Code Review 2018 Changes to International Codes IBC - FIRE SAFETY - FIRE TAC

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Building Codes and Standards

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2018 International Building Code (IBC – Fire Safety) Fire TAC

IBC Code Change No	IBC Section	Change Summary b/t 2015 IBC and 2018 IBC	Change Summary b/t 2017 FBC and 2018 IBC	Staff comments
FS7-15	704.2, 704.4.1	Revises section 704.2 "Column protection" and section 704.4.1 "Light-frame construction" to provide further clarification to a code change proposal that was approved last cycle and is included in the 2015 IBC in Section 704.4. Elements within fire-resistance rated walls of light- frame construction are addressed directly in Section 704.4.1. This code change was further modified by the Committee to eliminate redundant language by referencing Section 704.4.1 for limitations. Further, the modification appropriately recognizes steel framing members for the same allowable use.	Same as change between 2015 IBC and 2018 IBC	
		Cost Impact: Will not increase the cost of construction. By revising this section, there is no additional cost as it clarifies the intent of this code provision . If anything, this proposal will actually save money as some building officials and designers have interpreted this section to require stud packs or built-up columns within a rated wall assembly to be individually fire protected which increases construction cost.		

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.

TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS13-15	Table 705.2	projection" to simpl requirements by put table. Cost Impact: Will n construction. This cl	2 "Minimum distance of ify the projection distance tring the requirements in the ot increase the cost of hange will most likely reduce ction by providing clarity to	Same as cha between 201 and 2018 IB0	5 IBC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) abcdef Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS15-15	603.1, 1406.1, 1406.3, 1406.4, 705.2.3, 705.2.3.1 (New), 705.2.4 (New)	Cost Impact: Will n construction. Becau relocation of existi	relocate existing provisions. ot increase the cost of se this is an editorial ing provisions, there is no ations and therefore, no change	Same as cha between 201 and 2018 IB0	5 IBC			

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.

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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 Action Needed Overlapping rovisions	Cmsn.	
FS17-15	705.8.1	openings" to clarify to exterior walls is bas distance of each ind Cost Impact: Will n construction. The ch	 a.8.1 "Allowable area of that the limitation of openings in ed on the fire separation lividual story. b.6.1 the fire separation of the increase the cost of the increase the cost of the opening clarifies the intent of the opening of the construction of the construction	Same as change between 2015 IE and 2018 IBC			
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 Action Needed Overlapping ovisions	Cmsn.	
FS20-15	705.8.5	to allow temperature vertical separations exposure condition to project beyond the e Cost Impact: Will in construction. The e contradictory. It requ	ncrease the cost of	Same as change between 2015 IE and 2018 IBC			

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- f. Provide for the latest industry standards and design

		proposal creates the	intended level of safety.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	n Needed oping	Cmsn.	
FS21-15	705.8.6	the designer options fire separation distant to each building not of which implies one. F clearer in terms of ho code change was fur Committee. The moo grammar for clearer Cost Impact: Will no construction. This is measure fire separat	dification provides correct	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	n Needed pping	Cmsn.	
FS27-15	706.1.1.1		06.1.1 "Party walls" to give the ile maintaining safety. The fire	Same as cha between 201				

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		each building not o implies one. Furthe in terms of how the modification was m provide for correct of Cost Impact: Will r construction. There providing for a sys buildings that have ownership purpose alternative method	e (FSD) should be meas only the adjacent building er, plan review becomes e FSD is measured. Furt nade by the Committee t grammar for clearer pro not increase the cost of e will be a decrease in /stematic method of ha e a lot line bisecting them es, eliminating unnecess applications, appeal pro- n of walls not necessary	, which clearer her visions. cost by ndling for ary cesses	IBC			
TAC Action Accommodate Florida Specifi YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:		Commission Action Accommodate Florida Specifi YES (Select Criteria) a. b. b. c. d. Others (Explain):	NO:	No Actio	n Needed oping	Cmsn.	
FS29-15	706.2	that that the roof ar continuous to prope sheathing which co light frame construct panels between 7/1 thickness. These pa of causing failure of of a double fire wall	06.2 "Structural stability" nd floor diaphragms must erly perform its function. omprises these diaphrag action is generally wood s 16 inches to 23/32 inches banels represent a very s of the wall on the unaffect Il assembly. The benefit smic function as a diaph	t be between 2 The and 2018 ms in tructural s mall risk ted side of	015 IBC			

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		risk caused by fire ex double fire wall. This revised by public cor Cost Impact: Will no construction. This co	ot increase the cost of ode change does not create a allows an additional option					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	-
FS38-15	708.4, 718.4.2	718.4.2 "Groups R-1 between the I-Code recognizing that the cover buildings prote and limit the exceptio 60-feet in height abo Cost Impact: Will no construction. Code F	4 "Continuity" and section and R-2" for correlation and NFPA 13R's scope intent of the exceptions is to ected by NFPA 13R systems ons to buildings not exceeding we grade plane. bt increase the cost of Proposal's intent is just to application of the exceptions.	Same as cha between 201 and 2018 IB0	5 IBC			

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TAC Action			Commission Action				TAC	Cmsn.	
Accommodate Florida Specif	ic Need:		Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria)	NO:		YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed			
					Overla	oping			
					provisions				
FS40-15	708.4		.4 "Continuity" to eliminate the	Same as cha					
			stopping in buildings with a	between 201					
		fire sprinkler through	iout.	and 2018 IB0	j.				
		Cost Impost: Will p	ot increase the cost of						
		-	oposed addition of exception						
			will make provisions of this						
			with the exceptions in Section						
			will not increase the						
		construction cost.							
TAC Action			Commission Action				TAC	Cmsn.	
Accommodate Florida Specif YES (Select Criteria)	ic Need: NO:	-	Accommodate Florida Specific Need:	NO:					
a. b. c. d. e.	f. [YES (Select Criteria) abcdef	NO:	No Actio	on Needed			
Others (Explain):			Others (Explain):						
					Overlag provisions	oping			
					provisions				
FS42-15	708.1, 708.4,	Boving continue 700	1 "Conorol" to include "Crews	Some on she	ngo			I	
F342-13	708.1, 708.4, 708.4 (New),		.1 "General" to include "Group	Same as cha between 201	0				
	708.4.1 (New),	R" Occupancies. De	ds new section 708.4 "Fire	and 2018 IB					
	708.4.1 (New), 708.4.2 (New),		Id from the top of the	anu 2010 IDU	J				
	718.3,		eiling assembly below," Adds						
	718.3.2,		"Supporting construction,"						
	718.3.3,		08.4.2 "Fire blocks and draft						
	718.4,		construction," Revises section						
	718.4.2,		ing in floors," deletes without						

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	718.4.3	substitution section 718.3.2 "Groups R-1, R-2, R-3,	
		and R-4," deletes without substitution section	
		718.3.3 "Other groups," revises section 718.4	
		"Draft stopping within attics," deletes without	
		substitution section 718.4.2 "Groups R-1 and R-2,"	
		and deletes without substitution section 718.4.3	
		"Other groups" to delete the R-4 phrase in 708.4.2,	
		Exception 5. FS122-15 deleted the requirement in	
		718.3.2 for Group R-4 and was approved. The	
		reason from the proponent stated "There is no	
		apparent reason 718.3 and 718.4 to have handled	
		Group R occupancies differently for floors vs. attic	
		spaces, and it makes more sense for all Group	
		R attics to follow Section 708.4.2. Without fixing	
		this, R-3 and R-4 will continue to have conflicting	
		requirements in 708.4.2 and 718.4". The phrase in	
		Section 708.4.2, Exception should be deleted for	
		consistency with the decision. Group R-4 and R-3	
		will be treated the same. This code change was	
		further modified by the Committee to correctly	
		makes Section 718.4 applicable to all Group R	
		occupancies and through public comment to delete	
		the R-4 phrase in 708.4.2, Exception 5.	
		$\frac{1}{10} \times \frac{1}{10} \text{ prindso in } 100.7.2, \text{ LAUCPHOID }.$	
		Cost Impact: Will not increase the cost of	
		construction. There will be no impact on the cost of	
		construction. There will be no impact on the cost of construction other than the cost savings	
		associated with countless hours of design time	
		that was saved by people who no longer had to	
		study these sections for hours to figure out what	
		the actually required.	

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TAC Asting							740		
TAC Action Accommodate Florida Specific	c Need:		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria)	NO:		YES (Select Criteria)	NO:					
a. b. c. d. e.	f		abcdef		No Actio	on Needed			
Others (Explain):			Others (Explain):						
					Overlag	pping			
					provisions				
FS44-15	709.5	Revises section 709.	.5 "Openings" to allow the	Same as cha	nge				
		installation of a non-l	abeled protective plate,	between 201	5 IBC				
		usually made of stee	l or other resilient material, to	and 2018 IBC	2				
		be installed on these	smoke barrier doors to						
		protect them from ex	cessive wear and damage.						
			5						
		Cost Impact: Will no	ot increase the cost of						
		-	g the use of non-labeled						
			ostly than requiring labeled						
		plates.							
		plates							
TAC Action	I		Commission Action	<u> </u>			TAC	Cmsn.	
Accommodate Florida Specific	c Need:		Accommodate Florida Specific Need:						
YES (Select Criteria)	NO:		YES (Select Criteria)	NO:	No Actic	on Needed			
a. b. c. d. e.	f		abcdef			milleucu			
Others (Explain):			Others (Explain):		Overla	nning			
					provisions	phing			
FS46-15	712.1.10.1	Bovings conting 712	1.10.1 "Automobile ramps" to	Somo oo oho	ngo		1	1	
F340-13	112.1.10.1		•	Same as cha between 201					
			in the current language. The						
			ther modified by public	and 2018 IBC	J				
			nal FS 46-15 proposal is an						
			aning up language referring to						
			was leftover from previous						
			code originally stated just						
			ges before "enclosed" was						
		later added. For thes	se sections of the code, those						

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		two distinctions to "(public) parking garages" are no longer needed. Cost Impact: Will not increase the cost of construction. This change should reduce the cost of construction as it will clarify how openings are permitted in floors of parking garages.								
TAC Action Accommodate Florida Specif YES (Select Criteria)	fic Need:			Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:			TAC	Cmsn.	
a. b. c. d. e. Others (Explain):	f			a. b. c. d. e. f. Others (Explain):	NO.	No Acti	on Needed			
						Overla provisions	pping			
FS49-15	713.8.2(new)	the outside of shaft e was further modified editorial comment tha meaning of the origin new Section 713.8.2 the prohibition on per 713.8.1. Cost Impact: Will no construction. The coo increase the cost of o membrane penetratio the need for addition	w en l b nat na 2 fu en ot cc ior nal en	membrane penetrations on iclosures. This code change by public comment. This is an a does not change the al proposal. The proposed unctions as an exception to etrations in existing Section increase the cost of e change proposal will not onstruction since it will allow hs in shaft enclosures without I construction/material on the inclosure. Also, it increases	Same as cha between 201 and 2018 IB0	5 IBC				

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TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS50-15	713.13	and incinerator roon error. Cost Impact: Will n	8.13 "Waste and linen chutes ns" to eliminate a publishing ot increase the cost of st impact editorial code	Same as chan between 2015 and 2018 IBC	IBC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO: 	No Actio	on Needed Oping	Cmsn.	
FS51-15	713.13, 713.14, 3002.1	and incinerator room "Elevator dumbwaite revises section 3002 protection" because Sections 713.13, 71 are necessary to pe contained in Section referencing only Sec could be misunders Section 712 are not	8.13 "Waste and linen chutes ns," revises section 713.14 er and other hoistways," and 2.1 "Hoistway enclosure the proposed references in 3.14 and 3002.1 to Section 712 rmit the use of the exceptions of 712 for shaft construction. By ction 713 from these sections it tood that the exceptions of applicable for waste and linen tor rooms of Section 713.13, for	Same as chan between 2015 and 2018 IBC	IBC			

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		Section 713.14, or for Section 3002.1. Sections for shaft the 2012 IBC and the Sections 713.13, 713 overlooked for the 20 Cost Impact: Will not construction. This ch the cost of construct	for ctic t er he i 13. ² 201 not chai	nclosures were relocated in reference to that section from 14 and 3002.1 were 5 code.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):				Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS52-15	713.13.1	to be permitted to be a waste chute based associated with each Cost Impact: Will no construction. This pr cost of construction I allows one shaft to c a waste chute where	e lo ed c ch. not prop be cor cor	bosal does not increase the ecause the proposed revision ntain a recycling and wo separate shaft enclosures erwise. This proposal	Same as cha between 201 and 2018 IB	5 IBC			

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FS53-15	713.13.3	ensure the intent of the door provide a mining shaft enclosing the codoors. Cost Impact: Will in construction This proposal will incorrequiring that chute a	.13.3 "Chute access rooms" to the code that the room and num level of protection to the chute and the chute access Acrease the cost of crease construction costs by access rooms be configured to erformance feature contained	Same as cha between 201 and 2018 IBC	5 IBC			
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 Actio	on Needed pping	Cmsn.	
FS55-15	714.2	systems be installed installation instructio further modified by the modification ensures to all types of listed p	14.2 to require all listed based on the manufacturer's ons. The code change was he Committee. The s this requirement is applicable penetration systems. Also, by public comment to remove	Same as cha between 201 and 2018 IBC	5 IBC			

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		Cost Impact: Will no construction. Listed s	as it is vague and subjective. ot increase the cost of systems should already be ce with the manufacturer's ns.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS56-15	714.3.1.1, 714.4.1.1	assemblies," and ser resistance-rated ass options while still ret change was further r provides correct gran Cost Impact: Will no	Revises section 714.3.1.1 "Fire-resistance-rated assemblies," and section 714.4.1.1 "Fire- resistance-rated assemblies" to give the designer options while still retaining safety. The code change was further modified by the Committee to provides correct grammar for clearer provisions. Cost Impact: Will not increase the cost of construction. This simply clarifies the existing requirements.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Actio	on Needed oping	Cmsn.		
FS63-15	714.4.1.2		.4.1.2 "Through-penetration orrect an oversight and clarify	Same as cha between 201				

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		was further modified the oversight and cla exception. Cost Impact: Will no	ceptions. The code change by public comment to correct arifies the application of the ot increase the cost of ly clarifies the current	and 2018 IBC		
TAC Action Accommodate Florida Spect YES (Select Criteria) a. b. c. d. others (Explain):	ific Need: f		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		tion Needed lapping 5	Cmsn.
FS67-15	714.4.2	to recognize the listin and fluorescent can which protect recess fixtures, which have membrane penetration horizontal assemblie Cost Impact: Will no	ot increase the cost of products are already in use	Same as change between 2015 IBC and 2018 IBC		

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.

TAC Action Accommodate Florid <u>a Specifi</u>	c Nood:		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:		YES (Select Criteria)	NO:	Overla	on Needed pping			
					provisions				
FS69-15	715.1	fire-resistant joint sy joint between an ext or unrated, roof slab Cost Impact: Will n construction. The pr	ot increase the cost of oposal clarifies/adds an <mark>on</mark> to the need for a fire-	Same as cha between 201 and 2018 IBC	5 IBC				
TAC Action Accommodate Florida Specifi	a Naadi		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) abcde. Others (Explain):	NO:		Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed			
					Overla provisions	pping			
FS70-15	715.2	is appropriate to insist system in accordance manufacturer's instr accommodate build Cost Impact: Will n construction. The pr increase in the cost	5.2 "Installation" to clarify that t tall the fire-resistant joint ce with the listing (including uctions) and in a manner to ing movement. ot increase the cost of oposed text will not result in an of construction. Listed systems ustalled in accordance	Same as cha between 201 and 2018 IBC	5 IBC				

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.

		with the manufacture	er'	s installation instructions.						
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):				Commission Action Accommodate Florida Specific Need: YES (Select Criteria) abcdef Others (Explain):	NO:	No Action	on Needed pping		Cmsn.	
FS72-15	715.3	consistency between walls and fire-resista within exterior walls. Cost Impact: Will in Any tested system p	n t ant ncr	"Fire test criteria" for he requirements for exterior t joint systems installed ease the cost of construction eviously acceptable will still hay provide a negligible	Same as cha between 201 and 2018 IBC	5 IBC				
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):				Commission Action Accommodate Florida Specific Need: YES (Select Criteria) abcdef Others (Explain):	NO:	No Action No Action Overla	on Needed pping		Cmsn.	
FS74-15	1023.3.1, 3007.6.3, 3008.6.3, 3008.6.3.1, 402.8.6.1, 405.4.2, 405.4.3, 407.3.1,	section 405.4.2 "Sma revises section 405.4 407.3.1 "Corridor do Interior exit stairway revises section 410.3 revise section 510.2	nok .4.3 oor / ar .3.8 2 "F	t passageways," revises te barrier penetration," 3 "Elevators," revises section s," revises section "408.3.8 nd ramp construction," 5 "Proscenium curtain," Horizontal building separation ction 705.8.2 "Protected	Same as cha between 201 and 2018 IBC	5 IBC		·	·	

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.

	408.3.8, 410.3.5, 510.2, 705.8.2, 706.8, 3104.10, 722.2.4.4, 909.20.3.1, 909.20.3.2	revises section 722.2 revises section 909.2 section 909.20.3.2 "\ section 1023.3.1 "Ex 3008.6.3 "Lobby doo 3008.6.3.1 "Vision pa "Lobby doorways," a "Tunneled walkway" provide for more effe enforcement of the p Cost Impact: Will no construction. There s	ection 706.8 "Openings," 2.4.4 "Columns built into walls," 20.3.1 "Balcony doors," revises /estibule doors," adds new tension," revises section ways," revises section anel," revises section 3007.6.3 nd revises section 3104.10 to correlate references to ective application and rovisions. bt increase the cost of should be no cost increase; the are consistent with the intent					
TAC Action Accommodate Florida Specifi YES (Select Criteria)	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria)	NO:	No Action Nee	TAC	Cmsn.	
abcde. Others (Explain):	f		ab cdef Others (Explain):		Overlapping provisions			-
				1	·			
FS75-15	716.1, 716.5, 716.6	716.5 "Fire door and revises section 716.6 glazing" to clarify tha per NFPA standards further modified by th modification strikes r Section 716.6 to be o	1 "General," revises section shutter assemblies," and 6 "Fire-protection-rated t all opening shall be installed . The code change was ne Committee. The eference to NFPA 80 in consistent with these revisions.	Same as cha between 201 and 2018 IB0	5 IBC			

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.

			de change is primarily s that all opening protective NFPA 80.				
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):		o Action Needed Overlapping sions	Cmsn.	
FS76-15	Table 716.3, 2409.1	assemblies," and rev walkways" to mainta when dealing with fir adding the testing ar glass installed as pa Cost Impact: Will no	"Making fire-rate glazing vises section 2409.1 "Glass in consistency in the code re-rated glazing products, by nd marking requirements for rt of a floor/ceiling assembly. ot increase the cost of anges to the Table better le requirements.	Same as change between 2015 IBC and 2018 IBC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):		o Action Needed Overlapping sions	Cmsn.	
FS77-15	716.3.1	identification" to prov	.3.1 "ire-rated glazing vide code users more flexibility of the comparable UL	Same as change between 2015 IBC and 2018 IBC			

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.

		construction. This sir	ot increase the cost of nply provides code users allowing the use of the ndard.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS78-15	716.4	determining fire prote Section 716.4 to also conjunction with NFF Cost Impact: Will no construction. This co	4 "Alternative methods for ection ratings" to revise o reference UL 10B and 10C in PA 252 for consistency. ot increase the cost of ode change proposal allows ring analysis based on two UL	Same as cha between 2018 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Speci YES (Select Criteria) a. b. c. d. e Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS79-15		assemblies, ratings a footnote f to Table 7 ⁴ reference to the addi	"Opening fire protection and markings" to provide 16.5 provided an appropriate itional permitted marking rated glazing door vision	Same as cha between 2019 and 2018 IBC	5 IBC			

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.

		construction. This ch	ot increase the cost of hange merely clarifies the ts for a specific type of glazing.					
YES (Select Criteria)	Accommodate Florida Specific Need: YES (Select Criteria) NO: abcdef			NO:	 Overla	on Needed	Cmsn.	
FS80-15	Table 716.5	assemblies, ratings a c" from Table 716.5 any changes to the c indicated in the Table Cost Impact: Will no construction. The co	ot increase the cost of ost of construction would be ation of the code language	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actic	on Needed oping	Cmsn.		
FS82-15	Table 716.5, 716.5.6	assemblies, ratings a	""Opening fire protection and markings" and section n inconsistency in the way fire	Same as cha between 201 and 2018 IBC	5 IBC			

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.

	and sidelights found door. This provision glazing that is curren	in comparison to transoms in the same frame with a fire will allow the same type of tly allowed in fire windows to and sidelights in 2-hour			
	construction. Current permitted in transom rated exterior walls. use of 90-minute fire those applications, the allowed in fire windo resistance rated glaz more expensive that Allowing both fire-rest rated glazing in these choices of architect/s products available for	ot increase the cost of tly, only fire-resistant glazing is s and sidelights in 2-hour This proposal would permit the -protection rated glazing in the same type of glass currently ws in such exterior walls. Fire- ting is significantly heavier and the fire-protection rated glazing. Sistance rated or fire-protection the applications, expands the specifiers and the number of or these types of applications. If posal will reduce, not of construction.			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		tion Needed	AC Cmsn.
FS85-15 716.5.1	swinging doors" to re	.5.1 "Side-hinged or pivoted equire the test to be conducted ne positive pressure method dard.	Same as change between 2015 IBC and 2018 IBC		

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.

			ot increase the cost of de change proposal only to testing criteria.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	n Needed oping	Cmsn.	
FS87-15	716.5.2	testing requirements	de for consistency with the for NFPA 252. ot increase the cost of de change proposal only	Same as char between 2015 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specifi YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	n Needed oping	Cmsn.	
FS88-15	716.5.2	list since they have be either NFPA 252 or U Cost Impact: Will no	le rolling steel fire doors in the been tested and listed to meet	Same as char between 2015 and 2018 IBC	5 IBC			

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.

		•	•					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		No Actio	on Needed oping	Cmsn.	
FS90-15	716.5.3.1	Revises section 716. control" to make an e Cost Impact: Will no construction. This co increase the cost of o Editorial changes o	Same as chan between 2015 and 2018 IBC	IBC				
TAC Action Accommodate Florida Specifi 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. others (Explain):		No Actio	on Needed oping	Cmsn.	
FS91-15	716.5.8	an editorial clarification Cost Impact: Will not construction. This co	ot increase the cost of de change proposal will not construction because they are	Same as chan between 2015 and 2018 IBC	ĬВС			

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.

TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS92-15	716.5.8.1.2.1	delete the 10 inch m 100 square inch visio doors in horizontal e limit is not applied to maximum glazing siz 716, including Section and Table 716.5.	5.8.1.2.1 "Horizontal exits" to aximum dimension applied to on panels limits for swinging xits. The 10 inch dimension any other 100 square inch ze references in Section ons 716.5.5.1, 716.5.8.1.2.2 ot increase the cost of hing this proposal allows n options .	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specifi 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 Actic	on Needed oping	Cmsn.	
FS93-15	that side-hinged swir types of fire doors, an provisions.		5.9.1 "Latch required" to show nging fire doors, and no other re being addressed in these ot increase the cost of	Same as cha between 201 and 2018 IBC	5 IBC			

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.

		effect on the product	The language change has no t and thus no effect on us no study is needed.				
TAC Action Accommodate Florida Specifi 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):		Action Needed verlapping ions	Cmsn.	
FS94-15	202 (New), FS94-15, 716.5.9.3 (New)	Revises section "Aut assemblies," and sec closers" to give requ assemblies. The com modified by the Com should be considered Cost Impact: Will no construction. None. I currently required or	ot increase the cost of Delayed action closers are not prohibited by the code. This ppropriate guidance where	Same as change between 2015 IBC and 2018 IBC			
TAC Action Accommodate Florida Specifi 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):		Action Needed verlapping ions	Cmsn.	
FS95-15	716.5.9.3	Revises section 716 to provide clarificatio	.5.9.3 "Smoke activated doors" m.	Same as change between 2015 IBC			

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.

		construction. This pr	ot increase the cost of oposal is a clarification of efore, there is no increase in	and 2018 IBC	
TAC Action Accommodate Florida Spe 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 Acti	on Needed
FS97-15	Table 716.6, 716.6.7.1	protection window as 716.6 "FIRE WINDO PROTECTION RATI the code. The code to put the list in the p Cost Impact: Will no	ot increase the cost of arifying language will provide	Same as change between 2015 IBC and 2018 IBC	
TAC Action Accommodate Florida Spe YES (Select Criteria) a. b. 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 Acti	on Needed
FS98-15	716.6.2	systems" to bring co	.5.9.3 "Nonsymmetrical glazing nsistency between the erior walls and glazing systems.	Same as change between 2015 IBC and 2018 IBC	

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.

