pressure reducing valve or backflow preventer, a thermal expansion tank-control device shall be connected to the water heater cold water supply pipe at a point that is downstream of all check valves, pressure reducing valves and backflow preventers. Thermal expansion tanks control devices shall be sized in accordance with the tank- manufacturer's instructions and shall be sized such that the pressure in the water distribution system shall not exceed that required by Section 604.8.

Reason: There are many different products on the market today that provide effective solutions to thermal expansion control, including pressure relief valves and special-purpose ballcocks. The IPC should recognize all proven technologies and should not limit designers and contractors solely to thermal expansion tanks. This change is consistent with the IRC, and with all prior editions of the IPC.

Bibliography:

2015 International Residential Code:

P2903.4 Thermal expansion control. A means for controlling increased pressure (emphasis added) caused by thermal expansion shall be installed where required in accordance with Sections P2903.4.1 and P2903.4.2.

P2903.4.1 Pressure-reducing valve. For water services up to and including 2 inches (51 MM), a device for controlling thermal expansion (emphasis added) shall be installed where, because of thermal expansion, the pressure on the downstream side of a pressure-reducing valve exceeds the pressure-reducing valve setting.

P2903.4.2 Backflow prevention device or check valve. Where a backflow prevention device, check valve or other device is installed on a water supply system using storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure (emphasis added) shall be installed.

Cost Impact: Will not increase the cost of construction. By providing additional choices, the designer can select the most appropriate, cost effective solution depending on the situation.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: Alternate methods for accommodating thermal expansion are needed in the code.

Assembly Action:

Final Action Results P141-15 AS



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None

Approved as Submitted

Code Change No: P149-15

Original Proposal

Section: 608.3, 608.4 (New)

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

608.3 Devices, appurtenances, appliances and apparatus. Devices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, distillation, processing, cooling, or storage of ice or foods, and that connect to the water supply system, shall be provided with protection against backflow and contamination of the water supply system. Water pumps, filters, softeners, tanks and other appliances and devices that handle or treat potable water shall be protected against contamination.

Add new text as follows:

608.4 Potable water handling and treatment equipment. Water pumps, filters, softeners, tanks and other appliances and devices that handle or treat potable water to be supplied to the potable water distribution system shall be located to prevent contamination from entering the appliances and devices. Overflow, relief valve and waste discharge pipes from such appliances and devices shall terminate in accordance with the appliance or device manufacturer's installation instructions. Where such instructions do not specify the termination arrangement, the termination shall be to an air gap.

Reason: One interpretation of the existing Section 608.3 is that the potable water supply line to a water softener is required to have a backflow preventer, supposedly to protect the water in the water service line from contamination. However, the phrase "water softener" is in a group along with filters, pumps, tanks and appliances that handle or treat potable water. If water softeners are required to have a backflow preventer upstream, does this mean that pumps and filters are also required to have backflow preventers upstream? Those items are in the same sentence.

This doesn't seem to make sense because a water softener provides potable water to the building's potable water distribution system. It is understood that most water softeners have a brine tank where salt is placed and periodically replenished. If the chemical (salt) is safe enough to treat the resin bed of the softener (through which the potable water to the building flows), then is there really a problem?

Millions and millions of water softeners across this country have been installed without a backflow preventer upstream of the softener. The EPA's Cross Connection Manual and the USC Manual for Cross Connection Control do not specifically mention the presence of a water softener as needing a backflow preventer. Connection diagrams for (NSF 44) water softeners do not indicate a need for backflow protection or even mention checking with the local code official to be told that backflow protection is required.

It is believed that the existing language requirement was to make sure that that these devices were not installed in pits and the overflows and relief pipes and discharge pipes from these devices passed through an air gap to the point of discharge. Nothing more. If the code intended for these devices to have a backflow preventer upstream, the device would have had language in Section 608.13. The revised code language clarifies the original intent.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 193.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify proposal as follows:

608.4 Potable water handling and treatment equipment. Water pumps, filters, softeners, tanks and other appliances and devices that handle or treat potable water to be supplied to the potable water distribution system shall be located to prevent contamination from entering the appliances and devices. Overflow, relief valve and waste discharge pipes from such appliances and devices shall terminate in accordance with the appliance or device manufacturer's installation instructions. Where such instructions do not specify the termination arrangement, the termination shall be to through an air gap.

Committee Reason:

For the Modification only: Some manufacturer's installation instructions are inappropriate for providing the proper protection of the system.

For the proposal As Modified: The section needed clarification to be clearer on exactly what needed to be protected and how.

Assembly Action:

None

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P149-15

AM



Code Change No: P150-15 Part I

Original Proposal

Section: 608.7

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

608.7 Valves and outlets prohibited below grade. Potable water outlets and combination stop-andwaste valves shall not be installed underground or below grade. Freezeproof <u>A freezeproof</u> yard hydrants hydrant that drain drains the riser into the ground are shall be considered to be as having a stop-andwaste valves valve below grade.

Exception: Freezeproof yard hydrants that drain the riser into the ground shall be permitted to be installed, provided that the potable water supply to such hydrants is protected upstream of the hydrants in accordance with Section 608 and the hydrants are permanently identified as nonpotable outlets by *approved* signage that reads as follows: "Caution, Nonpotable Water. Do Not Drink."

Exception: Freezeproof yard hydrants that drain the riser into the ground shall be permitted to be installed provided that the potable water supply to such hydrants is protected in accordance with Section 608.13.2 or 608.13.5 and the hydrants and the piping from the backflow preventer to the hydrant are identified in accordance with Section 608.8.

Reason: There is no way to know what type of health hazard the stop and waste opening of a yard hydrant will be exposed to. The contaminants could include lawn fertilizer, animal wastes, garden fertilizer or septic tank effluent. This application is not any different than an irrigation system having at/below grade sprinkler heads. See Section 608.16.5 (IRC Section P2902.5.3). The code requires either a pressure vacuum breaker assembly or a backflow prevention assembly for that application. (For a valve downstream of the backflow preventer, an atmospheric vacuum breaker will not work). But the code currently lacks coverage for what type of backflow protection is necessary for yard hydrant applications. For the code officials who do give this yard hydrant application some thought, many simply choose a dual check valve which is only suitable for low hazard conditions. And there is no way to field verify that this type of backflow device is operational. This is a high hazard application just like an irrigation system and the potable water supply of the building should be protected accordingly. Improper backflow protection for connection of these frost proof yard hydrants to the building water distribution system is an accident waiting to happen.

Keep in mind that where a yard hydrant is needed, a sanitary type yard hydrant (one that does not drain the riser into the ground) can be provided, probably at a lower cost than requiring a backflow prevention assembly for the more inexpensive, riser drain-to-the-ground type yard hydrant. Where only one yard hydrant is installed, a sanitary yard hydrant will probably be an easier selection. Where multiple yard hydrants are on a lot, a dedicated yard hydrant line for all yard hydrants with one backflow prevention assembly to serve all hydrant might be easier.

The signage and marking requirements were removed as the indicated section was updated in the last code cycle to more adequately cover the topic. There is no need to duplicate requirements in the code.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 148.

Cost Impact:

Will increase the cost of construction.

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, where code officials were not requiring the correct backflow preventer for these applications, there will be a higher cost for the correct backflow preventer plus added labor and materials for

either placing the required backflow prevention assembly in a place where leakage (when failure of the device occurs) or for providing a drain for the assembly for when leakage happens (when failure of the device occurs).

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The current text was unclear about sanitary yard hydrants so this text is better.

Assembly Action:

Final Action Results

P150-15 Part I

AS

None

Approved as Submitted
Code Change No: P151-15

Original Proposal

Section: 608.9

Proponent: Ronald George, representing Self (Ron@Plumb-TechLLC.com)

Revise as follows:

608.9 Reutilization prohibited. Water utilized for the <u>heating or</u> cooling of equipment or other processes shall not be returned to the potable water system. Such water shall be discharged into a drainage system through an *air gap* or shall be utilized for nonpotable purposes.

Reason: Plumbing systems should use double wall heat exchangers or other approved means to prevent contamination of the potable water supply. Potable water should not be allowed to flow through heat exchangers either hot or cold for other process systems. There have been low-budget combined heating hot water and domestic hot water systems that utilize the domestic hot water piped through heat exchanger coils, baseboard piping, supply & return pipes and control valves for space heating. These systems often have components, coils, piping and valves that are not of approved materials for domestic water systems. In addition, many of these systems can remain dormant and for well over six to nine months when the heating cycle is not needed. Upon the first call for heat, all of the stagnant and brackish bacteria laden water in the heating system is flushed or injected into the potable hot water system in the hot water tank. This will significantly dump large quantities of bacteria laden water into the domestic hot water system. This is a serious cross-connection and contamination problem. This increases the chances of contracting Legionnaire's Disease and being exposed to a host of other Bacteria and pathogens in the domestic water system. Where the domestic water is allowed to flow through the hydronic heating circuit, the water will sit stagnant in the heating coils, valves and piping for long periods of time allowing the chlorine to dissipate after a few days. when the chlorine or other water treatment chemical is gone, bacteria will flourish. In all cases where the water sits stagnant in the piping for more than a few days conditions will be present where bacteria and other pathogens can grow to very high levels before flow resumes through the coils . These combined heating hot water and domestic hot water systems should not be allowed unless a closed loop of heat transfer fluid (propylene glycol) is flowing through the heating coils. Domestic water should not be allowed to flow through heating coils. There are many systems where heating coils are located inside a domestic hot water tank and the fluid in the heating coils is in a closed loop. That is a preferred system design for combined heating hot water and domestic hot water systems. The domestic hot water should not be allowed to flow through the heating hot water pipes because of this seasonal use and the great potential for bacteria growth. In my opinion, this is a cross connection that can be restricted by the code official, but the code is not clear on this because it only addresses cooling coils, not heating coils. This should provide clarification for safe plumbing systems.

22 pitfalls to avoid when designing or installing a combined heating hot water and domestic hot water system

A combined heating hot water and domestic hot water system is a hybrid system that utilizes a boiler or boilers to heat water for heating the building environment, and it uses boiler water to heat domestic hot water for bathing, washing and cleaning uses. The two systems are often combined in an effort to reduce the initial cost of installation, but there are a lot of differences between the two that, if not accounted for, could result in someone getting seriously injured.

Over the years, I have investigated numerous combined systems and found that there are a lot of mistakes or pitfalls that seem to occur. Since there are many opportunities to make mistakes with combined systems, someone very familiar with how both systems are supposed to operate should design them. Heating hot water generally needs to be at a very high temperature, while domestic hot water should be at a lower temperature. If the domestic water gets too hot there are scalding dangers, so proper controls are very important.

I have been investigating scald incidents since the mid 1990s, and I have seen a significant number of these combined systems involved in scald litigation cases because they are often not designed, operated or maintained properly. There are only two plumbing code sections that address combined systems. One section calls for the piping and components in a combined system to be approved for use in potable water systems. The other code requirement calls for a thermostatic mixing valve if the system temperature exceeds 140 F.

There are many more issues than the two mentioned above that need to be addressed. Following is a list of problems or pitfalls that I have found over the years that are related to combined heating hot water and domestic hot water systems. If you can avoid these pitfalls you will have a much safer system:

Pitfall number 1: Open system vs. closed system

There are two versions of a combined heating hot water and domestic hot water system. Systems with domestic hot water flowing from the city water supply through the heating hot water system components such as pumps, control valves and heating coils are often called open systems. Open systems utilize the domestic hot water flowing through the heating coils or baseboard heaters for heating the building. The same water flows to the plumbing fixtures for bathing and washing. These systems provide a significant challenge, because the fluid in the system must be potable water. It is difficult to circulate domestic hot water through many hydronic components without having scale, corrosion, buildup of air pockets and oxidation problems. These systems often sit stagnant for

long periods of time during the off-season for heating allowing bacteria and other debris to build up to high levels in the stagnant water. When heat is first called for in the fall, it will dose the domestic water heater with a large dose of bacteria and stagnant water. this will usually higher doses than the water treatment chemicals can handle.

Systems with a double wall heat exchanger to separate the fluid of the heating hot water system from the domestic hot water are referred to as closed systems. Closed systems use a heat exchanger to provide a closed loop for the heating hot water. The closed loop flows through the water heater tank in single or double wall heat exchanger coils to serve the heating hot water system or vice versa. The boiler will supply a coil in the domestic water tank. The heating coils and the heat exchanger serving the domestic hot water. Most hydronic systems have pumps, valves, coils and components that are not approved for drinking water service. Closed hydronic heating systems allow the heating hot water to be a glycol solution with corrosion inhibiters to prevent corrosion and other chemicals to prevent scale build-up on heating surfaces. The closed systems are preferred because they eliminate a lot of opportunities for systems problems.

Pitfall Number 2: System operating temperatures

The next challenge for combined systems is the system operating temperatures. Heating hot water systems are generally designed to operate between 180 F and 210 F. Domestic hot water systems are designed to operate between 85 F to 140 F. Heating coils sizes must be increased if the combined system temperatures are lower or scald prevention valves are needed if the system temperatures are kept higher for the heating hot water system temperatures.

Tempered water is water having a temperature range between 85 F (29 C) and 110 F (43 C). Hot water is water at a temperature greater than or equal to 110 F (43 C) Domestic hot water for bathing and showering is usually limited to a maximum of 120 F. Domestic hot water for dishwashing and laundries can be higher. Generally, domestic hot water systems operate around 140 F and heating hot water systems operate around 190 to 200 F. Scalding is often associated with combined systems when unqualified maintenance workers adjust system temperatures to address "lack of heat" calls.

Pitfall Number 3: Not including all of the required components in the combined systems

A combined system requires many components to operate properly. If all of the components are not installed in the proper location, the system will experience problems. These components include, but are not limited to the following: the boiler, storage tanks, expansion tank, isolation valves, unions, dielectric waterways, circulating pumps, air eliminators or air vents, control valves, relief valves, balancing valves, heating coils, fin tube radiators, thermostats, pressure gauges, temperature gauges, flushing connections, plumbing fixtures, etc. All of these components must work in concert and must be designed to work together as a system. If any one or several of the components are not installed, or if they are undersized or installed improperly, problems and safety issues can occur.

Pitfall Number 4: Seasonal pumping and pump sizing

During the winter heating season, all of the components in a combined system will require a simultaneous peak demand in the morning when it is showering time. The circulating pump must be sized for the simultaneous peak heating and showering loads. During this time it does not make sense to circulate a large quantity of water. I often see a smaller circulating pump that is piped around the large circulating pump so it can be used in the winter months when the large circulators are not needed for building heating.

Systems with domestic hot water flowing from the city water supply through the heating hot water system components such as pumps, control valves and heating coils are often called open systems. Systems with a double wall heat exchanger separating the fluid of the heating hot water system from the domestic hot water are often referred to as closed systems.

When a significant portion of a system is being used seasonally for heating and the remainder of the system is being used year round for domestic hot water, open systems are susceptible to bacteria growth in stagnant sections of heating coil piping. Heating coils have huge potential for bacterial amplification when hydronic systems are coupled with potable hot water systems where no physical barrier or heat exchanger exists between the two fluids.

Pitfall Number 5: Dead legs

During the summer months, the fan coil units and branches to baseboard heating units are shut off with a solenoid valve or the circulating pump on these branches does not run all summer long. It is not unusual for a heating system to sit idle for more than six months in southern climates. When the first call for heating is made, there is usually a slug of brackish and foul tasting water that is high in debris, metals and bacteria content. Combined systems are by design creating very large dead legs. This is a violation in many plumbing codes. Controls on combined systems need to incorporate a periodic flushing of the zones by operating the solenoid valves and circulators on each zone on at least a weekly basis if not more often.

Pitfall Number 6: Peak load problems

The early morning is generally the coldest time of day. It is also when guests at a hotel or residents of an apartment building or condominium take their morning showers. Equipment, piping, pumps and valves must be sized to handle this simultaneous peak load. If the equipment is not sized big enough the temperature of the space will fall and the shower water temperature will fall. Either condition is likely to result in calls and complaints.

Pitfall Number 7: Sizing

Sizing problems can arise when engineers, owners or contractors try to be thrifty and save a few bucks by rounding down on their peak load calculations and downsizing pumps, piping, valves or coils. This is when the phone starts ringing with complaints of spaces being too cold or there not being enough hot water for a shower. The maintenance men usually do what comes naturally when they receive calls of not enough heat: They go to the boiler and turn the temperature up. Turning up the temperature will not cause problems for the heating coils, but it does significantly increase the risk of scalding if the maximum temperature limit stops in the showers and tub/shower valves are not readjusted.

If the shower has an old two-handle or single handle non-compensating type shower valve that compensates for changes in incoming temperature or pressure the risk of scalding is even greater. The best solution is to have a thermostatic mixing valve on the hot water supply to limit the hot water to a safe temperature. If the hot water and heating water piping are still separated, and the

system uses one boiler, then a temperature actuated master thermostatic mixing valve conforming to ASSE 1017 or the appropriate CSA B-125 mixing valve can be located at the water heater to lower the hot water to a safe delivery temperature. If the combined system utilizes the same piping for heating hot water and domestic hot water, a temperature limiting valve conforming to ASSE 1070 should be used in-line to mix cold water with hot water to provide a safe temperature of hot water for bathing or showering fixtures.

Pitfall Number 8: Maintenance

The main problem with a combined system is that the system includes components and controls for two different mechanical trade disciplines. Often, if there is a service call, the service technician may be familiar with one system or the other. If the system was designed with a specific operating temperature, it is not uncommon for a service tech familiar with only one system to set the temperature to that of the system he is accustomed to.

There are also many components in the system that one trade or the other may be unfamiliar with. For example, in one case the owner called an HVAC technician to work on his combined system. The technician was used to setting hydronic systems for building heating at 190 to 200 F. He set the temperature to 190 F, and a woman was scalded when she got into her shower. The technician did not know that he needed to reset the maximum temperature limit stop on all of the ASSE 1016 shower valves when he readjusted the boiler set point temperature.

Pitfall Number 9: Cast iron boiler on an open system

Cast iron boilers do not perform well with open systems because of the large quantities of water that introduces oxygen and minerals that cause rust stains, oxidation and fouling of the heating surfaces. This mistake does not take long to find because of the rust stains that appear in sinks, bathtubs and showers. Cast iron boilers can work well, but they must have a separate closed loop of boiler water that is treated with corrosion inhibitors and other boiler chemicals as needed. The boiler water can then be piped to a coil in a hot water tank or to a heat exchanger to provide domestic hot water.

Pitfall Number 10: No storage tank with copper fin tube boilers

I have seen installations where someone thought they could save a few bucks by eliminating the storage tank and using the heating hot water main as the storage tank. This does not work in motels, hotels, apartment buildings and condos. In facilities like these there needs to be a stored volume of water ready for use in a dump load such as a morning shower period. Copper fin tube boilers are designed to raise the temperature of the water only 20 to 40 F as the water flows through the boiler. If the water flows too slowly through the boiler, it will scale up and if it flows too fast the copper will erode away. These types of boilers need to have a storage tank for plumbing applications with a dump load. In heating applications, the Btu input is matched to the heating load calculations, and the system works fine.

Pitfall Number 11: No thermal expansion tank

All heating hot water system and domestic hot water systems must have a thermal expansion tank rated for use in a potable water system, not a hydronic expansion tank. The tank should be sized for a system start-up from ambient to hot. If the system has one boiler and two piping systems with a heat exchanger each piping system should have a thermal expansion tank.

Pitfall Number 12: Scalding injuries and deaths

Many designers, contractors and owners forget that there are lives at stake when they design and build the combined hot water systems. People have been scalded to death or seriously injured when the systems are not designed, installed or maintained properly.

Pitfall Number 13: Litigation

Kurt Vonnegut, Jr. an American writer once wrote "Another flaw in the human character is that everybody wants to build and nobody wants to do maintenance." If you are not willing to commit to properly maintaining the system for the life of the system, don't design it, don't install it or don't request that it be installed. Combined systems require an extensive amount of work and oversight to make sure someone does not get injured. You must document everything, because when someone is injured, everyone will be named in the lawsuit.

Pitfall Number 14: Code requirements for thermostatic mixing valves

The 2009 International Plumbing Code (IPC) has the following language dealing with combined systems: 501.2 Water heater as space heater. Where a combination potable water heating and space heating system requires water for space heating at temperatures higher than 140°F (60°C), a master thermostatic mixing valve complying with ASSE 1017 shall be provided to limit the water supplied to the potable hot water distribution system to a temperature of 140°F (60°C) or less. The potability of the water shall be maintained throughout the system.

The 2009 IPC also has the following language addressing maximum water temperatures for instantaneous water heaters: 501.6 Water temperature control in piping from tankless heaters. The temperature of water from tankless water heaters shall be a maximum of $140^{\circ}F(60^{\circ}C)$ when intended for domestic uses. This provision shall not supersede the requirement for protective shower valves in accordance with Section 424.3.

Pitfall Number 15: Engineered system

I have seen a value engineering option offered by a contractor to combine the domestic hot water system with the heating hot water system. This was not a value to the owner, and it was not engineered. During the evaluation process, the owner decided to allow the contractor to combine the systems without having the contractor provide engineered drawings. This decision gave the contractor the ability to use whatever he wanted to use. The owner got a system that did not work.

Pitfall Number 16: Pipe materials

I have seen a cost cuting option labeled as a value engineering option given by a contractor. The option was accepted, and the contractor simply eliminated the domestic hot water system and changed the hydronic system from black steel to galvanized steel piping. This was in a condominium building that had about 500 condos that sold in the neighborhood of one million dollars each. The



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galvanized pipe started to rust significantly within two years of service and rust stains were significant in all fixtures. The seasonal dead legs from the heating coils allowed rust barnacles to form until the first call for heat. When the flow in these dead leg branches resumed on the first call for heat in the fall rust, debris, iron oxide and stagnant water would be flushed into the strainers of the control valves and into the domestic water system.

Galvanized steel pipe should never be used on a domestic hot water system because domestic hot water is an open system connected to the city water main, which introduces a large quantity of oxygenated water into the system. Oxygenated water will cause significant corrosion in ferrous metals such as black steel and galvanized pipe. All components of a combined system should be copper or another code approved non-ferrous material for domestic hot water service if they are in contact with the city water supply. I often see iron valves installed in these combined systems. This is usually the result of a heating contractor installing or performing maintenance on the combined system and of the contractor not being familiar with the requirements in the code for all components to be approved for domestic water use.

Pitfall Number 17: Pumps

When sizing pumps for a combined system there should be two separate systems and one boiler. The hydronic system should be a closed loop that can use large ductile iron-bodied pumps. The problem with an open system is that, when the large pumps are shut down for six months or more, the pumps, and all hydronic circuits to heating coils and baseboard heaters, become dead legs in the piping system. This is why there should be a separate closed piping circuit for the heating system piping.

Pitfall Number 18: Corrosion and Erosion of the pipes

I have seen large cast iron and ductile iron hydronic pumps that were not approved for domestic water systems installed in combined systems. When such systems are first turned on in the fall, large slugs of iron oxide laden water are forced into the domestic hot water distribution system. This generally results in sinks and bathtubs filled with orange rusty looking water until the entire system gets flushed out significantly. The ferrous materials in the combined system typically lead to other problems with plugged strainers on control valves and other components. Another problem I see often with these systems is the flow in GPM is not totaled for the peak flow for both systems often resulting in undersized piping. If copper piping is used, the hot water velocity must be within the limitations provided in the Copper Development Association's "Copper Piping Handbook" Cold water can have a velocity up to 8 feet per second. In copper pipes, hot water up to 140 F has a velocity limitation of 5 feet per second. Hot water over 140 F has a velocity limitation of 2 - 3 feet per second. I have seen many copper pipes springing leaks because of high velocities and high temperatures. High velocities and high temperatures can easily occur in combined systems.

Pitfall Number 19: Corrosion inhibitors and other boiler water

treatment chemicals

I visited one building on the East Coast where the combined system consisted of eight- inch galvanized water pipes. The galvanized pipes were corroding to the point where the hot water was very cloudy and orange. The building maintenance personnel chose to add an injection pump to inject chemicals into the domestic water main entering the building to raise the PH of the water and to intentionally build up a layer of scale inside the galvanized piping to minimize the amount of corrosion. The problem was that the scale also formed on the heating surfaces and in the control valves, causing them to fail. Upon inspecting the barrel of the chemicals being injected into the water supply. I noted that there were warning labels stating that the materials were toxic to humans. I reported this to the building owner, who had to correct the situation immediately. This was another case of a heating contractor working on a plumbing system and not being familiar with plumbing code requirements. The solution he came up with would be a possible option for a hydronic system, but in a domestic water system that was a code violation.

Pitfall Number 20: Loss of both systems when there is a problem. When there is a problem with a combined system that causes the system to shut down, both the domestic hot water system and the heating hot water system are out of service. If it is a boiler problem or another major problem, the entire building could be without both systems for a long period of time.

Pitfall Number 21: Legionellae bacteria

A research report in 1988 authored by Al Steele, who was the president of the ASPE Research foundation at the time, recommended storing domestic hot water between 135 F and 140 F and utilizing a thermostatic mixing valve to mix the hot water down to a safe delivery temperature below 120 F. With a storage temperature of 140 F, Legionellae bacteria will die within 32 minutes.

The Legionellae bacteria cannot survive water temperatures above 131 F (55 C) for more than five or six hours. The bacteria die instantly at temperatures above 158 F (70 C). General protection against the bacteria can be achieved by designing an operating water temperature of at least 140 F (60 C) or higher. As temperatures increase, so does the risk of scalding. For system water temperatures below 140 F (60 C) special provisions are necessary to allow for cleaning and chemical treatment procedures for addressing the Legionellae bacteria in the domestic hot water system.

A storage temperature of 140 F should be high enough to protect the water heater from the bacteria, but in open systems with Legionellae bacteria in the municipal water supply, the potable hot water system would continually be reseeded with high dosages of water that is potentially infested with Legionellae bacteria. This is another reason why combined systems should have a closed loop for the heating hot water system.

Pitfall Number 22: Leakage of boiler water

When boiler water at a higher temperature than 140 F, (180 to 210 degrees F) leaks through a faulty zone valve or solenoid valve or is allowed to flow by gravity circulation through a circulating pump that is de-energized, there is the potential for overheating the domestic hot water. A thermostat that controls a solenoid valve or circulating pumps on the water heater should never be used to control the temperature in a domestic hot water system. Thermostats allow too great a temperature variation and there is potential for leakage and temperature creep. The best way to address this is to provide a thermostatic mixing valve that conforms to ASSE 1017 on the domestic hot water line coming from the hot water tank to provide a safe hot water distribution temperature. If you are considering a combined system, avoiding these pitfalls should help keep your building warm and provide the occupants a safe temperature of hot water. If you don't avoid these pitfalls you could find yourself in hot water.

Another option would be to keep life simple and keep the systems separate. Then you will not have to worry about someone coming along later and messing up your system design with system modifications or poor maintenance that can create scalding issues. Steer clear of combined heating hot water and domestic hot water systems and you will also steer clear of potential litigation. Ron George is president of Ron George Design & Consulting Services. He has served as Chairman of the International Residential Plumbing & Mechanical Code Committee. He has also served on the IPC Code committee. He is active in plumbing code and plumbing product standard development committees with ICC, IAPMO, ASSE, ASME, ISEA, ASHRAE, NFPA and ASTM. His company specializes in plumbing, piping, fire protection and HVAC system design and consulting services. He also provides plumbing and mechanical code consulting services and he provides investigations of mechanical system failures and litigation support. To contact Ron, email: Ron@Plumb-TechLLC.com.

Bibliography: Title of Magazine: Plumbing Engineer Magazine, 22 pitfalls to avoid when designing or installing a combined heating hot water and domestic hot water system, August, 2010 Part 1 & September 2010 Part 2, By Ron George, CIPE, CPD, President, Ron George Design & Consulting Services - Part 1 Website: http://plumbingengineer.com/aug_10/code.php; Part 2 Website: http://plumbingengineer.com/sept_10/code.php

Copper Development Association's Copper Tube Handbook. website: http://www.copper.org/applications/plumbing/cth/

Cost Impact: Will not increase the cost of construction

There is no cost increase with this code change. This is simply a clarification. Combined system with open piping has not been allowed in the current code because of cross connections. This code change is just clarifying the language because the language is not clear it has allowed an unsafe condition to occur where it has been misinterpreted. Combined heating hot water and domestic hot water systems can still be used, There just needs to be a closed loops for the heating hot water to prevent contamination, stagnant water, corrosion and scald injuries.

	Report of Committee Action
Hearings	Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement. Closed valves in "off season" applications creates a water quality problem in potable water systems that are also used for heater systems.

Assembly Action:			None
	Final Action	n Results	
	P151-15	AS	



Code Change No: P152-15

Original Proposal

Section: 608.11

Proponent: Jeremy Brown, NSF International, representing NSF International

Revise as follows:

608.11 Painting of Potable water tanks. Where in contact with potable water intended for drinking water, water tanks, coatings for the inside of tanks and liners for water tanks shall conform to NSF 61. The interior surface of a potable water tank shall not be lined, painted or repaired with any material that changes the taste, odor, color or potability of the water supply when the tank is placed in, or returned to, service.

Reason: NSF/ANSI Standard 61 Drinking Water System Components-Health Effects addresses critical aspects of drinking water system components: whether contaminants that leach or migrate from the product/material into the drinking water are above acceptable levels in finished waters. Requiring NSF 61 will help protect the drinking water supply from the leaching of contaminants. The IPC and IRC already requires conformance to NSF 61 for pipes, fittings, faucets and valves intended to supply drinking water. (Sections 424.1, 605.3, 605.4, 605.5, 605.7 of IPC). It is logical that tanks should have to meet this same requirement to protect the drinking water. This requirement is also referenced in the Uniform Plumbing Code, and the water works regulations of 46 states.

There are adequate products on the market to fulfill this requirement as there are hundreds of products listed by NSF and other third party certifiers.

Cost Impact: Will not increase the cost of construction.

Because there are many certified tanks, tank liners, and coatings on the market, this is not expected to increase the cost of construction.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: Tanks are part of the water system and they must be NSF 61 compliant just as piping is required to be.

Assembly Action:

Final Action Results

P152-15

AS

Approved as Submitted

None



BACK

Code Change No: P153-15

Original Proposal

Section: 608.13.1

Proponent: Michael Moss, American Backflow Prevention Association, representing American Backflow Prevention Association (msmoss@utah.gov)

Revise as follows:

608.13.1 Air gap. The minimum required *air gap* shall be measured vertically from the lowest end of a potable water outlet to the *flood level rim* of the fixture or receptacle into which such potable water outlet discharges. *Air gaps* shall comply with ASME A112.1.2 and *air gap* fittings shall comply with ASME A112.1.3. <u>Products that are *listed* and *labeled* to ASME A112.1.2 or ASME A112.1.3 shall be considered to be in compliance with this section.</u>

Reason: Section 608.13.9 is incorrectly located with and greatly confused by the various types of backflow preventers within Section 608.13. This is specific to the types of backflow preventers, their standards and suitability for use in certain conditions. Table 608.1 aligns with that criteria. Chemical dispensers are already specified with the backflow requirements of Section 608.16.7.

Cost Impact: Will not increase the cost of construction. The installation and proper use of dispenser equipment would not increase or lower costs.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P153-15

AS



Code Change No: P155-15

Original Proposal

Section: 608.13.5, 608.13.8

Proponent: Michael Moss, American Backflow Prevention Association, representing American Backflow Prevention Association (msmoss@utah.gov)

Revise as follows:

608.13.5 Pressure vacuum breaker assemblies. Pressure vacuum breaker assemblies shall conform to comply with ASSE 1020 or CSA B64.1.2. Spill-resistant vacuum breaker assemblies shall comply with ASSE 1056 or CSA B64.1.3. These assemblies are designed for installation under continuous pressure conditions where shall be installed with the critical level is installed at of the required height assembly located not less than 12 inches (304.8 mm) above all downstream piping and outlets. Pressure vacuum breaker assemblies shall not be installed in locations where spillage could cause damage to the structure.

Delete without substitution:

608.13.8 Spill-resistant pressure vacuum breaker assemblies. Spill-resistant pressure vacuum breaker assemblies shall conform to ASSE 1056 or CSA B64.1.3. These assemblies are designed for installation under continuous-pressure conditions where the critical level is installed at the required height.

Reason: The existing section included spill-resistant vacuum breaker assemblies. Section 608.13.8 duplicated the requirements. The conditions for use of both types of backflow assemblies are the same. The deletion of the confusing language and the added language clarifies the installation requirements and inspection criteria for for applicable installations.

Cost Impact: Will not increase the cost of construction There is no cost increase with proper planning and installation.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The CSA standard is a viable standard for these products. The standard is already in the IRC plumbing code.

Assembly Action:

Final Action Results

P155-15

AS

None

Approved as Submitted

Code Change No: P159-15

Original Proposal

Section: 608.16.1, 608.16.1 (New), 608.16.1.2 (New)

Proponent: Roger Harper, representing Virginia Plumbing and Mechanical Inspectors Association (skip.harper@dhcd.virginia.gov)

Add new text as follows:

608.16.1 Beverage dispensers. The water supply connection to beverage dispensers shall be protected against backflow in accordance with Sections 608.16.1.1 and 608.16.1.2.

Revise as follows:

608.16.1-608.16.1.1 Beverage Carbonated beverage dispensers. The water supply connection to carbonated beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or by an air gap air gap. The portion of the backflow preventer device downstream from the second check valve of the device and the piping downstream therefrom shall not be affected by carbon dioxide gas.

Add new text as follows:

608.16.1.2 Coffee machines and non carbonated drink dispensers. The water supply connection to coffee machines and noncarbonated beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE 1022, ASSE 1024 or by an air gap.

Reason: This section needs to be sub-divided into two categories one for carbonated beverage dispensers and one for noncarbonated dispensers.

Cost Impact: Will not increase the cost of construction

There is no cost increase but actually less cost in many cases because of the price difference between the backflow devices.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The proposed language provides appropriate backflow prevention options for coffee machines and noncarbonated drink dispensers.

Assembly Action:

INTERNATIONAL CODE COUNCIL®

Final Action Results

P159-15

None

AS

Code Change No: P160-15

Original Proposal

Section: 608.16.1, 608.16.10, 608.16.9

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

608.16.1 Beverage dispensers. The water supply connection to <u>each</u> beverage dispensers <u>dispenser</u> shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or by an *air gap*. The portion of the backflow preventer device downstream from the second check valve and the piping downstream therefrom shall not be affected by carbon dioxide gas.

608.16.9 Dental pump-pumping equipment. Where The water supply connection to each dental pumping equipment connects to the water distribution system, the water supply system shall be protected against backflow in accordance with Section 608.13.1, 608.13.2, 608.13.5, 608.13.6 or 608.13.8.

608.16.10 Coffee machines and noncarbonated beverage dispensers. The water supply connection to <u>each</u> coffee <u>machines machine</u> and <u>each</u> noncarbonated beverage <u>dispensers dispenser</u> shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or by an *air gap*.

Reason: The reason for these revisions should be obvious. Each "unit" needs to be protected from backflow from the other "unit". For example, installing one backflow preventer device to serve multiple "units" leaves open the possibility that contamination in one "unit" could contaminate an adjacent "unit". In other words, cross contamination could occur. Although the backflow protection section of the code is primarily concerned with protecting the potable water supply from the "units", the code needs to also be specific about protection between units. These changes make this clear. Hopefully, many jurisdictions have already been aware of this potential problem and have already required separate backflow prevention devices for these units.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let 128.

Cost Impact: Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. For those jurisdictions that were not enforcing the code in this manner, yes, there might need to be extra backflow prevention devices installed. In those situations there will be an increased cost of material and labor.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:			None
	Final Actio	n Results	
	P160-15	AS	



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Approved as Submitted

Code Change No: P161-15

Original Proposal

Section: 608.16.1, 608.16.1.1 (New), 608.16.1.2 (New), 608.16.10

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

608.16.1 Beverage dispensers. The water supply connection to beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or by an *air gap*. The portion of the backflow preventer device downstream from the second check valve in accordance with Section 608.16.1.1 and the piping downstream therefrom shall not be affected by carbon dioxide gas 608.16.1.2.

Add new text as follows:

608.16.1.1 Carbonated beverage dispensers. The water supply connection to carbonated beverage dispensers shall be protected against backflow by a backflow prevention device conforming to ASSE 1022 or by an air gap. The portion of the backflow preventer device downstream from the second check valve of the device and the piping downstream therefrom shall not be affected by carbon dioxide gas.

608.16.1.2 Coffee machines and noncarbonated beverage dispensers. The water supply connection to coffee machines and noncarbonated beverage dispensers shall be protected against backflow by a backflow prevention device conforming to ASSE 1024 or by an air gap.

Delete without substitution:

608.16.10 Coffee machines and noncarbonated beverage dispensers. The water supply connection to coffee machines and noncarbonated beverage dispensers shall be protected against backflow by a backflow preventer conforming to ASSE 1022 or by an *air gap*.

Reason: There is not a need to protect the potable water supply to coffee machines and noncarbonated beverage dispensers with a backflow prevention device that is suitable for a potable water supply connection to a carbonated beverage dispenser. The ASSE 1022 device is constructed especially for exposure to carbon dioxide gas and carbonated water. An ASSE 1024 device is a dual check valve device just like the ASSE 1022 device but it does not have an intermediate atmospheric vent and thus, does not require a drain. There isn't any justification for needing to use the ASSE 1022 device (and having to provide a drain for the vent) where there will not be exposure to carbon dioxide gas or carbonated water. What comes from a coffee machine or a non-carbonated beverage dispenser is supposedly safe enough to ingest so why have so great of concern that the potable water supply might become "polluted" with something that will not make people sick if an ASSE 1024 device fails. (See the definition of POLLUTED in Chapter 2).

Also consider that, in general, ASSE 1022 devices apparently don't have a long life according to many field reports. On the other hand, ASSE 1024 devices are frequently used with great success in many other similar low hazard applications.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 95.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



Report of Committee Action
Hearings

Committee Action:

Committee Reason: Consistency with committee's action on P159-15. Section 608.16.10 needed to be deleted to complete the full intent of why committee approved P159-15.

Assembly Action:

None

Approved as Submitted

Final Action Results

P161-15

AS



Code Change No: P162-15 Part I

Original Proposal

Section: 608.16.11 (New), 801.1, 801.2, 802.1

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Add new text as follows:

608.16.11 Humidifiers. The water supply connection to humidifiers shall be protected against backflow by a backflow preventer conforming to ASSE 1012 or CSA B64.3, or by an *air gap*.

Revise as follows:

801.1 Scope. This chapter shall govern matters concerning indirect waste piping and special wastes. This chapter shall further control matters concerning food-handling establishments, sterilizers, <u>humidifiers, clear-water waste</u>, swimming pools, methods of providing *air breaks* or *air gaps*, and neutralizing devices for corrosive wastes.

801.2 Protection. Devices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, <u>humidification</u>, distillation, processing, cooling, or storage of ice or foods, and that discharge to the drainage system, shall be provided with protection against backflow, flooding, fouling, contamination and stoppage of the drain.

802.1 Where required. Food-handling equipment, in other than dwelling units, clear-water waste, <u>humidifiers</u>, dishwashing machines and utensils, pots, pans and dishwashing sinks shall discharge through an indirect waste pipe as specified in Sections 802.1.1 through 802.1.8. Health-care related fixtures, devices and equipment shall discharge to the drainage system through an indirect waste pipe by means of an *air gap* in accordance with this chapter and Section 713.3. Fixtures not required by this section to be indirectly connected shall be directly connected to the plumbing system in accordance with Chapter 7.

Reason: Most humidifier manufacturer installation instructions only say to make potable water connections in accordance with local codes. The codes are silent on the protection of the water supply connection to humidifiers. Humidifiers, if not regularly serviced, can be a source of contamination to the connected water supply. The inspector has no way of knowing whether such pieces of equipment have internal backflow protection. This simple addition to the codes will clarify the humidifiers need to have a backflow device just like other similar pieces of equipment in the list of items.

Humidifiers have overflows that drain excess water. Improper (direct) connection of the overflow tube could cause a contamination to occur inside of the humidifier which could result in contamination being carried into the airstream of the equipment that the humidifier is attached to. The requirement for an air gap connection at the termination of this discharge tube will prevent this possible contamination from occurring.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 177.

Cost Impact: Will increase the cost of construction



This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, there will be the added cost of a backflow preventer and the installation labor.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Some humidifiers on the market do not have integral backflow protection for the water supply.

Assembly Action:

None

As Submitted

Public Comments

Public Comment 1:

Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com) requests Approve as Modified by this Public Comment.

Modify as follows:

608.16.11 Humidifiers. The water supply connection to humidifiers <u>that do not have internal backflow</u> <u>protection</u> shall be protected against backflow by a backflow preventer conforming to ASSE 1012 or <u>CSA</u> <u>B64.3, or</u> by an *air gap*.

Commenter's Reason: This modification clarifies the requirements and adds the reference to the CSA standard. It was merely an oversight that the equivalent CSA standard was not listed.

Final Action Results

P162-15 Part I

AMPC1



Code Change No: P164-15

Original Proposal

Section: 611.2

Proponent: Jeremy Brown, NSF International, representing NSF International

Revise as follows:

611.2 Reverse osmosis systems. Point-of-use reverse osmosis drinking water treatment units shall comply with NSF58 or CSA B483.1. The discharge from a reverse osmosis drinking water treatment unit shall enter the drainage system through an *air gap* or an *air gap* device that meets the requirements of NSF 58 or CSA B483.1.

Reason: Point-of-use reverse osmosis (RO) drinking water treatment units are commonly used in kitchens, day care centers, breakrooms, etc. These standards are a necessary reference to ensure the protection of public health from these units from a performance, material safety and contaminant reduction aspect. These standards are already referenced in the P2909.2 of the IRC and the reference here contains similar language.

Cost Impact: Will not increase the cost of construction

Because a majority of point of use products sold in the US already meet the requirements of NSF/ANSI 58, this code change is not expected to increase the cost of construction.

Report of Committee	Action
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P164-15

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AS

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Approved as Submitted

None

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FPC

611.2 Reverse osmosis drinking water treatment systems shall meet the requirements of NSF 58, Reverse Osmosis Drinking Water Treatment Units, or Water Quality Association Standard S-300, Point-of-Use Low Pressure Reverse Osmosis Drinking Water Systems.

Code Change No: P166-15 Part I

Original Proposal

Section: 701.2

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

701.2 Sewer Connection to sewer required. Buildings in which Sanitary drainage piping from plumbing fixtures are installed in buildings and premises having sanitary drainage piping systems from premises shall be connected to a public sewer, where sewer. Where a public sewer is not available, or an approved the sanitary drainage piping and systems shall be connected to a private sewage disposal system in compliance with state or local requirements. Where state or local requirements do not exist for private sewage disposal systems, the sanitary drainage piping and systems shall be connected to an approved private sewage disposal system that is in accordance with the *International Private Sewage Disposal Code*.

Exception: Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Chapter 13 or 14.

Reason: The section is being re-written because many jurisdictions have state and local laws regulating private sewage disposal systems and do not and cannot use the IPSDC. However, there are some jurisdictions that do not have state and local laws for private sewage disposal, therefore in those cases, the IPSDC provide regulations for waste disposal.

The section language (existing or revised) presents a roadblock for utilizing gray water systems. The exception was added to allow for gray water to be diverted from the sewer or private sewage disposal system so that it can be processes by systems in accordance with Chapters 13 or 14.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 199.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None



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P166-15 Part I FPC

FPC

701.2 Sewer required. Every building in which plumbing fixtures are installed and premises having drainage piping shall be connected to a publicly owned or investor-owned sewage system, where available, or an approved onsite sewage treatment and disposal system in accordance with Chapter 64E-6, Florida Administrative Code, Standards for Onsite Sewage Treatment and Disposal Systems.