		•	ot increase the cost of ode change proposal provides					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS99-15	716.6.5	current NFPA require Cost Impact: Will no construction. This co	Revises section 716.6.5 "Installation" to clarify current NFPA requirements. Cost Impact: Will not increase the cost of construction. This code change proposal merely clarifies a current NFPA 80 requirement.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Actio	on Needed oping	Cmsn.		
FS100-15	716.6.7.3	protection window as remove code conflict Cost Impact: Will no	.6.7.3 "Where 1/3-hour fire- ssemblies permitted" to ts. ot increase the cost of is no impact to the cost of	Same as cha between 201 and 2018 IB0	5 IBC			

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.

			e this change corrects a guage should not appear				
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		o Action Needed verlapping ions	Cmsn.	
substantive changes titles and new charg section flow smooth Cost Impact: Will n construction. This co reorganization of e			ot increase the cost of	Same as change between 2015 IBC and 2018 IBC			
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) abcdef Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		o Action Needed Iverlapping ions	Cmsn.	
FS103-15	717.1.2	resistance-rated ass	.1.2 "Ducts that penetrate fire- emblies without dampers" to 14.3 is on rated walls and al assemblies.	Same as change between 2015 IBC and 2018 IBC			

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.

		construction. This pro- construction. Since the clarification to the construction increase the cost of construction "assemblies" actually	code language , it will not construction. Here, / is alluding to "walls" all along. added technical requirements					
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. b. c. d. e. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS104-15	717.1.2	resistance-rated asso clarify that only fire d applications describe Cost Impact: Will no construction. The pro one of the two option	1.2 "Ducts that penetrate fire- emblies without dampers" to ampers are appropriate for the ed in Section 717.1.2. In tincrease the cost of oposal switches between ons already required. Either topping is currently required.	Same as cha between 2019 and 2018 IBC	5 IBC			
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. others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS107-15	717.3.1	Revises section 717.	3.1 "Damper testing" to clarify	Same as cha	nge			

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.

			ot increase the cost of ode change <mark>simply clarifies</mark>	between 2015 IBC and 2018 IBC	
TAC Action Accommodate Florida Specif YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO: No Acti	on Needed
FS108-15	717.3.2.1, 717.3.2.3	and section 717.3.2. damper ratings," to o The code change wa Committee to remove language from Section Cost Impact: Will no	.3.2.1 "Fire damper ratings," 3 "Combination fire/smoke clarify existing requirements. as further modified by the e the same unnecessary on 717.3.2.1. bt increase the cost of mply clarifies the existing	Same as change between 2015 IBC and 2018 IBC	
TAC Action Accommodate Florida Specif 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 Acti	on Needed
FS111-15	717.5.2, 717.5.3	section 717.5.3 "Sha	.5.2 "Fire barriers," and revises aft Enclosures" to create ninology within Section 717,	Same as change between 2015 IBC and 2018 IBC	

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.

	dampers. Cost Impact: Will no construction. This do	e dampers and listed smoke ot increase the cost of les not represent a technical 717.3.1 already requires and labeled.				
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. b. c. d. e. Others (Explain):	NO: No Acti	on Needed	AC Cmsn.	
FS117-15 717.5.3	revises exception 5 to between the IBC & IM prohibition of damped exhaust. Cost Impact: Will no construction. This pro-	5.3 "Shaft enclosures" to o eliminate an inconsistency MC, with respect to the rs in kitchen and clothes dryer of increase the cost of oposal merely clarifies and will not increase the cost of	Same as change between 2015 IBC and 2018 IBC			
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. b. c. d. e. Others (Explain):	NO: No Acti	on Needed	AC Cmsn.	
FS119-15 717.6.2,	Revises section 717.	6.2 "Membrane penetrations,"	Same as change			

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.

	717.6.2.1	testing and installation and 717.6.2.1 in a way be understood better Cost Impact: Will no construction. The pro- cost of construction s	1 "Ceiling radiation dampers on" to combine Section 717.6.2 ay that the requirements could r and more enforceable. In the the cost of oposal will not increase the since the code change, as ason", is merely editorial for lerstand it better.	between 201 and 2018 IB0				
TAC Action Accommodate Florida Specif 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 Actio	on Needed pping	Cmsn.	-
FS120-15	717.6.2.1	dampers" to provide radiation dampers. E air ducts that meet co no apparent reason to ducts meeting the sa appears to simply be Cost Impact: Will no construction. This pu reducing the numbo ceiling radiation da expected is \$50-\$130 estimates are retail b	ot increase the cost of roposal will reduce costs by er of applications requiring a imper. The cost reduction 0 per instance. Prices based on Google shopping ceiling radiation damper",	Same as cha between 201 and 2018 IB0	5 IBC			

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 Florida Specif 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 Actio	on Needed pping	Cmsn.	
FS122-15	718.3.2	R-4" to remove the re in R-4 occupancies of afforded by Sections of the IBC/IFC that w Cost Impact: Will no construction. Clarific	.3.2 "Groups R-1, R-2, R-3 and equirement for draft stopping considering the protection 903.2.8.3 through 903.2.8.3.2 vere added in 2015 IBC/IFC. ot increase the cost of cation of the intent of draft ce the requirements for the s.	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specif 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	on Needed pping	Cmsn.	
FS123-15	720.1	materials to the end Section 720.1 is app materials. The code by the Committee. T	1 "General" to move the list of of the paragraph clarified that licable to all insulating change was further modified The modification adds other g materials and includes ting materials	Same as cha between 201 and 2018 IBC	5 IBC			

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.

		Cost Impact: Will no construction. No cha clarification.		increase the cost of ge in requirements - simple					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):				Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actic	on Needed pping	Cmsn.	
(3) requirements by req be secured to the re I-joists. Cost Impact: Will n			jui sil) to correct the construction ring the gypsum wallboard to lient channels rather than the increase the cost of rial correction to the	Same as cha between 201 and 2018 IB0	5 IBC			
TAC Action Accommodate Florida Speci YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS130-15	Table 721.1 (3)	requirements by requirements by requirements by required to the result-joists.	jui sil) to correct the construction ring the gypsum wallboard to lient channels rather than the increase the cost of prial correction to the	Same as cha between 201 and 2018 IB0	5 IBC			

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.
		existing code.						
YES (Select Criteria)	Accommodate Florida Specific Need: YES (Select Criteria)NO: abcdef Others (Explain):			NO:	No Actio	on Needed pping	Cmsn.	
FS132-15	803.3	regulate cross lamina the entire interior sur Cost Impact: Will in May increase cost	.3 "Heavy timber exemption" to ated timber to be used to form faces of egress elements. crease the cost of construction of construction as a higher rement would be required in	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specifi YES (Select Criteria) a. b. c. d. e. Others (Explain):	c Need: f		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS134-15	Table 803.11	CEILING FINISH RE OCCUPANCY" to up requirements for am increased as ambula occupants who are in Cost Impact: Will in	odate corridor finish bulatory care facilities to be atory care facilities contain ncapable of self-preservation.	Same as cha between 201 and 2018 IBC	5 IBC			

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.

		required currently in certified ambulatory federal CMS regulat therefore, the cost of	th ca tio of c	construction cost over what is ne IBC/IFC. Any Medicare are facilities are required by ns to have this system, construction will not increase te that not all ambulatory care certified.					
TAC Action Accommodate Florida Spect YES (Select Criteria) a. b. c. d. e	NO:			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f.	NO:	No Acti	on Needed	Cmsn.	-
Others (Explain):			-	Others (Explain):		Overla provisions	pping		-
FS135-15	803.11	factory-produced wit incorporated betwee and 803.12. Note als clarification of the wood veneers intend wood substrate is als as a new section bet and 803.12. Cost Impact: Will no construction. Clarifie	th so re de so tw ot	1 "Laminated products a wood substrate" to be existing sections 803.10 that the proposal to add a equirements for facings or ed to be applied on site over a printended to be incorporated veen existing sections 803.10 increase the cost of the mounting method for els mounted on wood	Same as cha between 201 and 2018 IBC	5 IBC			

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.

TAC Action Accommodate Florida Specir YES (Select Criteria) a. b. b. c. d. e. Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. b. c. d. e. others (Explain):	NO:	No Actic	on Needed pping	Cmsn.	
FS136-15	803.11 (New)	veneers intended to substrate" to clarify t Cost Impact: Will no	23.11 "Facings or wood be applied on site over a wood esting protocol. ot increase the cost of larifies the testing protocol.	Same as cha between 201 and 2018 IBC	5 IBC		I	
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS137-15	803.13.1, 803.13.1.1	furred construction," "Furred construction" Section 803.13.1.1 to concealed space to change was further r The modification furt Section 803.13.1.1 to concealed space to Cost Impact: Will no construction. This co	.13.1 "Direct attachment and and section 803.13.1.1 " to clarify the exception to o require all materials in the be noncombustible. This code modified by the Committee. ther clarifies the exception to o require all materials in the be noncombustible. ot increase the cost of ode change will save money e no need to provide fire	Same as cha between 201 and 2018 IBC	5 IBC			

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.

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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.

		Q 11	ping unless there are Is within a fire-resistance rated				
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) NO: a. b. c. d. e. Johners (Explain): Others (Explain): FS138-15 803.13.2 Revises section 803			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		erlapping	Cmsn.	
FS138-15	803.13.2	add an additional op construction, but doe requirements. This of modified by the Com appropriately remove item 3 as noncombu- in the code. Cost Impact: Will no construction. This p option when address does not change the	a.13.2 "Set-out construction" to obtion when addressing set-out es not change the current code code change was further mittee. The modification es the term "approved" from ustible materials are regulated ot increase the cost of proposal adds an additional ssing set-out construction, but e current code requirements, so tion is not affected by this	Same as change between 2015 IBC and 2018 IBC			
TAC Action Accommodate Florida Specif 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):		erlapping	Cmsn.	

- 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

FS139-15	803.1, 803.1.1, 803.1.1, 803.1.2, 803.1.2, 803.1.2, 803.1.3, 803.1.3, 803.1.4, 803.1.4, 803.5, 803.5, 803.5, 803.5, 803.5.1 (New), 803.6, 803.7, 803.8, 803.9	Revises section 803.1 "General," revises section "803.1.1," revises section "Interior wall and ceiling finish materials," adds new section 803.1.1.1 "Acceptance Criteria for NFPA 286," revises section 803.1.2 "Room corner test for interior wall or ceiling finish materials," deletes section 803.1.2.1 "Acceptance criteria for NFPA 286," revises section 803.1.3 "Room corner test for textile Interior wall coverings and expanded vinyl wall coverings ceiling finish materials with different requirements," deletes section 803.1.3.1 "Acceptance criteria for NFPA 25," deletes section 803.1.4 "Acceptance criteria for textile and expanded vinyl wall or ceiling coverings tested to ASTM E 84 or UL 723," revises section 803.5. "Textile wall coverings," adds new section 803.5.1 "Room corner test for textile wall coverings and expanded vinyl wall coverings," adds new section 803.5.1.1 "Acceptance Criteria for NFPA 265," adds new section 803.5.2 "Acceptance Criteria for textile and expanded vinyl wall or ceiling coverings tested to ASTM E 84 or UL 723," revises section 803.6 "Textile ceiling coverings," revises section 803.7 "Expanded vinyl wall coverings," revises section 803.8 "Expanded vinyl ceiling coverings," revises section 803.9 "High-density polyethylene (HDPE) and polypropylene (PP)," and revises section 803.11 "Interior finish requirements based on group" to move NFPA 286 to the beginning of the section for editorial purposes, and is appropriate for more product and removes redundant language. ASTM E84 remains an option for materials to meet and the section as a whole becomes more enforceable as it is more easily	Same as change between 2015 IBC and 2018 IBC	
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b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program.

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e. Maintain coordination with the Florida Fire Prevention Code.

		-	ot increase the cost of simply reorganization juirements.					
TAC Action Accommodate Florida Specif YES (Select Criteria) a. b. c. d. others (Explain):	ic Need: f		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
FS140-15	406.8.3, 424.2, 804.2, 804.3, Chapter 35	section 424.2 "Mater "Classification," revisi identification," and ac Standard Test Metho Floor-Covering Syste Heat Energy Source' equivalency of ASTM Cost Impact: Will no construction. This ch reference to anothe	tes section 804.3 "Testing and dds new standard "E648-14c od for Critical Radiant Flux of ems Using a Radiant ' for clarification on the M E648 and NFPA 253. ot increase the cost of hange simply adds a er standard, allowing users to M E648 or NFPA 253, so					

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.

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TAC Action			Commission Action				TAC	Cmsn.	
Accommodate Florida Specifi	c Need:	_	Accommodate Florida Specific Need:						
YES (Select Criteria)	NO:		YES (Select Criteria)	NO:		on Needed			
a. b. c. d. e.	f		abcdef			JII Neeueu			
Others (Explain):			Others (Explain):						
					Overla	pping			
					provisions				
				_					
FS141-15	707.3.10,	Revises section 707.	.3.10 "Fire areas," and revises	Same as cha	nge				
	901.7	section 901.7 "Fire a	reas" to remove a conflict with	between 201	5 IBC				
		the definition of fire a	area. The code change was	and 2018 IBC	`				
			0		<i>,</i>				
		further modified by the							
		modification also pro	vides a positive correlation						
		with Section and Tak	ble 707.3.10 regarding fire						
			sie verleive vegaranig me						
		areas.							
		Cost Impact: Will no	ot increase the cost of						
		construction This is	an editorial proposal that will						
		not affect the cost of	· · ·						
		not affect the cost of	construction.						
TAC Action			Commission Action				TAC	Cmsn.	
Accommodate Florida Specifi	c Need:	_	Accommodate Florida Specific Need:						
YES (Select Criteria)	NO:		YES (Select Criteria)	NO:		on Needed			
a. b. c. d. e.	f		abcdef		NO ACIA	nineeueu			
Others (Explain):			Others (Explain):						
					Overla	pping			
					provisions				
FS146-15	1403.5	Povince contine 140	3.5 "Vertical and lateral flame	Some ee che	ngo				
F3140-13	1403.5			Same as cha					
			y the intention of the current	between 201					
		code that the triager	for requiring NFPA 285 testing	and 2018 IBC	2				
			barrier material and not its						
		accessories. It exten	•						
		accessories specifica	ally mentioned to include						
			t associated with fenestration.						
	This code change		as rurmer mouned by the						

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b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program.

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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.

		all water-resistive ba this requirement. Cost Impact: Will no construction. This pro-	oosal will not increase the he proposal seeks to clarify						
TAC Action Accommodate Florida Sp 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 Actio	on Needed pping	Cmsn.	
FS157-15	Table 1405.2	OF WEATHER COV masonry veneer sho minimum nominal dir historical use and res Cost Impact: Will no construction. This ch increase to the cost of change may result construction as brick be slightly smaller, lin supporting brick coul	VE oul- ime esic of cf inte ks inte uld	ension of 2 inches based on dential code recognition. increase the cost of nge will not result in an construction. In fact, this a reduction in the cost of helves in foundations could	Same as cha between 201 and 2018 IB	5 IBC			

- 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.

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- e. Maintain coordination with the Florida Fire Prevention Code.
- f. Provide for the latest industry standards and design

YES (Select Criteria)	Accommodate Florida Specific Need: YES (Select Criteria)NO: abcdef Others (Explain):			NO:	No Actio	on Needed pping	Cmsn.	
FS158-15	Table 1405.2	weather coverings" to Table 1405.2 and ma referenced standards recommendations. Cost Impact: Will no construction. The cha to clarify the requir	ot increase the cost of anges proposed are primarily ements of Table 1405.2 and nt with referenced standards	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specifi 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 Actio	on Needed pping	Cmsn.	
FS160-15	1405.3.1	retarders" to clarify th for Zone Marine 4. Cost Impact: Will no construction. This pro-	5.3.1 "Class I and II vapor ne vapor retarder requirement of increase the cost of oposal will not increase the because it is a clarification of lage.	Same as cha between 201 and 2018 IBC	5 IBC			

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.

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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.

TAC Action Accommodate Florida Speci YES (Select Criteria) a. b. b. c. d. e Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Action Needed erlapping ns	Cmsn.	
FS162-15	202, Table 1405.3.2	revises Table 1405.3 to revise the table to solutions to include a insulation in order to it related to the appro- and adds the definition from the IRC and IEC Cost Impact: Will no	ot increase the cost of oposal is a <mark>clarification</mark> of	Same as change between 2015 IBC and 2018 IBC			
TAC Action Accommodate Florida Speci 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):		Action Needed erlapping ns	Cmsn.	
FS163-15	1405.3.4	airspaces and venter cladding" to recognize should be recognize on its similar charact	5.3.4 "Minimum clear d openings for vented te that polypropylene siding d as a vented cladding based reristics to vinyl siding as s code change was further	Same as change between 2015 IBC and 2018 IBC			

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.

		modified by the Com removes insulated vir established as a vent Cost Impact: Will no construction. This is a performance, it will no									
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 Actio	on Needed pping		Cmsn.	
FS164-15	1405.4, Chapter 35	1711 as a standard to specification for self- used in building cons was further modified modification properly adhered membranes fenestration in wall as Cost Impact: Will no construction. The pro- the use of a specific	1 as a standard to reference in the code as a cification for self-adhering flashing that is widely d in building construction. The code change s further modified by the Committee. The dification properly limits the application to self- ered membranes that are used as flashings of estration in wall assemblies. St Impact: Will not increase the cost of struction. The proposal does not mandate use of a specific material , and therefore does increase code requirements or associated			at c 3C Flo	not of the orida es to	Overlap consider code ch	red durin	vision to t ig step 2 ocess	of the

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.

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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.

TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):			Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):	NO:	No Actio	on Needed oping		Cmsn.	
FS165-15	1405.4, Chapter 35	standard "AAMA 714 Liquid Applied Flashi Resistive Seal aroun Buildings" to add AA to reference in the co applied flashing. This modified by the Com properly limits the ap flashings that are use in wall assemblies. Cost Impact: Will no construction. This pr the use of any mate	5.4 "Flashing," and adds new -15 Voluntary Specification for ng Used to Create a Water- d Exterior Wall Openings in MA 714 as a proper standard ode as a specification for liquid s code change was further mittee. The modification plication to liquid applied ed as flashings of fenestration of increase the cost of roposal does not mandate erial, and therefore does not ements or have associated	This change i similar to that FBC. The FB provides for F specific chang this section	t of the C Florida		ed durin	rision to b g step 2 c cess	
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 Actio	on Needed oping		Cmsn.	
FS166-15	1405.4.2		5.4 "Flashing" to require that p holes in anchored masonry	Same as cha between 201					

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.

		grade to function pro further modified by the modification reduces 10 inches, which is a reduce the amount of required below the fle Cost Impact: Will not construction. If anythe cost of construction	s the original height from 16 to a more reasonable height to of waterproofing that would be ashing. ot increase the cost of hing, this should lower the n as it would alleviate de to ensure that flashing and	and 2018 IBO	C			
TAC Action Accommodate Florida Specif 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. f. Others (Explain):	NO:	No Action	n Needed ping	Cmsn.	
FS167-15	1406.3, 2612.5	projections," and sec requirements" to allo the specified criteria applications where u balcony construction Cost Impact: Will no construction. No man proposal would allow composites) to be us applications. It may b	6.3 "Balconies and similar ction 2612.5 "Construction ow plastic composites meeting to be used in the same intreated wood may be used in n. ot increase the cost of indatory cost increase. This w additional materials (plastic sed in several specific be noted plastic composites than wood but the use of	Same as cha between 201 and 2018 IB0	5 IBC			

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.

		plastic composites is building owner.	at the discretion of the					
TAC Action Accommodate Florida Spe 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 No Action Overla	on Needed pping	Cmsn.	
S294-16	IBC:1406.3, 1410.1, 2407.1; IFC: 804.1.	"Balconies and similar composite decking", 20 "Interior trim". This prop "guardrail" to "guard" ir is defined in the IBC ar throughout the codes. Cost Impact: Will not This proposal will have	n 2407.1 "Materials", 1406.3 projections", 1410.1 "Plastic 015 International Fire Code 804.1 posal changes the term in several code sections. "Guard" and should be used consistently increase the cost of construction. a no effect on the cost of s the term "guardrail" to "guard" is.	Same as chan between 2015 and 2018 IBC-	IBC-B			
TAC Action Accommodate Florida Spe 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 No Action Overla	on Needed pping	Cmsn.	
FS168-15	1409.2	correct an error in a Cost Impact: Will no	9.2 "Exterior wall finish" to submitted proposal. ot increase the cost of anufacturers of the HPLs	Same as cha between 201 and 2018 IBC	5 IBC			

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.

		currently test as if the	e "through" was in the code.					
TAC Action Accommodate Florida Spec 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	on Needed pping	Cmsn.	
FS169-15	2603.3	IRC and clarify that t is appropriately appli thicknesses at or les Cost Impact: Will no	rovide consistency with the esting at a maximum thickness ied to installations of s than the tested specimen. ot increase the cost of ange is a clarification only it	Same as cha between 201 and 2018 IB0	5 IBC			
TAC Action Accommodate Florida Spector 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	on Needed pping	Cmsn.	
FS172-15	2603.4	provide an alternate barrier. Cost Impact: Will no construction. This p r	3.4 "Thermal barrier" to option for use as a thermal of increase the cost of rovides an alternate option barrier and does not mandate	Same as cha between 201 and 2018 IB0	5 IBC			

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.

TAC Action Accommodate Florida Specif 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 Actic	on Needed oping	Cmsn.	
FS175-15	2603.5	the fireblocking requirem This code change with Committee. The mo fireblocking requirem appropriately locates general section 2603 section.	3.5 "Concealed spaces" to add irements within the section. as further modified by the dification clarifies that it is the nents that is needed and a the requirement within the 3.5 rather than creating a new of increase the cost of oposal is a clarification and ments.	Same as cha between 201 and 2018 IBC	5 IBC			
TAC Action Accommodate Florida Specif 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 Actic	on Needed oping	Cmsn.	
FS178-15	2603.7, 2603.7.1, 2603.7.2, 2603.7.3; IMC: 602.2.1.6, 602.2.1.6.1,	used in plenums as plenums," deletes w 2603.7.1 "Separation substitution section 2	3.7 "Foam plastic insulation interior finish or interior trim in thout substitution section required," deletes without 2603.7.2 "Approval," deletes section 2603.7.3 "Covering,"	Same as cha between 201 and 2018 IBC	5 IBC			

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.

	602.2.1.6.2, 602.2.1.6.3	insulation in plenums trim," deletes without 602.2.1.6.1 "Separat substitution 602.2.1.1 deletes without subs IMC "Approval" to ge both the IBC and IMC change was further r The modification kee with Section 2603.9 code change was fur comment. This publ both proposals, as a committees and gen both code sections Cost Impact: Will no construction. The pro- eliminate redundant	2.1.6 IMC "Foam plastic s as interior finish or interior t substitution section tion required," deletes without 6.3 IMC "Covering," and titution section 602.2.1.6.2 enerate identical language in C code sections. The code modified by the Committee. eps reference to compliance as an alternative. Also, the rther modified by public ic comment simply combines ccepted by the technical erates identical language into of increase the cost of oposal will potentially at testing to additional of UL 723, ASTM E84, and					
TAC Action Accommodate Florida Speci 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 Need	led	Cmsn.	
FS180-15	2606.11	an editorial change.	6.11 "Greenhouses" to make ot increase the cost of	Same as cha between 201 and 2018 IBC	5 IBC			

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.

		construction. The pr is no change in requ	oposal is editorial only. There lirements.					
TAC Action Accommodate Florida Specif 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 Actic	on Needed pping	Cmsn.	
FS181-15	2609.4	remove the area lim Cost Impact: Will n construction. This cl the cost of constru	19.4 "Area limitations" to itations of Table 2609.4. ot increase the cost of nange will actually decrease iction by allowing for the use of stics in lieu of glass.	Same as cha between 201 and 2018 IB0	5 IBC			
TAC Action Accommodate Florida Specif 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 Actio	on Needed	Cmsn.	
FS182-15	2611.1, 2611.2, 2611.3, 2611.3 (New), 2611.4	substitution 2611.2 section 2611.2 "Max 2611.3 "Separation, "Encasement" to cla light-transmitting pla flexibility in increasin Cost Impact: Will n	1.1 "General," deletes without 'Aggregate area," revises kimum area," adds new section " and revises section 2611.4 rify requirements for interior astic signs, and allow for ng the size of such signs. ot increase the cost of roposal is intended to clarify	Same as cha between 201 and 2018 IB0	5 IBC			

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.

			terior light-transmitting plastic flexibility in increasing the size					
TAC Action Accommodate Florida Specific N YES (Select Criteria) a. b. c. d. e. f Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed pping	Cmsn.	
2 2 2 2 2 2 2 2 2 2 2	1410.1, 2612.2, 2612.2.1, 2612.2.2, 2612.3, 2612.4, 2612.6	decking," revises see identification," delete 2612.2.1 "Performan substitution section 2 section 2612.3 "Flam section 2612.6 "Plas boards, stair treads, provide for greater u improve application a requirements; provid and appropriately re- or component packa compliance with AST Cost Impact: Will no	ot increase the cost of st implications. <mark>No technical</mark>	Same as cha between 201 and 2018 IBC	5 IBC			

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.