Code Change No: P166-15 Part II

Original Proposal

Section: P2602.1

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P2602.1 General. The water-distribution-and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public water supply-or sewer system, respectively, if available. Where either a public water-supply or sewer-system, or both, are is not available, or connection to them the supply is not feasible, an individual water supply or individual (private) sewage-disposal system, or both, shall be provided. Sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises shall be connected to a public sewer. Where a public sewer is not available, the sanitary drainage piping and systems shall be connected to a private sewage disposal system in compliance with state or local requirements. Where state or local requirements do not exist for private sewage disposal systems, the sanitary drainage piping and systems shall be connected to an approved private sewage disposal system that is in accordance with the International Private Sewage Disposal Code.

Exception: Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Sections P2911 or P2910.

Reason: Some jurisdictions do not have state and local laws for private sewage disposal systems. Therefore in those cases, the IPSDC provides regulations for waste disposal. The section language (existing or revised) presents a roadblock for utilizing gray water systems. The exception was added to allow for gray water to be diverted from the sewer or private sewage disposal system so that it can be processed by systems in accordance with Chapters P2910 or P2911.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 199.

Cost Impact:

Will not increase the cost of construction.

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, where private sewage disposal is not regulated by state and local laws, builders could do anything with sewage. They might not provide a large enough private sewage disposal system or one made of materials having long life. In those situations, there will be the extra cost for properly sized systems and better materials. Possibly there would be some additional labor for a larger installation.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Approved as Submitted

None

Final Action Results

AS

P166-15 Part II

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Code Change No: P167-15

Original Proposal

Section: 701.8

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Delete without substitution:

701.8 Drainage piping in food service areas. Exposed soil or waste piping shall not be installed above any working, storage or eating surfaces in food service establishments.

Reason: Questions about this section have been coming up more frequently concerning the necessity of this requirement and the intent of the section. Does this section mean that soil and waste piping cannot be above the indicated areas regardless of whether a "ceiling" is between the piping and those areas? Or is this section requiring that a ceiling be installed and if so, what type of ceiling (lay-panel/grid work or gypsum board on framing)? Or is this section requiring custom-made "drip pans" under all soil and waste piping (whether there is a ceiling between the piping and the surfaces below or not)?

This section is vague and should be removed from the code. Here's why:

There seems to be the implication that soil and waste piping joints will always leak even though the piping is installed in accordance with the code and is pressure tested in the presence of a code official. If there really is a significant problem with joints failing, then that is an issue to be solved elsewhere. What about ductwork, sprinkler piping and even penetrations through a floor above that can leak "contaminated water" that can drop down to the surfaces below? What about condensation on the outside of cool surfaces that carry years of dirt off of surfaces. Why is there not a similar restriction against the installation of ductwork, sprinkler piping and penetrations above these areas?

If the assumption is made that a ceiling below the piping is what is required, why does a ceiling make the situation any more acceptable? Lay-in panel/grid ceiling systems can "leak" water without ever showing any damage to ceiling panels (think of the lighting troffers). Would we not be just as concerned about leakage in a space above a ceiling that served as an air plenum for a HVAC system?

A recent popular building design practice for restaurants is to not have a "ceiling" over the eating surfaces such as tables or bars. The "ceiling" in these areas is the bottom of the roof deck or the floor above. All the support structure, ductwork, sprinkler piping, other piping and associated hardware is exposed; typically all painted a uniform dark color.

Where the floor above the eating surfaces has plumbing fixtures, there will necessarily be soil and waste piping below the floor and in the open ceiling area just described. If the code intends for "drip pans" to be installed under the piping, then what should the drip pans be made of? Should those pans slope to a drain point? If so, where should the discharge of the drip pans be routed to? Is it acceptable to have the drip pans catching leaks for years and, unbeknownst to the owner, allowing a build-up of a festering mess of bacteria that is open to the moving ventilation air in the space?

A reading of the latest Food Code by the FDA, did not reveal any prohibitions for soil and waste piping above the surfaces indicated in this section. However, the Food Code does make a big deal about the "clean ability" of surfaces above food prep areas (but not above eating surfaces). Obviously, pipes and pipe hangers as well as most structural and ductwork surfaces would be difficult to clean. The local health departments enforcing their version of the Food Code will most likely demand ceilings in the food prep area even though the code (the IBC) does not have such a requirement.

Perhaps what needs to happen is that a proposal to the IBC be made to indicate that ceilings (and what type) are required above food preparation areas with the justification that the Food Code has concerns about "clean ability" of items that would be exposed if the ceiling was not there. That seems more logical than possibly what IPC Section 701.8 is trying to imply.

The PMGCAC did not feel that it was within their scope to make or suggest an IBC proposal for ceilings in restaurants. However, if such a proposal was made and was successful, it would be appropriate to make a proposal to the IPC that would prohibit the installation of any type of piping below a ceiling required by IBC Section 123.4 (whatever the IBC section number would end up being). Until then, this IPC Section 701.8 should simply be removed.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 137.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement. Ceilings for these areas should be addressed in the IBC.

Assembly Action:

None

Approved as Submitted

Final Action Results

P167-15

AS



Code Change No: P168-15

Original Proposal

Section: Table 702.1

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

TABLE 702.1 ABOVE-GROUND DRAINAGE AND VENT PIPE

MATERIAL	STANDARD
Brass pipe	ASTM B 43
Copper or copper-alloy pipe	ASTM B 42; <u>ASTM B 43;</u> B 302

(Portions of table not shown remain unchanged)

Reason: Brass is a copper alloy and I relocated the standard to the Copper and Copper Alloy Pipe line to cleanup the table.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P168-15

AS

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Approved as Submitted

None

Code Change No: P170-15 Part I

Original Proposal

Section: Table 702.2

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE 702.2 UNDERGROUND BUILDING DRAINAGE AND VENT PIPE

MATERIAL	STANDARD
Polyolefin pipe	ASTM F 1412; <u>ASTM F714;</u> CSA B181.3
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(Portions of table not shown remain unchanged)

Reason: ASTM F714 polyethylene pipe is sometimes used to rehabilitate piping sewers under buildings. Currently the code does not list the product for that use, and we were asked to submit a change to allow the use of the product.

HDPE sewer pipe made to ASTM F714, Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter is currently listed under TABLE 702.2, Building Sewer Pipe, allowing its installation and use outside of buildings. Section 717, which is a new section in the code, explains the use and installation of the product outside of buildings in pipe bursting methods. PPFA has had calls regarding the codes not permitting the products under buildings when repair is needed.

Cost Impact:

Will increase the cost of construction.

This proposal allows for an optional pipe material to be used under buildings. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase, and the material may even cost less than other options.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement. And for consistency with Section 717.4.

Assembly Action:

Final Action Results

P170-15 Part I

AS



None

Approved as Submitted

203

Code Change No: P170-15 Part II

Original Proposal

Section: Table P3002.1

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE P3002.1 UNDERGROUND BUILDING DRAINAGE AND VENT PIPE

PIPE	STANDARD
Polyolefin pipe	ASTM F 1412; <u>ASTM F714;</u> CSA B181.3

(Portions of table not shown remain unchanged)

Reason: ASTM F714 polyethylene pipe is sometimes used to rehabilitate piping sewers under buildings. Currently the code does not list the product for that use, and we were asked to submit a change to allow the use of the product.

HDPE sewer pipe made to ASTM F714, "Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter", is currently listed under TABLE P3002.1, Building Sewer Pipe, allowing its installation and use outside of buildings. PPFA has had calls regarding the codes not permitting the products under buildings when repair is needed.

ASTM F714, "Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter" is already in the code.

Cost Impact:

Will increase the cost of construction..

This proposal allows for an optional pipe material to be used under buildings. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase, and the material may even cost less than other options.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:		None
	Final Action Results	
	P170-15 Part II	AS

Approved as Submitted

Code Change No: P171-15

Original Proposal

Section: Table 702.3, 703.2, 705.16 (New)

Proponent: Shawn Coombs, Advanced Drainage Systems, Inc., representing Advanced Draiange Systems, Inc. (shawn.coombs@ads-pipe.com)

Revise as follows:

TABLE 702.3 (702.3) BUILDING SEWER PIPE

BUILDING SEV	
MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D 2661; ASTM F 628; ASTM F 1488; CSA B181.1
Acrylonitrile butadiene styrene (ABS) plastic pipe in sewer and drain diameters, including SDR 42 (PS 20), PS 35, SDR 35 (PS 45), PS 50, PS 100, PS 140, SDR 23.5 (PS 150) and PS 200; with a solid, cellular core or composite wall	ASTM F 1488; ASTM D 2751
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301
Concrete pipe	ASTM C 14; ASTM C 76; CSA A257.1M; CSA A257.2M
Copper or copper-alloy tubing (Type K or L)	ASTM B 75; ASTM B 88; ASTM B 251
Polyethylene (PE) plastic pipe (SDR-PR)	ASTM F 714
Polypropylene (PP) Plastic Pipe	ASTM F2736; ASTM F2764; CSA B182.13
Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall	ASTM D 2665; ASTM F 891; ASTM F 1488
Polyvinyl chloride (PVC) plastic pipe in sewer and drain diameters, including PS 25, SDR 41 (PS 28), PS 35, SDR 35 (PS 46), PS 50, PS 100, SDR 26 (PS 115), PS 140 and PS 200; with a solid, cellular core or composite wall	ASTM F 891; ASTM F 1488; ASTM D 3034; CSA B182.2; CSA B182.4
Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a solid, cellular core or composite wall	ASTM D 2949, ASTM F 1488
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F 1673; CSA B181.3
Stainless steel drainage systems, Types 304 and 316L	ASME A112.3.1
Vitrified clay pipe	ASTM C 4; ASTM C 700

For SI: 1 inch = 25.4 mm.



703.2 Drainage pipe in filled ground. Where a building sewer or building drain is installed on filled or unstable ground, the drainage pipe shall conform to one of the standards for ABS plastic pipe, cast-iron pipe, copper or copperalloy tubing, or_PVC plastic pipe or PP plastic pipe listed in Table 702.3.

Add new text as follows:

705.16 Polypropylene plastic. The joint between polypropylene plastic pipe and fittings shall incorporate an elastomeric seal. The joint shall conform to ASTM D3212. Mechanical joints shall not be installed above ground.

Reference standards type: Add new standard(s) as follows:

ASTM F2736-13e1 Standard Specification for 6 to 30 in (152 to 762 mm) Polypropylene (PP) Corrugated Single Wall Pipe And Double Wall Pipe

<u>ASTM F2764/F2764M-11ae2 Standard Specification for 30 to 60 in (750 to 1500 mm) Polypropylene (PP)</u> Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications

CSA B181.0-11 Definitions, general requirements, and methods of testing for thermoplastic non-pressure piping

CSA B182.13-11 Profile polypropylene (PP) sewer pipe and fittings for leak-proof sewer applications

Reason: This code change is proposed to incorporate the current ASTM and CSA standards for Polypropylene (PP) sanitary sewer pipe into the IPC code to bring it current with accepted pipe technology. PP pipe is widely used in North America for sanitary sewer trunk lines and has been used in Europe for many years for similar applications. The incorporation of PP into the IPC will allow sewer authorities following IPC to specify PP pipe in their systems.

Cost Impact: Will not increase the cost of construction.

Polypropylene has proven to be a lower cost alternative to many other sanitary sewer pipe products.

Analysis: A review of the standard proposed for inclusion in the code, ASTM F2736-13e1, ASTM F2764/F2764M-11ae2, CSA B181.0-11 & CSA B182.13-11, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Final Action Results

P171-15



AS

Code Change No: P173-15

Original Proposal

Section: Table 702.4

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

TABLE 702.4 PIPE FITTINGS

MATERIAL	STANDARD
Malleable iron	ASME B 16.3

(Portions of table not shown remain unchanged)

Reason: Chapter 7 is the sanitary drainage chapter of the code. The malleable iron row should be deleted. These are not drainage pattern fittings and would not be suitable for venting systems as the condensate would not ready flow back to the drain system. Malleable iron fittings has not been in the sanitary drainage fittings table of the IRC for many editions.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 54.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



Committee Action:

Committee Reason: This fitting's pattern is not suitable for vent piping applications.

Assembly	Action:
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Final Action Results

P173-15

AS

Approved as Submitted

None



Code Change No: P174-15 Part I

Original Proposal

Section: Table 702.4

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE 702.4 PIPE FITTINGS MATERIAL STANDARD Polyethylene ASTM D2683

Reason: Polyethylene pipe is already in IPC table for Building Sewer Pipe. However, a corresponding entry for pipe fittings of this material was not installed in the fittings table. This created a problem where fittings were needed for this pipe. Fittings could be required for branch piping, lateral connections and cleanouts. Section 717 for Pipe Bursting for sewer replacement was added to the code in the last cycle. That section included the fitting standard ASTM D2683. This standard just needs to be put in Table 702.4 so that fittings for polyethylene pipe included for sewer applications other than pipe bursting sewer applications.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 35.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action: None Final Action Results
P174-15 Part I AS



208

Approved as Submitted

Code Change No: P174-15 Part II

Original Proposal

Section: Table P3002.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

TABLE P3002.3 PIPE FITTINGS

PIPE MATERIAL	FITTING STANDARD
Polyethylene	ASTM D2683

(Portions of table not shown remain unchanged)

Reason: Polyethylene pipe is already in IRC table for Building Sewer Pipe. However, a corresponding entry for pipe fittings of this material was not installed in the fittings table. This created a problem where fittings were needed for this pipe. Fittings could be required for branch piping, lateral connections and cleanouts. Section P3010 for Pipe Bursting for sewer replacement was added to the code in the last cycle. That section included the fitting standard ASTM D2683. This standard just needs to be put in Table P3002.3 so that fittings for polyethylene pipe included for sewer applications other than pipe bursting sewer applications.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 35.

Cost Impact:

Will not increase the cost of construction..

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

209

Approved as Submitted

Final Action Results

P174-15 Part II

AS

Code Change No: P176-15

Original Proposal

Section: 703.4

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

703.4 Existing building sewers and <u>building drains</u>. Existing Where the entire sanitary drainage system of an existing building is replaced, existing building drains under concrete slabs and existing building sewers and drains shall connect with new building sewer and drainage systems only where found by examination and test to conform to that will serve the new system shall be internally examined to verify that the piping is sloping in quality the correct direction, is not broken, is not obstructed and is sized for the drainage load of material. The code official shall notify the owner new plumbing drainage system to make the changes necessary to conform to this code be installed.

Reason: This same proposal was approved for the 2015 IRC. This proposal is to coordinate the IPC with the same allowance.
 Consider a few situations that happen to buildings. 1) A slab-on grade building burns down or is wind damaged such that only the remaining slab foundation will be used to re-construct a new building. Re-use of the building drain would be desirable to avoid extensive slab rework. 2) A building is completely razed or the entire plumbing drainage system of a building needs replaced such

that only the building sewer remains. Re-use of the building sewer would be desirable to avoid extensive costs and possible complications for replacing the sewer (such as crossing a public street to connect to the public sewer). Why tear out good, serviceable building drains and building sewers for the sake of replacing with new material? The only way to know if existing building drains and existing building sewers are serviceable is to internally examine the piping for problems.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 200.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: It is important to verify that existing drainage systems are properly sized for the drainage load.

Assembly Action:

None

Final Action Results

P176-15



Approved as Submitted



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AS

Code Change No: P177-15

Original Proposal

Section: 704.1, Table 704.1

Proponent: Ronald George, Self, representing Self (Ron@Plumb-TechLLC.com)

Revise as follows:

704.1 Slope of horizontal drainage piping. Horizontal drainage piping shall be installed in uniform alignment at uniform slopes. The slope of a horizontal drainage pipe shall be not less than that indicated in Table 704.1 except that where the drainage piping is upstream of a grease interceptor, the slope of the piping shall be twice that indicated in Table 704.1.

TABLE 704.1 (704.1) SLOPE OF HORIZONTAL DRAINAGE PIPE

SIZE (inches)	MINIMUM SLOPE (inch per foot)
2 1/2 or less	1/4 ^ª
3 to 6	1/8ª
8 or larger	1/16 ^ª

For SI: 1 inch = 25.4 mm, 1 inch per foot = 83.33 mm/m.

Notes:

a. Slopes for piping draining to a grease interceptor shall comply with Section 704.1.

Reason: Currently there is no requirement for increased slope for grease laden waste to increase the velocity of the grease laden waste to get it to the interceptor before ot cools and coagulates in the drain line. This concept of increasing the slope of grease laden waste has been discussed in many design books and industry publications and articles for years, but it has not been a code requirement.

Cost Impact: Will not increase the cost of construction There should be no additional materials required to apply this design.

Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify proposal as follows:

704.1 Slope of horizontal drainage piping. Horizontal drainage piping shall be installed in uniform alignment at uniform slopes. The slope of a horizontal drainage pipe shall be not less than that indicated in Table 704.1 except that where the drainage piping is upstream of a grease interceptor, the slope of the piping shall be twice that indicated in Table 704.1 not less than 1/4 inch per foot (2 percent slope).

Committee Reason:

For the Modification only: A slope of 1/4 inch per foot is all that is necessary to keep grease laden waste flowing.

For the proposal As Modified: There needs to be a greater minimum pipe slope slope to keep grease-laden waste flowing.

Assembly Action:

None

Final Action Results

P177-15

AM

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Code Change No: P178-15 Part I

Original Proposal

Section: 704.2

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

704.2 <u>Change.</u> <u>No reduction in size in the direction of flow</u>. The size of the drainage piping shall not be reduced in size in the direction of the flow. <u>The following shall not be considered a reduction in size in the direction of flow</u>:

- 1. A 4-inch by 3-inch (102 mm by 76 mm) water closet connection shall flange.
- 2. <u>A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided</u> <u>that the 4 inch leg of the fitting is upright and below, but</u> not be considered as a reduction in size. connected to, the water closet flange.
- 3. An approved offset closet flange.

Reason: This section begs for clarification especially since 4 x 3 closet bends (elbows) and offset closet flanges are frequently being used in current day construction. Item 1 is not any change to what was stated before.

Item 2- Four x 3 closet bends were commonly used many decades ago when these bends were made of lead. The item is carefully worded to make the intent clear that the bend is to be installed in the upright orientation (and not horizontally). Also, the wording indicates that the bend is not required to be directly connected to closet flange – there can be a vertical section of pipe between the upright bend and the closet flange.

Item 3-Offset closet flanges have been used for decades. Some jurisdictions are reluctant to allow any offset closet flanges because the code doesn't outright discuss the use offset flanges (nor does it prohibit them). Because some offset closet flanges are especially "restrictive looking", code officials didn't want to start allowing some types and not other types. This section is often cited as the basis for disapproving the use of all offset flanges. However, that doesn't seem completely appropriate as some offset closet flanges comply with the standards indicated for pipe fittings in Table 702.4. For example, the standard ASTM D2665 (for PVC fittings) references the standard ASTM D3311 for the patterns and dimensions of DWV fittings. Table 44 in ASTM D3311 shows two types of offset closet flanges. Thus, a code official denying the use of that particular offset closet flange might not be supported by what the code is allowing by Table 702.4. Therefore, Item 3 is being added to open the door for fittings that are already approved by inclusion in a referenced standard and any other offset closet flange that the code official thinks is acceptable.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 201.

Cost Impact:

Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.



Report of Committee Action Hearings

Committee Action:

Disapproved

Committee Reason: Requiring offset closet flanges be approved (by the code official) puts the responsibility onto the code official without providing him any guidance as to how to decide what is acceptable.

Assembly Action:

None



Public Comment 1:

Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Committee (PMGCAC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as follows:

704.2 No reduction in size in the direction of flow. The size of the drainage piping shall not be reduced in the direction of the flow. The following shall not be considered <u>as</u> a reduction in size in the direction of flow:

- 1. A 4-inch by 3-inch (102 mm by 76 mm) water closet flange.
- A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided that the 4 inch leg of the fitting is upright and below, but not necessarily directly connected to, the water closet flange.
- 3. An approved offset closet flange.

Commenter's Reason: The Committee's point about offset closet flange is well-taken. The PMGCAC is removing "approved". This does not necessarily mean that *any* design of offset closet flange is acceptable. Closet flanges are pipe fittings and should comply with the standards indicated for pipe fittings in Table 702.4.

For example, PVC pipe standards ASTM D2665 and F1866 include a reference to ASTM D3311 which covers the patterns and dimensions for drainage fittings. ASTM D3311 includes the pattern and dimensions for an offset closet flange. Therefore, where the offset closet flange is marked with the standard for the pipe, that fitting is acceptable. Any pipe fitting, such as a closet flange, that is not marked with the pipe or fitting standard that includes a reference to fitting patterns for offset closet flanges, would need to be approved under Section 105.2 Alternative design, materials and methods.



P178-15 Part I

AMPC1

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Code Change No: P178-15 Part II

Original Proposal

Section: P3005.1.6

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3005.1.6 <u>Change No reduction</u> in size in the direction of flow. The size of the drainage piping shall not be reduced in size in the direction of the flow. The following shall not be considered as a reduction in size- in the direction of flow:

- 1. A 4-inch by 3-inch (102 mm by 76 mm) water closet connection shall flange.
- 2. <u>A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided</u> <u>that the 4 inch leg of the fitting is upright and below, but</u> not be considered as a reduction in size, <u>necessarily directly connected to, the water closet flange</u>.
- 3. An approved offset closet flange.

Reason: This section begs for clarification especially since 4 x 3 closet bends (elbows) and offset closet flanges are frequently being used in current day construction. Item 1 is not any change to what was stated before.

Item 2- Four x 3 closet bends were commonly used many decades ago when these bends were made of lead. The item is carefully worded to make the intent clear that the bend is to be installed in the upright orientation (and not horizontally). Also, the wording indicates that the bend is not required to be directly connected to closet flange – there can be a vertical section of pipe between the upright bend and the closet flange.