TAC Action Accommodate Florida 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 N Overlappin provisions			
FS1-16	806.3 (New), [F] 806.1, [F] 806.2, [F] 806.3, [F] 806.4	806.2 "Combustible new section 806.3 "C requirements," and 8 reports" to coordinate IFC. This code char Committee. The pro brings clarity and add the section. Cost Impact: Will no construction. This is	806.4 "Acceptance criteria and e with the requirement of the age was further modified by the posal with the modification ditional criteria for approval to bt increase the cost of coordination with the IFC. There are not changes to	Same as cha between 201 and 2018 IBC	5 IBC			
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 N Overlappin provisions		Cmsn.	
FS6-16	[BS] 1405.18	allow combustible m coverings for any typ	5.18 "Polypropylene siding" to aterials to be used as wall be of construction if they pass fire separation distances as 2.1.1.2.	Same as cha between 201 and 2018 IBC	5 IBC			

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.

		construction. It would have another exteri	Cost Impact: Will not increase the cost of construction. It would allow the building owner to have another exterior wall covering option to choose from that meets existing Code test Requirements					
TAC Action Accommodate Florida Specifi YES (Select Criteria) a. b. c. d. e. Others (Explain):	NO:		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):	NO:	No Actio	on Needed oping	Cmsn.	
FS7-16	2603.12, 2603.12.1, Table 2603.12.2	sheathing to cold-for section 2603.12.1 "D table 2603.12.2 "FUF FASTENING REQUI APPLICATION OVEL SHEATHING TO SU to make some editor formed steel framing AISI referenced stan framing to the latest Cost Impact: Will in construction This code change pr industry standard for time, it is difficult to a construction will be for note that some of the	IREMENTS FOR R FOAM PLASTIC IPPORT CLADDING WEIGHT" ial corrections relative to cold- l, this code change updates the idard for cold-formed steel edition.	Same as cha between 201 and 2018 IBC	5 IBC			

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

	cold-formed steel.					
TAC Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Commission Action Accommodate Florida Specific Need: YES (Select Criteria) a. b. c. d. others (Explain):		Action Needed Perlapping Dns	TAC Cmsn Image: Comparison of the second sec	
FS8-16 Table 2603.12.2 2603.12.2	 FASTENING REQUE ATTACHMENT OVI SHEATHING TO SUE WEIGHT," and revise "FURRING MINIMU REQUIREMENTS F FOAM PLASTIC SH SUPPORT CLADDI precision of the table fastening requirement Cost Impact: Will no construction. This poption (18 psf claded increase cost. 	IM FASTENING FOR APPLICATION OVER HEATHING TO ING WEIGHT" to increase the es added in the last cycle for ents over foam sheathing. Not increase the cost of roposal adds an additional ding weight) and does not	Same as change between 2015 IBC and 2018 IBC		TAC Cmsn	
YES (Select Criteria) a. b. c. d. others (Explain):		YES (Select Criteria) a. b. c. d. e. f. Others (Explain):		Action Needed rerlapping ons		
FS9-16 2603.13	Adds new section 2	603.13 "Cladding attachment	Same as change			

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.

(New), 2603.13.1 (New), 2603.13.2 (New)	section 2603.13.1 "E new section 2603.13 attachment," to add p foam sheathing conr Cost Impact: Will no construction. This pr additional code-cor	provisions for cladding over nected to wood framing. In increase the cost of oposal simply provides mpliant options for ling over foam sheathing and	between 201 and 2018 IB					
TAC Action Accommodate Florida Specific Need:		Commission Action Accommodate Florida Specific Need:				TAC	Cmsn.	
YES (Select Criteria) NO: a. b. c. d. e. f. Others (Explain): 		YES (Select Criteria) ab cd ef Others (Explain):	NO:	No Actio	on Needed			
				Overlag provisions	oping			

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.

Code Change No: FS7-15

Original Proposal

Section: 704.2, 704.4.1

Proponent: David Tyree, American Wood Council, representing American Wood Council (dtyree@awc.org)

Revise as follows:

704.2 Column protection. Where columns are required to have protection to achieve a fire-resistance rating, the entire column shall be provided individual encasement protection by protecting it on all sides for the full column height, including connections to other structural members, with materials having the required *fire-resistance rating*. Where the column extends through a ceiling, the encasement protection shall be continuous from the top of the foundation or floor/ceiling assembly below through the ceiling space to the top of the column.

Exception: Columns located in a wall of light frame construction and located entirely between the top and bottom plates shall be permitted to have the fire resistance ratings provided by the membrane protection provided by the fire-resistance rated wall.

704.4.1 Light-frame construction. Studs, columns, and boundary elements that are integral elements in load-bearing walls of light-frame construction, and are located entirely between the top and bottom plates shall be permitted to have required *fire-resistance ratings* provided by the membrane protection provided for the load-bearing wall.

Reason: Reason: This proposal is to provide further clarification to a code change proposal that was approved last cycle and is included in the 2015 IBC in Section 704.4. Elements within fire-resistance rated walls of light-frame construction are addressed directly in Section 704.4.1 (Light-frame construction) and can be a part of a fire-resistance rated wall assembly without additional fire protection. Many buildings are built out of typical light frame construction; the concentrated loads from trusses or beams must have a continuous load path to the foundation. Some jurisdictions are interpreting that those construction boundary elements, such as, built-up and solid structural elements, are columns and are requiring them to be provided with individual fire protection. It is the intent of this provision, which has been verified by ICC staff, that it was never the intent to require individual fire protection of these elements, as they are not considered a portion of the primary structural frame.

This proposal was discussed and revised based on comments from the Colorado Chapter ICC Code Changes Committee and clarifies this provision is not intended to address continuous columns, does not have any connections to any elements of a structural frame, and is within a rated wall assembly.

For a complete list of AWC code change proposals and additional information please go to http://www.awc.org/Code-Officials/2015-IBC-Code-Changes.

Cost Impact: Will not increase the cost of construction

By revising this section, there is no additional cost as it clarifies the intent of this code provision. If anything, this proposal will actually save money as some building officials and designers have interpreted this section to require stud packs or built-up columns within a rated wall assembly to be individually fire protected which increases construction cost.

Report of Committee Action Hearings

Committee Action:

Approved as Modified

Modify as follows:

704.2 Column protection. Where columns are required to have protection to achieve a fire-resistance rating, the entire column shall be provided individual encasement protection by protecting it on all sides for the full column height, including connections to other structural members, with materials having the required fire-resistance rating.



Where the column extends through a ceiling, the encasement protection shall be continuous from the top of the foundation or floor/ceiling assembly below through the ceiling space to the top of the column.

Exception: Columns located in a wall that meet the limitations of light frame construction and located entirely between the top and bottom plates shall be permitted to have the fire resistance ratings provided by the membrane protection provided by the fire-resistance rated wall Section 704.4.1.

704.4.1 Light-frame construction. Studs, columns, and boundary elements that are integral elements in walls of light-frame construction, and are located entirely between the top and bottom plates or tracks shall be permitted to have required fire-resistance ratings provided by the membrane protection provided for the wall.

Committee Reason: The committee agreed that built-up solid structural elements, such as 2 or more vertical framing members, within fire-resistance rated walls of light-frame construction that meet the limitations of Section 704.4.1 can be a part of a fireresistance rated wall assembly without requiring the individual ecasement protection of Section 704.2. The modification eliminates redundant language by referencing Section 704.4.1 for limitations. Further, the modification appropriately recognizes steel framing members for the same allowable use.

Assembly Action

None

Final Hearing Results

FS7-15

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Code Change No: FS13-15

Original Proposal

Section: Table 705.2

Proponent: Stephen Thomas, Colorado Code Consulting, LLC, representing Colorado Chapter ICC (sthomas@coloradocode.net)

Revise as follows:

FIRE SEPARATION DISTANCE <u>- FSD</u> (FSD <u>feet</u>)	MINIMUM DISTANCE FROM LINE USED TO DETERMINE FSD
0 feet to <u>less than</u> 2 feet	Projections not permitted
Greater than 2 feet to less than 3 feet	24 inches
Greater than 3 feet to less than 30 5 feet	24 inches plus 8 inches for every foot of FSD beyond 3 feet or fraction thereof
30 feet5 or greater	20 feet <u>40 inches</u>

TABLE 705.2 (705.2)

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

Reason: This table was changed over the last two code cycles. We were the proponent of the original change. Our intent was to simplify the projection distance requirements by putting the requirements in a table. The change in the 2015 edition attempted to address an anomoly within the table. However, that change created a much more restrictive requirement than what was in the 2012 IBC and earlier editions. There was no technical justification for this more restrictive requirement. In previous codes, the maximum distance that a projection would be required was 40 inches. In the current edition, a building that has a fire separation distance of 30 feet would be required to hold the projection back from the lot line by a minimum of 20 feet. We feel that this is over-restrictive. This change puts the requirement back to what was permitted in previous codes and eliminates the anomoly that was present in the 2012 edition.

Cost Impact: Will not increase the cost of construction This change will most likely reduce the cost of construction by providing clarity to the code.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that the proposed revisions correctly bring the requirements in line with what was intended when this table was revised a couple of cycles ago, in that it allows the projection to be a minimum distance of 40 inches from the line to determine fire separation distance (FSD) once you are at a FSD of 5 feet or greater.

Assembly Action: None **Final Hearing Results** FS13-15 AS



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Code Change No: FS15-15

Original Proposal

Section: 603.1, 1406.1, 1406.3, 1406.4, 705.2.3, 705.2.3.1 (New), 705.2.4 (New)

Proponent: Jonathan Siu, representing City of Seattle Department of Planning & Development (Jon.Siu@seattle.gov)

Revise as follows:

705.2.3 Combustible projections. Combustible projections extending to within 5 feet (1524 mm) of the line used to determine the *fire separation distance* shall be of not less than 1-hour fire-resistance-rated construction, Type IV construction, fire-retardant-treated wood or as-required permitted by Section 1406.3705.2.3.1.

Exception: Type VB construction shall be allowed for combustible projections in Group R-3 and U occupancies with a fire separation distance greater than or equal to 5 feet (1524 mm).

Add new text as follows:

705.2.3.1 Balconies and similar projections. Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated where required by Table 601 for floor construction or shall be of Type IV construction in accordance with Section 602.4. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

Exceptions:

- 1. On buildings of Type I and II construction, three stories or less above grade plane, fireretardant-treated wood shall be permitted for balconies, porches, decks and exterior stairways not used as required exits.
- 2. Untreated wood is permitted for pickets and rails or similar guardrail devices that are limited to 42 inches (1067 mm) in height.
- 3. Balconies and similar projections on buildings of Type III, IV and V construction shall be permitted to be of Type V construction, and shall not be required to have a fire-resistance rating where sprinkler protection is extended to these areas.
- 4. Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited.

705.2.4 Bay and oriel windows. Bay and oriel windows shall conform to the type of construction required for the building to which they are attached.

Exception: Fire-retardant-treated wood shall be permitted on buildings three stories or less above grade plane of Type I, II, III or IV construction.

Delete without substitution:

1406.1 General. Section 1406 shall apply to exterior wall coverings; balconies and similar projections; and bay and oriel windows constructed of combustible materials.

1406.3 Balconies and similar projections. Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated where required by Table 601 for floor





construction or shall be of Type IV construction in accordance with Section 602.4. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

Exceptions:

- On buildings of Type I and II construction, three stories or less above grade plane, fireretardant-treated wood shall be permitted for balconies, porches, decks and exterior stairways not used as required exits.
- 2. Untreated wood is permitted for pickets and rails or similar guardrail devices that are limited to 42 inches (1067 mm) in height.
- Balconies and similar projections on buildings of Type III, IV and V construction shall be permitted to be of Type V construction, and shall not be required to have a fire-resistance rating where sprinkler protection is extended to these areas.
- Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited.

1406.4 Bay and oriel windows. Bay and oriel windows shall conform to the type of construction required for the building to which they are attached.

Exception: Fire-retardant-treated wood shall be permitted on buildings three stories or less above grade plane of Type I, II, III or IV construction.

Reason: This proposal is editorial in nature, making no technical changes. It simply relocates the provisions that state the protection and type of construction requirements for combustible decks and balconies, and bay and oriel windows from Chapter 14 to Chapter 7. Chapter 14 is mostly about exterior finishes, and these provisions are likely to be missed there. Chapter 7 is a more appropriate location for these provisions, since Section 705.2 already deals with type of construction and fire-resistance rated protection for projections.

Section 1406.1 is deleted since it only contained general charging language, which is not necessary now that only one section remains in Section 1406 (currently 1406.2, to be renumbered to 1406.1).

Cost Impact: Will not increase the cost of construction

Because this is an editorial relocation of existing provisions, there is no change in the regulations and therefore, no change in the cost of construction.



Committee Action:

Approved as Modified

Modify as follows:

603.1 Allowable materials. Combustible materials shall be permitted in buildings of Type I or II construction in the following applications and in accordance with Sections 603.1.1 through 603.1.3:

- (no changed to items 1 through 12)
- 13. Combustible exterior wallcoverings, balconies and similar projections and bay or oriel windows in accordance with Chapter 14 and Section 705.2.3.1.
- (no changes to items 14 through 18
- 19. Heavy timber as permitted by Note c to Table 601 and Sections 602.4.7 and 1406.3705.2.3.1.
- (no changes to remaining items)

705.2.4 Bay and oriel windows. Bay and oriel windows constructed of combustible materials shall conform to the type of construction required for the building to which they are attached.

Exception: Fire-retardant-treated wood shall be permitted on buildings three stories or less above grade plane of Type I, II, III or IV construction.

Committee Reason: The committee agreed that built-up solid structural elements, such as 2 or more vertical framing members, within fire-resistance rated walls of light-frame construction that meet the limitations of Section 704.4.1 can be a part of a fireresistance rated wall assembly without requiring the individual ecasement protection of Section 704.2. The modification eliminates redundant language by referencing Section 704.4.1 for limitations. Further, the modification appropriately recognizes steel framing members for the same allowable use.



Assembly Action			None
	Final Hearing	Results	
	FS15-15	AM	

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Code Change No: FS17-15

Original Proposal

Section: Table 705.2

Proponent: Stephen Thomas, representing Colorado Chapter (sthomas@coloradocode.net)

Revise as follows:

705.8.1 Allowable area of openings. The maximum area of unprotected and protected openings permitted in an *exterior wall* in any *story* of a building shall not exceed the percentages specified in Table 705.8 based on the fire separation distance of each individual story.

Exceptions:

- 1. In other than Group H occupancies, unlimited unprotected openings are permitted in the first *story* above grade plane either:
 - 1.1 Where the wall faces a street and has a *fire separation distance* of more than 15 feet (4572 mm); or
 - 1.2 Where the wall faces an unoccupied space. The unoccupied space shall be on the same lot or dedicated for public use, shall be not less than 30 feet (9144 mm) in width and shall have access from a street by a posted fire lane in accordance with the *International Fire Code*.
- Buildings whose exterior bearing walls, exterior nonbearing walls and exterior primary structural frame are not required to be fire-resistance rated shall be permitted to have unlimited unprotected openings.

Reason: The intent of this change is to clarify that the limitation of openings in exterior walls is based on the fire separation distance of each individual story. There appears to be confusion on how to evaluate openings in exterior walls when an upper floor extends out over a lower floor. We believe that the opening protection is determined at the exterior wall of the story, not the wall plane of the story above. Just the opposite would be true if the building was a pyramid style building where the upper floors step back from the floor below. The opening protection would depend on the distance to the lot line at each story, not the first story. Please see attached diagrams.



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Committee Action:

Committee Reason: The committee agreed that this proposal clarifies that the limitation of openings in exterior walls is based on the fire separation distance of each individual story, rather than only based on the FSD of the first story.

Assembly Action:			None
	Final Hearing	Results	
	FS17-15	AS	

Approved as Submitted

Code Change No: FS20-15

Original Proposal

Section: Table 705.8.5

Proponent: Tony Crimi, representing International Firestop Council (tcrimi@sympatico.ca)

Revise as follows:

705.8.5 Vertical separation of openings. Openings in exterior walls in adjacent stories shall be separated vertically to protect against fire spread on the exterior of the buildings where the openings are within 5 feet (1524 mm) of each other horizontally and the opening in the lower story is not a protected opening with a *fire protection rating* of not less than $\frac{3}{4}$ hour. Such openings shall be separated vertically not less than 3 feet (914 mm) by spandrel girders, exterior walls or other similar assemblies that have a fire-resistance rating of not less than 1 hour, rated for exposure to fire from both sides, or by flame barriers that extend horizontally not less than 30 inches (762 mm) beyond the exterior wall. Flame barriers shall have a fire-resistance rating of not less than 1 hour. The unexposed surface temperature limitations specified in ASTM E 119 or UL 263 shall not apply to the flame barriers or vertical separation unless otherwise required by the provisions of this code.

Exceptions:

- 1. This section shall not apply to buildings that are three *stories* or less above *grade plane*.
- 2. This section shall not apply to buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 3. Open parking garages.

Reason: The existing provision indicates that openings in exterior walls shall be separated vertically not less than 3 feet (914 mm) by spandrel girders, exterior walls or other similar assemblies that have a fire-resistance rating of not less than 1 hour, rated for exposure to fire from both sides. However, the last sentence of 705.8.5 then waives the unexposed surface temperature limitations specified in ASTM E 119 or UL 263. While this may be reasonable for the flame barriers because they extend horizontally beyond the build face, it is not justified for spandrel panels, exterior walls, or other similar assemblies that are mounted vertically above openings in the fire compartment. That vertical portion of the curtain wall is often immediately adjacent to cumbustible materials such as window coverings, drapes and carpets.

Our understanding of exterior fires and their mechanism of spread in buildings has been researched and reported. Building geometry and exterior projections of the curtain wall or building structural elements can have a beneficial or negative effect on flame length extension and heat flux exposure to curtain wall elements above the fire compartment. Such condition can allow the unrestricted passage of flames and hot gases from a fire on a floor below into the floor above. The position and geometry of the opening relative to the expected flame extension is important in assessing the risk of a leap frog event. The requirement to provide a fire-resistance-rating should not be waived for the vertical separation between openings.

Fire spread in high rise buildings from floor to floor occurs if flames emerge and extend on the facade of the building to cause ignition in the floor above fire floor. Even though considerable effort has been exerted to address this issue, the relevant physics is still under study and has been poorly clarified. Key factors that impact a curtain wall's fire performance are being addressed by the new Draft ASTM Test Method for Determining the Fire Resistance of Building Perimeter Containment Systems Due to External Spread of Fire. Such a test Standard could eventually be useful to provide enhanced protection or evaluate a curtain wall assembly's potential performance when subject to uncontrolled heat/flame exposure.

Cost Impact: Will increase the cost of construction

The current Code text is contradictory. It requires an ASTM E119 or UL 723 fire resistance rating from both sides, but then waives one of the most critical aspects. This proposals creates the intended level of safety. There may be some impact on cost where spandrel panels do not meet the existing ASTM E119 temperature rise conditions. In many cases, where one or more layers of gypsum board is used on the interior surface, there may be no additional cost depending on the type of spandrel construction.

Report of Committee Action				
Hearings				

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that allowing temperature rise limitations to not apply to vertical separations as this is a different fire exposure condition than the flame barriers that project beyond the exterior wall. The concern is that the fire will be directly against the exterior wall, which would make temperature rise on the unexposed surface more critical. Although a test standard is under development to address the fire exposure of this condition, the committee believes that this change should be made now to address the temperature rise concern.

Assembly Action:

None



FS20-15

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Code Change No: FS21-15

Original Proposal

Section: 705.8.6

Proponent: Gary Lampella, City of Redmond, Oregon, representing Oregon Building Officials Association (gary.lampella@ci.redmond.or.us)

Revise as follows:

705.8.6 Vertical exposure. For buildings on the same lot, opening protectives having a fire protection rating of not less than ³/₄ hour shall be provided in every opening that is less than 15 feet (4572 mm) vertically above the roof of an adjacent building or structure based on assuming an imaginary line between them. The opening protectives are required where the *fire separation* distance distances between the imaginary line and the adjacent to each building or structure is less than 15 feet (4572 mm).

Exceptions:

- 1. Opening protectives are not required where the roof assembly of the adjacent building or structure has a *fire-resistance rating* of not less than 1 hour for a minimum distance of 10 feet (3048 mm) from the exterior wall facing the imaginary line and the entire length and span of the supporting elements for the fire-resistance-rated roof assembly has a fire-resistance rating of not less than 1 hour.
- 2. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with Section 705.8.6.

Reason: This proposal would clear up the confusion and uncertainty of when to apply the provisions of Section 705.8.6. Currently this section only addresses the the fire separation distance of one of the buildings, presumably the lower building. What this proposal will do is make it clear that in order to apply the fire-resistive provisions of this section, both buildings would have to have a fire separation distance of less than 15 feet to the imaginary line. This would also line up with the ICC interpretation that assumes the imaginary line to be equidistant between the two buildings.

Cost Impact: Will not increase the cost of construction

This is just a clarification of how to measure fire separation distance for 2 buildings on the same lot and should have no financial impact

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

705.8.6 Vertical exposure. For buildings on the same lot, opening protectives having a fire protection rating of not less than 3/4 hour shall be provided in every opening that is less than 15 feet (4572 mm) vertically above the roof of an adjacent building or structure based on assuming an imaginary line between them. The opening protectives are required where the fire separation distances between from the imaginary line and the adjacent to each building or structure is less than 15 feet (4572 mm).

Exceptions:

1. Opening protectives are not required where the roof assembly of the adjacent building or structure has a fire-resistance rating of not less than 1 hour for a minimum distance of 10 feet (3048 mm) from the exterior wall facing the imaginary line and the entire length and span of the supporting elements for the fireresistancerated roof assembly has a fire-resistance rating of not less than 1 hour.



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2. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with Section 705.8.6.

Committee Reason: The committee felt that the proposed revisions gave the designer options while maintaining safety. The fire separation distance (FSD) should be measured to each building not only the adjacent building, which implies one. Further, plan review becomes clearer in terms of how the FSD is measured. The modification provides correct grammer for clearer provisions.

Assembly Action			None
	Final Hearin	g Results	
	FS21-15	AM	

Code Change No: FS27-15

Original Proposal

Section: 706.1.1

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Add new text as follows:

706.1.1.1 Fire walls not required Fire walls are not required on lot lines dividing a building for ownership purposes where the aggregate height and area of the portions of the building located on both sides of the lot line do not exceed the maximum height and area requirements of this code. The code official shall be provided with copies of dedicated access easements and contractual agreements that permit the owner of the portion of the building located on either side of the lot line access to the other side for purposes of maintaining fire and life safety systems necessary for the operation of the building.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

Currently the only requirement for constructing a fire wall within the IBC is when a building exceeds the maximum height and area requirements of the code. This is reflected in Section 503.1 of the IBC and the user is pointed to Section 706 for the technical requirements applying to fire walls. At Section 706.1.1 the language states that if a wall is constructed on a lot line with the wall intended for use between two buildings it must be constructed as a fire wall. Two key issues are that the construction of a party wall is not mandated based upon the existence of a lot line; and, often a wall is built adjacent to a lot line, not on it, making this section moot in most cases.

his proposal is intended to recognize that it is increasingly common to have property subdivided with a lot line dividing a building for ownership purposes, this issue is addressed in Chapter 4 for malls where anchor stores have lot lines specific to the anchor store established for financial purposes along the wall that separates the mall from the anchor store. But this issue is not addressed for other types of buildings and as a result, designers, building owners and code officials are left to wrestle with the issue on a case by case basis.

The proposed language specifies that where a property line divides a building for ownership purposes, and the building portions on both sides of the line do not exceed the maximum height and area requirements of the code, a fire wall is not required to be constructed on the property line. This allowance is only permitted where copies of dedicated access easements and contractual agreements allowing for maintenance of required fire and life safety systems that straddle the separation wall be provided to the code official. This new section is intended to provide guidance to ensure consistency in application of the code to buildings divided by ownership lot lines.

Cost Impact: Will not increase the cost of construction

There will be a decrease in cost by providing for a systematic method of handling buildings that have a lot line bisecting them for ownership purposes, eliminating unnecessary alternative method applications, appeal processes and/or construction of walls not necessary for fire or life safety.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

706.1.1 Party walls. Any wall located on a lot line between adjacent buildings, which is used or adapted for joint service between the two buildings, shall be constructed as a fire wall in accordance with Section 706. Party walls shall be constructed without openings and shall create separate buildings.


Exceptions:

- Openings in a party wall separating an anchor building and a mall shall be in accordance with Section 402.4.2.2.1.
- Fire walls are not required on lot lines dividing a building for ownership purposes where the aggregate height and area of the portions of the building located on both sides of the lot line do not exceed the maximum height and area requirements of this code. The code official shall be provided with copies of dedicated access easements and contractual agreements that permit the owner of the portion of the building located on either side of the lot line access to the other side for purposes of maintaining fire and life safety systems necessary for the operation of the building for review and approval.

706.1.1.1 Fire walls not required. Fire walls are not required on lot lines dividing a building for ownership purposes where the aggregate height and area of the portions of the building located on both sides of the lot line do not exceed the maximum height and area requirements of this code. The code official shall be provided with copies of dedicated access easements and contractual agreements that permit the owner of the portion of the building located on either side of the lot line access to the other side for purposes of maintaining fire and life safety systems necessary for the operation of the building.

Committee Reason: The committee felt that the proposed revisions gave the designer options while maintaining safety. The fire separation distance (FSD) should be measured to each building not only the adjacent building, which implies one. Further, plan review becomes clearer in terms of how the FSD is measured. The modification provides correct grammar for clearer provisions.

Assembly Action

None

Final Hearing Results	
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FS27-15

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Code Change No: FS29-15

Original Proposal

Section(s): 706.2

Proponent: Homer Maiel, PE, representing ICC Tri-Chapter (Peninsula, East Bay, Monterey Bay) (hmaiel@gmail.com)

Revise as follows:

706.2 Structural stability. Fire walls shall be designed and constructed to allow collapse of the structure on either side without collapse of the wall under fire conditions. Fire walls designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.

Exception: Where double fire walls are used in accordance with NFPA 221, floor and roof sheathing not exceeding 3/4 inch (19.05 mm) thickness shall be permitted to be continuous through the wall assemblies of light frame construction.

Reason: There is widely accepted interpretation by many building departments and structural engineers that the roof and floor diaphragms must be continuous to properly perform its function. The sheathing which comprises these diaphragms in light frame construction is generally wood structural panels between 7/16 inches to 23/32 inches thickness. These panels represent a very small risk of causing failure of the wall on the unaffected side of a double fire wall assembly. The benefit of performing the seismic function as a diaphragm is generally regarded as well worth any very small risk caused by fire exposure from one side of a double fire wall.

The following link is to a Structural Engineers of Southern California recommendation to carry the floor sheathing through these fire walls.http://www.icclabc.org/uploads/Opinion_from_SEAOSC_on_Firewall_Final.pdf

Cost Impact: Will not increase the cost of construction

This code change does not create a new requirement. It allows an additional option for compliance that is not required.

Report of Committee Action			
Hearings			

Committee Action:

Committee Reason: The committee disapproved this proposal based on a lack of data to substantiate the floor or roof sheathing being continuous through the fire wall. Also, it is not understood how structural stability will be achieved under loading and fire conditions.

Assembly Action:

None

Disapproved

Public Comments

Public Comment 1:

Homer Maiel, PE, representing ICC Tri-Chapter (Peninsula, East Bay, Monterey Bay) (hmaiel@gmail.com) requests Approve as Modified by this Public Comment.

Modify as follows:

706.2 Structural stability. Fire walls shall be designed and constructed to allow collapse of the structure on either side without collapse of the wall under fire conditions. Fire walls designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.



Exception: In SDC D through F, where Where double fire walls are used in accordance with NFPA 221, floor and roof sheathing not exceeding 3/4 inch (19.05 mm) thickness shall be permitted to be continuous through the wall assemblies of light frame construction.

Commenter's Reason: There is widely accepted interpretation by many building departments and structural engineers that the roof and floor diaphragms must be continuous to properly perform its function. The sheathing which comprises these diaphragms in light frame construction is generally wood structural panels between 7/16 inches to 23/32 inches thickness. These panels represent a very small risk of causing failure of the wall on the unaffected side of a double fire wall assembly. The benefit of performing the seismic function as a diaphragm is generally regarded as well worth any very small risk caused by fire exposure from one side of a double fire wall. The following link is to a Structural Engineers of Southern California recommendation to carry the floor sheathing through these fire walls. http://www.icclabc.org/uploads/Opinion_from_SEAOSC_on_Firewall_Final.pdf

Final Hearing Results

FS29-15

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Code Change No: FS38-15

Original Proposal

Section: 708.4, 718.4.2

Proponent: Marshall Klein, representing National Multtfamily Housing Council (makleinfpe@comcast.net)

Revise as follows:

708.4 Continuity. Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the *fire partitions* are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required *fire-resistance rating* of the wall supported, except for walls separating tenant spaces in covered and open mall buildings, walls separating dwelling units, walls separating sleeping units and corridor walls, in buildings of Type IIB, IIIB and VB construction.

Exceptions:

- 1. The wall need not be extended into the crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- 2. Where the room-side fire-resistance-rated membrane of the corridor is carried through to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated floor or roof above, the ceiling of the corridor shall be permitted to be protected by the use of ceiling materials as required for a 1-hour fire-resistance-rated floor or roof system.
- 3. Where the corridor ceiling is constructed as required for the corridor walls, the walls shall be permitted to terminate at the upper membrane of such ceiling assembly.
- 4. The fire partitions separating tenant spaces in a covered or open mall building, complying with Section 402.4.2.1, are not required to extend beyond the underside of a ceiling that is not part of a fire-resistance-rated assembly. A wall is not required in attic or ceiling spaces above tenant separation walls.
- Attic fireblocking or draftstopping is not required at the partition line in Group R-2 buildings that do not exceed occupancies up to and including four stories in height in buildings not exceeding 60 feet in height above grade plane, provided the attic space is subdivided by draftstopping into areas not exceeding 3,000 square feet (279 m²) or above every two dwelling units, whichever is smaller.
- Fireblocking or draftstopping is not required at the partition line in buildings equipped with 6. an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, provided that automatic sprinklers are installed in combustible floor/ceiling and roof/ceiling spaces.

718.4.2 Groups R-1 and R-2. Draftstopping shall be provided in attics, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more dwelling units and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, sleeping unit and dwelling unit separation walls that do not extend to the underside of the roof sheathing above.



Exceptions:

- 1. Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
- 2. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. In occupancies in Group R-2 that do not exceed up to and including four stories in height in buildings not exceeding 60 feet in height above grade plane, the attic space shall be subdivided by *draftstops* into areas not exceeding 3,000 square feet (279 m²) or above every two dwelling units, whichever is smaller.
- 4. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed space where the draftstopping is being omitted.

Reason: Completing correlation between the I-Codes and NFPA 13R's scope, which was partially done last code cycle under Proposal F134-13, approved as modified. That proposal correlated Section 903.3.1.2 with NFPA 13R Section 1.1. This code proposal correlates these two exceptions with Section 903.3.1.2, recognizing that the intent of the exceptions is to cover buildings protected by NFPA 13R systems and limit the exceptions to buildings not exceeding 60-feet in height above grade plane. As currently written, the exceptions could be applied to buildings that are taller than 60 feet, which was not intended and should not be allowed.

Cost Impact: Will not increase the cost of construction

Code Proposal's intent is just to clarify the intended application of the exceptions.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed that this proposal was a proper and necessary correlation between the I-Codes and NFPA 13R's scope recognizing that the intent of the exceptions is to cover buildings protected by NFPA 13R systems and limit the exceptions to buildings not exceeding 60-feet in height above grade plane.

Assembly Action:

Final Hearing Results

FS38-15

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Approved as Submitted

None

Code Change No: FS40-15

Original Proposal

Section: 708.4

Proponent: Masoud Sabounchi, Representing Colorado Chapter of ICC, representing masoud sabounchi (masoud@acecode.com)

Revise as follows:

708.4 Continuity. Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the *fire partitions* are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required *fire-resistance rating* of the wall supported, except for walls separating tenant spaces in covered and open mall buildings, walls separating dwellingunits, walls separating sleeping units and corridor walls, in buildings of Type IIB, IIIB and VB construction.

Exceptions:

- 1. The wall need not be extended into the crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- 2. Where the room-side fire-resistance-rated membrane of the corridor is carried through to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated floor or roof above, the ceiling of the corridor shall be permitted to be protected by the use of ceiling materials as required for a 1-hour fire-resistance-rated floor or roof system.
- 3. Where the *corridor* ceiling is constructed as required for the *corridor* walls, the walls shall be permitted to terminate at the upper membrane of such ceiling assembly.
- 4. The fire partitions separating tenant spaces in a covered or open mall building, complying with Section 402.4.2.1, are not required to extend beyond the underside of a ceiling that is not part of a fire-resistance-rated assembly. A wall is not required in attic or ceiling spaces above tenant separation walls.
- 5. Attic fireblocking or draftstopping is not required at the partition line in Group R-2 buildings that do not exceed four stories above grade plane, provided the attic space is subdivided by draftstopping into areas not exceeding 3,000 square feet (279 m²) or above every two dwelling units, whichever is smaller.
- 6. Fireblocking or draftstopping is not required at the partition line in buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, provided that automatic sprinklers are installed in combustible floor/ceiling and roof/ceiling spaces.
- 7. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Reason: Sections 718.3.2 exception #1, 718.3.3 exception, 718.4.2 exception #2, and 718.4.3 exception allow elimination of draft stops in concealed combustible floor or attic spaces when the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 (NFPA 13). Section 708.4 exception 6 allows elimination of draftstopping when a NFPA 13 sprinkler system is installed and the combustible floor and attic spaces are sprinkler protected, Exceptions in section 718.3 and 718.4 do not require sprinkler protection of combustible floor of attic spaces to allow elimination of draft stops when building is protected by a NFPA 13 automatic sprinkler system. NFPA 13 has specific provisions that would allow elimination of sprinkler protection in combustible concealed spaces (such as filling the combustible concealed spaces with non-combustible insulation). Either exceptions to section 718.3 and 718.4 have to be revised to indicate that draftstopping can only be eliminated when



concealed combustible spaces are sprinkler protected or another exception would be required in Section 708.4 to coordinate the noted exceptions with each other. The proposed exception creates this consistency. The reason exception #6 of Section 708.4 remains unchanged is because this exception allows elimination of "fire blocking" as well as draftstopping while the proposed exception #7 only addresses draftstopping.

Cost Impact: Will not increase the cost of construction

The proposed addition of exception #7 to Section 708.4 will make provisions of this section consistent with the exceptions in Section 718.3 and 718.4 and will not increase the construction cost.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that the exception eliminating the requirement for draftstopping in buildings throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 was appropriate taking into account similar provisions in other sections of the code.

Assembly Action:

Final Hearing Results

FS40-15

Code Change No: FS42-15

Original Proposal

Section(s): 708.1, 708.4, 708.4 (New), 708.4.1 (New), 708.4.2 (New), 718.3, 718.3.2, 718.3.3, 718.4, 718.4.2, 718.4.3

Proponent: Jeffrey Shapiro, National Multifamily Housing Council, representing National Multifamily Housing Council (jeff.shapiro@intlcodeconsultants.com)

Revise as follows:

708.1 General. The following wall assemblies shall comply with this section.

- Separation walls as required by Section 420.2 for Groups Group I-1, R-1, R-2 and R-3Group R occupancies.
- 2. Walls separating tenant spaces in *covered and open mall buildings* as required by Section 402.4.2.1.
- 3. Corridor walls as required by Section 1020.1.
- 4. Elevator lobby separation as required by Section 3006.2.
- 5. Egress balconies as required by Section 1019.2

Delete and substitute as follows:

708.4 Continuity. Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the fire partitions are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required fire-resistance rating of the wall supported, except for walls separating tenant spaces in covered and open mall buildings, walls separating dwelling units, walls separating sleeping units and corridor walls, in buildings of Type IIB, IIIB and VB construction.

Exceptions:

- 1. The wall need not be extended into the crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- 2. Where the room-side fire-resistance-rated membrane of the corridor is carried through to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated floor or roof above, the ceiling of the corridor shall be permitted to be protected by the use of ceiling materials as required for a 1-hour fire-resistance-rated floor or roof system.
- 3. Where the corridor ceiling is constructed as required for the corridor walls, the walls shall be permitted to terminate at the upper membrane of such ceiling assembly.
- 4. The fire partitions separating tenant spaces in a covered or open mall building, complying with Section 402.4.2.1, are not required to extend beyond the underside of a ceiling that is not part of a fire-resistance-rated assembly. A wall is not required in attic or ceiling spaces above tenant separation walls.
- 5. Attic fireblocking or draftstopping is not required at the partition line in Group R-2 buildings that do not exceed four stories abovegrade plane, provided the attic space is subdivided by draftstopping into areas not exceeding 3,000 square feet (279 m₂) or above every two dwelling units, whichever is smaller.

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 184-Colles: Stories: 6. Fireblocking or draftstopping is not required at the partition line in buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, provided that automatic sprinklers are installed in combustible floor/ceiling and roof/ceiling spaces.

Add new text as follows:

<u>708.4</u> <u>Continuity</u> <u>Fire partitions shall extend from the top of the foundation or floor/ceiling</u> <u>assembly below to:</u>

- 1. The underside of the floor or roof sheathing, deck or slab above, or
- 2. The underside of a floor/ceiling or roof/ceiling assembly having a fire-resistance rating that is not less than the fire-resistance rating of the fire partition.

Fire partitions shall be securely attached to 1 or 2 above.

Exceptions:

- 1. Fire partitions shall not be required to extend into a crawl space below where the floor above the crawl space has a minimum 1-hour fire-resistance rating.
- 2. Fire partitions serving as a corridor wall shall not be required to extend above the lower membrane of a corridor ceiling provided the corridor ceiling membrane is equivalent to corridor wall membrane, and either:
 - 2.1.The room-side membrane of the corridor wall extends to the underside of the floor or roof sheathing, deck or slab of a fire-resistance-rated floor or roof above, or
 - 2.2. The building is equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, including automatic sprinklers installed in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above.
- 3. Fire partitions serving as a corridor wall shall be permitted to terminate at the upper membrane of the corridor ceiling assembly where the corridor ceiling is constructed as required for the corridor wall.
- <u>4. Fire partitions separating tenant spaces in a covered or open mall building complying with Section 402.4.2.1 shall not be required to extend above the underside of a ceiling. Such ceiling shall not be required to be part of a fire-resistance-rated assembly, and the attic or space above the ceiling at tenant separation walls shall not be required to be subdivided by fire partitions.</u>

708.4.1 Supporting construction. The supporting construction for a fire partition shall have a fireresistance rating that is equal to or greater than the required fire-resistance rating of the supported fire partition.

Exception. In buildings of Type IIB, IIIB and VB construction, the supporting construction requirement shall not apply to fire partitions separating tenant spaces in covered and open mall buildings, fire partitions separating dwelling units, fire partitions separating sleeping units, and fire partitions serving as corridor walls.

708.4.2 Fireblocks and draftstops in combustible construction In combustible construction where fire partitions do not extend to the underside of the floor or roof sheathing, deck or slab above, the space above and along the line of the fire partition shall be provided with one of the following:

1. Fire-blocking up to the underside of the floor or roof sheathing, deck or slab above using materials complying with 718.2.1, or

2. Draftstopping up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.3.1 for floors or 718.4.1 for attics.

Exceptions:

- Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1.
- 2. Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
- 3. In Group R-2 occupancies with less than 4 dwelling units, fire-blocking and draftstopping shall not be required.
- 4. In Group R-2 occupancies that do not exceed four stories above grade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m2) or above every two dwelling units, whichever is smaller.
- In Group R-3 occupancies with less than 3 dwelling units, fire-blocking and draftstopping shall not be required in floor assemblies. This exception shall not apply to Group R-4.

Revise as follows:

718.3 Draftstopping in floors. In combustible construction, draftstopping Draftstopping shall be installed to subdivide floor/ceiling assemblies in the locations prescribed where required by Section 708.4.2. In other than Group R occupancies, draftstopping shall also be installed to subdivide combustible floor/ceiling assemblies so that horizontal floor areas do not exceed 1,000 square feet (93 m2).

Exception: Buildings equipped throughout with an automatic sprinkler system in Sections 718.3.2 through 718.3.3. accordance with Section 903.3.1.1.

Delete without substitution:

718.3.2 Groups R-1, R-2, R-3 and R-4. Draftstopping shall be provided in floor/ceiling spaces in Group R-1 buildings, in Group R-2 buildings with three or more dwellingunits, in Group R-3 buildings with twodwellingunits and in Group R-4 buildings. Draftstopping shall be located above and in line with the dwellingunit and sleeping unit separations.

Exceptions:

- 1. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed spaces where the draftstopping is being omitted.

718.3.3 Other groups. In other groups, draftstopping shall be installed so that horizontal floor areas do not exceed 1,000 square feet (93 m₂).

Exception: Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Revise as follows:

718.4 Draftstopping in attics. In combustible construction, draftstopping





Draftstopping shall be installed to subdivide attic spaces where required by Section 708.4.2. In other than Group R-1 and R-2 occupancies, draftstopping shall also be installed to subdivide combustible attic spaces and combustible concealed roof spaces in the locations prescribed in Sections 718.4.2 and 718.4.3 such that any horizontal area does not exceed 3,000 square feet (279 m2). Ventilation of concealed roof spaces shall be maintained in accordance with Section 1203.2.

Exceptions. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Delete without substitution:

718.4.2 Groups R-1 and R-2. Draftstopping shall be provided in attics, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more dwellingunits and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, sleeping

unit and dwellingunit separation walls that do not extend to the underside of the roof sheathing above.

Exceptions:

- 1. Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
- 2. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. In occupancies in Group R-2 that do not exceed four stories above grade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m₂) or above every two dwelling units, whichever is smaller.
- 4. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed space where the draftstopping is being omitted.

718.4.3 Other groups. Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 3,000 square feet (279 m2).

Exception: Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Reason: 708.1 Editorial correlation with 2015 IBC Section 420.1, which added the requirement for separation walls in R-4 occupancies to be fire partitions. It is understood that Section 310.6 requires Group R-4 to meet requirements of Group R-3 unless otherwise specified by the IBC (that's also the reason that Section 708.4.2, Exception 5 for Group R-3 has to exclude R-4 to keep the exception consistent with current requirements). However, changing 708.1 to include all Group R occupancies will eliminate the appearance that R-4 has been omitted from the requirements of this section, particularly considering that R-4 is specifically listed in Section 420.1, which triggers provisions in Section 708.1.

708.4 The proposed rewrite results from an initial intent of adding another exception to this section (which I've now done in a separate proposal). I hadn't read the text of this section in quite some time because I knew what it was supposed to say. However, when I actually read the text, I found it unintelligible. The base paragraph has several different things going on...basic continuity, draftstopping/fire-blocking above, and supporting construction requirements. Then the 6 exceptions that follow aren't clear with respect to which parts of the main paragraph they apply to. Making matters worse, there is overlap and conflict between 708.4 and 718.3.2 and 718.4.2. I decided to undertake rewriting all of the provisions in an attempt to fix these issues while maintaining the current technical requirements. Although there has been no deliberate intent to change how the code applies, there were cases where interpretations were necessary to clarify conflicting provisions.

Deciphering the apparent intent of the code, pulling the sections and exceptions into pieces and reassembling them into comprehensible requirements took many hours, and I invite all "code groupies" and industry experts to closely compare the current and proposed provisions and notify me if any unintentional technical changes have occurred.

718.3.2 and 718.4.2. The existing draftstopping thresholds in 718.3.2 and 718.4.2 are specific to certain occupancies. These conflict with the draftstopping requirements in Section 708.4.2, which relate to continuity of fire partitions (recognizing that all dwelling and sleeping unit separations are fire partitions, as required by Sections 420.1 and 420.2). Based on the "specific over general" rule in Section 102.1 and the fact that there would be no reason for the current code to include the thresholds in 718.3.2 and 718.4.2 if they weren't intended to override Section 708.4.2, the existing special thresholds in 718.3.2 and 718.4.2 were moved to Section 708.4 to eliminate the conflict and consolidate all of the draftstopping requirements for Group R in a single location. The current text related to mansards and overhangs is irrelevant because the following sentence in the current Section 718.4.2 ties this text only to continuity of fire partitions that form separations for sleeping units and dwelling units. By referencing the revised

Copyright © 2017 ICC. ALL RIGHTS RESERVED. Accessed by Monammed Madani on Dec 15, 2017 002.50 Interpretation of the Federal Copyright act ABCT BC CONTRACTOR ACCESS AND CHARGES AND CHARGE 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 708.4 in this proposal, any space above a fire partition (mansard, overhang, or whatever) requires the same level of protection based on the "continuity of fire partitions" requirement.

One additional change that should be considered by the Code Development Committee, but was skipped in this proposal because it is a technical change, is extending the Group R exception in Section 718.4 of this proposal (for attics) to include all Group R occupancies, as is the case for floor assemblies under 718.3.2 of the 2015 IBC. There is no apparent reason for 718.3 and 718.4 to have handled Group R occupancies differently for floors vs. attic spaces, and it makes more sense for all Group R attics to follow Section 708.4.2. Without fixing this, R-3 and R-4 will continue to have conflicting requirements in 708.4.2 and 718.4.

Cost Impact: Will not increase the cost of construction

There will be no impact on the cost of construction other than the cost savings associated with countless hours of design time that was saved by people who no longer had to study these sections for hours to figure out what the actually required.



Committee Action:

Approved as Modified

Modify as follows:

718.4 Draftstopping in attics. Draftstopping shall be installed to subdivide attic spaces where required by Section 708.4.2. In other than Group R-1 and R-2 R occupancies, draftstopping shall also be installed to subdivide combustible attic spaces and combustible concealed roof spaces such that any horizontal area does not exceed 3,000 square feet (279 m2). Ventilation of concealed roof spaces shall be maintained in accordance with Section 1203.2.

Exceptions. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Committee Reason: The committee agreed that the proposal was an editorial clarification that resulted in better application and enforcement of the provisions. The modification correctly makes Section 718.4 applicable to all Group R occupancies.

Assembly Action:

None

Public Comments

Public Comment 1:

Carl Baldassarra, P.E., FSFPA, representing Code Technologies Committee (CTC@iccsafe.org) requests Approve as Modified by this Public Comment.

Further modify as follows:

708.4.2 Fireblocks and draftstops in combustible construction In combustible construction where fire partitions do not extend to the underside of the floor or roof sheathing, deck or slab above, the space above and along the line of the fire partition shall be provided with one of the following:

- Fire-blocking up to the underside of the floor or roof sheathing, deck or slab above using materials complying with 1. 718.2.1. or
- 2. Draftstopping up to the underside of the floor or roof sheathing, deck or slab above using materials complying with Section 718.3.1 for floors or 718.4.1 for attics.

Exceptions:

- 1. Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the fire partition and underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1.
- 2. Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
- 3. In Group R-2 occupancies with less than 4 dwelling units, fire-blocking and draftstopping shall not be required.
- In Group R-2 occupancies that do not exceed four stories above grade plane, the attic space shall be 4. subdivided by draftstops into areas not exceeding 3,000 square feet (279 m2) or above every two dwelling units. whichever is smaller.
- In Group R-3 occupancies with less than 3 dwelling units, fire-blocking and draftstopping shall not be required in 5. floor assemblies. This exception shall not apply to Group R-4.

Commenter's Reason: This proposed modification is to delete the R-4 phrase in 708.4.2, Exception 5. FS122-15 deleted the requirement in 718.3.2 for Group R-4 and was approved. The reason from the proponent stated "There is no apparent reason for

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718.3 and 718.4 to have handled Group R occupancies differently for floors vs. attic spaces, and it makes more sense for all Group R attics to follow Section 708.4.2. Without fixing this, R-3 and R-4 will continue to have conflicting requirements in 708.4.2 and 718.4". The phrase in Section 708.4.2, Exception should be deleted for consistency with the decision. Group R-4 and R-3 will be treated the same.