Item 3-Offset closet flanges have been used for decades. Some jurisdictions are reluctant to allow any offset closet flanges because the code doesn't outright discuss the use offset flanges (nor does it prohibit them). Because some offset closet flanges are especially "restrictive looking", code officials didn't want to start allowing some types and not other types. This section is often cited as the basis for disapproving the use of all offset flanges. However, that doesn't seem completely appropriate as some offset closet flanges comply with the standards indicated for pipe fittings in Table 702.4. For example, the standard ASTM D2665 (for PVC fittings) references the standard ASTM D3311 for the patterns and dimensions of DWV fittings. Table 44 in ASTM D3311 shows two types of offset closet flanges. Thus, a code official denying the use of that particular offset closet flange might not be supported by what the code is allowing by Table P3002.3. Therefore, Item 3 is being added to open the door for fittings that are already approved by inclusion in a referenced standard and any other offset closet flange that the code official thinks is acceptable.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 201.

Cost Impact:

Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

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Report of Committee Action Hearings

Committee Action:

Disapproved

Committee Reason: Item 3 requires offset closet flanges to be approved by the code official but there is not any criteria for the code official to use for making that approval. There are many different types of offset closet flanges that would not be appropriate.

Assembly Action:

None



Public Comment 1:

Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Committee (PMGCAC@iccsafe.org) requests Approve as Modified by this Public Comment.

Modify as follows:

P3005.1.6 No reduction in size in the direction of flow. The size of the drainage piping shall not be reduced in the direction of the flow. The following shall not be considered as a reduction in size in the direction of flow:

- 1. A 4-inch by 3-inch (102 mm by 76 mm) water closet flange.
- 2. A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided that the 4 inch leg of the fitting is upright and below, but not necessarily directly connected to, the water closet flange.
- 3. An approved offset closet flange.

Commenter's Reason: The Committee's point about offset closet flange is well-taken. The PMGCAC is removing "approved". This does not necessarily mean that *any* design of offset closet flange is acceptable. Closet flanges are pipe fittings and should comply with the standards indicated for pipe fittings in Table 702.4.

For example, PVC pipe standards ASTM D2665 and F1866 include a reference to ASTM D3311 which covers the patterns and dimensions for drainage fittings. ASTM D3311 includes the pattern and dimensions for an offset closet flange. Therefore, where the offset closet flange is marked with the standard for the pipe, that fitting is acceptable. Any pipe fitting, such as a closet flange, that is not marked with the pipe or fitting standard that includes a reference to fitting patterns for offset closet flanges, would need to be approved under Section 105.2 Alternative design, materials and methods.



P178-15 Part II

AMPC1



Code Change No: P179-15

Original Proposal

Section: 705.3, 705.3.1, 705.3.2, 705.3.3, 705.3.4

Proponent: Pennie L Feehan, Copper Development Association, representing Copper Development Association (penniefeehan@me.com)

Delete without substitution:

705.3 Brass. Joints between brass pipe or fittings shall comply with Sections 705.3.1 through 705.3.4.

705.3.1 Brazed joints. All joint surfaces shall be cleaned. An *approved* flux shall be applied where required. The joint shall be brazed with a filler metal conforming to AWS A5.8.

705.3.2 Mechanical joints. Mechanical joints shall be installed in accordance with the manufacturer's instructions.

705.3.3 Threaded joints. Threads shall conform to ASME B1.20.1. Pipe-joint compound or tape shall be applied on the male threads only.

705.3.4 Welded joints. All joint surfaces shall be cleaned. The joint shall be welded with an *approved* filler metal.

Reason: The proposal removes brass because brass is a copper alloy and is covered in Section 706.6 and Secton 705.7.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

None

Approved as Submitted

Final Action Results

P179-15

AS



Code Change No: P180-15

Original Proposal

Section: 705.16.1, 705.16.2, 705.16.3, 705.19

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

<u>705.16.1 Copper or copper-alloy pipe or</u> tubing to cast-iron hub pipe. Joints between copper or copper-alloy <u>pipe or</u> tubing and cast-iron hub pipe shall be made with a <u>brass-copper or copper-alloy</u> ferrule or compression joint. The copper or copper-alloy<u>pipe or</u> tubing shall be soldered to the ferrule in an *approved* manner, and the ferrule shall be joined to the cast-iron hub by a caulked joint or a mechanical compression joint.

705.16.2 Copper or copper-alloy <u>pipe or</u> tubing to galvanized steel pipe. Joints between copper or copper-alloy <u>pipe or</u> tubing and galvanized steel pipe shall be made with a <u>brass converter fitting copper-alloy</u> or dielectric fitting. The copper tubing shall be soldered to the fitting in an *approved* manner, and the fitting shall be screwed to the threaded pipe.

705.16.3 Cast-iron pipe to galvanized steel-or brass pipe. Joints between cast-iron and galvanized steel-or brass pipe shall be made by either caulked or threaded joints or with an *approved* adapter fitting.

705.19 Soldering bushings. Soldering bushings shall be of <u>red brass copper or copper-alloy</u> and shall be in accordance with Table 705.19.

Reason: This proposal cleans up the section and does not change the intent. Copper-alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze. The term brass convertor fitting is typical use in fuel gas piping systems.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

	Report of Committee Action Hearings		
Committee Action:			Approved as Submitted
Committee Reason: Consistency with comm	mittee's action on P50-15.		
Assembly Action:			None
	Final Action Results		
P1	80-15	AS	



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Code Change No: P181-15 Part I

Original Proposal

Section: 705.16.1

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

705.16.1 Copper <u>pipe</u> or <u>copper-alloy</u> tubing to cast-iron hub pipe. Joints between copper <u>pipe</u> or <u>copper-alloy</u> tubing and cast-iron hub pipe shall be made with a <u>brass copper-alloy</u> ferrule or compression joint. The copper <u>pipe</u> or <u>copper-alloy</u> tubing shall be soldered to the ferrule in an *approved* manner, and the ferrule shall be joined to the cast-iron hub by a caulked joint or a mechanical compression joint.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

None

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Approved as Submitted

Final Action Results

P181-15 Part I

AS

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BACK

Code Change No: P181-15 Part II

Original Proposal

Section: P3003.13.1, P3003.13.2, P3003.13.3

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3003.13.1 Copper <u>pipe</u> or <u>copper-alloy</u> tubing to cast-iron hub pipe. Joints between copper <u>pipe</u> or <u>copper-alloy</u> tubing and cast-iron hub pipe shall be made with a copper-alloy ferrule or compression joint. The copper <u>pipe</u> or <u>copper-alloy</u> tubing shall be soldered to the ferrule in an *approved* manner, and the ferrule shall be joined to the cast-iron hub by a caulked joint or a mechanical compression joint.

P3003.13.2 Copper <u>pipe</u> or <u>copper-alloy</u> tubing to galvanized steel pipe. Joints between copper <u>pipe</u> or <u>copper-alloy</u> tubing and galvanized steel pipe shall be made with a copper-alloy fitting or dielectric fitting. The copper tubing shall be soldered to the fitting in an *approved* manner, and the fitting shall be screwed to the threaded pipe.

P3003.13.3 Cast-iron pipe to galvanized steel or brass_copper-alloy pipe. No change to text.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P181-15 Part II

AS



Code Change No: P184-15 Part I

Original Proposal

Section: 705.16.4, 707.1, Chapter 14

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

705.16.4 Plastic pipe or tubing to other piping material. Joints between different types of plastic pipe shall be made with an approved adapter fitting or by a solvent cement joint only where a single joint is made between ABS and PVC pipes at the end of a building drainage pipe and the beginning of a building sewer pipe using a solvent cement complying with ASTM D3138. Joints between plastic pipe and other piping material shall be made with an *approved* adapter fitting. Joints between plastic pipe and cast-iron hub pipe shall be made by a caulked joint or a mechanical compression joint.

707.1 Prohibited joints. The following types of joints and connections shall be prohibited:

- 1. Cement or concrete joints.
- 2. Mastic or hot-pour bituminous joints.
- 3. Joints made with fittings not approved for the specific installation.
- 4. Joints between different diameter pipes made with elastomeric rolling O-rings.
- 5. Solvent-cement joints between different types of plastic pipe except where provided for in Section 705.16.4.
- 6. Saddle-type fittings.
- 7.

Reference standards type: Add new standard(s) as follows:

ASTM D3138-04(2011), Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Component.

Reason: The use of a special transition cement for this single application is widely accepted, both by local authorities having jurisdiction and other national codes when the building sewer and building drainage change from ABS to PVC. This will create a consistent practice in the industry.

Cost Impact:

Will not increase the cost of construction.

This proposal allows for an optional method of joining used elsewhere, but not in this code. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase.

Analysis: A review of the standard proposed for inclusion in the code, ASTM D3138, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P184-15 Part I

AS



Code Change No: P184-15 Part II

Original Proposal

Section: P3003.2, P3003.13.4, Chapter 44

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3003.2 Prohibited joints. Running threads and bands shall not be used in the drainage system. Drainage and vent piping shall not be drilled, tapped, burned or welded.

The following types of joints and connections shall be prohibited:

- 1. Cement or concrete.
- 2. Mastic or hot-pour bituminous joints.
- 3. Joints made with fittings not approved for the specific installation.
- 4. Joints between different diameter pipes made with elastomeric rolling O-rings.
- 5. Solvent-cement joints between different types of plastic pipe<u>except where provided for in Section</u> <u>P3003.13.4</u>.
- 6. Saddle-type fittings.

P3003.13.4 Plastic pipe or tubing to other piping material. Joints between different types of plastic pipe shall be made with *approved* adapter fitting or by a solvent cement joint only where a single joint is made between ABS and PVC pipes at the end of a building drainage pipe and the beginning of a building sewer pipe using a solvent cement complying with ASTM D3138. Joints between plastic pipe and other piping material shall be made with an *approved* adapter fitting. Joints between plastic pipe and cast-iron hub pipe shall be made by a caulked joint or a mechanical compression joint.

Reference standards type: Add new standard(s) as follows:

ASTM D3138-04(2011) Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Components

Reason: The use of a special transition cement for this single application is widely accepted, both by local authorities having jurisdiction and other national codes when the building sewer and building drainage change from ABS to PVC. This will create a consistent practice in the industry.

Cost Impact:

Will not increase the cost of construction.

This proposal allows for an optional method of joining used elsewhere, but not in this code. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase.

Analysis: A review of the standard proposed for inclusion in the code, ASTM D3138, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

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Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P184-15 Part II

AS



Code Change No: P185-15

Original Proposal

Section: 705.18

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

705.18 Caulking ferrules. Ferrules shall be of red brass copper-alloy and shall be in accordance with Table 705.18.

Reason: Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P185-15

AS

INTERNATIONAL CODE COUNCIL®

None

Code Change No: P186-15

Original Proposal

Section: 705.18

Proponent: Janine Snyder, City of Thornton, Colorado, representing Colorado Association of Plumbing & Mechanical Officials (Janine.Snyder@cityofthornton.net)

Revise as follows:

705.18 Caulking ferrules. Ferrules <u>Caulking ferrules</u> shall be of red brass and shall be in accordance with Table 705.18.

Reason: Simply an editorial clarification within the section.

Cost Impact: Will not increase the cost of construction. This is merely an editorial change to clarify the type of ferrule not a new code requirement.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P186-15

INTERNATIONAL CODE COUNCIL®

None

226

AS

Code Change No: P191-15 Part I

Original Proposal

Section: 708.1.6

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

708.1.6 Cleanout plugs. Cleanout plugs shall be of brass copper-alloy, plastic or other approved materials. Cleanout plugs for borosilicate glass piping systems shall be of borosilicate glass. Brass Copper-alloy cleanout plugs shall conform to ASTM A 74 and shall be limited for use only on metallic piping systems. Plastic cleanout plugs shall conform to the referenced standards for plastic pipe fittings, as indicated in Table 702.4. Cleanout plugs shall have a raised square head, a countersunk square head or a countersunk slot head. Where a cleanout plug will have a trim cover screw installed into the plug, the plug shall be manufactured with a blind end threaded hole for such purpose.

Reason: This proposal cleans up the section and does not change the intent. There are many different copper and copper-alloy compositions. Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P191-15 Part I

AS



None

227

Code Change No: P191-15 Part II

Original Proposal

Section: P3005.2.6

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3005.2.6 Cleanout plugs. Cleanout plugs shall be copper alloy, plastic or other *approved* materials. Cleanout plugs for borosilicate glass piping systems shall be of borosilicate glass. Brass Copperalloy cleanout plugs shall conform to ASTM A74 and shall be limited for use only on metallic piping systems. Plastic cleanout plugs shall conform to the referenced standards for plastic pipe fittings as indicated in Table P3002.3. Cleanout plugs shall have a raised square head, a countersunk square head or a countersunk slot head. Where a cleanout plug will have a trim cover screw installed into the plug, the plug shall be manufactured with a blind end threaded hole for such purpose.

Reason: This proposal cleans up the section and does not change the intent. There are many different copper and copper-alloy compositions. Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P191-15 Part II

AS



Approved as Submitted

None

228

Code Change No: P192-15

Original Proposal

Section: 709.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

709.3 Values for continuous and semicontinuous Conversion of gpm flow into dfu values. Where discharges to a waste receptor or to a drainage system are only known in gallons per minute (liters per second) values, the *Drainage drainage fixture unit* values for continuous and semicontinuous flow into a drainage system those flows shall be computed on the basis that 1 gpm (0.06 L/s) of flow is equivalent to two *drainage* fixture units.

Reason: This section is often misunderstood because of the vague and undefined terms "continuous" and "semicontinuous". Also, some have interpreted that this is a conversion factor that works in both directions. It is not and was never intended to be because of the "probability of use" of a fixture that is incorporated in all dfu values. This equivalency is provided as an easy way to convert gallons per minute flows into an approximate dfu value so that the designer of the plumbing system can move forth with the design of the drainage system according to dfu sizing tables.

This wording only clarifies the intent of the existing section and does not add any new requirements.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let 34.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: This proposal eliminates the confusion about the terms continuous and semi-continuous.

Assembly Action:

None

Final Action Results

P192-15



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AS

Code Change No: P194-15 Part I

Original Proposal

Section: 712.3.2

Proponent: Donald Surrena, National Association of Home Builders, representing National Association of Home Builders (dsurrena@nahb.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

712.3.2 Sump pit. The sump pit shall be not less than 18 inches (457 mm) in diameter and not less than 24 inches (610 mm) in depth, unless otherwise *approved*. The pit shall be accessible and located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, concrete, steel, plastic or other *approved* materials. The pit bottom shall be solid and provide permanent support for the pump. The sump pit shall be fitted with a gastight removable cover that is installed flush with grade or floor level, or above not more than 2 inches (51 mm) below grade or floor level. The cover shall be adequate to support anticipated loads in the area of use. The sump pit shall be vented in accordance with Chapter 9.

Reason: The purpose of this code change is to make the IPC consistent with the IRC where the sump cover is installed not more than 2 inches below grade. Currently the cover for sump pits needs to be located at grade or higher leaving little to no flexibility for the design of the finished floor, however by allowing the cover to be not more than 2 inches below grade (as in the IRC) or higher eliminates this problem.

Cost Impact:

Will not increase the cost of construction.

When unable to install cover flush with grade, or to allow for a finished surface, correcting the problem could potentially cost in excess of \$200. Therefore, this code change could decrease the cost of construction in certain circumstances.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Final Action Results

P194-15 Part I

Approved as Submitted

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AS

Code Change No: P194-15 Part II

Original Proposal

Section: P3007.3.2

Proponent: Donald Surrena, National Association of Home Builders, representing National Association of Home Builders (dsurrena@nahb.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3007.3.2 Sump pit. The sump pit shall be not less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep, unless otherwise approved. The pit shall be accessible and located so that drainage flows into the pit by gravity. The sump pit shall be constructed of tile, concrete, steel, plastic or other approved materials. The pit bottom shall be solid and provide permanent support for the pump. The sump pit shall be fitted with a gas-tight removable cover that is installed above grade level or floor level, or not more than 2 inches (51 mm) below grade or floor level. The cover shall be adequate to support anticipated loads in the area of use. The sump pit shall be vented in accordance with Chapter 31.

Reason: The purpose of this code change is to make the IPC consistent with the IRC where the sump cover is installed not more than 2 inches below grade. Currently the cover for sump pits needs to be located at grade or higher leaving little to no flexibility for the design of the finished floor, however by allowing the cover to be not more than 2 inches below grade (as in the IRC) or higher eliminates this problem.

Cost Impact:

Will not increase the cost of construction. There is no change to the requirements of this section. This proposal is for correlation purposes only.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P194-15 Part II

AS

INTERNATIONAL CODE COUNCIL®

BACK

Approved as Submitted

None

Code Change No: P195-15 Part I

Original Proposal

Section: 712.3.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

712.3.3 Discharge pipe and fittings. Discharge pipe and fittings serving sump pumps and ejectors shall be constructed of materials in accordance with Sections 712.3.3.1 and 712.3.3.2 and shall be *approved*.

Reason: Subsections 712.3.3.1 and 712.3.3.1 provide enough guidance to the designer and installer for proper selection of discharge piping components such that there is not a need for the code official to further approve the selections. Besides, what other criteria would a code official use to grant approval?

712.3.3.1 Materials. Pipe and fitting materials shall be constructed of brass, copper, CPVC, ductile iron, PE, or PVC. **712.3.3.2 Ratings.** Pipe and fittings shall be rated for the maximum system operating pressure and temperature. Pipe fitting materials shall be compatible with the pipe material. Where pipe and fittings are buried in the earth, they shall be suitable for burial.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let 50.

Cost Impact:

INTERNATIONAL CODE COUNCIL®

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action: Final Action Results

P195-15 Part I

Approved as Submitted

AS

None

Code Change No: P195-15 Part II

Original Proposal

Section: P3007.3.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3007.3.3 Discharge pipe and fittings. Discharge pipe and fittings serving sump pumps and ejectors shall be constructed of materials in accordance with Sections P3007.3.3.1 and P3007.3.3.2-and shall be approved.

Reason: Subsections 712.3.3.1 and 712.3.3.1 provide enough guidance to the designer and installer for proper selection of discharge piping components such that there is not a need for the code official to further approve the selections. Besides, what other criteria would a code official use to grant approval?

712.3.3.1 Materials. Pipe and fitting materials shall be constructed of brass, copper, CPVC, ductile iron, PE, or PVC. **712.3.3.2 Ratings.** Pipe and fittings shall be rated for the maximum system operating pressure and temperature. Pipe fitting materials shall be compatible with the pipe material. Where pipe and fittings are buried in the earth, they shall be suitable for burial.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let 50.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Approved as Submitted

Final Action Results

P195-15 Part II

AS



BACK

Code Change No: P196-15

Original Proposal

Section: 712.3.3.1

Proponent: Pennie L Feehan, representing Copper Development Association (penniefeehan@me.com)

Revise as follows:

712.3.3.1 Materials. Pipe and fitting materials shall be constructed of brass copper, copper-alloy, CPVC, ductile iron, PE, or PVC.

Reason: This proposal cleans up the section and does not change the intent. Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction as this change is only to update the name of a material that is already in the code.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: Consistency with committee's action on P50-15.

Assembly Action:

Final Action Results

P196-15

AS

INTERNATIONAL CODE COUNCIL®

Approved as Submitted

None

Code Change No: P197-15 Part I

Original Proposal

Section: 712.4.2

Proponent: Robert Adkins, Prince William County, representing Virginia Plumbing and Mechanical Inspectors Association (radkins@pwcgov.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

712.4.2 Capacity. A sewage pump or sewage ejector shall have the capacity and head for the application requirements. Pumps or ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including 1 $\frac{1}{2}$ inch ($\frac{2513}{12}$ mm). The capacity of a pump or ejector based on the diameter of the discharge pipe shall be not less than that indicated in Table 712.4.2.

Exceptions:

- 1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a discharge opening of not less than 1 -1/4 inches (32 mm).
- 2. Macerating toilet assemblies that serve single water closets shall have a discharge opening of not less than ³/₄ inch (19 mm).

Reason: Many pumps do not comply with the 1 inch minimum requirement, especially smaller pump systems used for individual fixtures such as pantry sinks, etc. Numerous pumps for these purposes are available with this size discharge.

Cost Impact:

Will not increase the cost of construction. Allowing a slightly smaller pump will not increase the cost of construction.

> Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement. Smaller pumps are needed for limited applications.

Assembly Action:

Final Action Results

P197-15 Part I

AS



None

235

Code Change No: P197-15 Part II

Original Proposal

Section: P3007.6

Proponent: Robert Adkins, Prince William County, representing Virginia Plumbing and Mechanical Inspectors Association (radkins@pwcgov.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3007.6 Capacity. Sewage pumps and sewage ejectors shall have the capacity and head for the application requirements. Pumps and ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including 1 inch (25.4 mm)½ inch (13 mm). The minimum capacity of a pump or ejector based on the diameter of the discharge pipe shall be in accordance with Table 3007.6.

Exceptions:

- 1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a discharge opening of not less than 1¹/₄ inches (32 mm).
- 2. Macerating toilet assemblies that serve single water closets shall have a discharge opening of not less than ³/₄ inch (19 mm).

Reason: Many pumps do not comply with the 1 inch minimum requirement, especially smaller pump systems used for individual fixtures such as pantry sinks, etc. Numerous pumps for these purposes are available with this size discharge.

Cost Impact:

Will not increase the cost of construction. Allowing a slightly smaller pump will not increase the cost of construction.

> Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement. Smaller pumps are needed for limited applications.

Assembly Action:

Final Action Results

P197-15 Part II

AS



BACK

None

236

Code Change No: P198-15 Part II

Original Proposal

Section: P3007.6

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3007.6 Capacity. Sewage pumps and sewage ejectors shall have the capacity and head for the application requirements. Pumps and ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including <u>1/2</u> inch (<u>25.413</u> mm). The minimum capacity of a pump or ejector based on the diameter of the discharge pipe shall be in accordance with Table 3007.6.

Exceptions:

- 1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a discharge opening of not less than 1¹/₄ inches (32 mm).
- 2. Macerating toilet assemblies that serve single water closets shall have a discharge opening of not less than ³/₄ inch (19 mm).