Final Hearing Results

FS42-15

AMPC1

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Code Change No: FS44-15

Original Proposal

Section: 709.5

Proponent: John Williams, CBO, CBO, Chair, Adhoc Healthcare Committee, representing Adhoc Health Care Committee (AHC@iccsafe.org); Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

Revise as follows:

709.5 Openings. Openings in a *smoke barrier* shall be protected in accordance with Section 716.

Exceptions:

- 1. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, where a pair of oppositeswinging doors are installed across a corridor in accordance with Section 709.5.1, the doors shall not be required to be protected in accordance with Section 716. The doors shall be close fitting within operational tolerances, and shall not have a center mullion or undercuts in excess of ³/₄ inch (19.1 mm), louvers or grilles. The doors shall have head and jamb stops, and astragals or rabbets at meeting edges. Where permitted by the door manufacturer's listing, positive-latching devices are not required. Factory applied or field applied protective plates are not required to be labeled.
- 2. In Group I-1 Condition 2, Group I-2 and ambulatory care facilities, horizontal sliding doors installed in accordance with Section 1010.1.4.3 and protected in accordance with Section 716.

Reason: Smoke barrier doors are typically installed across corridors and patient treatment areas. These doors see a very high volume of gurney and bed traffic, as well as carts, wheeled equipment and transport devices. As a result they are often damaged. This proposal would allow the installation of a non-labeled protective plate, usually made of steel or other resilient material, to be installed on these doors to protect them from excessive wear and damage. Due to the size of equipment being wheeled through, these protective plates need to be allowed to be greater than 48" high. Currently NFPA 80 would require that the protective plates on rated doors be limited to 48" and that they be labeled. The doors in smoke barriers do not function as true fire doors. This section contains many special directives and requirements exempting smoke barriers doors from meeting fire door requirements. This code change follows with the established intent of this section. Smoke barriers are intended to be substantial construction and providing protective plates provides additional protection to the doors keeping the original construction free from damage thus in a more substantial manner. They do not provide the same fire resistance rating as a true 1 hour fire barrier.

A correlative change is planned for the IFC Section 1105.6.3 as part of the Group B proposals.

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.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. 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 at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx .

Cost Impact: Will not increase the cost of construction Allowing the use of non-labled plates will be less costly than requiring labeled plates.



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Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed that since these doors were not required to be fire resistance rated there was no need for requiring labeling of the protective plates.

Assembly Action:

None

Approved as Submitted

Final Hearing Results

FS44-15

AS

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Code Change No: FS46-15

Original Proposal

Section(s): 712.1.10.1

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

Revise as follows:

712.1.10.1 Automobile ramps. Vertical openings for automobile ramps in open and enclosed parking garages shall be permitted where constructed in accordance with Sections 406.5 and 406.6. respectively.

Reason: The current language in the code is redundant and confusing. The new language allows openings that may be used for other purposes including occupant mobility.

Cost Impact: Will not increase the cost of construction

This change should reduce the cost of construction as it will clarify how openings are permitted in floors of parking garages.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed that the current language in the code is redundant and confusing and that the new language allows openings that may be used for other purposes including occupant mobility.

Assembly Action:

Public Comments

Public Comment 1:

David Collins, representing The American Institute of Architects (dcollins@preview-group.com) requests Approve as Modified by this Public Comment.

Further modify as follows:

402.4.1.3 Parking garage. The building area and building height of any parking garage, open or enclosed, shall be based on the type of construction as required by Sections 406.5 and 406.6, respectively.

402.4.2.3 Parking garages. An attached garage for the storage of passenger vehicles having a capacity of not more than nine persons and open parking garages shall be considered as a separate building where it is separated from the covered or open mall building or anchor building by not less than 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

Parking garages, open or enclosed, which are separated from covered mall buildings, open mall buildings or anchor buildings, shall comply with the provisions of Table 602.

Pedestrian walkways and tunnels that connect garages to mall buildings or anchor buildings shall be constructed in accordance with Section 3104.

704.9 Impact protection. Where the fire protective covering of a structural member is subject to impact damage from moving vehicles, the handling of merchandise or other activity, the fire protective covering shall be protected by corner guards or by a substantial jacket of metal or other noncombustible material to a height adequate to provide full protection, but not less than 5 feet (1524 mm) from the finished floor.

Exception: Corner protection is not required on concrete columns in open or enclosed parking garages.



Approved as Submitted

None

712.1.10 Parking garages. Vertical openings in parking garages for automobile ramps, elevators and duct systems shall comply with Section 712.1.10.1, 712.1.10.2 or 712.1.10.3, as applicable.

712.1.10.1 Automobile ramps. Vertical openings for automobile ramps in open and enclosed parking garages shall be permitted where constructed in accordance with Sections 406.5 and 406.6, respectively.

712.1.10.2 Elevators. Vertical openings for elevator hoistways in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall be permitted.

712.1.10.3 Duct systems. Vertical openings for mechanical exhaust or supply duct systems in open or enclosed parking garages complying with Sections 406.5 and 406.6, respectively, shall be permitted to be unenclosed where such duct system is contained within and serves only the parking garage.

715.1 General. Joints installed in or between fire-resistance-rated walls, floor or floor/ceiling assemblies and roofs or roof/ceiling assemblies shall be protected by an approved fire-resistant joint system designed to resist the passage of fire for a time period not less than the required fire-resistance rating of the wall, floor or roof in or between which the system is installed. Fire-resistant joint systems shall be tested in accordance with Section 715.3.

Exception: Fire-resistant joint systems shall not be required for joints in all of the following locations:

- Floors within a single dwelling unit. 1.
- Floors where the joint is protected by a shaft enclosure in accordance with Section 713. 2.
- Floors within atriums where the space adjacent to the atrium is included in the volume of the atrium for smoke control 3. purposes.
- 4 Floors within malls.
- Floors and ramps within open and enclosed parking garages or structures constructed in accordance with Sections 5. 406.5 and 406.6, respectively.
- 6. Mezzanine floors.
- Walls that are permitted to have unprotected openings. 7.
- Roofs where openings are permitted. 8.
- Control joints not exceeding a maximum width of 0.625 inch (15.9 mm) and tested in accordance with ASTM E 119 9 or UL 263.

722.2.2.1 Reinforced and prestressed floors and roofs. The minimum thicknesses of reinforced and prestressed concrete floor or roof slabs for *fire-resistance ratings* of 1 hour to 4 hours are shown in Table 722.2.2.1.

Exception: Minimum thickness shall not be required for floors and ramps within open and enclosed parking garages constructed in accordance with Sections 406.5 and 406.6, respectively.

[P] 2902.3 Employee and public toilet facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 2902.1 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:

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

Commenter's Reason: The original FS 46-15 proposal is an editorial change, cleaning up language referring to parking garages that was leftover from previous code changes. The code originally stated just "open" parking garages before "enclosed" was later added. For these sections of the code, those two distinctions to "(public) parking garages" are no longer needed.

Final Hearing Results

FS46-15

AMPC1

Code Change No: FS49-15

Original Proposal

Section(s): 713.8.2 (New)

Proponent: Matthew Davy, representing Arup (matt.davy@arup.com)

713.8 Penetrations. Penetrations in a shaft enclosure shall be protected in accordance with Section 714 as required for fire barriers. Structural elements, such as beams or joists, where protected in accordance with Section 714 shall be permitted to penetrate a shaft enclosure.

713.8.1 Prohibited penetrations. Penetrations other than those necessary for the purpose of the shaft shall not be permitted in shaft enclosures.

Add new text as follows:

713.8.2 Membrane penetrations. Membrane penetrations shall be permitted on the outside of shaft enclosures. Such penetrations shall be protected in accordance with Section 714.3.2.

Reason: The purpose of Section 713.8 and 713.8.1 is to limit through penetrations into a shaft enclosure; however, membrane penetrations should be permitted on the outside of the shaft enclosure. As currently written, an electrical box is not permitted on the outside of the shaft enclosure. This section needs to clarify the intent of Section 713.8.

Cost Impact: Will not increase the cost of construction

The code change proposal will not increase the cost of construction since it will allow membrane penetrations in shaft enclosures without the need for additional construction/material on the outside of the shaft enclosure. Also, it increases net area for the building.



Committee Action:

Approved as Submitted

None

Committee Reason: The committee felt this was a good change based on the fact that these membrane penetrations were already allowed in exit passageways and shafts.

Assembly Action:

Public Comments

Public Comment 1:

Maureen Traxler, representing Seattle Dept of Planning **Development** & (maureen.traxler@seattle.gov) requests Approve as Modified by this Public Comment.

Modify as follows:

713.8.1 Prohibited penetrations. Penetrations other than those necessary for the purpose of the shaft shall not be permitted in shaft enclosures.

Exception:- Membrane penetrations shall be permitted on the outside of shaft enclosures. Such penetrations shall be protected in accordance with Section 714.3.2.

713.8.2 Membrane penetrations. Membrane penetrations shall be permitted on the outside of shaft enclosures. Such penetrations shall be protected in accordance with Section 714.3.2.



Commenter's Reason: This is an editorial comment that does not change the meaning of the original proposal. The proposed new Section 713.8.2 functions as an exception to the prohibition on penetrations in existing Section 713.8.1.

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Final H	learing	Results
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FS49-15

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Code Change No: FS50-15

Original Proposal

Section: 713.13

Proponent: Ali Fattah, City of San Diego Development Services, representing SD Area Chapter ICC

Revise as follows:

713.13 Waste and linen chutes and incinerator rooms. Waste and linen chutes shall comply with the provisions of NFPA 82, Chapter 5-6 and shall meet the requirements of Sections 713.13.1 through 713.13.6. Incinerator rooms shall meet the provisions of Sections 713.13.4 through 713.13.5.

Exception: Chutes serving and contained within a single dwelling unit.

Reason: The code section as published is in error. Chapter 5 of NFPA 82 includes requirements for incinerators however Ch 6 includes requirement for waste and linen chutes. Section 713.13.5 appropriately references a section in Ch 5 of NFPA 82 for incinerator rooms. This corrected reference will result in correct code application.

Bibliography: 2014 edition of NFPA 82 "STANDARD ON INCINERATORS AND WASTE AND LINEN HANDLING SYSTEMS AND EQUIPMENT"

Cost Impact: Will not increase the cost of construction No cost impact editorial code change.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee agreed that Chapter 6 of NFPA 82 was the correct reference for Waste and linen chutes.

Assembly Action:

Final Hearing Results

FS50-15

AS



None

Approved as Submitted

Code Change No: FS51-15

Original Proposal

Section: 713.13, 713.14, 3002.1

Proponent: Lee Kranz, City of Bellevue, WA, representing Lee Kranz

Revise as follows:

713.13 Waste and linen chutes and incinerator rooms. Waste and linen chutes shall comply with the provisions of NFPA 82, Chapter 5 and shall meet the requirements of Sections 712 and 713.13.1 through 713.13.6. Incinerator rooms shall meet the provisions of Sections 713.13.4 through 713.13.5.

Exception: Chutes serving and contained within a single dwelling unit.

713.14 Elevator, dumbwaiter and other hoistways. Elevator, dumbwaiter and other hoistway enclosures shall be constructed in accordance with Section-Sections 712, 713 and Chapter 30.

3002.1 Hoistway enclosure protection. Elevator, dumbwaiter and other hoistway enclosures shall be shaft enclosures complying with Section Sections 712 and 713.

Reason: The proposed references in Sections 713.13, 713.14 and 3002.1 to Section 712 are necessary to permit the use of the exceptions contained in Section 712 for shaft construction. By referencing only Section 713 from these sections it could be misunderstood that the exceptions of Section 712 are not applicable for waste and linen chutes and incinerator rooms of Section 713.13, for elevator, dumbwaiter and other hoistways of Section 713.14, or for hoistway enclosures of Section 3002.1. Section 712 is where the exceptions for shaft enclosures were relocated in the 2012 IBC and the reference to that section from Sections 713.13, 713.14 and 3002.1 were overlooked for the 2015 code.

Cost Impact: Will not increase the cost of construction

This change will have no bearing on the cost of construction for shafts because it permits the use of the exceptions contained in Section 712.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that reference to Section 712 at these locations is necessary to permit the use of the exceptions contained in Section 712 for shaft construction.

Assembly Action:

None

Final Hearing Results

FS51-15



Code Change No: FS52-15

Original Proposal

Section: 713.13.1

Proponent: Masoud Sabounchi, Representing Colorado Chapter of ICC, representing masoud sabounchi (masoud@acecode.com)

Revise as follows:

713.13.1 Waste and linen. A shaft enclosure containing a recycling, or waste or linen chute shall not be used for any other purpose and shall be enclosed in accordance with Section 713.4. A shaft enclosure shall be permitted to contain recycling and waste chutes. Openings into the shaft, from access rooms and discharge rooms, shall be protected in accordance with this section and Section 716. Openings into chutes shall not be located in corridors. Doors into chutes shall be self-closing. Discharge doors shall be self- or automatic-closing upon the actuation of a smoke detector in accordance with Section 716.5.9.3, except that heat-activated closing devices shall be permitted between the shaft and the discharge room.

Reason: Section 713.13.1 implies that a recycling chute is not permitted to be located in the same shaft with a waste chute. Hazard associated with a recycling chute is not any different than that of a waste chute. To provide two side by side shaft enclosures to enclose the recycling and the waste chute does not provide additional safety especially since chutes have specific installation requirements, sprinkler protection, ventilation and similar.

Cost Impact: Will not increase the cost of construction

This proposal does not increase the cost of construction because the proposed revision allows one shaft to contain a recycling and a waste chute where two separate shaft enclosures might be required otherwise. This proposal reduces cost of construction.



Final Hearing Results

FS52-15

Code Change No: FS53-15

Original Proposal

Section: 713.13.3

Proponent: Stephen DiGiovanni, Clark County Building Department (sdigiovanni@clarkcountynv.gov)

Revise as follows:

713.13.3 Chute access rooms. Access openings for waste or linen chutes shall be located in rooms or compartments enclosed by not less than 1-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. Openings into the access rooms shall be protected by opening protectives having a *fire protection rating* of not less than ³/₄ hour. Doors shall be self- or automatic-closing upon the detection of smoke in accordance with Section 716.5.9.3. The room or compartment shall be configured to allow the access door to the room or compartment to close and latch with the access panel to the refuse or laundry chute in any position.

Reason: The proposed would ensure the intent of the code that the room and door provide a minimum level of protection to the shaft enclosing the chute and the chute access doors. This intended protection is made clear in Section 713.13.1. If the room design does not allow the door to close upon failure of the self-closing requirement of the chute access door the intent of the section is defeated. This proposal brings clarity to the implied intent of the code.

Cost Impact: Will increase the cost of construction

This proposal will increase construction costs by requiring that chute access rooms be configured to address an added performance feature contained within this proposal.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that the chute access room compartment and door provide a minimum level of protection to the shaft enclosing the chute and the chute access doors. They also agreed that room should be designed to allow the room access door to close upon failure of the self-closing requirement of the chute access door.

Assembly Action:

Final Hearing Results

FS53-15

Code Change No: FS55-15

Original Proposal

Section(s): 714.2 (New)

Proponent: William Koffel, representing Firestop Contractors International Association (wkoffel@koffel.com)

Add new text as follows:

714.2 Installation A listed through-penetration firestop system shall be securely installed in accordance with the manufacturer's installation instructions and the listing criteria.

Reason: The intent of the paragraph is to require that all listed systems be installed in accordance with the listing critieria (including manufacturer's instructions). The manufacturer's instructions provide additional details that are not commonly identified in the listing criteria, including environmental conditions and tooling.

Cost Impact: Will not increase the cost of construction Listed systems should already be installed in accordance with the manufacturer's installation instructions.

> **Report of Committee Action** Hearings

Committee Action:

Modify as follows:

714.2 Installation. A listed through-penetration firestop system shall be securely installed in accordance with the manufacturer's installation instructions and the listing criteria.

Committee Reason: The committee agreed that these listed systems needed to be installed in accordance with the manufacturer's installation instructions. The modification ensures this requirement is applicable to all types of listed penetration systems.

Assembly Action:

Public Comments

Public Comment 1:

Jeffrey Shapiro, representing National Multifamily Housing Council (jeff.shapiro@intlcodeconsultants.com) requests Approve as Modified by this Public Comment.

Further modify as follows:

714.2 Installation A listed penetration firestop system shall be securely installed in accordance with the manufacturer's installation instructions and the listing criteria.

Commenter's Reason: The word "securely" is vague and subjective. Since the section will require installation in accordance with the manufacturer's instructions, the subject of mounting is adequately covered without the need to add subjective text to the IBC. Section 713.8.2 functions as an exception to the prohibition on penetrations in existing Section 713.8.1.

Final Hearing Results

FS55-15

AMPC1



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Approved as Modified

None

Back

Code Change No: FS56-15

Original Proposal

Section: 714.3.1.1, 714.4.1.1

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

714.3.1.1 Fire-resistance-rated assemblies. Penetrations_Through penetrations shall be protected using materials installed as tested in an-the approved fire-resistance-rated assembly.

714.4.1.1 Installation-Fire-resistance-rated assemblies. Through penetrations shall be protected using materials installed as tested in the *approved* fire-resistance-rated assembly.

Reason: As written, these two similar sections, covering wall assemblies and horizontal assemblies, state penetrations shall be installed as tested in the approved fire-resistance-rated assembly. By definition, a penetration is a breach in the floor, floor-ceiling or wall assembly. This proposal clarifies that it is the method of protecting the penetration, not the penetration itself, that is the subject of these sections. It also revises the title of Section 714.4.1.1 to be consistent with that of Section 714.3.1.1.

Cost Impact: Will not increase the cost of construction This simply clarifies the existing requirements.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

714.3.1.1 Fire-resistance-rated assemblies. Through penetrations shall be protected using materials systems installed as tested in the approved fire-resistance-rated assembly.

714.4.1.1 Fire-resistance-rated assemblies. Through penetrations shall be protected using materials systems installed as tested in the approved fire-resistance-rated assembly.

Committee Reason: The committee felt that the proposed revisions gave the designer options while maintaining safety. The fire separation distance (FSD) should be measured to each building not only the adjacent building, which implies one. Further, plan review becomes clearer in terms of how the FSD is measured. The modification provides correct grammar for clearer provisions.

Assembly Action

None

Final Hearing Results

FS56-15

AM



Code Change No: FS63-15

Original Proposal

Section(s): 714.4.1.2

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

714.4.1.2 Through-penetration firestop system. Through penetrations shall be protected by an approved through-penetration firestop system installed and tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (2.49 Pa). The system shall have an F rating/T rating of not less than 1 hour but not less than the required rating of the floor penetrated.

Exceptions:

- 1. Floor penetrations contained and located within the cavity of a wall above the floor or below the floor do not require a T rating.
- 2. Floor penetrations by floor drains, tub drains or shower drains contained and located within the concealed space of a horizontal assembly do not require a T rating.
- 3. Floor penetrations of cable or maximum 4-inch (102 mm) nominal diameter metal conduit or tubing penetrating directly into metal-enclosed electrical power switchgear do not require a T rating.

Reason: In its current form. Exception 3 of Section 714.4.1.2 is incomplete in that it does not specify what is penetrating the floor into the top of the switchgear. The reason statement that was submitted with FS75-12, which led to Exception 3, references "metal EMT or conduit". However, these devices are also wired with cable. As such, this proposal suggests wiring methods which reflect all these options.

Cost Impact: Will not increase the cost of construction It simply clarifies the current requirements.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee disapproved this item based on the following: No maximum diameter is given for the cable; and no justification has been provided for the metal conduit.

Assembly Action:

Public Comments

Public Comment 1:

Marilyn Williams, National Electrical Manufacturers Association, representing National Electrical Manufacturers Association requests Approve as Modified by this Public Comment.

Modify as follows:

714.4.1.2 Through-penetration firestop system. Through penetrations shall be protected by an approved through-penetration firestop system installed and tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of



None

Disapproved

0.01 inch of water (2.49 Pa). The system shall have an F rating/T rating of not less than 1 hour but not less than the required rating of the floor penetrated.

Exceptions:

- Floor penetrations contained and located within the cavity of a wall above the floor or below the floor do not require a 1. T rating.
- Floor penetrations by floor drains, tub drains or shower drains contained and located within the concealed space of a 2. horizontal assembly do not require a T rating.
- 3. Floor penetrations of eable or maximum 4-inch (102 mm) nominal diameter metal conduit or tubing penetrating directly into metal-enclosed electrical power switchgear do not require a T rating.

Commenter's Reason: The Committee correctly disapproved this proposal because it was much too broad as written and included "cables" without any substantiation or clarification as to what types of cables. The original proposal (FS75-12) that was accepted to create Exception #3 specifically referenced "metallic EMT or conduit" in the reason statement, but the final language omitted this critical provision. This comment corrects the oversight and clarifies the application of the exception.

[Final Hearing Results]
FS63	-15 AM	MPC1

Code Change No: FS67-15

Original Proposal

Section: 714.4.2

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

714.4.2 Membrane penetrations. Penetrations of membranes that are part of a horizontal assembly shall comply with Section 714.4.1.1 or 714.4.1.2. Where floor/ceiling assemblies are required to have a *fire-resistance rating*, recessed fixtures shall be installed such that the required *fire resistance* will not be reduced.

Exceptions:

- 1. Membrane penetrations by steel, ferrous or copper conduits, pipes, tubes or vents, or concrete or masonry items where the annular space is protected either in accordance with Section 714.4.1 or to prevent the free passage of flame and the products of combustion. The aggregate area of the openings through the membrane shall not exceed 100 square inches (64 500 mm²) in any 100 square feet (9.3 m²) of ceiling area in assemblies tested without penetrations.
- 2. Ceiling membrane penetrations of maximum 2-hour horizontal assemblies by steel electrical boxes that do not exceed 16 square inches (10 323 mm²) in area, provided the aggregate area of such penetrations does not exceed 100 square inches (44 500 mm²) in any 100 square feet (9.29 m²) of ceiling area, and the annular space between the ceiling membrane and the box does not exceed 1/ "inch (3.2 mm).
- 3. Membrane penetrations by electrical boxes of any size or type, that have been listed as part of an opening protective material system for use in horizontal assemblies and are installed in accordance with the instructions included in the listing.
- 4. *Membrane penetrations* by *listed* electrical boxes of any material, provided such boxes have been tested for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing. The annular space between the ceiling membrane and the box shall not exceed 1/ , inch (3.2 mm) unless *listed* otherwise.
- 5. The annular space created by the penetration of a fire sprinkler, provided it is covered by a metal escutcheon plate.
- 6. Noncombustible items that are cast into concrete building elements and that do not penetrate both top and bottom surfaces of the element.
- 7. The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a wall assembly that is sheathed with Type X gypsum wallboard, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1 or 714.4.1.2 and the ceiling membrane is tight to the top plates.
- 8. Ceiling membrane penetrations by listed luminaires (light fixtures) or by luminaires protected with listed materials, which have been tested for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing.

Reason: This proposal recognizes the listings of recessed incandescent and fluorescent can lights, or enclosure materials which protect recessed can lights or troffer light fixtures, which have been tested as a ceiling membrane penetration of fire-resistancerated horizontal assemblies. There are currently twenty six UL listed can lights which incorporate integral fire protection which have evaluated for use in fire-resistance-rated horizontal assemblies. Similarly there are eleven UL listed enclosure materials which have





been evaluated for their ability to protect penetrations in ceiling membranes by non fire rated can lights or troffer light fixtures.

Cost Impact: Will not increase the cost of construction These products are already in use within the construction industry.

Report of Committee Action			
Hearings			

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that it was appropriate to allow these light fixture assemblies as they are required to be tested and listed and installed in accordance with the listing instructions. The committee also felt that these systems could reduce construction costs. Lastly, the committee suggested that this new exception be combined with exception #4 to reduce the laundry list of items.

Assembly Action:

None

Final Hearing Results

FS67-15

Code Change No: FS69-15

Original Proposal

Section: 715.1

Proponent: Tony Crimi, representing International Firestop Council (tcrimi@sympatico.ca)

Revise as follows:

715.1 General. Joints installed in or between fire-resistance-rated walls, floor or floor/ceiling assemblies and roofs or roof/ceiling assemblies shall be protected by an approved fire-resistant joint system designed to resist the passage of fire for a time period not less than the required *fire-resistance rating* of the wall, floor or roof in or between which the system is installed. Fire-resistant joint systems shall be tested in accordance with Section 715.3.

Exception: Fire-resistant joint systems shall not be required for joints in all of the following locations:

- 1. Floors within a single dwelling unit.
- 2. Floors where the joint is protected by a shaft enclosure in accordance with Section 713.
- 3. Floors within atriums where the space adjacent to the atrium is included in the volume of the atrium for smoke control purposes.
- 4. Floors within malls.
- 5. Floors and ramps within open and enclosed parking garages or structures constructed in accordance with Sections 406.5 and 406.6, respectively.
- Mezzanine floors.
- 7. Walls that are permitted to have unprotected openings.
- 8. Roofs where openings are permitted.
- 9. Control joints not exceeding a maximum width of 0.625 inch (15.9 mm) and tested in accordance with ASTM E 119 or UL 263.
- 10. The intersection of exterior curtain wall assemblies and the roof slab or roof deck.

Reason: The purpose of this code proposal is to clarify that a fire-resistant joint system is not required for the joint between an exterior curtain wall and a rated, or unrated, roof slab or deck.. The IBC has never had any requirement for that joint to be protected. However, given that the code does not say that you do or don't have to provide some protection at that joint, it is occasionally assumed and misinterpreted that some protection is required. Adding this joint to the list of joints that do not require a fire-resistant joint system will prevent such mis-application of the code.

There are currently no systems available to protect these joints, and no test methods available for this condition. So even if a request was made for a fire-resistant joint system at this location, it would be impossible to comply with that request. In addition, Section 711.4 already exempts penetrations of roof assemblies from needing protection. However, that should not be confused with continued need to protect penetrations through membranes of fire-resistance rated roof/ceiling assemblies.

In this case, it is specifically the joint between the roof slab or roof deck and the exterior curtain wall that would be exempted in a manner similar to through penetrations of a roof slab or roof deck.

Cost Impact: Will not increase the cost of construction

The proposals clarifies/adds an additional exemption to the need for a fire-resistant joint system.



Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this proposal clarifies that a fire-resistant joint system is not required for the joint between an exterior curtain wall and a rated, or unrated, roof slab or deck. Further, the committee suggested that the exceptions be combined to reduce the laundry list of items.

Assembly Action:

None



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	Final Hearing Results	
FS	69-15	AS

Code Change No: FS70-15

Original Proposal

Section: 715.2

Proponent: William Koffel, representing Firestop Contractors International Association (wkoffel@koffel.com)

Revise as follows:

715.2 Installation. A fire-resistant joint system shall be securely installed in accordance with the manufacturer's installation instructions and the listing criteria in or on the joint for its entire length so as not to-dislodge, loosen or otherwise- impair its ability to accommodate expected building movements and to resist the passage of fire and hot gases.

Reason: It is appropriate to install the fire-resistant joint system in accordance with the listing (including manufacturer's instructions) and in a manner to accommodate building movement. The text proposed to be deleted is subjective and does not provide enforceable Code text.

The manufacturer's installation instructions provide additional details that are not commonly identified in the listing criteria. This includes environmental conditions, tooling, and additional details regarding how the fire-resistant joint system is to be installed.

Cost Impact: Will not increase the cost of construction

The proposed text will not result in an increase in the cost of construction. Listed systems should already be installed in accordance with the manufacturer's installation instructions.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee agreed that It is appropriate to install the fire-resistant joint system in accordance with the listing (including manufacturer's instructions) and in a manner to accommodate building movement. This also matches what the committee recommended approval for in FS55-15. Lastly, it appropriately deletes unenforceable language.

Assembly Action:

Final Hearing Results

FS70-15

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Approved as Submitted

None

Code Change No: FS72-15

Original Proposal

Section: 715.3

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

715.3 Fire test criteria. Fire-resistant joint systems shall be tested in accordance with the requirements of either ASTM E 1966 or UL 2079. Nonsymmetrical wall joint systems shall be tested with both faces exposed to the furnace, and the assigned *fire-resistance rating* shall be the shortest duration obtained from the two tests. Where evidence is furnished to show that the wall was tested with the least fireresistant side exposed to the furnace, subject to acceptance of the building official, the wall need not be subjected to tests from the opposite side.

Exception: For exterior walls with a horizontal fire separation distance greater than 5-10 feet (1524 3048 mm), the joint system shall be required to be tested for interior fire exposure only.

Reason: Section 705.5 of the 2015 International Building Code (IBC) states the required fire-resistance rating of exterior walls with a fire separation distance of greater than 10 feet shall be rated for exposure to fire from the inside only. This distance was increased from 5 feet to 10 feet with the 2009 edition of the IBC. This proposed change to the Exception of Section 715.3 is intended to bring consistency between the requirements for exterior walls and fire-resistant joint systems installed within exterior walls.

Cost Impact: Will increase the cost of construction Any tested system previously acceptable will still be acceptable. This may provide a negligible increase cost.

Report of Committee Action		
Hearings		

Committee Action:

Committee Reason: The committee agreed that this proposed change to the Exception of Section 715.3 results in consistency between the requirements for exterior walls and fire-resistant joint systems installed within exterior walls.

Assembly Action:	Assem	blv	Action:
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Final Hearing Results

FS72-15

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None

Approved as Submitted

Code Change No: FS74-15

Original Proposal

Section: 1023.3.1, 3007.6.3, 3008.6.3, 3008.6.3.1, 402.8.6.1, 405.4.2, 405.4.3, 407.3.1, 408.3.8, 410.3.5, 510.2, 705.8.2, 706.8, 3104.10, 722.2.4.4, 909.20.3.1, 909.20.3.2

Proponent: John Woestman, Kellen Company, representing Builders Hardware Manufacturers Association (BHMA) (jwoestman@kellencompany.com)

Revise as follows:

402.8.6.1 Exit passageways. Where exit passageways provide a secondary means of egress from a tenant space, doorways to the exit passageway shall be protected by 1-hour fire door assemblies that comply with Section 716 and are self- or automatic-closing by smoke detection in accordance with Section 716.5.9.3.

405.4.2 Smoke barrier penetration. The compartments shall be separated from each other by a *smoke* barrier in accordance with Section 709. Penetrations between the two compartments shall be limited to plumbing and electrical piping and conduit that are firestopped in accordance with Section 714. Doorways shall be protected by fire door assemblies that comply with Section 716 and shall be that are automaticclosing by smoke detection in accordance with Section 716.5.9.3 and are installed in accordance with NFPA 105 and Section 716.5.3. Where provided, each compartment shall have an air supply and an exhaust system independent of the other compartments.

405.4.3 Elevators. Where elevators are provided, each compartment shall have direct access to an elevator. Where an elevator serves more than one compartment, an elevator lobby shall be provided and shall be separated from each compartment by a smoke barrier in accordance with Section 709. Doors Doorways in the smoke barrier shall be gasketed protected by fire door assemblies that comply with Section 716, have a drop sill shall comply with the smoke and draft control assembly requirements of Section 716.5.3 with the UL 1784 test conducted without an artificial bottom seal, and shall be automaticclosing by smoke detection in accordance with Section 716.5.9.3.

407.3.1 Corridor doors. Corridor doors, other than those in a wall required to be rated by Section 509.4 or for the enclosure of a vertical opening or an exit, shall not have a required fire protection rating and shall not be required to be equipped with *self-closing* or automatic-closing devices, but shall provide an effective barrier to limit the transfer of smoke and shall be equipped with positive latching. Roller latches are not permitted. Other doors shall conform to Section 716.5-716.

408.3.8 Interior exit stairway and ramp construction. One interior exit stairway or ramp in each building shall be permitted to have glazing installed in doors and interior walls at each landing level providing access to the interior exit stairway or ramp, provided that the following conditions are met:

- 1. The *interior exit stairway or ramp* shall not serve more than four floor levels.
- 2. Exit doors shall be not less than $3/_4$ -hour fire door assemblies complying with Section 716.5716
- 3. The total area of glazing at each floor level shall not exceed 5,000 square inches (3.2 m²) and individual panels of glazing shall not exceed 1.296 square inches (0.84 m²).
- 4. The glazing shall be protected on both sides by an *automatic sprinkler system*. The sprinkler system shall be designed to wet completely the entire surface of any glazing affected by fire when actuated.
- 5. The glazing shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) the glass before the sprinkler system operates.

6. Obstructions, such as curtain rods, drapery traverse rods, curtains, drapes or similar materials shall not be installed between the automatic sprinklers and the glazing.

410.3.5 Proscenium curtain. Where a proscenium wall is required to have a *fire-resistance rating*, the *stage* opening shall be provided with a fire curtain complying with NFPA 80, horizontal sliding doors complying with Section <u>716.5.2716</u> having a fire protection rating of at least 1 hour, or an *approved* water curtain complying with Section 903.3.1.1 or, in facilities not utilizing the provisions of smoke-protected assembly seating in accordance with Section 1029.6.2, a smoke control system complying with Section 909 or natural *ventilation* designed to maintain the smoke level not less than 6 feet (1829 mm) above the floor of the *means of egress*.

510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of *fire walls*, limitation of number of *stories* and type of construction where all of the following conditions are met:

- 1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours.
- 2. The building below the *horizontal assembly* is of Type IA construction.
- 3. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Section 716.5-716.

Exception: Where the enclosure walls below the *horizontal assembly* have not less than a 3-hour *fire-resistance rating* with opening protectives in accordance with Section 716.5716, the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating*, provided:

- 1. The building above the *horizontal assembly* is not required to be of Type I construction;
- 2. The enclosure connects fewer than four stories; and
- 3. The enclosure opening protectives above the *horizontal assembly* have a *fire protection rating* of not less than 1 hour.
- 4. The building or buildings above the *horizontal assembly* shall be permitted to have multiple Group A occupancy uses, each with an *occupant load* of less 300, or Group B, M, R or S occupancies.
- 5. The building below the *horizontal assembly* shall be protected throughout by an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
- 6. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the *grade plane*.

705.8.2 Protected openings. Where openings are required to be protected, *fire doors* and fire shutters <u>opening protectives</u> shall comply with Section 716.5 and *fire window assemblies* shall comply with <u>Section 716.6 716</u>.

Exception: Opening protectives are not required where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and the exterior openings are protected by a water curtain using automatic sprinklers *approved* for that use.

706.8 Openings. Each opening through a *fire wall* shall be protected in accordance with Section $\frac{716.5}{716}$ and shall not exceed 156 square feet (15 m²). The aggregate width of openings at any floor level shall not exceed 25 percent of the length of the wall.

Exceptions:

1. Openings are not permitted in party walls constructed in accordance with Section 706.1.1.
2. Openings shall not be limited to 156 square feet (15 m²) where both buildings are equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.

722.2.4.4 Columns built into walls. The minimum dimensions of Table 722.2.4 do not apply to a reinforced concrete column that is built into a concrete or masonry wall provided all of the following are met:

- 1. The *fire-resistance rating* for the wall is equal to or greater than the required rating of the column;
- 2. The main longitudinal reinforcing in the column has cover not less than that required by Section 722.2.4.2; and
- 3. Openings in the wall are protected in accordance with Table 716.5 Section 716.

Where openings in the wall are not protected as required by Section 716.5716, the minimum dimension of columns required to have a fire-resistance rating of 3 hours or less shall be 8 inches (203 mm), and 10 inches (254 mm) for columns required to have a fire-resistance rating of 4 hours, regardless of the type of aggregate used in the concrete.

909.20.3.1 Balcony doors. Where access to the stairway or ramp is by way of an open exterior balcony, the door assembly into the enclosure shall be a *fire door assembly* in accordance with Section 716.5-716.

909.20.3.2 Vestibule doors. Where access to the stairway or ramp is by way of a vestibule, the door assembly into the vestibule shall be a *fire doorassembly* complying with Section 716.5716. The door assembly from the vestibule to the stairway shall have not less than a 20-minute fire protection rating complying with Section 716.5-716.

Add new text as follows:

1023.3.1 Extension. Where *interior exit stairways* and *ramps* are extended to an *exit discharge* or a public way by an exit passageway, the interior exit stairway and ramp shall be separated from the exit passageway by a fire barrier constructed in accordance with Section 707 or a horizontal assembly constructed in accordance with Section 711, or both. The fire-resistance rating shall be not less than that required for the interior exit stairway and ramp. A fire door assembly complying with Section 716 shall be installed in the fire barrier to provide a means of egress from the interior exit stairway and ramp to the exit passageway. Openings in the fire barrier other than the fire door assembly are prohibited. Penetrations of the *fire barrier* are prohibited.

Exceptions:

- 1. Penetrations of the *fire barrier* in accordance with Section 1023.5 shall be permitted.
- 2. Separation between an interior exit stairway or ramp and the exit passageway extension shall not be required where there are no openings into the exit passageway extension.

Revise as follows:

3008.6.3 Lobby doorways. Other than the doors to the hoistway, elevator machine rooms, machinery spaces, control rooms and control spaces within the lobby enclosure smoke barrier, each doorway to an occupant evacuation elevator lobby shall be provided with a 3/4-hour fire door assembly complying with Section 716.5-716. The *fire door assembly* shall comply with the smoke and draft control assembly requirements of Section 716.5.3.1, and tested in accordance with the UL 1784 test conducted without the an artificial bottom seal.

3008.6.3.1 Vision panel. A vision panel shall be installed in each fire door assembly protecting the lobby doorway. The vision panel shall consist of fire-protection-rated glazing and shall comply with the requirements of Section 716 and shall be located to furnish clear vision of the occupant evacuation elevator lobby.



3007.6.3 Lobby doorways. Other than doors to the hoistway, elevator control room or elevator control space, each doorway to a fire service access elevator lobby shall be provided with a 3/4-hour fire door assembly complying with Section 716.5716. The fire door assembly shall comply with the smoke and draft control door assembly requirements of Section 716.5.3.1, and tested in accordance with the UL 1784 test conducted without the an artificial bottom seal.

3104.10 Tunneled walkway. Separation between the tunneled walkway and the building to which it is connected shall be not less than 2-hour fire-resistant construction and openings therein shall be protected in accordance with Table 716.5. Section 716.

Reason: This proposal is an effort to review all I-Code references that "point" IBC Section 716 and its subsections.

In many locations, the references to a subsection of IBC 716 many need only an editorial update to the new location of the references requirements based on the reorganized text.

In other locations, it seems appropriate to clarify and / slightly revise the text and the reference.

These proposed revisions may, in some cases, be considered technical revisions. But, the goal of the proposed revisions is to be consistent with what is understood to be the intent of the code.

Cost Impact: Will not increase the cost of construction

There should be no cost increase, if the proposed revisions are consistent with the intent of the code.

Report	of Committee	Action
	Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that the correlation of references provided for more effective application and enforcement of the provisions.

Assembly Action:

Final Hearing Results

FS74-15

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Code Change No: FS75-15

Original Proposal

Section: 716.1, 716.5, 716.6

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.1 General. Opening protectives required by other sections of this code shall comply with the provisions of this section and shall be installed in accordance with NFPA 80.

716.5 Fire door and shutter assemblies. Approved fire door and fire shutter assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Section 716.5.1, 716.5.2 or 716.5.3 and the fire protection rating indicated in Table 716.5. Fire door frames with transom lights, sidelights or both shall be permitted in accordance with Section 716.5.6. Fire door assemblies and shutters shall be installed in accordance with the provisions of this section and NFPA 80.

Exceptions:

- 1. Labeled protective assemblies that conform to the requirements of this section or UL 10A, UL 14B and UL 14C for tin-clad fire door assemblies.
- 2. Floor *fire door* assemblies in accordance with Section 712.1.13.1.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

This proposal relocates the requirement for installation in accordance with NFPA 80 to Section 716.1 because this is applicable to all opening protectives covered in Section 716, including fire door assemblies, fire shutter assemblies, fire window assemblies and glass unit masonry.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction This code change is primarily editorial but clarifies that all opening protectives shall be installed to NFPA 80.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

716.6 Fire-protection-rated glazing. Glazing in fire window assemblies shall be fire protection rated in accordance with this section and Table 716.6. Glazing in fire door assemblies shall comply with Section 716.5.8. Fire-protection rated glazing in fire window assemblies shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257 or UL 9. Fire-protectionrated glazing shall comply with NFPA 80. Openings in nonfire-resistance-rated exterior wall assemblies that require protection in accordance with Section 705.3, 705.8, 705.8.5 or 705.8.6 shall have a fire protection rating of not less than 3 /4 hour. Fireprotection-rated glazing in 0.5-hour fire-resistance-rated partitions is permitted to have an 0.33-hour fire protection rating.



Committee Reason: The committee agreed that the testing requirements for opening protective should be located at the beginning of the section for clarity. The modification strikes reference to NFPA 80 in Section 716.6 to be consistent with these revisions.

Assembly Action

None

Final Hearing Results

FS75-15

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Code Change No: FS76-15

Original Proposal

Section: Table 716.3, 2409.1

Proponent: Michael O'Brian, ICC Staff, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

MARKING FIRE-RATED GLAZING ASSEMBLIES								
FIRE TEST STANDARD	MARKING	DEFINITION OF MARKING						
ASTM E 119 or UL 263	W	Meets wall assembly criteria.						
ASTM E 119 or UL 263	<u>FC</u>	Meets floor/ceiling criteria ^a						
NFA 257 or UL 9	ОН	Meets fire window assembly criteria including the hose stream test.						
NFPA 252 or UL 10B or UL 10C	Н	Meets fire door assembly criteria. Meets fire door assembly hose stream test. Meets 450°F temperature rise criteria for 30 minutes						
	XXX	The time in minutes of the fire resistance or fire protection rating of the glazing assembly.						

TABLE 716.3 (716.3) MARKING FIRE-RATED GLAZING ASSEMBLIES

For SI: °C = [(°F) - 32]/1.8.

a. See Section 2409.1

2409.1 Glass walkways. Glass installed as a part of a floor/ceiling assembly as a walking surface and constructed with laminated glass shall comply with ASTM E 2751 or with the load requirements specified in Chapter 16. Such assemblies shall comply with the fire-resistance rating and marking requirements of this code where applicable.

Reason: 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 Unenclosed stairways and ADA/IBC coordination. 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.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

To assist designers, builders and code officials in determining the correct product has been supplied/installed when fire protection or fire-resistance-rated glazing is called for in a construction project, the code requires markings linked to the rating/appropriate use of the product. As new products and uses are introduced to the market, the marking requirements require updating. This proposal recognizes the use of ASTM E 119 or UL 263 tested and listed products for rated floor/ceiling assemblies by designating the marking as FC. The proposal adds the criteria and the marking letters to Table 716.3 and it modifies Section 2409.1 to include the requirement for the marking. This proposal maintains consistency in the code when dealing with fire-rated glazing products.

Cost Impact: Will not increase the cost of construction The changes to the Table better reflect existing code requirements.



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Report of Committee Action
Hearings

Committee Action:

Committee Reason: The committee agreed that this proposal maintains consistency in the code when dealing with firerated glazing products, by adding the testing and marking requirements for glass installed as part of a floor/ceiling assembly.

Assembly Action:

None

Approved as Submitted

Final Hearing Results

FS76-15

AS

Code Change No: FS77-15

Original Proposal

Section: 716.3.1

Proponent: Jonathan Roberts, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

716.3.1 Fire-rated glazing identification. For fire-rated glazing, the label shall bear the identification required in Tables 716.3 and 716.5. "D" indicates that the glazing is permitted to be used in fire door assemblies and that the glazing meets the fire protection requirements of NFPA 252, UL 10B or UL 10C. "H" shall indicate that the glazing meets the hose stream requirements of NFPA 252, UL 10B or UL 10C. "T" shall indicate that the glazing meets the temperature requirements of Section 716.5.5.1. The placeholder "XXX" represents the fire-rating period, in minutes.

Reason: UL 10B and 10C have been included as comparable standards to NFPA 252 since the 2009 edition of the International Building Code. All other sections of the Section 716 which reference NFPA 252 also include UL 10B and 10C. This proposal revises Section 716.4 to also reference UL 10B and 10C in conjunction with NFPA 252 for consistency.

Cost Impact: Will not increase the cost of construction

This simply provides code users more flexibility by allowing the use of the comparable UL standard.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed that providing reference to UL 10B and 10C in Section 716.3.1 was consistent with other sections in 716 that recognize these test methods.

Assembly Action:

None

Approved as Submitted

Final Hearing Results

FS77-15

AS



Code Change No: FS78-15

Original Proposal

Section: 716.4

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.4 Alternative methods for determining fire protection ratings. The application of any of the alternative methods listed in this section shall be based on the fire exposure and acceptance criteria specified in NFPA 252, UL 10B, UL 10C, NFPA 257 or UL 9. The required *fire resistance* of an opening protective shall be permitted to be established by any of the following methods or procedures:

- 1. Designs documented in *approved* sources.
- 2. Calculations performed in an *approved* manner.
- 3. Engineering analysis based on a comparison of opening protective designs having fire protection ratings as determined by the test procedures set forth in NFPA 252, UL 10B, UL 10C, NFPA 257 or UL 9.
- 4. Alternative protection methods as allowed by Section 104.11.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

UL 10B and 10C have been included as comparable standards to NFPA 252 since the 2009 edition of the International Building Code. All other sections of the Section 716 which reference NFPA 252 also include UL 10B and 10C. This proposal revises Section 716.4 to also reference UL 10B and 10C in conjunction with NFPA 252 for consistency.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one

Cost Impact: Will not increase the cost of construction This code change proposal allows options for engineering analysis based on two UL standards.

Report of Committee Action	
Hearings	

Committee Action:

Assembly Action:

Committee Reason: Consistent with their action on FS77, the committee agreed that providing reference to UL 10B and 10C in Section 716.3.1 was consistent with other sections in 716 that recognize these test methods.

Final Hearing Results

FS78-15

AS



116

None

Approved as Submitted

Code Change No: FS79-15

Original Proposal

Section: Table 716.5

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

TABLE 716.5 (716.5) OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS										
TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY	AND FIRE Y SHUTTER	DOOR VISION PANEL	FIRE- RATED GLAZING MARKING	ASSE	ISOM	FIRE-RATED GLAZING MARKING SIDELIGHT/TRANSOM PANEL			
	RATING (hours)	ASSEMBLY RATING (hours)	SIZE ^b	DOOR VISION PANEL ^{d<u>.f</u>}	Fire protection	Fire resistance	Fire protection	Fire resistance		
	4	3	See Note b	D-H-W-240	Not Permitted	4	Not Permitted	W-240		
Fire walls	3	3 ^a	See Note b	D-H-W-180	Not Permitted	3	Not Permitted	W-180		
and fire barriers having a required fire- resistance rating greater than 1 hour	2	1 ¹ /2	100 sq. in.	≤100 sq. in. = D-H-90 >100 sq. in.= D-H-W- 90	Not Permitted	2	Not Permitted	W-120		
	1 ¹ /2	1 ¹ /2	100 sq. in.	≤100 sq. in. = D-H-90 >100 sq. in.=D-H-W- 90	Not Permitted	1 ¹ /2	Not Permitted	W-90		
Enclosures for shafts, interior exit stairways and interior exit ramps.	2	1 ¹ /2	100 sq. in.	≤100 sq. in. = D-H-90 > 100 sq. in.=D-H-T- W-90	Not Permitted	2	Not Permitted	W-120		
Horizontal exits in fire walls ^e	4	3	100 sq. in.	≤100 sq. in. = D-H-180 > 100 sq. in.=D-H-W- 240	Not Permitted	4	Not Permitted	W-240		
	3	3ª	100 sq. in.	≤100 sq. in. = D-H-180 > 100 sq. in.=D-H-W- 180	Not Permitted	3	Not Permitted	W-180		
Fire barriers having a required fire- resistance	1	1	100 sq. in. ^c	≤100 sq. in. = D-H-60 >100 sq. in.=	Not Permitted	1	Not Permitted	W-60		

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			D-H-T-W- 60				
		Fire	e protection	I			
1	³ / ₄	Maximum size tested	D-H	³ /,	4	D-	Н
1	¹ /3 ^b	Maximum size tested	D-20	³ /4 ^b		D-H-OH-45	
0.5	¹ /3 ^b	Maximum size tested	D-20	¹ / ₃		D-H-OH-20	
1	³ / ₄	Maximum size tested	D-H-45	3/4		D-H-45	
0.5	¹ / ₃	Maximum size tested	D-H-20	¹ /	3	D-H-20	
3	1 ¹ / ₂	100 sq. in. ^b	≤100 sq. in. = D-H-90 >100 sq. in = D-H-W- 90	Not Permitted	3	Not Permitted	W-180
2	1 ¹ / ₂	100 sq. in. ^b	≤100 sq. in. = D-H-90 >100 sq. in.= D-H- W-90	Not Permitted	2	Not Permitted	W-120
				Fire pro	tection		
1	³ / ₄	Maximum size tested	D-H-45	3 /	4	D-H	-45
1	¹ / ₃	Maximum size tested	D-20	3 /	4	D-H-OH-45	
	1 0.5 1 0.5 3 2 1 1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 ${}^{3}/_{4}$ Maximum size tested1 ${}^{1}/_{3}{}^{b}$ Maximum size tested0.5 ${}^{1}/_{3}{}^{b}$ Maximum size tested1 ${}^{3}/_{4}$ Maximum size tested0.5 ${}^{1}/_{3}{}^{b}$ Maximum size tested3 ${}^{1}/_{2}$ 100 sq. in. ^b 2 ${}^{1}/_{2}$ 100 sq. in. ^b 1 ${}^{3}/_{4}$ Maximum size tested1 ${}^{3}/_{4}$ Maximum size tested1 ${}^{3}/_{4}$ Maximum size tested1 ${}^{1}/_{3}$ Maximum size tested	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c } \hline & & & & & & & & & & & & & & & & & & $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$

For SI: 1 square inch = 645.2 mm.