Reason: There are smaller pump systems used for individual fixtures such as pantry sinks and bar sinks that are only capable of passing ½ inch solids. These pumps have been successfully used in jurisdictions where these pumps were approved as an alternative method.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let m 113.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P198-15 Part II

AS



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Code Change No: P200-15

Original Proposal

Section: 713.4

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Revise as follows:

713.4 Vacuum system station. Ready *access* shall be provided to vacuum system station receptacles inlets. Such receptacles shall be built into cabinets or recesses and shall be visible.

Reason: The proper term is 'inlet', not 'receptacles'. It is a conflict to both require being built into a cabinet and visible. The inlets cannot be recessed because it would be too hard to connect with patient equipment

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction.

This proposal removes a potentially hazardous requirement. There are many more options available, therefore, the cost of construction will not change.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: This corrects the code text to refer to vacuum inlets and not vacuum receptacles.

Assembly Action:

None

Approved as Submitted

Final Action Results

P200-15

AS



Code Change No: P201-15

Original Proposal

Section: 713.5, 713.6, 713.7, 713.7.1, 713.7.2

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Revise as follows:

713.5 Bottle Medical vacuum system. Vacuum (fluid suction) Medical vacuum systems intended for collecting, removing and disposing of blood, pus-other bodily fluids or other fluids by the bottle system waste anesthesia gasses shall provided comply with receptacles equipped with an overflow prevention device at each vacuum outlet station.NFPA 99.

Delete without substitution:

713.6 Central disposal system equipment. Central vacuum (fluid suction) systems shall provide continuous service. Systems equipped with collecting or control tanks shall provide for draining and cleaning of the tanks while the system is in operation. In hospitals, the system shall be connected to the emergency power system. The exhausts from a vacuum pump serving a vacuum (fluid suction) system shall discharge separately to open air above the roof.

713.7 Central vacuum or disposal systems. Where the waste from a central vacuum (fluid suction) system of the barometric-lag, collection-tank or bottle-disposal type is connected to the drainage system, the waste shall be directly connected to the sanitary drainage system through a trapped waste.

713.7.1 Piping. The piping of a central vacuum (fluid suction) system shall be of corrosion-resistant material with a smooth interior surface. A *branch* shall be not less than $\frac{4}{2^{-1}}$ inch (12.7 mm) nominal pipe size for one outlet and shall be sized in accordance with the number of vacuum outlets. A main shall be not less than 1-inch (25 mm) nominal pipe size. The pipe sizing shall be increased in accordance with the manufacturer's instructions as stations are increased.

713.7. Velocity. The velocity of airflow in a central vacuum (fluid suction) system shall be less than 5,000 feet per minute (25 m/s).

Reason: This proposal deletes some of the incomplete requirements in this section and references NFPA 99, which is broadly accepted as the national standard for medical gas and vacuum systems. It is much more appropriate to send the medical vacuum component of the piping system to NFPA 99 for design and installation. This system is covered more completely in 5.1.10 in that standard. As written the requirements in this section are incomplete. NFPA99 is already referenced in Section 1202.1.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction.

NFPA 99 is referenced in Section 1202.1, therefore, there would be no increase in construction cost

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Report of Committee Action
Hearings

Committee Action:

Committee Reason: NFPA 99 is a more definitive document as compared to the requirements of the current code text.

Assembly Action:

Final Action Results

AS

P201-15

None

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Code Change No: P202-15 Part II

Original Proposal

Section: P3008.1, P3008.2 (New)

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Mainline Backflow Products (JBENGINEER@aol.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3008.1 Sewage backflow Where required. Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, the fixtures shall be protected by a backwater valve installed in the *building drain*, branch of the *building drain* or horizontal branch serving such fixtures. Plumbing fixtures having flood level rims above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not discharge through a backwater valve.

Exception: In existing buildings, fixtures above the elevation of the manhole cover of the next upstream manhole in the *public sewer* shall not be prohibited from discharging through a backwater valve.

Add new text as follows:

P3008.2 Allowable installation. Where plumbing fixtures are installed on a floor with a finished floor elevation above the elevation of the manhole cover of the next upstream manhole in the public sewer, and a backwater valve is installed in the building drain or horizontal branch serving such fixtures, the backwater valve shall be of the normally-open type.

Exception: Normally-closed backwater valve installations for existing buildings shall not be prohibited.

Reason: This section was originally developed based on the use of what is now classified as "normally closed backwater valve." ASME A112.14.1 has two categories of backwater valves, normally closed backwater valves and normally open backwater valves. A normally open backwater valve allows the free movement of air throughout the drainage system. The connection to the public sewer is based on having a free movement of air from the public sewer through the vent terminal on the roof.

When a normally closed backwater valve is installed for the entire plumbing system, this is not accomplished. However, with a normally open backwater valve, the free movement of air occurs in the sanitary drainage and vent system.

This change merely adds a distinction between the use of a normally closed backwater valve and a normally open backwater valve. The requirements for normally closed backwater valve remain the same. The only change is to revise the title of the section to read, "Where required." Since this is the section that requires backwater valves to be installed, it is most appropriate to entitle the section, "Where required."

The second half of the original section has been split into a new section entitled, "Allowable installation." This is the part of the original code section that placed limitations on using backwater valves for fixtures that are located above the elevation of the manhole cover. The change is to allow the discharge of fixtures located above the elevation of the manhole cover provided that a normally open backwater valve is installed. This is consistent with the intended use of each style of backwater valve. The wording of the exception was been changed to reflect the revised wording to Section 915.2. However, the requirements of the exception do not change. It still will allow a normally closed backwater valve for an existing building.

Cost Impact:

Will not increase the cost of construction.

This change provides options for the code user. There is no additional language mandating the use of backwater valves.



Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Approved as Submitted

Final Action Results

AS

P202-15 Part II

Code Change No: P203-15 Part I

Original Proposal

Section: 715.2, 715.3, 715.4, 715.5

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Mainline Backflow Products (JBENGINEER@aol.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

715.2 Material. Bearing parts of backwater valves shall be of corrosion-resistant material. Backwater valves shall comply with ASME A112.14.1, CSA B181.1 or CSA B181.2.

Delete without substitution:

715.3 Seal. Backwater valves shall be so constructed as to provide a mechanical seal against backflow.

715.4 Diameter. Backwater valves, when fully opened, shall have a capacity not less than that of the pipes in which they are installed.

Revise as follows:

715.5715.3 Location. Backwater valves shall be installed so that access is provided to the working parts for service and repair.

Reason: This change cleans up the language in the section. Backwater valves, like all plumbing products, are required to be third party listed. The listing is to the referenced standard. The reference standard has the requirements that are proposed to be stricken in the section. Furthermore, plumbing inspectors are not checking on the dimensions or working parts of a listed backwater valve.

Paragraph 2.4 of ASME A112.14.1 goes into great detail regarding the material requirements for the backwater valve. Not only are the bearing parts corrosion resistant, the quality of the corrosion resistance is listed. Hence the first sentence in Section 712.2 is unnecessary.

Paragraph 3.2 of the ASME standard specifies water tightness requirements for the backwater valve. Hence, Section 712.3 is unnecessary.

Paragraph 2.1.1 of the ASME standard requires the backwater valve to comply with the opening dimensions of Table 1. The opening dimensions equal the pipe dimensions. Hence, Section P712.4 is unnecessary.

The last section does not require a statement that the access is for service and repair. The language is simply cleaned up to use the term defined in the code

Cost Impact: Will not increase the cost of construction.

There are no changes to the mandatory requirements. This cleans up the requirement with greater reliance on the standard and listing.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Approved as Submitted



	Final Action Re	esults
P203-	15 Part I	AS

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Code Change No: P203-15 Part II

Original Proposal

Section: P3008.2, P3008.3, P3008.4, P3008.5

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Mainline Backflow Products (JBENGINEER@aol.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3008.2 Material. Bearing parts of backwater valves shall be of corrosion-resistant material. Backwater valves shall comply with ASME A112.14.1, CSA B181.1 or CSA B181.2.

P3008.5-P3008.3 Location. Backwater valves shall be installed so that the working parts are accessible for service and repair.access is provided to the working parts.

Delete without substitution:

P3008.3 Seal. Backwater valves shall be constructed to provide a mechanical seal against backflow.

P3008.4 Diameter. Backwater valves, when fully opened, shall have a capacity not less than that of the pipes in which they are installed.

Reason: This change cleans up the language in the section. Backwater valves, like all plumbing products, are required to be third party listed. The listing is to the referenced standard. The reference standard has the requirements that are proposed to be stricken in the section. Furthermore, plumbing inspectors are not checking on the dimensions or working parts of a listed backwater valve.

Paragraph 2.1.1 of ASME A112.14.1 requires the backwater valve to comply with the opening dimensions of Table 1. The opening dimensions equal the pipe dimensions. Hence, Section P3008.4 is unnecessary.

Paragraph 2.4 of the ASME standard goes into great detail regarding the material requirements for the backwater valve. Not only are the bearing parts corrosion resistant, the quality of the corrosion resistance is listed. Hence the first sentence in Section P3008.2 is unnecessary.

Paragraph 3.2 of the ASME standard specifies water tightness requirements for the backwater valve. Hence, Section P3008.3 is unnecessary.

The last section has been cleaned up to identify that the internal moving components are what must be accessible. The movement in the code has been to use the term, "provide access" or "access is provided," as opposed to accessible. The term "accessible" is more associated with requirements for the physically challenged. The sentence would become identical to the wording in the IPC.

Cost Impact:

Will not increase the cost of construction.

There is no change in the requirements. The proposal cleans up the language with reliance on the standard and the listing.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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	Final Action Re	sults
P2	03-15 Part II	AS

Code Change No: P204-15 Part I

Original Proposal

Section: 717.4, 717.5

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

717.4 Pipe. The replacement piping pipe shall be manufactured with made of a high density polyethylene (HDPE) and shall have a standard dimension ratio (SDR) of 17-and. The pipe shall be in compliance with ASTM F 714.

717.5 Pipe fittings. Pipe fittings to be connected to the replacement piping pipe shall be made of extrahigh molecular weight PE3408 material high-density polyethylene (HDPE) and shall be-manufactured with an SDR of 17 and in compliance with ASTM D 2683.

Reason: ASTM F714, Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter, only refers to pipe, not fittings. Fittings are not made in SDR's. And calling out resin designation codes is not necessary. This change has a companion change in the IRC to get the requirements to match this language.

Cost Impact:

Will not increase the cost of construction

This proposal is modifying language to coordinate with each other in multiple code sections and does not impact costs. Thus the code with this proposal added will not cause the cost of construction to increase.



Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

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Final Action Results

P204-15 Part I

Approved as Submitted

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AS

BACK

Code Change No: P204-15 Part II

Original Proposal

Section: P3010.4, P3010.5

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3010.4 Pipe. The replacement pipe shall be made of a high-density polyethylene (HDPE) that conforms to cell classification number PE3608, PE4608 or PE4710 as indicated in ASTM F 714. The pipe fittings and shall be manufactured with an SDR of 17 and in compliance with ASTM F 714.

P3010.5 Pipe fittings. Pipe fittings to be connected to the replacement <u>piping pipe</u> shall be made of highdensity polyethylene (HDPE) that conforms to cell classification number PE3608, PE4608 or PE4710 as indicated in ASTM F 714. The pipe fittings and shall be manufactured with an SDR of 17 and in compliance with ASTM D 2683.

Reason: ASTM F714, Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter, only refers to pipe, not fittings. Fittings are not made in SDR's. And calling out resin designation codes is not necessary. This change has a companion change in the IRC to get the requirements to match this language.

Cost Impact:

Will not increase the cost of construction

This proposal is modifying language to coordinate with each other in multiple code sections and does not impact costs. Thus the code with this proposal added will not cause the cost of construction to increase.

Report of Committee Action				
Hearings				

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P204-15 Part II

AS



Code Change No: P205-15 Part II

Original Proposal

Section: 3011 (New), Chapter 44

Proponent: Larry Gill, representing IPEX USA LLC (larry.gill@ipexna.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC PLUMBING COMMITTEE.

Add new text as follows:

SECTION 3011 REPLACEMENT OF UNDERGROUND SEWERS BY PVC FOLD AND FORM METHODS

3011.1 General This section shall govern the replacement of existing building sewer piping by PVC Fold and Form methods.

3011.2 Applicability The replacement of building sewer piping by PVC Fold and Form methods shall be limited to gravity drainage piping 4 inches (152MM) to 18 inches (457mm). The replacement piping shall be of the same nominal size as the existing piping.

3011.3 Pre-installation inspection The existing piping sections to be replaced shall be inspected internally by a recorded video camera survey. The survey shall include notations of the position of cleanouts and the depth of connections to the existing piping.

3011.4 Pipe The replacement piping shall be manufactured in compliance with ASTM F1871 or ASTM F1504.

3011.5 Installation The piping sections to be replaced shall be cleaned and flushed. Remediation shall be performed where there is groundwater infiltration, roots, collapsed pipe, dropped joints, offsets more than 12% of the inside pipe diameter or other obstructions.

3011.6 Cleanouts Where the existing building sewer did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

3011.7 Post-installation inspection The completed replacement piping shall be inspected internally by a recorded video camera survey. The video survey shall be reviewed and approved by the code official prior to pressure testing of the replacement piping system.

3011.8 Pressure testing The replacement piping system as well as the connections to the replacement piping shall be tested in accordance with Section P2503.4.

Reference standards type: Add new standard(s) as follows:

ASTM F1871 - 2011 Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation ASTM F1504 - 2014 Standard Specification for Folded Poly(Vinyl Chloride) (PVC) Pipe for Existing Sewer and Conduit Rehabilitation



ASTM F1947 - 2010 Standard Practice for Installation of Folded Poly (Vinyl Chloride) (PVC) Pipe into Existing Sewers and Conduits

ASTM F1867 - 2012 Standard Practice for Installation of Folded/Formed Poly (Vinyl Chloride) (PVC) Pipe Type A for Existing Sewer and Conduit Rehabilitation

Reason: The current IPC includes provisions for replacement of underground sewers by pipe bursting or the installation of new pipe in an open cut trench. This proposal introduces a different method for sewer rehabilitation which is similar to pipe bursting. Fold and form is a method where a PVC pipe is manufactured in a plant to either ASTM F1504 or ASTM F1871. The pipe is heated and collapsed to form a roll for transport to the worksite. Once on site the pipe is heated and pulled into an existing sewer pipe which is in need of rehabilitation. The new pipe is then expanded and installed per ASTM F1947 or ASTM F1867. This proposal also includes sections similar to Section 717 to put the sewer line back in service. This proposal will provide for an alternative to open cut and pipe bursting methods and give owners and municipalities additional means to repair a deteriorating system.

Cost Impact:

Will not increase the cost of construction

No cost impact. It is estimated that pipe bursting and fold and form methods are approximately 60% of the cost of open cut installations. These methods offer significant savings as well as less impact on the surrounding area.

Analysis: A review of the standard proposed for inclusion in the code, ASTM F1871-2011, ASTM F1504-2014, ASTM F1947-2010 and ASTM F1867-2012, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify proposal as follows:

P3011.2 Applicability. The replacement of building sewer piping by PVC Fold and Form methods shall be limited to gravity drainage piping in sizes 64 inches (152102 mm) and smaller to 18 inches (457 mm). The replacement piping shall be of the same nominal size as the existing piping.

P3011.5 Installation. Piping complying with ASTM F1504<u>The piping sections to be replaced</u> shall be installed in accordance with ASTM F1947<u>cleaned and flushed</u>. Piping complying with ASTM ASTM F1F1871<u>Remediation</u> shall be installed in accordance with ASTM F1867<u>performed where there is groundwater infiltration</u>, roots, collapsed pipe, dropped joints, offsets more than 12 percent of the inside pipe diameter or other obstructions.

Reference Standards:

ASTM F1871 - 2011 Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation

ASTM F1504 - 2014 Standard Specification for Folded Poly(Vinyl Chloride) (PVC) Pipe for Existing Sewer and Conduit Rehabilitation

ASTM F1947 - 2010 Standard Practice for Installation of Folded Poly (Vinyl Chloride) (PVC) Pipe into Existing Sewers and Conduits ASTM F1867 - 2012 Standard Practice for Installation of Folded/Formed Poly (Vinyl Chloride) (PVC) Pipe Type A for Existing Sewer and Conduit Rehabilitation

Committee Reason:

For the Modification only:

The size of piping that this process can be used on was corrected to allow its use for larger piping systems that could exist for IRC buildings.

For the proposal As Modified:

The committee agreed with the proponent's reason statement.

Assembly Action:

None

Analysis. For staff analysis of the content of ASTM F1871-2011, ASTM F1504-2014, ASTM F1947-2010 and ASTM F1867-2012 with regard to the ICC criteria for referenced standards (Section 3.6 of CP #28), please visit: http://www.iccsafe.org/wp-content/uploads/2015-Proposed-Standards-Group-AFinal.Pdf

Final Action Results

P205-15 Part II

AM


Code Change No: P206-15

Original Proposal

Section: 802.1

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

802.1 Where required. Food-handling equipment, in other than dwelling units, clear-water waste, dishwashing machines and utensils, pots, pans and dishwashing sinks shall discharge through an indirect waste pipe as specified in Sections 802.1.1 through 802.1.8. Health-care related fixtures, devices and equipment shall discharge to the drainage system through an indirect waste pipe by means of an *air gap* in accordance with this chapter and Section 713.3. Fixtures not required by this section to be indirectly connected by this section and the exception of Section 301.6 shall be directly connected to the plumbing system in accordance with Chapter 7.

Reason: The revised language resolves a conflict that has existed in the code for many cycles. The existing section language seemed to require that floor drains at the base of elevator shafts had to be direct connected to the drainage system. However, the exception of Section 301.6 requires that these floor drains must be indirectly connected to the drainage system.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 17.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: This proposal brings Section 802.1 in line with the requirements of Section 301.6 for hydraulic elevator shafts.

Final Action Results

Assembly Action:

Approved as Submitted

None

P206-15



Code Change No: P207-15

Original Proposal

Section: 802.1

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Revise as follows:

802.1 Where required. Food-handling equipment, in other than dwelling units, clear-water waste, dishwashing machines and utensils, pots, pans and dishwashing sinks shall discharge through an indirect waste pipe as specified in Sections 802.1.1 through 802.1.8. Health-care related fixtures, devices and equipment shall discharge to the drainage system through an indirect waste pipe by means of an *air* gap in accordance with this chapter and Section 713.3. Fixtures not required by this section to be indirectly connected shall be directly connected to the plumbing system in accordance with Chapter 7.

Reason: This proposal deletes the requirement that all healthcare related fixtures discharge through an air gap. Flushing rim sinks, which are used for the disposal of solid waste and bedpan cleaning, are healthcare related fixtures and should not have an indirect drain. The term "healthcare related" is too broad, and potentially creates infection control problems.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction. This proposal is for clarification, therefore, there will be not increase in the cost of construction.



Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P207-15

AS

Approved as Submitted

None



Code Change No: P208-15

Original Proposal

Section: 202, 422, 713, 802.1

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org)

Delete without substitution:

SECTION 202 DEFINITIONS

STERILIZER.

Boiling type. A boiling-type sterilizer is a fixture of a nonpressure type utilized for boiling instruments, utensils or other equipment for disinfection. These devices are portable or are connected to the plumbing system.

Instrument. A device for the sterilization of various instruments.

Pressure (autoclave). A pressure vessel fixture designed to utilize steam under pressure for sterilizing.

Pressure instrument washer sterilizer. A pressure vessel fixture designed to both wash and sterilize instruments during the operating cycle of the fixture.

Utensil. A device for the sterilization of utensils as utilized in health care services.

Water. A device for sterilizing water and storing water.

STERILIZER VENT. A separate pipe or *stack*, indirectly connected to the building drainage system at the lower terminal, that receives the vapors from nonpressure sterilizers, or the exhaust vapors from pressure sterilizers, and conducts the vapors directly to the open air. Also called vapor, steam, atmospheric or exhaust vent.

SECTION 422 HEALTH CARE FIXTURES AND EQUIPMENT

422.1 Scope. This section shall govern those aspects of health care plumbing systems that differ from plumbing systems in other structures. Health care plumbing systems shall conform to the requirements of this section in addition to the other requirements of this code. The provisions of this section shall apply to the special devices and equipment installed and maintained in the following *occupancies*: nursing homes, homes for the aged, orphanages, infirmaries, first aid stations, psychiatric facilities, clinics, professional offices of dentists and doctors, mortuaries, educational facilities, surgery, dentistry, research and testing laboratories, establishments manufacturing pharmaceutical drugs and medicines and other structures with similar apparatus and equipment classified as plumbing.

422.2 Approval. All special plumbing fixtures, equipment, devices and apparatus shall be of an *approved* type.

422.3 Protection. All devices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, distillation, processing, cooling, or storage of ice or foods, and that connect

to either the water supply or drainage system, shall be provided with protection against backflow, flooding, fouling, contamination of the water supply system and stoppage of the drain.

422.4 Materials. Fixtures designed for therapy, special cleansing or disposal of waste materials, combinations of such purposes, or any other special purpose, shall be of smooth, impervious, corrosion-resistant materials and, where subjected to temperatures in excess of 180°F (82°C), shall be capable of withstanding, without damage, higher temperatures.

422.5 Access. Access shall be provided to concealed piping in connection with special fixtures where such piping contains steam traps, valves, relief valves, check valves, vacuum breakers or other similar items that require periodic inspection, servicing, maintenance or repair. Access shall be provided to concealed piping that requires periodic inspection, maintenance or repair.

422.6 Clinical sink. A clinical sink shall have an integral trap in which the upper portion of a visible trap seal provides a water surface. The fixture shall be designed so as to permit complete removal of the contents by siphonic or blowout action and to reseal the trap. A flushing rim shall provide water to cleanse the interior surface. The fixture shall have the flushing and cleansing characteristics of a water closet.

422.7 Prohibited usage of clinical sinks and service sinks. A clinical sink serving a soiled utility room shall not be considered as a substitute for, or be utilized as, a service sink. A service sink shall not be utilized for the disposal of urine, fecal matter or other human waste.

422.8 Ice prohibited in soiled utility room. Machines for manufacturing ice, or any device for the handling or storage of ice, shall not be located in a soiled utility room.

422.9 Sterilizer equipment requirements. The approval and installation of all sterilizers shall conform to the requirements of the *International Mechanical Code*.

422.9.1 Sterilizer piping. Access for the purposes of inspection and maintenance shall be provided to all sterilizer piping and devices necessary for the operation of sterilizers.

422.9.2 Steam supply. Steam supplies to sterilizers, including those connected by pipes from overhead mains or branches, shall be drained to prevent any moisture from reaching the sterilizer. The condensate drainage from the steam supply shall be discharged by gravity.

422.9.3 Steam condensate return. Steam condensate returns from sterilizers shall be a gravity return system.

422.9.4 Condensers. Pressure sterilizers shall be equipped with a means of condensing and cooling the exhaust steam vapors. Nonpressure sterilizers shall be equipped with a device that will automatically control the vapor, confining the vapors within the vessel.

422.10 Special elevations. Control valves, vacuum outlets and devices protruding from a wall of an operating, emergency, recovery, examining or delivery room, or in a corridor or other location where patients are transported on a wheeled stretcher, shall be located at an elevation that prevents bumping the patient or stretcher against the device.

SECTION713-HEALTH CARE PLUMBING

713.1 Scope. This section shall govern those aspects of health care plumbing systems that differ from plumbing systems in other structures. Health care plumbing systems shall conform to this section in addition to the other requirements of this code. The provisions of this section shall apply to the special devices and equipment installed and maintained in the following occupancies: nursing homes; homes for the aged; orphanages; infirmaries; first aid stations; psychiatric facilities; clinics; professional offices of dentists and doctors; mortuaries; educational facilities; surgery, dentistry, research and testing



laboratories; establishments manufacturing pharmaceutical drugs and medicines; and other structures with similar apparatus and equipment classified as plumbing.

713.2 Bedpan washers and clinical sinks. Bedpan washers and clinical sinks shall connect to the drainage and vent system in accordance with the requirements for a water closet. Bedpan washers shall also connect to a local vent.

713.3 Indirect waste. Sterilizers, steamers and condensers shall discharge to the drainage through an indirect waste pipe by means of an *air gap*. Where a battery of not more than three sterilizers discharges to an individual receptor, the distance between the receptor and a sterilizer shall not exceed 8 feet (2438 mm). The indirect waste pipe on a bedpan steamer shall be trapped.

713.4 Vacuum system station. Ready *access* shall be provided to vacuum system station receptacles. Such receptacles shall be built into cabinets or recesses and shall be visible.

713.5 Bottle system. Vacuum (fluid suction) systems intended for collecting, removing and disposing of blood, pus or other fluids by the bottle system shall be provided with receptacles equipped with an overflow prevention device at each vacuum outlet station.

713.6 Central disposal system equipment. Central vacuum (fluid suction) systems shall provide continuous service. Systems equipped with collecting or control tanks shall provide for draining and cleaning of the tanks while the system is in operation. In hospitals, the system shall be connected to the emergency power system. The exhausts from a vacuum pump serving a vacuum (fluid suction) system shall discharge separately to open air above the roof.

713.7 Central vacuum or disposal systems. Where the waste from a central vacuum (fluid suction) system of the barometric-lag, collection-tank or bottle-disposal type is connected to the drainage system, the waste shall be directly connected to the sanitary drainage system through a trapped waste.

713.7.1 Piping. The piping of a central vacuum (fluid suction) system shall be of corrosion-resistant material with a smooth interior surface. A *branch* shall be not less than 1/2- inch (12.7 mm) nominal pipe size for one outlet and shall be sized in accordance with the number of vacuum outlets. A main shall be not less than 1-inch (25 mm) nominal pipe size. The pipe sizing shall be increased in accordance with the manufacturer's instructions as stations are increased.

713.7.2 Velocity. The velocity of airflow in a central vacuum (fluid suction) system shall be less than 5,000 feet per minute (25 m/s).

713.8 Vent connections prohibited. Connections between local vents serving bedpan washers or sterilizer vents serving sterilizing apparatus and normal sanitary plumbing systems are prohibited. Only one type of apparatus shall be served by a local vent.

713.9 Local vents and stacks for bedpan washers. Bedpan washers shall be vented to open air above the roof by means of one or more local vents. The local vent for a bedpan washer shall be not less than a 2-inch-diameter (51 mm) pipe. A local vent serving a single bedpan washer is permitted to drain to the fixture served.

713.9.1 Multiple installations. Where bedpan washers are located above each other on more than one floor, a local vent *stack* is permitted to be installed to receive the local vent on the various floors. Not more than three bedpan washers shall be connected to a 2-inch (51 mm) local vent *stack*, not more than six to a 3-inch (76 mm) local vent *stack* and not more than 12 to a 4-inch (102 mm) local vent *stack*. In multiple installations, the connections between a bedpan washer local vent and a local vent*stack* shall be made with tee or tee-wye sanitary pattern drainage fittings installed in an upright position.

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Copyright © 2017 ICC. ALL RIGHTS RESERVED. Accessed by Mohammed Madani on Dec 15, 2017 8:02:38 AM pursuant to License Agreement with ICC. No further reproduction or distribution authorized. ANY UNAUTHORIZED REPRODUCTION OR DISTRIBUTION IS A VIOLATION OF THE FEDERAL COPYRIGHT ACT AND THE LICENSE AGREEMENT, AND SUBJECT TO CIVIL AND CRIMINAL PENALTIES THEREUNDER. **713.9.2 Trap required.** The bottom of the local vent stack, except where serving only one bedpan washer, shall be drained by means of a trapped and vented waste connection to the sanitary drainage system. The trap and waste shall be the same size as the local vent *stack*.

713.9.3 Trap seal maintenance. A water supply pipe not less than 1/4 inch (6.4 mm) in diameter shall be taken from the flush supply of each bedpan washer on the discharge or fixture side of the vacuum breaker, shall be trapped to form not less than a 3-inch (76 mm) water seal and shall be connected to the local vent stack on each floor. The water supply shall be installed so as to provide a supply of water to the local vent stack for cleansing and drain trap seal maintenance each time a bedpan washer is flushed.

713.10 Sterilizer vents and stacks. Multiple installations of pressure and nonpressure sterilizers shall have the vent connections to the sterilizer vent *stack* made by means of inverted wye fittings. Access shall be provided to vent connections for the purpose of inspection and maintenance.

713.10.1 Drainage. The connection between sterilizer vent or exhaust openings and the sterilizer vent *stack* shall be designed and installed to drain to the funnel or baskettype waste fitting. In multiple installations, the sterilizer vent *stack* shall be drained separately to the lowest sterilizer funnel or baskettype waste fitting or receptor.

713.11 Sterilizer vent stack sizes. Sterilizer vent *stack* sizes shall comply with Sections 713.11.1 through 713.11.4.

713.11.1 Bedpan steamers. The minimum size of a sterilizer vent serving a bedpan steamer shall be 11/2 inches (38 mm) in diameter. Multiple installations shall be sized in accordance with Table 713.11.1.

	CONNECTION SIZE		
- STACK SIZE (inches)	11/2"	-	2"
11 /2a	4	or	θ
2a	2	Or	4
2b	4	and	4
3a	4	Or	2
3b	2	and	2
4 a	8	Of	4
4 b	4	and	4

TABLE 713.11.1 STACK SIZES FOR BEDPAN STEAMERS AND BOILING-TYPE STERILIZERS (Number of Connections of Various Sizes Permitted to Various-sized Sterilizer Vent Stacks)

For SI: 1 inch = 25.4 mm.

a. Total of each size.

b. Combination of sizes.

713.11.2 Boiling-type sterilizers. The size of a sterilizer vent *stack* shall be not less than 2 inches (51 mm) in diameter where serving a utensil sterilizer and not less than 14/2 inches (38 mm) in diameter where serving an instrument sterilizer. Combinations of boiling-type sterilizer vent connections shall be sized in accordance with Table 713.11.1.

713.11.3 Pressure sterilizers. Pressure sterilizer vent stacks shall be 21/2 inches (64 mm) minimum. Those serving combinations of pressure sterilizer exhaust connections shall be sized in accordance with Table 713.11.3.



		CONNECTION SIZE		
-STACK SIZE (inches)	3/4"	1"	11/4"	11/2"
11 /2a	3 or	2 or	4	—
11 / 2b	2 and	4	_	_
2a	6 or	3 or	2 or	4
2b	3 and	2	—	_
2b	2 and	1 and	1	—
2b	1 and	1 and	_	4
3a	15 or	7 or	5 or	3
3b	1 and	1 and 5 and	2 and	21

TABLE 713.11.3 STACK SIZES FOR PRESSURE STERILIZERS (Number of Connections of Various Sizes Permitted To Various-sized Vent Stacks)

For SI: 1 inch = 25.4 mm.

a. Total of each size.

b. Combination of sizes.

713.11.4 Pressure instrument washer sterilizer sizes. The diameter of a sterilizer vent stack serving an instrument washer sterilizer shall be not less than 2 inches (51 mm). Not more than two sterilizers shall be installed on a 2-inch (51 mm) *stack*, and not more than four sterilizers shall be installed on a 3-inch (76 mm).

Revise as follows:

802.1 Where required. Food-handling equipment, in other than dwelling units, clear-water waste, dishwashing machines and utensils, pots, pans and dishwashing sinks shall discharge through an indirect waste pipe as specified in Sections 802.1.1 through 802.1.8. Health-care related fixtures, devices and equipment shall discharge to the drainage system through an indirect waste pipe by means of an *air gap* in accordance with this chapter-and Section 713.3. Fixtures not required by this section to be indirectly connected shall be directly connected to the plumbing system in accordance with Chapter 7.

Reason: This proposal deletes a section that provides no practical value to the text. The requirements in this section are too broad to be enforceable; too generic to provide any clear direction; or otherwise covered in the text of this code.

The ICC Ad Hoc Committee on Healthcare (AHC) has just completed its 4th year. The AHC was established by the ICC Board to evaluate and assess contemporary code issues relating to hospitals and ambulatory healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. Information on the AHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the AHC effort can be downloaded from the AHC website at: http://www.iccsafe.org/cs/AHC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction. These items are already addressed in the IPC, therefore, the deletion will not increase the cost of construction.

Report of Committee A	Action		
Hearings			

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action: None Final Action Results P208-15 AS



Approved as Submitted

Code Change No: P212-15

Original Proposal

Section: 802.3.3.1 (New)

Proponent: Guy McMann, Jefferson County, Colorado (gmcmann@jeffco.us)

Add new text as follows:

802.3.3.1 Connection of laundry tray to standpipe. As an alternative for a laundry tray fixture connecting directly to a drainage system, a laundry tray waste line without a fixture trap shall connect to a standpipe for an automatic clothes washer drain. The standpipe shall extend not less than 30 inches (732 mm) above the weir of the standpipe trap and shall extend above the flood level rim of the laundry tray. The outlet of the laundry tray shall not be greater than 30 inches (762 mm) horizontal distance from the side of the standpipe.

Reason: This allowance language has been in the IRC for several code cycles and has been a frequent practice in many jurisdictions for much longer. It has been proven to work well for many years. There is no technical justification to not allow this method for IPC buildings.

Where this method will really be advantageous is in multi-family high-rise construction where the cost savings will be significant *and* the laundry tray providing a buffer against overflow of the ACW standpipe (if the standpipe drain clogs). The laundry tray will fill up with the washer discharge. This is a nice safety feature against water damage for multi-level buildings.

Cost Impact: Will not increase the cost of construction.

This proposal will not increase costs and may actually decrease costs by permitting a practice that is recognized in the residential Code. The savings could be realized as not having to install a vent, trap and waste line for a laundry tub.



Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P212-15

AS

Approved as Submitted

None

Code Change No: P213-15

Original Proposal

Section: 804, 804.1

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Self (JBENGINEER@aol.com)

Revise as follows:

804.1 <u>802.2</u> General <u>Material, joints, and connections</u>. The materials, joints, connections, and methods utilized for the construction and installation of indirect waste pipes and piping systems shall comply with the applicable provisions of Chapter 7.

Delete without substitution:

SECTION-804-MATERIALS, JOINTS AND CONNECTIONS

Reason: Since this requirement only applies to indirect waste systems, it should appear in Section 802, not as a separate section. Section 803 applies to special waste. Nothing in Section 804 applies to special waste. Hence, the appropriate location is Section 802.

The text has been cleaned up to address joints and connections, as well as, materials. The current section does not coordinate with the title of the section.

Cost Impact: Will not increase the cost of construction.

There is no increase in the cost of construction when the code is wordsmithed to make it easier to understand.

Report of Committee Action			
Hearings			

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P213-15

AS



None

Approved as Submitted

Code Change No: P215-15 Part II

Original Proposal

Section: P3101.1.2 (New), P3103.1, P3103.1.1 (New), P3103.1.3 (New), P3103.1.4 (New), P3103.6

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing Solar City (JBENGINEER@aol.com)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3103.1 Roof extension Vent pipes terminating outdoors. Open vent Vent pipes that extend through a roof terminating outdoors shall be terminated not less than 6 inches (152 mm) above extended to the outdoors through the roof or 6 inches (152 mm) above a side wall of the anticipated snow accumulation, whichever is greater. Where a roof is to be used for assembly, as a promenade, observation deck or sunbathing deck or for similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above building in accordance with one of the roof methods identified in Sections P3103.1.1 through P3103.1.4.

Add new text as follows:

P3103.1.1 Roof extension. Open vent pipes that extend through a roof and that do not meet the conditions of Section P3101.1.2 or Section P3101.1.3 shall terminate not less than 6 inches (150 mm) above the roof or 6 inches (150 mm) above the anticipated snow accumulation, which ever is greater.

P3101.1.2 Roof used for recreational purposes. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

P3103.1.3 Roof extension covered. Where an open vent pipe terminates above a sloped roof and is covered by either a roof-mounted panel such as a solar collector or photovoltaic panel mounted over the vent opening, or by a roof element such as an architectural feature or a decorative shroud, the vent pipe shall terminate not less than 2 inches (51 mm) above the roof surface. Such roof elements shall be designed to prevent the adverse effects of snow accumulation and wind on the function of the vent. The placement of a panel over a vent pipe and the design of a roof element covering the vent pipe shall provide for an open area for the vent pipe to the outdoors that is not less than the area of the pipe, as calculated from the inside diameter of the pipe. Such vent terminals shall be protected by a method that prevents birds and rodents from entering or blocking the vent pipe opening.

P3103.1.4 Side wall vent terminal. Vent terminals extending through the wall shall terminate not closer than 10 feet (3048 mm) from a lot line and not less than 10 feet (3048 mm) above the highest grade elevation within 10 feet (3048 mm) in any direction horizontally of the vent terminal. Vent pipes shall not terminate under the overhang of a structure where the overhang includes soffit vents. Such vent terminals shall be protected by a method that prevents birds and rodents from entering or blocking the vent pipe opening and that does not reduce the open area of the vent pipe.

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Delete without substitution:

P3103.6 Extension through the wall. Vent terminals extending through the wall shall terminate not less than 10 feet (3048 mm) from the *lot line* and 10 feet (3048 mm) above the highest adjacent *grade* within 10 feet (3048 mm) horizontally of the vent terminal. Vent terminals shall not terminate under the overhang of a structure with soffit vents. Side wall vent terminals shall be protected to prevent birds or rodents from entering or blocking the vent opening.

Reason: This proposed change reorganizes the section regarding the vent terminal. There are currently three options for a vent terminal, extending the vent (number) inches or more above the roof, extending the vent more than 7 feet above the roof when the roof is used for entertainment, or extending the vent through the side wall. However, the three requirements are separated between multiple sections. This makes the requirement readily identifiable in a section that presents all the options in one main section. A fourth option for terminating the vent has been included. The fourth option would allow the vent to terminate 2 inches above a sloped roof when protected by a covering. This would allow photovoltaic solar collectors to be installed over vent terminals. It would also allow other protected vent terminals, such as architectural features that hide the vent for aesthetic purposes.

The size, length, and location of vent terminals has been a subject matter that has been greatly discussed over the last century. There are many myths, innuendoes, theories, and hypothesis regarding vent terminals. One of the most complete papers on vent terminals was published by the National Bureau of Standards (NBS) in 1954, entitled, "Frost Closure of Roof Vents in Plumbing Systems," authored by Nerbert Eaton and Robert Wyly. Most of the current code requirements originate from the recommendations of this paper.

The NBS paper investigated plumbing roof vents and their termination throughout North America. Identified as a major concern is the frost closure of the vent terminal. Other concerns included snow blockage, shearing off of the vent terminal, and rainwater entrance.

Prior to this paper, it was largely alluded that the reason for a minimum size of 1-1/4 inch and a termination above the roof surface was to prevent a bird from building a nest and laying an egg to block off the vent. To this day, birds building nests in vents is a concern. However, that concern is more related to side wall venting that provides an easy opening for a bird to build a nest. When a vent terminates lower to the roof, measures must be taken to prevent a bird from building a nest around the vent pipe and blocking it off. Increasing the size of the vent is one means used to avoid a bird's nest. Screening and vent covers also are used to prevent birds from building a nest.

The more pressing issue is how far above the roof a vent should terminate. Two issues of importance are water tightness of the flashing and preventing rainwater entrance into the plumbing vent. Modern day flashings can make the roof penetration water tight at much lower heights, including a termination 2 inches above the roof.

The NBS report suggested a minimum of 2 inch penetration above the roof to prevent rainwater from entering the plumbing vent. It is recognized that a flat roof can have a greater accumulation of water hence the need for the vent to be at a higher elevation. Typically secondary roof drains are located between 2 and 4 inches above the roof. Thus, the vent terminal would have to be located at a higher height which is the reason for maintaining a minimum of inserting the appropriate number of inches above the roof for a flat roof.

The NBS report identified a vent terminal used in Saskatoon, Canada that terminates at the sloped roof. There was no extension above the roof. This was found to be extremely effective in preventing frost closure. As the NBS report states, the closer the vent terminates to the roof, the lower the possibility of frost closure. The report also found that by making the vent a minimum of 3 inch in diameter, frost closure that impacts the performance of the venting system was avoided.

Snow accumulation has been a subject of more recent discussions regarding vent terminals. However, snow accumulation was addressed in the NBS report. The NBS report found that while snow may completely cover the vent terminal, the snow eventually melts from the heated vapors emanating out of the vent. Prior to the snow melting, the NBS report found that the snow cover did not impact the performance of the vent. This makes sense since the purpose of the vent is to balance the pressure in the drainage system with atmospheric pressure. The snow cover is not dense enough to prevent the balancing of pressure in the piping system.

The current code requires the vent to terminate at a height specified by the jurisdiction. The Residential Code requires the termination to be 6 inches above the anticipated snow cover. The requirement add the local value remains intact. However, when the vent is covered, such as by a solar panel or architectural feature, it cannot be covered by snow such that the vent doesn't perform properly. Thus, the vent could terminate at a 2 inch height above a sloped roof.

In the mountain west, shearing of the roof vent is a problem when the snow and ice melt and slide off of sloped roofs. By extending the vent higher through the roof, there is a greater force applied on the vent that can result in the pipe being sheared off. If the vent is lowered, the force on the vent during snow and ice slides is also lowered. This may reduce the shearing incidents of vent pipes. However, that is not part of the reason for lowering the vent terminal height. The vent would be protected if installed at a lower height. Hence, the snow and ice slides would have little to no impact on the vent since it is covered.

Plumbing contractors in the mountain west with heavy snow and ice accumulations have found that the more practical solution is to extend the vent through the roof closer to the peak of the roof. Thus, the force from sliding snow and ice is lowered. This has not been addressed in this code change and is more of a regional issue addressed by knowledgeable local contractors.

The remaining issue that is not often addressed for vent terminals is the impact of wind. During windy conditions, the vent terminal can create a reduced pressure zone that siphons the trap seal. This is often called a Venturi effect. The other concern is downdrafts that can increase the pressure in the drainage system. However, downdrafts have not had a major impact on the drainage system based on the termination height above the roof. While the possibility exists that a lower vent termination height could result in higher wind downdrafts, this has not proven to be the case. However, the code requirement addresses downdrafts by requiring the covering to prevent any adverse impact from wind.

What the plumbing profession must acknowledge is that solar is a viable source of energy for a building. As such, accommodations must be made to allow for the maximum area of roof coverage with solar panels. This may require the adjustment in the height of the vent terminal.



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While accommodations must be made, there cannot be a sacrifice of public health. The lowering of the vent terminal to 2 inches on a sloped roof will not impact public health. This was proven by the NBS study published in 1954. Furthermore, modern building practices will result in a water tight vent terminal that will perform as intended.

Bibliography:

"Frost Closure of roof Vents in Plumbing Systems," Herbert N. Eaton and Robert S. Wyly, BMS Report 142, published 1954, United States Department of Commerce, National Bureau of Standards.

National Plumbing Code Handbook, Standards and Design Information, Vincent T. Manas, P.E., copyright 1957, McGraw-Hill Book Company

Cost Impact:

Will not increase the cost of construction.

This change provides options. As such, there is no cost implication.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P215-15 Part II



Code Change No: P220-15 Part II

Original Proposal

Section: P3111.1

Proponent: Billy Smith, American Society of Plumbing Engineers Legislative Committee, representing American Society of Plumbing Engineers Legislative Committee (bsmith@aspe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3111.1 Type of fixtures. A combination waste and vent system shall not serve fixtures other than floor drains, sinks and lavatories. A combination waste and vent system shall not receive the discharge of a food waste disposer.