Two doors, each with a fire protection rating of 11/2 hours, installed on opposite sides of the same opening in a fire wall, shall a. be deemed equivalent in fire protection rating to one 3-hour fire door.

Fire-resistance-rated glazing tested to ASTM E 119 in accordance with Section 716.2 shall be permitted, in the maximum size b. tested.

Except where the building is equipped throughout with an automatic sprinkler and the fire-rated glazing meets the criteria c. established in Section 716.5.5.

Under the column heading "Fire-rated glazing marking door vision panel," W refers to the fire-resistance rating of the glazing, d. not the frame.

See Section 716.5.8.1.2.1. e.

See also Section 716.3.1 and Table 716.3 for additional permitted markings.

Reason: 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 labeling of fire-rated glazing Information on the CTC, including: the sunset plan; meeting





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This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

Section 716.3 and 716.3.1 allow for fire rated glazing products to have product performance markings greater than the minimum requirement of the code. The language was added to the 2012 code. Table 716.5 is a graphic representation of the codes requirements for the rating opening assemblies, the allowable use of fire rated glazing and the minimum marking criteria when fire rated glazing is permitted. The table is not the actual technical requirements, those technical requirements exist within the written sections of Chapter 7. The table serves as an application aid for quick reference on what is required depending on the assembly an opening is in. Sections 716.3 and 716.3.1 are intended to be enhancements to the required markings of glazing products and the footnote proposed to be added is to enhance the application of Table 716.5 and clarify the table as a quick reference guide.

Cost Impact: Will not increase the cost of construction

This change merely clarifies the marking requirements for a specific type of glazing.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that providing footnote f to Table 716.5 provided an appropriate reference to the additional permitted marking requirements for fire rated glazing door vision panels.

Assembly Action:

None

Final Hearing Results

FS79-15

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Code Change No: FS80-15

Original Proposal

Section: Table 716.5

Proponent: Robert Davidson, Davidson Code Concepts, LLC, representing SAFTI FIRST (rjd@davidsoncodeconcepts.com)

Revise as follows:

	OPENING	FIRE PROTE		16.5 (716.5) EMBLIES, F		ND MARKIN	NGS	
TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY RATING	UIRED FIRE DOOR ALL AND FIRE EMBLY SHUTTER	DOOR VISION PANEL	FIRE- RATED GLAZING MARKING DOOR	MINIMUM SIDELIGHT/ TRANSOM ASSEMBLY RATING (hours)		FIRE-RATED GLAZING MARKING SIDELIGHT/TRANSO M PANEL	
	(hours)	RATING (hours)	SIZE ^b	VISION PANEL ^d	Fire protection	Fire resistance	Fire protection	Fire resistance
	4	3	See Note b	D-H-W- 240	Not Permitted	4	Not Permitted	W-240
Fire wells and	3	3 ^a	See Note b	D-H-W- 180	Not Permitted	3	Not Permitted	W-180
Fire walls and fire barriers having a required fire- resistance rating greater than 1 hour	2	1 ¹ / ₂	100 sq. in.	≤100 sq. in. = D-H- 90 >100 sq. in.= D- H-W-90	Not Permitted	2	Not Permitted	W-120
	1 ¹ / ₂	1 ¹ / ₂	100 sq. in.	≤100 sq. in. = D-H- 90 >100 sq. in.=D- H-W-90	Not Permitted	1 ¹ / ₂	Not Permitted	W-90
Enclosures for shafts, interior exit stairways and interior exit ramps.	2	1 ¹ / ₂	100 sq. in.	≤100 sq. in. = D-H- 90 > 100 sq. in.=D- H-T-W-90	Not Permitted	2	Not Permitted	W-120
Horizontal exits in fire walls ^e	4	3	100 sq. in.	≤100 sq. in. = D-H- 180 > 100 sq. in.=D- H-W-240	Not Permitted	4	Not Permitted	W-240
	3	3ª	100 sq. in.	≤100 sq. in. = D-H- 180 > 100 sq. in.=D- H-W-180	Not Permitted	3	Not Permitted	W-180
Fire barriers having a required fire- resistance rating	1	1	100 sq. in. ^e	≤100 sq. in. = D-H- 60 >100 sq.	Not Permitted	1	Not Permitted	W-60

of 1 hour: Enclosures forshafts,exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls				in.= D-H-T-W- 60				
			Fire p	protection				
Other fire barriers	1	³ / ₄	Maximum size tested	D-H		³ / ₄	D	-H
Fire partitions:	1	¹ / ₃ ^b	Maximum size tested	D-20	³ / ₄ ^b		D-H-OH-45	
Corridor walls	0.5	¹ / ₃ ^b	Maximum size tested	D-20	¹ / ₃		D-H-OH-20	
Other fire	1	³ / ₄	Maximum size tested	D-H-45	³ / ₄		D-H-45	
partitions	0.5	¹ / ₃	Maximum size tested	D-H-20	¹ / ₃		D-H-20	
	3	1 ¹ / ₂	100 sq. in. ^b	≤100 sq. in. = D-H-90 >100 sq. in = D-H-W-90	Not Permitte d	3	Not Permitted	W-180
Exterior walls	2	1 ¹ / ₂	100 sq. in. ^b	≤100 sq. in. = D-H-90 >100 sq. in.= D-H-W- 90	Not Permitte d	2	Not Permitted	W-120
					Fire protection			
	1	³ / ₄	Maximum size tested	D-H-45		3/4	D-ł	H-45
					Fire protection			
Smoke barriers	1	¹ / ₃	Maximum size tested	D-20		3/4	D-H-(OH-45
For SI: 1 square inc	h = 645.2 mm							

For SI: 1 square inch = 645.2 mm.

Two doors, each with a fire protection rating of 11/2 hours, installed on opposite sides of the same opening in a fire wall, shall a. be deemed equivalent in fire protection rating to one 3-hour fire door.

b. Fire-resistance-rated glazing tested to ASTM E 119 in accordance with Section 716.2 shall be permitted, in the maximum size tested.

Except where the building is equipped throughout with an automatic sprinkler and the fire-rated glazing meets the criteria c. established in Section 716.5.5.

Under the column heading "Fire-rated glazing marking door vision panel," W refers to the fire-resistance rating of the glazing, d. not the frame.

e. See Section 716.5.8.1.2.1.

Reason: This proposal is to delete "note c" from Table 716.5 since the note does not make any changes to the current code requirements indicated in the Table. Note c is attached to the "100 sq. in." limitation in the "Door Vision Panel Size" column at the "Fire barriers having a required fire resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls" line.

It directs the user to Section 716.5.5 of the code. However, current Section 716.5.5 does not provide for any modification of the 100 sq. in. limitation for fire protection rated glazing. (Note B at the top of the column provides for increased fire-resistance rated glazing size).





716.5.5 Doors in interior exit stairways and ramps and exit passageways. Fire door assemblies in interior exit stairways and ramps and exit passageways shall have a maximum transmitted temperature rise of not more than 450°F (250°C) above ambient at the end of 30 minutes of standard fire test exposure.

Exception: The maximum transmitted temperature rise is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

716.5.5.1 Glazing in doors. Fire-protection-rated glazing in excess of 100 square inches (0.065 m2) is not permitted. Fireresistance-rated glazing in excess of 100 square inches (0.065 m2) shall be permitted in door fire doors. Listed fire-resistance-rated glazing in a fire door shall have a maximum transmitted temperature rise in accordance with Section 716.5.5 when the fire door is tested in accordance with NFPA 252, UL 10B or UL 10C.

The note traces back to a previous edition of the IBC where the maximum transmitted temperature rise exception was repeated under Section 716.5.5.1 in error. That was corrected with the exception being deleted in the 2012 edition of the IBC and as a result Note c needs to be deleted as it currently creates misdirection to a user of the table.

Cost Impact: Will not increase the cost of construction

The cost of construction would be reduced by clarification of the code language through deletion of the misleading note.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed that Note c to Table 716.5 needs to be deleted as it currently creates misdirection to a user of the table by sending the user to Section 716.5.5 of the code, which does not provide for any modification of the 100 sq. in. limitation for fire protection rated glazing.

Assembly Action:

None

Approved as Submitted

Final Hearing Results

FS80-15

AS

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Code Change No: FS82-15

Original Proposal

Section: Table 716.5, 716.5.6

Proponent: Tom Zaremba, Roetzel & Andress, representing Alliance of Fire Rated Glazing Manufacturers (tzaremba@ralaw.com)

Revise as follows:

OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS										
TYPE OF ASSEMBLY	REQUIRED WALL ASSEMBLY		DOOR VISION	FIRE- RATED GLAZING MARKING	MINIMUM SIDELIGHT/ TRANSOM ASSEMBLY RATING (hours)		FIRE-RATED GLAZING MARKING SIDELIGHT/TRANSOM PANEL			
	RATING (hours)	ASSEMBLY RATING (hours)	PANEL SIZE [♭]	DOOR VISION PANEL ^d	Fire protection	Fire resistance	Fire protection	Fire resistance		
	4	3	See Note b	D-H-W-240	Not Permitted	4	Not Permitted	W-240		
Fire walls	3	3 ^a	See Note b	D-H-W-180	Not Permitted	3	Not Permitted	W-180		
and fire barriers having a required fire- resistance rating greater than 1 hour	2	1 ¹ / ₂	100 sq. in.	≤100 sq. in. = D-H-90 >100 sq. in.= D-H- W-90	Not Permitted	2	Not Permitted	W-120		
	1 ¹ / ₂	1 ¹ / ₂	100 sq. in.	≤100 sq. in. = D-H-90 >100 sq. in.=D-H-W- 90	Not Permitted	1 ¹ / ₂	Not Permitted	W-90		
Enclosures for shafts, interior exit stairways and interior exit ramps.	2	1 ¹ / ₂	100 sq. in.	≤100 sq. in. = D-H-90 > 100 sq. in.=D-H-T- W-90	Not Permitted	2	Not Permitted	W-120		
Horizontal exits in fire walls ^e	4	3	100 sq. in.	≤100 sq. in. = D-H-180 > 100 sq. in.=D-H-W- 240	Not Permitted	4	Not Permitted	W-240		
	3	3ª	100 sq. in.	≤100 sq. in. = D-H-180 > 100 sq. in.=D-H-W- 180	Not Permitted	3	Not Permitted	W-180		
Fire barriers	1	1	100 sq. in. ^c	≤100 sq. in.	Not	1	Not	W-60		

TABLE 716.5 (716.5)

			= D-H-60 >100 sq. in.= D-H-T-W- 60	Permitted		Permitted	
				Fire pro	tection		
1	³ / ₄	Maximum size tested	D-H	-		D	-H
1	¹ /3 ^b	Maximum size tested	D-20	³ /4 ^b		D-H-OH-45	
0.5	¹ / ₃ ^b	Maximum size tested	D-20	¹ / ₃		D-H-OH-20	
1	³ / ₄	Maximum size tested	D-H-45	³ / ₄		D-H-45	
0.5	¹ / ₃	Maximum size tested	D-H-20	¹ / ₃		D-H-20	
3	1 ¹ / ₂	100 sq. in. ^b	≤100 sq. in. = D-H-90 >100 sq. in = D-H-W- 90	Not Permitted	3	Not Permitted	W-180
2	1 ¹ /2	100 sq. in.^b Maximum size tested	≤100 sq. in. = D-H-90 >100 sq. in.= D-H-₩- 90 D-H-90 or D-H-90	Not Permitted <u>1 1/2</u>	2	Not Permitted D-H-OH-90	W-120
				Fire protection			
1	³ / ₄	Maximum size tested	D-H-45			D-H	I-45
				-			
1	¹ / ₃	Maximum size tested	D-20	3	/4	D-H-C	DH-45
	1 0.5 1 0.5 3 3 2 1 1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 7_4 size tested1 $1/3^b$ Maximum size tested0.5 $1/3^b$ Maximum size tested1 $3/4$ Maximum size tested0.5 $1/3$ Maximum size tested3 $1^1/3$ Maximum size tested3 $1^1/2$ 100 sq. in.^b 2 $1^1/2$ $\frac{100 \text{ sq. in.}^b}{Maximum}$ size tested1 $3/4$ Maximum size tested1 $3/4$ Maximum size tested1 $3/4$ Maximum size tested1 $1/3$ Maximum size tested1 $1/3$ Maximum size tested	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c } & & & & & & & & & & & & & & & & & & &$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

For SI: 1 square inch = 645.2 mm.

a. Two doors, each with a fire protection rating of 11/2 hours, installed on opposite sides of the same opening in a fire wall, shall be deemed equivalent in fire protection rating to one 3-hour fire door.

b. Fire-resistance-rated glazing tested to ASTM E 119 in accordance with Section 716.2 shall be permitted, in the maximum size tested.

c. Except where the building is equipped throughout with an automatic sprinkler and the fire-rated glazing meets the criteria established in Section 716.5.5.

d. Under the column heading "Fire-rated glazing marking door vision panel," W refers to the fire-resistance rating of the glazing, not the frame.

e. See Section 716.5.8.1.2.1.

716.5.6 Fire door frames with transom lights and sidelights. Door-Fire-protection rated glazing shall be permitted in door frames with transom lights, sidelights or both, shall be permitted where a $3/_4$ hour fire protection rating or less is required and in 2-hour fire-resistance rated exterior walls in accordance with Table 716.5. Fire door frames with transom lights, sidelights, or both, installed with fireresistance-rated glazing tested as an assembly in accordance with ASTM E 119 or UL 263 shall be permitted where a fire protection rating exceeding ³/₄ hour is required in accordance with Table 716.5.

Reason: This proposal is intended to correct an inconsistency in the way fire windows are treated in comparison to transoms and sidelights found in the same frame with a fire door. In that regard, Table 716.6 currently allows fire windows in 2-hour exterior walls to use either 90-minute fire-protection rated glass - or - fire-resistance rated glass with a fire rating equal to that of the exterior wall. However, if a fire window is in the same frame as a fire door, (and is, therefore, called a transom or sidelight), Section 716.5.6 prohibits the use of fire-protection rated glass and requires, instead, fire-resistance rated glass.

The only real difference between a "fire window" and a "transom" or a "sidelight" is whether it is, or is not, in the same frame as a fire door. This is evident in Section 716.5.3.2. It specifies that "[i]n a 20- minute fire door assembly, the glazing material in the door itself shall have a minimum fire-protection-rated glazing of 20 minutes and shall be exempt from the hose stream test." However, it goes on to provide that glazing in the transom and sidelights of the assembly are to be tested as a fire window, "including the hose stream test, in accordance with Section 716.6."

It should be noted, that, according to Table 716.5, doors with sidelights and transoms in the same frame are required to be tested to both the fire door test standard, NFPA 252, and the fire window test stardard, NFPA 257. And, that is exactly what is being proposed here.

The adoption of this proposal will, simply, allow the same type of glazing that is currently allowed in fire windows to be used in transoms and sidelights in 2-hour exterior walls.

Cost Impact: Will not increase the cost of construction

Currently, only fire-resistant glazing is permitted in transoms and sidelights in 2-hour rated exterior walls. This proposal would permit the use of 90-minute fire-protection rated glazing in those applications, the same type of glass currently allowed in fire windows in such exterior walls. Fire-resistance rated glazing is significantly heavier and more expensive than fire-protection rated glazing. Allowing both fire-resistance rated or fire-protection rated glazing in these applications, expands the choices of architect/specifiers and the number of products available for these types of applications. If adopted, this proposal will reduce, not increase, the cost of construction.

Report of Committee Action
Hearings

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that this proposal corrects an inconsistency in the way fire windows are treated in comparison to transoms and sidelights found in the same frame with a fire door. This provision will allow the same type of glazing that is currently allowed in fire windows to be used in transoms and sidelights in 2-hour exterior walls.

Assembly Action:

Final Hearing Results

FS82-15

AS

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Code Change No: FS85-15

Original Proposal

Section: 716.5.1

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.5.1 Side-hinged or pivoted swinging doors. Fire door assemblies with side-hinged and pivoted swinging doors shall be tested in accordance with NFPA 252 or UL 10C. After 5 minutes into For tests conducted in accordance with NFPA 252, the fire test shall be conducted using the NFPA 252 test, the neutral positive pressure level method specified in the furnace shall be established at 40 inches (1016 mm) or less above the sill-standard.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

NFPA 252 describes two fire test procedures, a positive pressure test and a "test conducted at other than positive pressure" (a neutral pressure test). The current description in Section 716.5.1 does not accurately reflect the required positive pressure conditions described in the current edition of NFPA 252. As such, this proposal is intended to correct that situation by simply requiring the test to be conducted in accordance with the positive pressure method specified in the standard. UL 10C only includes a positive pressure test, so there is no need to mention pressure conditions for it.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction

This code change proposal only clarifies references to testing criteria.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that the proposed change provides for consistency with the testing requirements within NFPA 252.

Assembly Action:

None

Final Hearing Results

FS85-15

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Code Change No: FS87-15

Original Proposal

Section: 716.5.2

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.5.2 Other types of assemblies. Fire door assemblies with other types of doors, including swinging elevator doors, horizontal sliding fire door assemblies, and fire shutter assemblies, bottom and sidehinged chute intake doors, and top-hinged chute discharge doors, shall be tested in accordance with NFPA 252 or UL 10B. The- For tests conducted in accordance with NFPA 252, the neutral pressure plane in the furnace shall be maintained as nearly equal to the atmospheric pressure as possible. Once established, at the pressure shall be maintained during top of the entire test period door, as specified in the standard.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

NFPA 252 describes two fire test procedures, a positive pressure test and a "test conducted at other than positive pressure" (i.e. a neutral pressure test). Currently Section 716.5.1 defines the positive pressure conditions for NFPA 252 tests for the sidehinged and pivoted swinging doors. But Section 716.5.2 does not define this for the other types of assemblies. This proposal provides that clarification. UL 10B only includes a neutral pressure test, so there is no need to mention pressure conditions for it. The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction This code change proposal only clarifies references to testing criteria.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: Consistent with FS85, the committee agreed that the proposed change provides for consistency with the testing requirements within NFPA 252.

Assembly Action:

Final Hearing Results

FS87-15

AS

Code Change No: FS88-15

Original Proposal

Section: 716.5.2

Proponent: Joseph Hetzel, representing Door & Access Systems Manufacturers Association (Jhetzel@thomasamc.com)

Revise as follows:

716.5.2 Other types of assemblies. Fire door Fire door assemblies with other types of doors, including swinging elevator doors, horizontal sliding fire door assemblies doors, and rolling steel fire shutter assemblies doors, fire shutters, bottom and side-hinged chute intake doors, and top-hinged chute discharge doors, shall be tested in accordance with NFPA 252 or UL 10B. The pressure in the furnace shall be maintained as nearly equal to the atmospheric pressure as possible. Once established, the pressure shall be maintained during the entire test period.

Reason: Rolling steel fire doors should be included in the list since they have been successfully required to be tested and listed to either NFPA 252 or UL 10B for many years. The other changes are typographical for consistency within the list of door types.

Cost Impact: Will not increase the cost of construction

None. The language change has no effect on the product and thus no effect on construction cost, thus no study is needed. This code change proposal only clarifies references to testing criteria.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed that rolling steel fire doors should be included in the list since they have been tested and listed to meet either NFPA 252 or UL 10B.

Assembly Action:

None

Approved as Submitted

Final Hearing Results

FS88-15

AS

Code Change No: FS90-15

Original Proposal

Section: 716.5.3.1

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.5.3.1 Smoke and draft control. Fire door assemblies shall meet the requirements for a that also serve as smoke and draft control-door assembly assemblies shall be tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 m³/s · m²) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. Installation of smoke doors shall be in accordance with NFPA 105.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at:http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

Editorial change only. The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction This code change proposal will not increase the cost of construction because they are Editorial changes only.



Assembly Action:

Final Hearing Results

FS90-15

AS



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None

Code Change No: FS91-15

Original Proposal

Section: 716.5.8

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.5.8 Glazing material. Fire-rated glazing-and fire-resistance-rated glazing- conforming to the opening protection requirements in Section 716.5 shall be permitted in *fire door* assemblies.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at:http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

The definition of the phrase fire-rated glazing is "Glazing with either a fire protection rating or a fire-resistance rating." As such, the reference to fire-resistance-rated glazing in Section 716.5.8 is redundant.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction This code change proposal will not increase the cost of constructio because they are editorial changes only.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed that this was an editorial clarification that removes redundant language.

Assembly Action:

Final Hearing Results

FS91-15

AS

Approved as Submitted

None

Code Change No: FS92-15

Original Proposal

Section: 716.5.8.1.2.1

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.5.8.1.2.1 Horizontal exits. Fire-protection-rated glazing shall be permitted as vision panels in selfclosing swinging fire door assemblies serving as horizontal exits in fire walls where limited to 100 square inches (0.065 m²) with no dimension exceeding 10 inches (0.3 mm).

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

This code change deletes the 10 inch maximum dimension applied to 100 square inch vision panels limits for swinging doors in horizontal exits. The 10 inch dimension limit is not applied to any other 100 square inch maximum glazing size references in Section 716, including Sections 716.5.5.1, 716.5.8.1.2.2 and Table 716.5. The 10 inch dimension limit may also result in a conflict with ADA Standards for Accessible Design, which specifies glazing height requirements for doors and sidelights adjacent to doors. Deleting the 10 inch maximum dimension limit for horizontal exits will allow for a fire door vision panel that meets ADA 43 inch height limits and the goal of accessible design.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction If anything this proposal allows greater construction options.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee agreed that deleting the 10 inch maximum dimension limit for horizontal exits will allow for a fire door vision panel that meets ADA 43 inch height limits and the goal of accessible design.

Assembly Action:

None

Approved as Submitted

Final Hearing Results

FS92-15

AS

Code Change No: FS93-15

Original Proposal

Section: 716.5.9.1

Proponent: Joseph Hetzel, Thomas Associates, Inc. representing DASMA, representing Door & Access Systems Manufacturers Association (Jhetzel@thomasamc.com)

Revise as follows:

716.5.9.1 Latch required. Unless otherwise specifically permitted, single side-hinged swinging fire doors and both leaves of pairs of side-hinged swinging fire doors shall be provided with an active latch bolt that will secure the door when it is closed.

Reason: Clarification is needed to show that side-hinged swinging fire doors, and no other types of fire doors, are being addressed in these provisions.

Cost Impact: Will not increase the cost of construction None. The language change has no effect on the product and thus no effect on construction cost, thus no study is needed.

Report of Committee Action			
Hearings			

Committee Action:

Committee Reason: The committee agreed that this proposal clarifies that only side-hinged swinging fire doors are being addressed in these provisions.

Assembly Action:

Final Hearing Results

FS93-15

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Approved as Submitted

None

Code Change No: FS94-15

Original Proposal

Section: 202 (New), 716.5.9.2, 716.5.9.3 (New)

Proponent: John Woestman, Kellen Company, representing Builders Hardware Manufacturers Association (BHMA) (jwoestman@kellencompany.com)

Add new definition as follows:

DELAYED ACTION CLOSER. Self-closing device that incorporates a delay prior to the initiation of closing. Delayed action closers are mechanical devices with an adjustable delay.

Add new text as follows:

716.5.9.2 Automatic-closing fire door assemblies. Automatic-closing fire door assemblies shall be selfclosing in accordance with NFPA 80.

716.5.9.3 Delayed action closers Doors required to be self-closing and not required to be automatic closing shall be permitted to be equipped with delayed action closers with not more than 60 seconds delay before the door is closed.

Reason: The IBC is silent regarding allowing delayed action closers, and applicable requirements.

Delayed action closer functionality is commonly required and / or desired for closers installed on doors. Example: delayed action closers are frequently used in schools to allow a teacher to lead a group of students from one area of the building to another. A door with a delayed action closer allows the teacher with a group of students to pass through the door before it closes, helping to keep the group intact.