Cost Impact:

Part II: Will not increase the cost of construction. It's going to allow an installation that previously wasn't permitted thus lowering the cost of production.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P220-15 Part II

AS

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None

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Approved as Submitted

Code Change No: P221-15 Part II

Original Proposal

Section: P3111.1, P3111.1.1 (New), P3111.2, P3111.2.1, P3111.2.2, P3111.2.3, P3111.2.4, P3111.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3111.1 Type of fixtures. A combination waste and vent system shall <u>not only</u> serve fixtures other than floor drains, sinks, <u>lavatories</u> and <u>lavatories</u> <u>drinking fountains</u>. A combination waste and vent system shall <u>be considered to be the vent for those fixtures</u>. The developed length of a fixture drain to the combination waste and vent system piping shall not exceed the limitations of Table P3105.1. Combination waste and vent systems shall not receive the discharge of-from a food waste disposer.

Add new text as follows:

P3111.1.1 Single fixture systems. A horizontal fixture drain shall be considered to be a combination waste and vent system provided that the fixture drain size complies with P3105.1.

Revise as follows:

P3111.2 Installation. The only vertical pipe of a combination waste and vent system shall be the connection between the <u>a</u> fixture drain and the <u>a</u> horizontal combination waste and vent pipe. The <u>length</u> <u>of the</u> vertical distance pipe shall be not greater than 8 feet (2438 mm).

P3111.2.1 Slope. The <u>slope of a</u> horizontal combination waste and vent <u>pipe piping</u> shall <u>have a slope</u> of <u>be</u> not greater than ½ unit vertical in 12 units horizontal (4-percent slope). The minimum slope and shall <u>not</u> be less than that indicated in accordance with Section P3005.3 P3005.2.

P3111.2.2 <u>Connection Vent connection</u>. The <u>A</u> combination waste and vent system shall be provided with a dry vent connected at any point within the system or the system shall connect to a horizontal drain <u>or building drain</u>, that serves vented fixtures located on the same floor. Combination waste and vent systems connecting to <u>building drains</u> receiving only the discharge from one or more stacks shall be provided with a dry vent. The <u>dry vent connection connected</u> to the combination waste and vent pipe shall extend vertically to a point not less than 6 inches (152 mm) above the flood level rim of the highest fixture being vented by the combination waste and vent system before offsetting horizontally horizontal offsets in the dry vent piping are allowed.

P3111.2.3 Vent size. The <u>dry vent connected to the combination waste and vent system</u> shall be sized for the total <u>drainage</u> fixture unit load in accordance with Section <u>P3113.1P3111.1</u>.

Delete without substitution:

P3111.2.4 Fixture branch or drain. The fixture branch or *fixture drain* shall connect to the combination waste and vent within a distance specified in Table P3105.1. The combination waste and vent pipe shall be considered the vent for the fixture.



Revise as follows:

P3111.3 Size and length. The size of a combination drain and vent pipe piping shall be not less than that specified in Table 3111.3. The horizontal length of a combination drain and vent system shall be unlimited.

Reason: The primary reason for this proposal is to add new Section 915.1.1 to cover the very special situation of a single fixture combination waste and vent system.

Consider a 2 inch floor drain which by definition has a 2 inch trap. Where the floor drain is an emergency floor drain, Table P3004.1 indicates that the dfu value is zero. Where the floor drain is not emergency floor drain, note b indicates the dfu unit value is the summation of dfu discharging to the floor drain. For this example, consider that the floor drain is a 2 dfu value. Now review Table P3111.3 and determine that a 2 inch combination waste and vent pipe can accommodate up to 3 dfu. Therefore, the 2 inch pipe from the trap of the 2 inch floor drain can be its own combination waste and vent system.

However, this is not readily apparent from existing language especially when reading existing Section P3111.2.4. That section seems to indicate that the length of a fixture drain to its vent connection is always limited by the trap-to-vent distances in Table P3105.1. The piping from any fixture trap to the vent connection is limited in length so that the vent connection is not below the trap weir (see Section P3105.2). Table P3105.1reflects the maximum length of the fixture drain at the indicated slopes so Section P3105.2 is not violated. But where the fixture drain is "oversized" according to the requirements for a combination waste and vent system, then the limit on fixture drain length for these single fixture applications is meaningless. The fixture trap cannot siphon because the pipe is oversized for the intended dfu going into the drain.

For a better flow of requirements, Section P3111.2.4 was merged into Section P3111.1. This was important in order to move the requirement for meeting Table P3105.1 before new Section P3111.1 to make that new section make sense.

Several minor changes were made to other sections including changing pipe to piping. Pipe implies a section of pipe without fittings. A combination waste and vent system can have horizontal bends. Some have misinterpreted that "pipe" meant that a CWV system only was allowed as a "straight run" system.

Another small but important change is in P3111.2. Here, pipe really does mean pipe as in a straight run of pipe in vertical direction. Adding words to the last sentence will hopefully reinforce that it is not just the distance of 8 feet but a vertical pipe not longer than 8 feet. Note the definition for VERTICAL PIPE in chapter 2. A vertical pipe could have vertical offsets and still be considered vertical.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC let 18.

Cost Impact:

Will not increase the cost of construction.

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action		
Hearings		

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Final Action Results

P221-15 Part II

AS



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Code Change No: P226-15 Part I

Original Proposal

Section: 918.8

Proponent: Guy McMann, representing Colorado Association of Plumbing and Mechanical Officials (CAPMO) (gmcmann@jeffco.us)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

918.8 Prohibited installations. Air admittance valves shall not be installed in nonneutralized special waste systems as described in Chapter 8 except where such valves are in compliance with ASSE 1049, are constructed of materials *approved* in accordance with Section 702.5 and are tested for chemical resistance in accordance with ASTM F 1412. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves without an engineered design shall not be utilized to vent sumps or tanks of any type. <u>Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes or mechanical air intakes.</u>

Reason: This type of installation is not consistent with the intent of use of AAVs. These are still mechanical devices with a shelf life and are subject to failure even if the correct AAV for outdoor use is installed. Failures will result in sewer gas making its way into building openings. The correct remedy is to move or raise the vent.

Cost Impact:

Will not increase the cost of construction

There is no additional cost that would normally occur to correct a non-code compliant installation. This proposal attempts to circumvent the installation of a product against its' intended use as air admittance valves are a mechanical devices that will eventually fail.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

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Approved as Submitted

Final Action Results

P226-15 Part I



Code Change No: P226-15 Part II

Original Proposal

Section: P3114.8

Proponent: Guy McMann, representing Colorado Association of Plumbing and Mechanical Officials (CAPMO) (gmcmann@jeffco.us)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

P3114.8 Prohibited installations. *Air admittance valves* shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer. <u>Air admittance valves</u> shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity or mechanical air intakes.

Reason: This type of installation is not consistent with the intended use of AAVs. These are still mechanical devices with a shelf life and are subject to failure even if the correct AAV for outdoor use is installed. Failures will result in sewer gas making its way into building openings. The correct remedy is to move or raise the vent.

Cost Impact:

Will not increase the cost of construction

There is no additional cost that would normally occur to correct a non-code compliant installation. This proposal attempts to circumvent the installation of a product against its' intended use as air admittance valves are a mechanical devices that will eventually fail.

Report of Con	nmittee Action		
Hearings			

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P226-15 Part II

AS

Approved as Submitted

None

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Code Change No: P227-15

Original Proposal

Section: 918.8

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

918.8 Prohibited installations. Air admittance valves shall not be installed in nonneutralized special waste systems as described in Chapter 8 except where such valves are in compliance with ASSE 1049, are constructed of materials *approved* in accordance with Section 702.5 and are tested for chemical resistance in accordance with ASTM F 1412. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves without an engineered design shall not be utilized <u>used</u> to vent sumps or tanks of any type except where the vent system for the sump or tank has been <u>designed by an engineer</u>.

Reason: The IRC already has this correction/clarification made in the last cycle and this proposal is for coordination with that IRC change.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 150.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Committee Reason: Correlation with the 2015 IRC and allows for use of an AAV on a tank or sump where an engineer takes responsibility for the design.

Assembly Action:

None

Approved as Submitted

Final Action Results

P227-15



Code Change No: P230-15

Original Proposal

Section: 1003.3

Proponent: Ken Loucks, representing Schier Products Company (ken.loucks@schierproducts.com)

Revise as follows:

1003.3 Grease interceptors. Grease interceptors shall comply with the requirements of Sections 1003.3.1 through <u>1003.3.5-1003.3.7</u>.

Reason: The 2015 language failed to include all of the relevant sections for grease interceptors in the requirements for grease interceptors under 1003.3 since it currently only requires interceptors to meet sections up to 1003.3.5 (leaving out 1003.3.6 and 1003.3.7). This has the effect of exempting gravity grease interceptors from requirements that should pertain to all grease interceptors without exception. Also, 1003.3.7 specifically requires grease interceptors to be directly connected to the sanitary drainage system, however this is confusing since this section is not mandated for compliance in 1003.3.

Cost Impact: Will not increase the cost of construction There is no cost impact, since this only clarifies requirements already in the code but which are confusing as is.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: Correlation with the 2015 IRC and allows for use of an AAV on a tank or sump where an engineer takes responsibility for the design.

Assembly Action:

Final Action Results

P230-15

Code Change No: P233-15

Original Proposal

Section: 1003.3.2

Proponent: Julius Ballanco, JB Engineering and Code Consulting, P.C., representing InSinkErator (JBENGINEER@aol.com)

Revise as follows:

1003.3.2 Food waste disposers <u>restriction</u>. Where <u>A</u> food waste disposers connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste disposers. Emulsifiers, chemicals, enzymes and bacteria <u>disposer</u> shall not discharge <u>into the food waste disposer to a grease interceptor</u>.

Reason: It has been well established that food waste from a disposer must not discharge through a grease interceptor. If food waste passes through a grease interceptor, it greatly reduces the efficiency of the interceptor. Food waste decomposition in a grease interceptor will dramatically increase the oxygen consumption. The food waste will also drop the pH, increase corrosion, and increase the hydrogen sulfide production. The only means of preventing this occurrence is to not have the food waste disposer discharge to the grease interceptor.

Using a solids interceptor before a grease interceptor is not a viable solution. The solids interceptor will continually fill up with food waste requiring maintenance. In a food handling establishment, this maintenance could be hourly.

A food waste disposer must discharge directly to the sanitary drainage system. This code change will result in such a requirement.

Cost Impact: Will not increase the cost of construction

This identifies a limitation on the discharge of food waste disposers through grease interceptor. By properly connecting the food waste disposer, the cost will be less because of material savings.



Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P233-15

AS

Approved as Submitted

None



Code Change No: P234-15

Original Proposal

Section: 1003.3.2, 1003.3.3 (New)

Proponent: JEFFREY HUTCHER, cleanblu, representing Cleanblu (jhutcher@pacbell.net)

Revise as follows:

1003.3.2 Food waste disposers. Where food waste disposers connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste disposers. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste disposer.

Add new text as follows:

1003.3.3 Additives to grease interceptors. Dispensing systems that dispense interceptor performance additives to grease interceptors shall not be installed except where such systems dispense microbes for the enhancement of aerobic bio remediation of grease and other organic material, or for inhibiting growth of pathogenic organisms by anaerobic methods. Such microbial dispensing systems shall be installed only where the grease interceptor manufacturer's instructions allow such systems and the systems conform to ASME A112.14.6. Systems that discharge emulsifiers, chemicals or enzymes to grease interceptors shall be prohibited.

Reason: Section 1003.3.2 is outdated and ignores the advances of new technology. To include bacteria in the prohibition is not only ignoring science, it is akin to prohibiting electricity as an energy solution. bioremediation is the sole mechanism of ALL waste water treatment plants and natures way to handle waste. Enzymes and microbes are not the same. Enzymes are dead strings of protein that disperse grease and is a common additive in dish soap. Microbes are lifeforms that eat and digest waste. Microbes can be blended (not altered) to feed on grease, sulfur, while inhibiting the growth of pathogens and other harmful organisms. Waste water treatment depends on microbes and and would simply cease to function without them ; So would the human body. Yeast are microbes in any establishment. Using Microbes in point source pollution control is enhancing already naturally occurring bacteria and introducing them to their food source. Just like yeast, the by-products are Carbon Dioxide and water. Systems designed to use aerobic Microbes are now listed and meet ASME A112.4.6, using the rigorous EPA test protocol 1664. There is no reason to exclude them in point source pollution control. Exclusion of microbial treatment would be irresponsible, unnatural and dangerous to human and animal health.

Cost Impact: Will not increase the cost of construction

The microbe dispensing systems are optional and therefore, there is no additional cost of material or labor. The new section simply allows these optional systems to be installed as long as they comply with the requirements indicated by the section.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: This treatment protocol exists in the standard and is being used in the California area.

Assembly Action: None Final Action Results P234-15 AS



Approved as Submitted

Code Change No: P236-15

Original Proposal

Section: Table 1102.4, Chapter 14

Proponent: Shawn Coombs, Advanced Drainage Systems, Inc., representing Advanced Drainage Systems, Inc. (shawn.coombs@ads-pipe.com)

Revise as follows:

BUILDING STORM SEWER PIPE		
MATERIAL	STANDARD	
Polypropylene (PP) Pipe	<u>CSA B182.13</u>	

TABI E 1102 4

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

<u>CSA B182.13-2011 Profile Polypropylene (Pp) Sewer Pipe And Fittings For Leak-Proof Sewer</u> Applications

Reason: This code change is proposed because there is currently an CSA Standard Specification for this pipe material. PP pipe has been used in gravity flow storm sewer applications (both watertight and soil tight) in Europe for over 25 years and is now being manufactured in the United States. AASHTO has approved the material under AASHTO Specification M330. The American Society Testing Materials (ASTM) has also approved PP pipe per ASTM F2881-11. The acceptance of the proposed change will enable manufacturers with products that meet the requirements of the ASTM Standard to have their products used. This change will also allow the authorities having jurisdiction to permit the use of products that meet this CSA standard.

Cost Impact: Will increase the cost of construction

Using PP will slightly increase the pipe material cost, but will facilitate ease of installation, due to the stiffer nature of the pipe's wall.

Analysis: A review of the standard proposed for inclusion in the code, CSA B182.13-2011, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Approved as Submitted

Final Action Results

P236-15

Code Change No: P237-15

Original Proposal

Section: Table 1102.4, Chapter 14

Proponent: Shawn Coombs, Advanced Drainage Systems, Inc., representing Advanced Drainage Systems, Inc. (shawn.coombs@ads-pipe.com)

Revise as follows:

TABLE 1102.4 BUILDING STORM SEWER PIPE

MATERIAL	STANDARD
Polyethylene (PE) plastic pipe	<u>ASTM F667;</u> ASTM F 2306/F 2306M

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

ASTM F667 - 12 "Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings"

Reason: This code change is proposed because the currently listed ASTM F2306 has a size range of 12" to 60". There are applications where the designer uses smaller diameter polyethylene pipe to convey storm water or other drainage from the end of the building drain to a public sewer, private sewer, individual sewage disposal system or other point of disposal. Proposed ASTM F667-06 is needed as it covers pipe sizes 3" to 24"

The acceptance of the proposed change will allow the authorities having jurisdiction to permit the use of this product in smaller diameters where required.

Cost Impact: Will not increase the cost of construction

The addition of this standard will allow more appropriately sized diameters of PE to be used, thus optimizing cost.

Analysis: A review of the standard proposed for inclusion in the code, ASTM F667, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P237-15

Approved as Submitted

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None



Code Change No: P238-15

Original Proposal

Section: Table 1102.4, Chapter 14

Proponent: Shawn Coombs, representing Advanced Drainage Systems, Inc. (shawn.coombs@ads-pipe.com)

Revise as follows:

TABLE 1102.4 BUILDING STORM SEWER PIPE		
MATERIAL	STANDARD	
Polyethylene (PE) plastic pipe	ASTM F 2306/F 2306M; <u>ASTM F2648/F2648M</u>	

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

ASTM F2648/F2648M-13 Standard Specification for 2 to 60 inch [50 to 1500 mm] Annular Corrugated Profile Wall Polyethylene (PE) Pipe and Fittings for Land Drainage Applications

Reason: Section 503 Material Selection of the IGCC discusses the use of recyclable building materials and the use of indigenous materials on projects. This code change is proposed because ASTM F2648 allows the use of recycled materials to be used in the manufacture of High Density Polyethyene pipe. The addition of ASTM F2648 to Table 1102.4 is in support of the IGCC initiative. The acceptance of the proposed change will allow the authorities having jurisdiction to permit the use of this product on projects in direct support of the IGCC.

Cost Impact: Will not increase the cost of construction

The use of recycled materials in our products in most cases makes the pipe more cost effective.

Analysis: A review of the standard proposed for inclusion in the code ASTM F2648/F2648M, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P238-15

AS



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None

Approved as Submitted

Code Change No: P239-15

Original Proposal

Section: Table 1102.4, Chapter 14

Proponent: Shawn Coombs, Advanced Drainage Systems, Inc., representing Advanced Drainage Systems, Inc. (shawn.coombs@ads-pipe.com)

Revise as follows:

TABLE	1102.4
BUILDING STOR	RM SEWER PIPE
	0

MATERIAL	STANDARD
Polypropylene (PP) Pipe	ASTM F2881

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

ASTM F2881-11 "Standard Specification for 12 to 60 in. [300 to 1500 mm] Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications"

Reason: This code change is proposed because there is currently an ASTM Standard Specification for this pipe material. PP pipe has been used in gravity flow storm sewer applications (both watertight and soil tight) in Europe for over 25 years and is now being manufactured in the United States. AASHTO has approved the material under AASHTO Specification M330. The Canadian Standards Association (CSA) has also approved PP pipe per CSA B182.13-11. The acceptance of the proposed change will enable manufacturers with products that meet the requirements of the ASTM Standard to have their products used. This change will also allow the authorities having jurisdiction to permit the use of products that meet this ASTM standard.

Cost Impact: Will increase the cost of construction

Using polypropylene pipe will slightly increase the pipe material cost, but will facilitate installation, due to the stiffer nature of the pipe's wall.

Analysis: A review of the standard proposed for inclusion in the code, ASTM F2881, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P239-15



Code Change No: P240-15

Original Proposal

Section: Table 1102.4

Proponent: Michael Cudahy, representing Plastic Pipe and Fittings Association (mikec@cmservices.com)

Revise as follows:

TABLE 1102.4 (1102.4) BUILDING STORM SEWER PIPE

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall.	ASTM D 2661; ASTM D 2751; ASTM F 628; <u>ASTM F</u> <u>1488;</u> CSA B181.1; CSA B182.1
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301
Concrete pipe	ASTM C 14; ASTM C 76; CSA A257.1M; CSA A257.2M
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 306
Polyethylene (PE) plastic pipe	ASTM F 2306/F 2306M
Polyvinyl chloride (PVC) plastic pipe (Type DWV, SDR26, SDR35, SDR41, PS50 or PS100) in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall.	ASTM D 2665; ASTM D 3034; ASTM F 891; <u>ASTM F</u> <u>1488;</u> CSA B182.4; CSA B181.2; CSA B182.2
Vitrified clay pipe	ASTM C 4; ASTM C 700
Stainless steel drainage systems, Type 316L	ASME A112.3.1

Reason: ASTM D2751 has been withdrawn in 2014. ASTM F1488, "Standard Specification for Coextruded Composite Pipe" is found in table 702.2, but not table 1102.4

Cost Impact: Will not increase the cost of construction

This proposal simply adds another option for piping material into the code and corrects others, and as such, the option is not requiring that this material be chosen. Thus the code with this proposal added will not cause the cost of construction to increase.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Approved as Submitted

None



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Code Change No: P241-15

Original Proposal

Section: Table 1102.5, Chapter 14

Proponent: Shawn Coombs, Advanced Drainage Systems, Inc., representing Advanced Drainage Systems, Inc. (shawn.coombs@ads-pipe.com)

Revise as follows:

TABLE 1102.5 SUBSOIL DRAIN PIPE		
MATERIAL	STANDARD	
	ASTM F 405; <u>ASTM F667;</u> CSA B182.1; CSA B182.6; CSA B182.8	

(Portions of table not shown remain unchanged)

Reference standards type: Add new standard(s) as follows:

ASTM F667 - 12 Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings

Reason: This code change proposal is proposed because the currently listed ASTM F405 is limited in size to only 3" to 6" diameter pipe. There are applications where larger diameters of perforated polyethylene pipe are required to collect subsurface water or seepage water and convey such water to a place of disposal. The proposed ASTM F667-06 is needed as it covers pipe sizes 3" to 24" diameters. The acceptance of the proposed change will allow the authorities having jurisdiction to permit the use of this product in larger diameters where required.

Cost Impact: Will not increase the cost of construction

The addition of this standard will allow more appropriately sized diameters of PE to be used, thus optimizing cost.

Analysis: A review of the standard proposed for inclusion in the code, ASTM F667 - 12, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Approved as Submitted

None

Final Action Results

P241-15



Code Change No: P246-15

Original Proposal

Section: 1106.5, 1108.3

Proponent: Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

Revise as follows:

1106.5 Parapet wall <u>scupper location scuppers</u>. Parapet wall Where scuppers are used for primary roof drainage scupper or for secondary (emergency overflow) roof drainage or both, the quantity, size, location and overflow scupper location shall comply with the requirements of Section 1503.4<u>inlet</u> elevation of the scuppers shall be chosen to prevent the depth of ponding water on the roof from exceeding the maximum water depth that the roof was designed for as determined by Section 1611.1 of the International Building Code. Scupper openings shall be not less than 4 inches (102 mm) in height and have a width that is equal to or greater than the circumference of a roof drain sized for the same roof area. The flow through the primary system shall not be considered when locating and sizing secondary scuppers.

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 based on the rainfall rate for which the primary system is sized. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of not less than 4 inches (102 mm) in height and have an opening width equal to the circumference of the roof drain required for the area served, sized in accordance with Table 1106.2(1). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Reason: The current language in the IPC and IBC implies that scuppers are only approved for secondary roof drainage. However, there are many areas of the country where scuppers are used for the primary roof drain system with another set of scuppers (installed at a higher elevation) used for the secondary drainage system. Where scuppers are used for primary system, there needs to be method to equate the code required drain size to a scupper opening width. A simple design criteria of the scupper width equaling the circumference of the code required primary roof drain has worked very well in such areas such as Phoenix where buildings are subject to annual monsoon thunderstorms in the summer. Statement trailing the reason:

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 168.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: Scuppers are an acceptable means for primary roof drainage. This proposal provides appropriate sizing for scuppers.

Assembly Action:

None

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Code Change No: P247-15

Original Proposal

Section: 1301.1.1 (New)

Proponent: Jeff Hugo, National Fire Sprinkler Association, representing National Fire Sprinkler Association (hugo@nfsa.org)

Add new text as follows:

1301.1.1 Fire Protection Systems The storage, treatment and distribution of nonpotable water to be used for fire protection systems shall be in accordance with the *International Fire Code*.

Reason: This proposal is to insert text to remind designers and users of the International Plumbing Code for nonpotable water systems that use of these systems in fire protection warrant further examination and design considerations. While many of these systems are used and governed by the International Plumbing Code, there are a fair amount of these systems used for fire protection systems. By referencing the International Fire Code, the user of International Plumbing Code has direct reference to the installation standards used for fire protection systems. Many of these installation standards have specific listing requirements and design considerations that must be incorporated into the nonpotable water systems of Sections 1301, 1302, 1303 and 1304.

Cost Impact: Will not increase the cost of construction The reference to the IFC and the appropriate installation standards does not increase the cost of construction.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: Chapter 13 was all new for the 2015 IPC. It is necessary for this new section to be added to coordinate with the IFC.

Assembly Action:

None

Final Action Results

P247-15

Code Change No: P251-15

Original Proposal

Section: 1301.6

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1301.6 Approved components <u>Components</u> and materials. Piping, plumbing components and materials used in collection and conveyance systems shall be manufactured of material approved <u>by the manufacturer</u> for the intended application and compatible with any disinfection and treatment systems used.

Reason: Treatment and disinfection systems are not expected to affect permitted piping, plumbing components and materials. Since the section already specifies that materials must be "approved" this term has no value added by remaining in the section heading.

Cost Impact: Will not increase the cost of construction

This code change is for clarification only and does not increase the specific provisions addressed in the code section.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P251-15

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Approved as Submitted

None

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BACK

Code Change No: P253-15

Original Proposal

Section: 1301.9.1

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Delete without substitution:

1301.9.1 Sizing. The holding capacity of the storage tank shall be sized in accordance with the anticipated demand.

Reason: In the absence of providing more informed guidance, this section should be eliminated. For example, tank sizing for rainwater storage is based on anticipated demand patterns, rainfall characteristics, and cost, not just anticipated demand.

Cost Impact: Will not increase the cost of construction Deleting this sizing section does not add more restrictive requirements to the installation.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

P253-15

None

Approved as Submitted

AS

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Code Change No: P255-15

Original Proposal

Section: 1301.9.2

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1301.9.2 Location. Storage tanks shall be installed above <u>Any storage tank</u> or below grade. Above-grade storage tanks portion thereof that is above-grade shall be protected from direct sunlight and shall be constructed using opaque, UV-resistant materials such as, but not limited to, heavily tinted plastic, fiberglass, lined metal, concrete, wood, or painted <u>exposure</u> to prevent algae growth, or shall have specially constructed sun barriers including, but not limited to, installation in garages, crawl spaces or sheds. sunlight by one of the following methods:

- 1. Tank construction using opaque, UV-resistant materials such as heavily tinted plastic, fiberglass, lined metal, concrete, wood, or painted to prevent algae growth,
- 2. Specially constructed sun barriers.
- 3. Installation in garages, crawl spaces or sheds.

Storage tanks and their manholes shall not be located directly under soil piping, waste piping or any source of contamination.

Reason: The first sentence has no added value. The provisions of this and other sections dictate the necessary requirements for storage tanks based on their installation above or below grade. The methods used for protection from sunlight is easier in a list format as opposed to a single paragraph.

Cost Impact: Will not increase the cost of construction This code change merely reorganizes the section without adding or deleting any existing provisions.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P255-15



Code Change No: P258-15

Original Proposal

Section: 1301.9.7

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1301.9.7 Access. Not less than one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an *approved* locking device or other approved method of securing access. Below-grade storage tanks, located outside of the building, shall be provided with a manhole either not less than 24 inches (610 mm) square or with an inside diameter not less than 24 inches (610 mm). Manholes shall extend not less than 4 inches (102 mm) above ground or shall be designed to prevent water infiltration. Finished grade shall be sloped away from the manhole to divert surface water. Manhole covers shall be secured to prevent unauthorized access. Service ports in manhole covers shall be not less than 8 inches (203 mm) in diameter and shall be not less than 4 inches (102 mm) above the finished grade level. The service port shall be secured to prevent unauthorized access.

Exception: Storage Water storage tanks for treated water that are less than 800 gallons (3028L) in volume and installed below grade shall not be required to be equipped with a manhole, but shall have provided that the tank has a service port of not less than 8 inches (203 mm) in diameter.

Reason: Raw water storage tanks should have an easy access for cleaning (i.e. manhole access). The exception more appropriately applies to treated water storage tanks.

Cost Impact: Will not increase the cost of construction

This code change clarifies the appropriate access for treated water tanks. Such tanks are typically smaller than water storage tanks that store water prior to treatment.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembl	y Action:

None

285

Approved as Submitted

Final Action Results

P258-15



BACK

Code Change No: P259-15

Original Proposal

Section: 1301.9.9

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1301.9.9 Draining of tanks. Where tanks require draining Tanks shall be provided with a means of emptying the contents for the purpose of service or cleaning, tanks. Tanks shall be drained by using a pump or by a drain located at the lowest point in the tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table 606.5.7. Not less than one cleanout shall be provided on each drain pipe in accordance with Section 708.

Reason: It is important for all water storage tanks to have a means for draining or emptying the tank for maintenance purposes and cleaning in order to protect the health and safety of users.

Cost Impact: Will not increase the cost of construction

This code change clarifies the methods for draining or emptying tanks, but does not add or increase any additional provisions for such.

Report of Committee A	ction		
Hearings			

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

AS

P259-15

None

Approved as Submitted

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Code Change No: P261-15

Original Proposal

Section: 1302.1, 1304.3

Proponent: Dru Meadows, theGreenTeam, Inc., representing Walmart (dmeadows@thegreenteaminc.com)

Revise as follows:

1302.1 General. The provisions of <u>ASTM E2635 and</u> Section 1302 shall govern the construction, installation, alteration and repair of on-site nonpotable water reuse systems for the collection, storage, treatment and distribution of on-site sources of nonpotable water as permitted by the jurisdiction.

1304.3 Reclaimed water systems. The design of the reclaimed water systems shall conform to ASTM E 2635 and accepted engineering practice.

Reason: This proposal is intended to coordinate the scope of ASTM E2635 and its prior use in the IgCC, with the reorganization of IgCC Chapter 7 language to IPC Chapter 13.

There was some streamlining in the relocation of the language from IgCC Chapter 7 to IPC Chapter 13. That helped to clarify the difference between systems that use nonpotable water captured on-site, and systems that use nonpotable water capture off-site (i.e. nonpotable water delivered to the site, also called "reclaimed water" "municipal reclaimed water" or "recycled water").

Reference to ASTM E2635 seems to have ended up in the wrong subsection. In the IgCC, it addressed water reclaimed/reused on-site. In the IPC, it is located in a section that appears limited to water reclaimed off-site. It should be moved from Section 1304 to Section 1302.

The scope of ASTM E2635 – 14, Standard Practice for Water Conservation in Buildings Through In-Situ Water Reclamation, states:

"This practice specifies limitations for use of reclaimed water in-situ. It is not intended for application to the use of reclaimed water delivered from an offsite municipal wastewater treatment facility."

Cost Impact: Will not increase the cost of construction

No new requirements are identified so there is not a change in the cost of construction.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P261-15

INTERNATIONAL CODE COUNCIL®

AS

Code Change No: P262-15

Original Proposal

Section: 1302.2

Proponent: Troy Vassos, representing self (tvassos@golder.com)

Revise as follows:

1302.2 Sources. On-site nonpotable water reuse systems shall collect waste discharge from only the following sources: bathtubs, showers, lavatories, clothes washers and laundry trays. Water <u>Where approved and as appropriate for the intended application, water</u> from other approved nonpotable sources including swimming pool backwash operations, air conditioner condensate, rainwater, cooling tower blow-down water, foundation drain water, steam system condensate, fluid cooler discharge water, food steamer discharge water, combination oven discharge water, industrial process water and fire pump test water shall also be permitted to be collected for reuse by on-site nonpotable water reuse systems, as approved by the code official and as appropriate for the intended application.

Reason:

- 1. As approval of alternative sources of reuse water is required by the Code Section, it is unnecessary to provide an example list of alternative sources.
- 2. The list of alternative sources is not exhaustive, and other sources of reusable water could be considered.
- 3. Many of the alternative nonpotable wastewater sources have considerably different types of contaminants and levels of contamination than the greywater sources noted in the first sentence. Consequently, the type of treatment and treatment complexity is expected to be considerably different for many of the example non-potable water sources listed, than for the greywater sources noted. Non-potable water sources of particular concern in the alternative sources include cooling tower blow-down water, food steamer discharge water, and industrial process water.
- 4. Consequently, it is recommended that the example list of alternative non-potable water sources be deleted.

Cost Impact: Will not increase the cost of construction

The elimination of an example list of alternative non-potable water sources will not have a cost impact, and does not affect the intent of the section to recognize that jurisdictions may also consider other appropriate sources of non-potable water.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: The proposed text expands the use of available nonpotable water provide that the use is approved by the code official.

Assembly Action:

Final Action Results
P262-15 AS



Code Change No: P267-15

Original Proposal

Section: 1302.7.2

Proponent: Richard Grace, Fairfax County, VA, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and VA Building Code Officials Association (VBCOA) (richard.grace@fairfaxcounty.gov)

Delete without substitution:

1302.7.2 Design and construction. Storage tanks shall be designed and constructed in accordance with Chapters 16 through 22 of the *International Building Code* and in accordance with the following standards, as appropriate for the material of the storage tank: AWWA D100, AWWA D115, AWWA D120, UL 58, UL 1746, UL 1316, UL 142, API 12F or API 12D.

Reason: Section 1301.9 as referenced under section 1302.7 already gives specific design and construction information for tanks. The references given to the specific standards under section 1302.7.2 leave out many material and methods used to store nonpotable water and is very restrictive and cost prohibitive.

Cost Impact: Will not increase the cost of construction

By removing the referenced section th requirement for tanks to comply with the specific listed standards is removed which allows other materials and methods to be used.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: This section only covers some types of tanks, Tanks are already covered in the general part of Chapter 13 (Section 1302.7).

Assembly Action:

None

Final Action Results

P267-15

AS



Code Change No: P269-15

Original Proposal

Section: 1303.2

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1303.2 Collection surface. Rainwater shall be collected only from above-ground impervious roofing surfaces constructed from <u>approved materials and where approved materials</u>. Collection of water from vehicular parking or pedestrian surfaces shall be prohibited except where the water is used exclusively for landscape irrigation. Overflow and bleed-off pipes from roof-mounted appliances including, but not limited to, evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection walking surfaces.

Reason: Current rainwater harvesting practices include the collection of water from vehicular parking or pedestrian surfaces. While such restriction may be appropriate for collection of rainwater intended to be treated for potable use, this chapter address rainwater collection for nonpotable use. Rainwater harvesting technologies are able to safely accommodate collection from these surfaces. The change is required in order to allow the use of modern conservation techniques.

Cost Impact: Will not increase the cost of construction

This code section clarifies the type of collection surfaces and to a degree expands the use of such surfaces.

	Report of Committee Action Hearings	
Committee Action:		Approved as Submitted
Committee Reason: The committee agree	d with the proponent's published reason sta	tement.
Assembly Action:		None
	Final Action Results]
P2	69-15	AS



Code Change No: P270-15

Original Proposal

Section: 1303.15.2, 1303.3, 1303.4

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1303.3 Debris excluders. Downspouts and leaders shall be connected to a roof washer and shall be equipped with a debris excluder or equivalent device that is designed to prevent the contamination of collected rainwater with remove leaves, sticks, pine needles and similar material. Debris excluders and equivalent devices shall be self-cleaning. debris to prevent such from entering the storage tank

1303.4 Roof washer <u>First-flush diverter</u>. A sufficient amount of rainwater <u>First-flush diverters</u> shall be diverted at the beginning of each rain event, <u>operate automatically</u> and not allowed to enter the storage tank, to wash accumulated debris from the collection surface. The amount of rainfall to be diverted shall be field adjustable as necessary to minimize storage tank water contamination. The roof washer shall not rely on manually operated manually-operated valves or devices, and shall operate automatically. Diverted rainwater shall not be drained to the roof surface, and shall be discharged in a manner consistent with the storm water runoff requirements of the jurisdiction. Roof washers<u>First-flush diverters</u>shall be accessible for maintenance and service.

1303.15.2 Roofwasher First-flush diverter test. Roofwashers-First-flush diverters shall be tested by introducing water into the gutters collection system upstream of the diverter. Proper diversion of the first quantity amount of water shall be in accordance with the requirements of Section 1303.4 shall be verified.

Reason: The intent of the provisions in these sections is to divert the initial runoff of water from a roof with its contaminants that may build up during a non-rain event so that it does not enter the storage tank. While the result is basically an initial washing of the roof area, the term "roof washer" is commonly mistaken for a mechanical device. Using the term "first-flush diverter" will allow for both the typical non-mechanical standpipe application or an approved manufactured mechanical device. This code change deletes the mandate to install roof washers or first-flush diverters since such would not be necessary for a rainwater system serving outside landscape irrigation only or for the common practice of using rain barrels for irrigation purposes.

Cost Impact: Will not increase the cost of construction

This code change results in clarifying where non-mechanical diverters may be used, and would actually decrease the cost of installation for nonpotable reuse of rainwater.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The proposed language eliminates the confusion about whether a mechanical (roof washer) device is required.

Assembly Action:			None
	Final Actio	n Results	
	P270-15	AS	



Code Change No: P275-15

Original Proposal

Section: 1303.15.8, 1303.15.9 (New)

Proponent: David Cantrell, representing Joint Consensus Committee on Rainwater Collection System Design and Installation (IS-RCSDI) (dave.cantrell@kingcounty.gov)

Revise as follows:

1303.15.8 Water quality test. The quality of the water for the intended application shall be verified at the point of use in accordance with the requirements of the jurisdiction. Except where site conditions as specified in ASTM E 2727 affect the rainwater, collected rainwater shall be considered to have the parameters indicated in Table 1303.15.8.

Delete without substitution:

PARAMETER	VALUE
	VALUE
pH	6.0-7.0
BOD	Not greater than 10 mg/L
NTU	Not greater than 2
Fecal coliform	No detectable fecal coli in 100 mL
Sodium	No detectable sodium in 100 mL
Chlorine	No detectable chlorine in 100 mL
Enteroviruses	No detectable enteroviruses in 100 mL

TABLE 1303.15.8 RAINWATER QUALITY

Add new text as follows:

1303.15.9 Collected raw rainwater quality. ASTM E2727 shall be used to determine what, if any, site conditions impact the quality of collected raw rainwater and whether those site conditions require treatment of the raw water for the intended end use or make the water unsuitable for specific end uses.

Reason: Table 1303.15.8 presents qualities that would wrongly be assumed to be typical of collected rainwater by many users of this code. The site conditions that affect collected rainwater quality vary significantly and often from one place to another. Directing the user to the ASTM standard alone without providing the table will result in a much better assessment of the collected rainwater quality and result in much better design of the required treatment and determination of suitablity for an intended use. It is currently unclear as to whether the second sentence of Section 1303.15.8 applies to the raw collected rainwater or the product (treated) water to be used for a specific purpose. Breaking Section 1303.15.8 into two separate and distinct sections will improve clarity and application.

Cost Impact: Will not increase the cost of construction This code change merely describes what is involved in the water quality test. It does not add additional testing requirements.



Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

Final Action Results

AS

P275-15

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None

Approved as Submitted

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Code Change No: P276-15

Original Proposal

Section: 1303.15.8

Proponent: JEFFREY HUTCHER, representing ARCSA (jhutcher@pacbell.net)

Revise as follows:

1303.15.8 Water quality test. The quality of the <u>water rainwater</u> for the intended application shall be verified at the point of use in accordance with the requirements of the jurisdiction. Except where site conditions as specified in ASTM E 2727 affect the rainwater, collected rainwater shall be considered to have the parameters indicated in Table 1303.15.8.

Reason: ASTM E 2727 does not address the differing regulations that govern water quality. Since Jurisdictions have different requirements, testing shall reflect the Jurisdictions guidelines for different intended uses. Testing to ASTM E 2727 guidelines may not be acceptable to the jurisdiction. In addition, ASTM E 2727 does not account for different intended uses, commercial or otherwise. The water quality standard for a residential subsurface irrigation system would not have the same treatment requirements as cooling tower make up water.

Cost Impact: Will not increase the cost of construction

Since jurisdictions have different protocols and requirements regarding rainwater quality, even using the data in ASTM E 2727 may not apply. It is up to the permittee to obtain the jurisdiction's requirements regardless.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: The addition of "rain" is an appropriate clarification for this section.

Assembly Action:

None

Approved as Submitted



P276-15

AS

Code Change No: P278-15

Original Proposal

Section: 1304.3.1.3

Proponent: Troy Vassos, Golder Associates Ltd., representing self (tvassos@golder.com)

Revise as follows:

1304.3.1.3 Labeling and marking. Nonpotable-rainwater distribution piping labeling and marking shall comply with Section 608.8.

Reason:

1. Reclaimed water is not rainwater. Reclaimed water is reuse water, or wastewater that has been treated to an acceptable water quality standard for nonpotable water applications.

Cost Impact: Will not increase the cost of construction Rainwater should not be referenced in the section - this is a zero cost correction.

Report of Committee Action Hearings

Committee Action:

Committee Reason: Only nonpotable water piping is required to be marked as nonpotable water. Rainwater distribution piping does not have to be marked.

Assembly Action:

Final Action Results

P278-15

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Approved as Submitted

None

Code Change No: P279-15 Part I

Original Proposal

Section: 702.2, 717, 717.1, 717.2, 717.6

Proponent: Roger Harper (skip.harper@dhcd.virginia.gov); Shawn Strausbaugh, VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA), representing VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA), representing VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA) (Skip.Harper@dhcd.virginia.gov)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

SECTION 717 REPLACEMENT OF UNDERGROUND <u>BUILDING</u> SEWERS <u>AND BUILDING DRAINS</u> BY PIPE-BURSTING METHODS

717.1 General. This section shall govern the replacement of existing *building sewer* <u>and building</u> <u>drain</u> piping by pipe-bursting methods.

717.2 Applicability. The replacement of *building sewer* <u>and *building drain*</u> piping by pipe-bursting methods shall be limited to gravity drainage piping of sizes 6 inches (152 mm) and smaller. The replacement piping shall be of the same nominal size as the existing piping.

717.6 Cleanouts. Where the existing *building sewer <u>or building drain</u>* did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

TARI E 702 2

	B DRAINAGE AND VENT PIPE
MATERIAL	STANDARD
Polyethylene (PE) plastic pipe (SDR-PR)	ASTM F 714
(Dertians of table not about remain unabourged)	

(Portions of table not shown remain unchanged)

For SI: 1 inch = 25.4 mm.

Reason: Pipe bursting is commonly used in both underground building sewers and building drains. The original proposal did not include the replacement of existing underground building drainage piping. The changes as seen above will allow pipe bursting of underground building drainage piping meeting all of the other necessary requirements under these sections. The addition of PE pipe to the underground building drain and vent piping table provides the suitable material for pipe bursting sections of underground building drains.

Cost Impact: Will not increase the cost of construction

The addition of pipe bursting of existing building drains will lead to repair/renovation cost that will most likely be less than by using conventional pipe replacement methodology.



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Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

AS

P279-15 Part I

INTERNATIONAL CODE COUNCIL®

Code Change No: P279-15 Part II

Original Proposal

Section: P3002.1, P3010, P3010.1, P3010.2, P3010.6

Proponent: Roger Harper (skip.harper@dhcd.virginia.gov); Shawn Strausbaugh, VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA), representing VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA), representing VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA) (Skip.Harper@dhcd.virginia.gov)

THIS IS A 2 PART CODE CHANGE. PART I WAS HEARD BY THE IPC COMMITTEE. PART II WAS HEARD BY THE IRC-PLUMBING COMMITTEE.

Revise as follows:

UNDERGROUND BUILDING DRAINA	AGE AND VENT PIPE
PIPE	STANDARD
Polyethylene (PE) plastic pipe (SDR-PR)	<u>ASTM F 714</u>

TABLE P3002.1

(Portions of table not shown remain unchanged) For SI: 1 inch = 25.4 mm.

Revise as follows:

SECTION P3010 REPLACEMENT OF UNDERGROUND <u>BUILDING</u>SEWERS<u>AND BUILDING DRAINS</u> BY PIPE BURSTING METHODS

P3010.1 General. This section shall govern the replacement of existing *building sewer<u>and building</u> drain* piping by pipe-bursting methods.

P3010.2 Applicability. The replacement of building sewer <u>and building drain piping</u> by pipe bursting methods shall be limited to gravity drainage piping of sizes 6 inches (150 mm) and smaller. The replacement piping shall be of the same nominal size as the existing piping.

P3010.6 Cleanouts. Where the existing *building sewer<u>or building drain</u>* did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

Reason: Pipe bursting is commonly used in both underground building sewers and building drains. The original proposal did not include the replacement of existing underground building drainage piping. The changes as seen above will allow pipe bursting of underground building drainage piping meeting all of the other necessary requirements under these sections. The addition of PE pipe to the underground building drain and vent piping table provides the suitable material for pipe bursting sections of underground building drains.

Cost Impact: Will not increase the cost of construction

The addition of pipe bursting of existing building drains will lead to repair/renovation cost that will most likely be less than by using conventional pipe replacement methodology.



Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed with the proponent's published reason statement.

Assembly Action:

None

Approved as Submitted

Final Action Results

P279-15 Part II

AS