Unlike automatic-closing doors which are commonly held in an open position, self-closing doors which are not automaticclosing doors are normally in a closed position unless being used. Thus, in a fire situation, the doors within the scope of this proposal would be closed except when being used and during the relatively brief delay caused by the delayed action closer. The delay of delayed action closers is usually adjustable. A maximum 60 seconds delay seems reasonable for a common application in schools.

For reference; IBC definition: SELF-CLOSING. As applied to a fire door or other opening protective, means equipped with a device that will ensure closing after having been opened.

Cost Impact: Will not increase the cost of construction

None. Delayed action closers are not currently required or prohibited by the code. This proposal provides appropriate guidance where delayed action closers are installed.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

716.5.9.3 Delayed action closers. Doors required to be self-closing and not required to be automatic closing shall be permitted to be equipped with delayed action closers with not more than 60 seconds delay before the door is closed.

Committee Reason: Including provisions for delayed action closers is appropriate as they are being widely used. The modification removes the 60 second door-closing time delay as it is an arbitrary number. The committee felt a public comment to address time delay should be considered.

Assembly Action

None



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F	inal Hearing Results]
FS94-15		AM

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Code Change No: FS95-15

Original Proposal

Section: 716.5.9.3

Proponent: John Williams, CBO, Chair, representing Adhoc Health Care Committee (AHC@iccsafe.org); Adolf Zubia, Chair, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.5.9.3 Smoke-activated doors. Automatic-closing doors installed in the following locations shall be permitted to have hold-open devices. Doors shall automatically close automatic-closing by the actuation of smoke detectors installed in accordance with Section 907.3 or by loss of power to the smoke detector or hold-open device. Doors that are automatic-closing by smoke detection shall not have more than a 10second delay before the door starts to close after the smoke detector is actuated.- Automatic-closing doors that protect openings installed in the following locations shall comply with this section:

- 1. Doors installed across a corridor.
- 2. Doors installed in the enclosures of exit access stairways and ramps in accordance with Sections 1019 and 1023, respectively.
- Doors that protect openings in exits or corridors required to be of fire-resistance-rated construction.
- 1.4. Doors that protect openings in walls that are capable of resisting the passage of smoke that separate incidental uses in accordance with Section 509.4.
- 2.7. Doors installed In fire wall-walls in accordance with Section 706.8.
- 3. In fire barriers in accordance with Section 707.6
- 4.6. Doors installed In *fire partitions* in accordance with Section 708.6.
- 5. Doors installed In smoke barriers in accordance with Section 709.5.
- 6.12. Doors installed In smoke partitions in accordance with Section 710.5.2.3.
- 7.8. Doors installed In shaft enclosures in accordance with Section 713.7.

8.9. Doors installed In waste and linen chutes, discharge openings and access and discharge rooms in accordance with Section 713.13. Loading doors installed in waste and linen chutes shall meet the requirements of Sections 716.5.9 and 716.5.9.1.1.

10 Doors installed in the walls for compartmentation of underground buildings in accordance with Section 405.4.2.

11. Doors installed in the elevator lobby walls of underground buildings in accordance with Section 405.4.3.

Reason: The intent of this proposal is clarification. Current items 1, 2, 3, 10 and 11 are addressed in the items specific to smoke barriers, shaft enclosures, fire barriers and smoke barriers respectively. They should be deleted as redundant. Current items 4 through 9 and 12 are reworded to be consistent and to be technically correct. Fire barriers were added to the list to address doors that protect openings in exit enclosures, vertical shafts, incidental uses, etc. Items are proposed to be renumbered to be in the same order as they are found in the 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.

This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. Since its inception in July, 2011, the Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls which included members of the committees as well

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as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

Cost Impact: Will not increase the cost of construction This proposal is a clarification of requirements; therefore, there is no increase in cost.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed that the proposal editorially clarifies Section 716.5.9.3 and deletes redundant language.

Assembly Action:

Final Hearing Results

FS95-15

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Approved as Submitted

None

Code Change No: FS97-15

Original Proposal

TABLE 716.6

Section: Table 716.6, 716.6.7.1

Proponent: Robert Davidson, Davidson Code Concepts, LLC, representing SAFTI FIRST (rjd@davidsoncodeconcepts.com)

Revise as follows:

TYPE OF WALL ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE WINDOW ASSEMBLY RATING (hours)	FIRE-RATED GLAZING MARKING
Interior walls			
Fire walls	All	NP ^a	W-XXX ^b
Fire barriers	>1 1	NP ^a NP ^a	W-XXX ^b W-XXX ^b
Incidental use areas (Section 707.3.7), Mixed occupancy separations (Section 707.3.9), <u>Atrium</u> separations (Section 707.3.6)	1	³ / ₄	OH-45 or W-60
Fire partitions	1 0.5	³ / ₄ 1 _{/3}	OH-45 or W-60 OH-20 or W-30
Smoke barriers	1	³ / ₄	OH-45 or W-60
Exterior walls	>1 1 0.5	1 ¹ /2 3/4 1/3	OH-90 or W-XXX ^b OH-45 or W-60 OH-20 or W-30
Party wall	All	NP	Not Applicable

NP = Not Permitted.

Not permitted except fire-resistance-rated glazing assemblies tested to ASTM E 119 or UL 263, as specified in Section 716.2. a.

XXX = The fire rating duration period in minutes, which shall be equal to the fire-resistance rating required for the wall b. assembly.

Revise as follows:

716.6.7.1 Where ${}^{3}/_{4}$ -hour fire protection window assemblies permitted. Fire-protection-rated glazing requiring 45-minute opening protection in accordance with Table 716.6 shall be limited to fire partitions designed in accordance with Section 708 and fire barriers utilized in the applications set forth in Sections 707.3.6, 707.3.7 and 707.3.9 where the fire-resistance rating does not exceed 1 hour. Fireresistance-rated glazing assemblies tested in accordance with ASTM E 119 or UL 263 shall not be subject to the limitations of this section.

Reason: The purpose of this proposal is to clarify application of the code. Sections 404.6 Enclosure of atriums, 707.3.6 Atriums, and 707.6 Openings Exception 4 all provide for the use of a 1 hour fire-resistance rated fire barrier for enclosing an atrium and provide for the use of fire windows. However, if the designer decides to provide for a fire window in the fire barrier, Section 716.6.7.1 does not include the atrium section reference, (Section 707.3.6), and Table 716.6 does not have provisions for the Minimum Window Assmbly Rating or Fire-Rated Glazing Marking for the Atrium separation assembly and has led some designers and code officials to question whether fire windows could be utilized because of the general limitation against fire windows in fire barriers. By including the added language in the table clarification and guidance will be provided to the code user.



Cost Impact: Will not increase the cost of construction The clarifying language will provide for a reduced cost of construction.

Report of Committee Action		
Hearings		

Committee Action:

Modify as follows:

FIRE WINDOW ASSEMBLY FIRE PROTECTION RATINGS **TYPE OF WALL REQUIRED WALL MINIMUM FIRE FIRE-RATED** ASSEMBLY ASSEMBLY WINDOW GLAZING ASSEMBLY RATING MARKING (hours) RATING (hours) Atrium separations (Section 707.3.6), 1 3/4 OH-45 or W-60 Incidental use areas (Section 707.3.7), Mixed occupancy separations (Section 707.3.9)., Atrium separations (Section 707.3.6)

(no change to balance of table or footnotes)

Committee Reason: The committee agreed that it is appropriate to include 707.3.6 Atriums into Table 716.6 because it provides for the use of a 1 hour fire-resistance rated fire barrier for enclosing an atrium and provide for the use of fire windows. This will provide clarification and guidance will be provided to the code user. The modification puts the list in the proper order.

Assembly /	Action
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Final Hearing Results

FS97-15

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TABLE 716.6

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None

Approved as Modified

Approved as Submitted

None

Code Change No: FS98-15

Original Proposal

Section: 716.5.9.3

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.6.2 Nonsymmetrical glazing systems. Nonsymmetrical fire-protection-rated glazing systems in fire partitions, fire barriers or in exterior walls with a fire separation distance of 510 feet (1524-3048 mm) or less pursuant to Section 705 shall be tested with both faces exposed to the furnace, and the assigned fire protection rating shall be the shortest duration obtained from the two tests conducted in compliance with NFPA 257 or UL 9.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

Section 705.5 of the 2015 International Building Code (IBC) states the required fire-resistance rating of exterior walls with a fire separation distance of greater than 10 feet shall be rated for exposure to fire from the inside only. This distance was increased from 5 feet to 10 feet with the 2009 edition of the IBC. This proposed change to the Section 716.6.2 brings consistency between the requirements for exterior walls and glazing systems installed within exterior walls.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction

This code change proposal provides better correlation to existing code requirements.

FS98-15

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed that the proposed change to the Section 716.6.2 brings consistency between the requirements for exterior walls and glazing systems installed within exterior walls.

Assembly Action:

Final Hearing Results

AS

Code Change No: **FS99-15**

Original Proposal

Section: 716.6.5

Proponent: Michael O'Brian, representing Fire Code Action Committee (fcac@iccsafe.org)

Revise as follows:

716.6.5 Installation. Fire-protection-rated glazing shall be in the fixed position or be automatic-closing and shall be installed in <u>approved labeled</u> frames.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 10 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

Fire door and fire window frames are commonly listed and labeled, and code authorities typically look for labels during installation. This proposal reflects common installation practice and is consistent with NFPA 80, Section 17.1.3 which requires these frames to be labeled.

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a number of proposed changes to IBC Section 716, including this one.

Cost Impact: Will not increase the cost of construction This code change proposal merely clarifies a current NFPA 80 requirement.

> Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed that fire door and fire window frames are commonly listed and labeled, and code authorities typically look for labels during installation. Further, this is consistent with NFPA 80, Section 17.1.3, which requires these frames to be labeled.

Assembly Action:

Final Hearing Results

FS99-15

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None

Approved as Submitted

Code Change No: FS100-15

Original Proposal

Section: 716.6.7.3

Proponent: Amber Armstrong, City of Edmond (Oklahoma), representing self (amber.armstrong@edmondok.com)

Revise as follows:

16.6.7.3 Where ¹/₃**-hour fire-protection window assemblies permitted.** Fire-protection-rated glazing shall be permitted in window assemblies tested to NFPA 257 or UL 9 in smoke barriers and fire partitions requiring $\frac{1}{3}$ -hour opening protection in accordance with Table 716.6.

Reason: This code change is intended to remove the term "smoke barrier" from this section on the grounds that:

- The charging section for this sub section does not include smoke barriers. Section 716.6.7 addresses the use of fire window assemblies in fire partitions and fire barriers only.
- B) This section states the fire-protection rating for window assemblies in smoke barriers is 1/3-hour in accordance with Table 716.6, however Table 716.6 states the minimum fire window assembly rating in a smoke barrier is 3/4-hour.

Cost Impact: Will not increase the cost of construction

There is no impact to the cost of construction because this change corrects a mistake and the language should not appear where it is stated.

Report of Committee Action
Hearings

Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that it is appropriate to remove the term "smoke barrier" from Section 716.6.7.3 because the charging section (716.6.7) for this sub section does not include smoke barriers and Table 716.6 states the minimum fire window assembly rating in a smoke barrier is 3/4-hour. This is greater than and in conflict with the 1/3 hour protection provided in 716.6.7.3.

Assembly Action:

Final Hearing Results

FS100-15

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Code Change No: FS101-15

Original Proposal

Section: 716 (New)

Proponent: Michael O'Brian (fcac@iccsafe.org)

Delete Section 716 in its entirety and replace as follows:

716.1 General. Opening protectives required by other sections of this code shall comply with the provisions of this section.

716.1.1 Alternative methods for determining fire protection ratings. The application of any of the alternative methods listed in this section shall be based on the fire exposure and acceptance criteria specified in NFPA 252, NFPA 257 or UL 9. The required fire resistance of an opening protective shall be permitted to be established by any of the following methods or procedures:

- 1. Designs documented in *approved* sources.
- 2. Calculations performed in an approved manner.
- 3. Engineering analysis based on a comparison of opening protective designs having fire protection ratings as determined by the test procedures set forth in NFPA 252, NFPA 257 or UL 9.
- 4. Alternative protection methods as allowed by Section 104.11.

716.1.2 Glazing. Glazing used in fire door assemblies and fire window assemblies shall comply with this section in addition to the requirements of Sections 716.2 and 716.3, respectively.

716.1.2.1 Safety glazing. Fire-protection-rated glazing and fire-resistance-rated glazing installed in fire door assemblies and fire window assemblies shall comply with the safety glazing requirements of Chapter 24 where applicable.

716.1.2.2 Marking fire-rated glazing assemblies. Fire-rated glazing assemblies shall be marked in accordance with Tables 716.1.A, 716.1.B and 716.1.C.

716.1.2.2.1 Fire-rated glazing identification For fire-rated glazing, the label shall bear the identification required in Tables 716.1.A and 716.1.B. "D" indicates that the glazing is permitted to be used in fire door assemblies and that the glazing meets the fire protection requirements of NFPA 252. "H" shall indicate that the glazing meets the hose stream requirements of NFPA 252. "T" shall indicate that the glazing meets the temperature requirements of Section 716.2.2.3.1. The placeholder "XXX" represents the firerating period, in minutes.

716.1.2.2.2 Fire-protection-rated glazing identification. For fire-protection-rated glazing, the label shall bear the following identification required in Tables 716.1.A and 716.1.C: "OH - XXX." "OH" indicates that the glazing meets both the fire protection and the hose-stream requirements of NFPA 257 or UL 9 and is permitted to be used in fire window openings. The placeholder "XXX" represents the fire-rating period, in minutes.

716.1.2.2.3 Fire-resistance-rated glazing identification. For fire-resistance-rated glazing, the label shall bear the identification required in Section 703.6 and Table 716.1.A.

716.1.2.2.4 Fire-rated glazing that exceeds the code requirements. Fire-rated glazing assemblies marked as complying with hose stream requirements (H) shall be permitted in applications that do not require compliance with hose stream requirements. Fire-rated glazing assemblies marked as complying with temperature rise requirements (T) shall be permitted in applications that do not require compliance with temperature rise requirements. Fire-rated glazing assemblies marked with ratings (XXX) that exceed the ratings required by this code shall be permitted.

716.1.2.3 Fire-resistance-rated glazing. Fire-resistance-rated glazing tested as part of a fire-resistancerated wall or floor/ceiling assembly in accordance with ASTM E 119 or UL 263 and labeled in accordance with Section 703.6 shall not otherwise be required to comply with this section where used as part of a wall or floor/ceiling assembly.

716.1.2.3.1 Glazing in fire door and fire window assemblies. Fire-resistance-rated glazing shall be permitted in fire door assemblies and fire window assemblies where tested and installed in accordance with their listings and where in compliance with the requirements of Sections 716.2 and 716.3, respectively.

<u>FIRE TEST</u> STANDARD	MARKING	DEFINITION OF MARKING
ASTM E 119 or UL 263	W	Meets wall assembly criteria.
NFPA 257 or UL 9	UH	Meets fire window assembly criteria including the hose stream test.
NFPA 252 or UL 10B or UL 10C	H	Meets fire door assembly criteria. Meets fire door assembly hose stream test. Meets 450°F temperature rise criteria for 30 minutes
-	XXX	The time in minutes of the fire resistance or fire protection rating of the glazing assembly.

TABLE 716.1.A MARKING FIRE-RATED GLAZING ASSEMBLIES

For SI: °C = [(°F) - 32]/1.8.

TABLE 716.1.B OPENING FIRE PROTECTION ASSEMBLIES, RATINGS AND MARKINGS

<u>TYPE OF</u> ASSEMBLY	REQUIRED WALL ASSEMBLY RATING (hours)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (hours)	DOOR VISION PANEL SIZE [®]	FIRE- RATED GLAZING MARKING DOOR VISION PANEL ^a	<u>MINIMUM</u> <u>SIDELIGHT/</u> <u>TRANSOM</u> <u>ASSEMBLY</u> <u>RATING (hours)</u>		FIRE-RATED GLAZING MARKING SIDELIGHT/TRANSOM PANEL	
					Fire protection	<u>Fire</u> resistance	<u>Fire</u> protection	<u>Fire</u> resistance
Fire walls and fire barriers having a required fire- resistance rating greater than 1 hour	<u>4</u>	<u>3</u>	See Note b	<u>D-H-W-</u> <u>240</u>	<u>Not</u> Permitted	<u>4</u>	<u>Not</u> Permitted	<u>W-240</u>
	<u>3</u>	<u>3</u> ª	See Note b	<u>D-H-W-</u> <u>180</u>	<u>Not</u> Permitted	<u>3</u>	<u>Not</u> Permitted	<u>W-180</u>
	2	<u>1¹/2</u>	<u>100 sq. in.</u>	$\frac{\le 100 \text{ sq.}}{\text{in.} = \text{D-H-}} \\ \frac{90 > 100}{\text{sq. in.} = \text{D-}} \\ \frac{\text{H-W-90}}{\text{H-W-90}}$	<u>Not</u> Permitted	<u>2</u>	<u>Not</u> Permitted	<u>W-120</u>
	<u>1¹/2</u>	<u>1¹/2</u>	<u>100 sq. in.</u>	<u>≤100 sq.</u> <u>in. = D-H-</u> <u>90 >100</u> <u>sq. in.=D-</u> <u>H-W-90</u>	<u>Not</u> Permitted	<u>1¹/2</u>	<u>Not</u> Permitted	<u>W-90</u>

				<u>90</u>	Fire pro	tection		
Exterior walls	2	<u>1¹/2</u>	<u>100 sq.</u> in. ^b	≤100 sq. in. = D-H- <u>90 >100</u> sq. in.= <u>D-H-W-</u> 90	<u>Not</u> Permitted	<u>2</u>	<u>Not</u> Permitted	<u>W-120</u>
partitions	<u>3</u>	<u>1¹/2</u>	<u>100 sq.</u> in. ^b	<u>≤100 sq.</u> in. = D-H- <u>90 >100</u> <u>sq. in =</u> <u>D-H-W-</u> <u>90</u>	<u>Not</u> Permitted	<u>3</u>	<u>Not</u> Permitted	<u>W-180</u>
	<u>0.5</u>	<u>¹/3</u>	Maximum size tested	<u>D-H-20</u>	1 <u>/3</u>		<u>D-H-20</u>	
Fire partitions: Corridor walls Other fire	1	<u>³/4</u>	tested Maximum size tested	<u>D-H-45</u>	³ / ₄		<u>D-H-45</u>	
	<u>0.5</u>	<u>1/3</u> b	size tested Maximum size	<u>D-20</u>	<u>1/3</u>		<u>D-H-OH-20</u>	
<u>barriers</u>	<u>1</u>	<u>¹/3^b</u>	Maximum	<u>D-20</u>	<u><u> </u></u>		<u>D-H-OH-45</u>	
- Other fire	<u>1</u>	<u>³/4</u>	Maximum size tested	<u>D-H</u>	Fire pro		<u>-</u> <u>D-H</u>	
Horizontal exits in fire walls [®] Fire barriers having a required fire- resistance rating of 1 hour: Enclosures for shafts exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls	4 <u>3</u> 1	<u>3</u> <u>3</u> ^a <u>1</u>	<u>100 sq. in.</u> <u>100 sq. in.</u>	<u>180 > 100</u> <u>sq. in.=D-</u> <u>H-W-240</u> ≤ <u>100 sq.</u> <u>in. = D-H-</u> <u>180 > 100</u> <u>sq. in.=D-</u> <u>H-W-180</u> ≤ <u>100 sq.</u> <u>in. = D-H-</u> <u>60</u> <u>>100 sq.</u> <u>in.=</u> <u>D-H-T-W-</u> <u>60</u>	<u>Not</u> <u>Permitted</u>	4 <u>3</u> <u>1</u>	Not Permitted	<u>W-240</u> <u>W-180</u> <u>W-60</u>
<u>ramps.</u>		2	100.00 in	<u>H-T-W-90</u> <u>≤100 sq.</u> in. = D-H- 180 ≿ 100	<u>Not</u>	4	Not	W 240
Enclosures for shafts, interior exit stairways and interior exit	<u>2</u>	<u>1¹/2</u>	<u>100 sq. in.</u>	<u>≤100 sq.</u> <u>in. = D-H-</u> <u>90 > 100</u> <u>sq. in.=D-</u>	<u>Not</u> Permitted	<u>2</u>	<u>Not</u> Permitted	<u>W-120</u>

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	<u>1</u>	<u>³/4</u>	<u>Maximum</u> <u>size</u> <u>tested</u>	<u>D-H-45</u>	<u>³/</u> ₄	<u>D-H-45</u>
		_			Fire protection	_
<u>Smoke</u> barriers	<u>1</u>	<u>1/3</u>	<u>Maximum</u> <u>size</u> tested	<u>D-20</u>	<u>³/4</u>	<u>D-H-OH-45</u>

For SI: 1 square inch = 645.2 mm.

Two doors, each with a fire protection rating of 11/2 hours, installed on opposite sides of the same opening in a fire wall, shall be deemed equivalent in fire protection rating to one 3-hour fire door.

Fire-resistance-rated glazing tested to ASTM E 119 in accordance with Section 716.2 shall be permitted, in the maximum size tested.

Except where the building is equipped throughout with an automatic sprinkler and the fire-rated glazing meets the criteria С established in Section 716.5.5.

Under the column heading "Fire-rated glazing marking door vision panel," W refers to the fire-resistance rating of the glazing, not the frame.

See Section 716.5.8.1.2.1.

TABLE 716.1.C FIRE WINDOW ASSEMBLY FIRE PROTECTION RATINGS

<u>TYPE OF WALL</u> <u>ASSEMBLY</u>	REQUIRED WALL ASSEMBLY RATING (hours)	<u>MINIMUM</u> <u>FIRE</u> <u>WINDOW</u> <u>ASSEMBLY</u> <u>RATING</u> (hours)	<u>FIRE-</u> <u>RATED</u> <u>GLAZING</u> <u>MARKING</u>
Interior walls	_	_	_
Fire walls	All	<u>NP^a</u>	<u>W-XXX^b</u>
Fire barriers	> <u>1</u> <u>1</u>	<u>NP^a NP^a</u>	<u>W-XXX^b</u> <u>W-XXX^b</u>
Incidental use areas (Section 707.3.7), Mixed occupancy separations (Section 707.3.9)	<u>1</u>	<u>³/</u> ₄	<u>OH-45 or W-</u> <u>60</u>
Fire partitions	<u>1</u> <u>0.5</u>	³ / ₄ 1 <u>/3</u>	<u>OH-45 or W-60</u> <u>OH-20 or W-30</u>
Smoke barriers	<u>1</u>	$\frac{3}{4}$	<u>OH-45 or W-60</u>
Exterior walls	<u>>1</u> 1 05	$\frac{\frac{1}{3}\frac{1}{2}}{\frac{1}{2}}{\frac{1}{2}}{\frac{1}{2}}{\frac{1}{2}}{\frac{1}{2}}$	<u>OH-90 or W-</u> <u>XXX^b</u> <u>OH-45 or W-</u> <u>60</u> <u>OH-20 or W-</u> <u>30</u>
Party wall	All	NP	Not Applicable

<u>NP = Not Permitted.</u>

Not permitted except fire-resistance-rated glazing assemblies tested to ASTM E 119 or UL 263, as specified in Section 716.2. a.

XXX = The fire rating duration period in minutes, which shall be equal to the fire-resistance rating required for the wall b. assembly.

716.2 Fire door assemblies. Fire door assemblies required by other sections of this code shall comply with the provisions of this Section. Fire door frames with transom lights, sidelights or both shall be permitted in accordance with Section 716.2.5.4.



716.2.1 Testing requirements. Approved fire door and fire shutter assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Sections 716.2.1.1, 716.2.1.2, 716.2.1.3 or 716.2.1.4 and the *fire protection rating indicated in Table 716.1.B.*

Exceptions:

- 1. Labeled protective assemblies that conform to the requirements of this section or UL 10A, UL 14B, and UL 14C for tin-clad fire door assemblies.
- 2. Floor *fire door* assemblies in accordance with Section 712.1.13.1.

716.2.1.1 Side-hinged or pivoted swinging doors. Fire door assemblies with side-hinged and pivoted swinging doors shall be tested in accordance with NFPA 252 or UL 10C. After 5 minutes into the NFPA 252 test, the neutral pressure level in the furnace shall be established at 40 inches (1016 mm) or less above the sill.

716.2.1.2 Other fire door assemblies. Fire door assemblies with other types of doors, including swinging elevator doors, horizontal sliding fire door assemblies, and fire shutter assemblies, bottom and side-hinged chute intake doors, and top-hinged chute discharge doors, shall be tested in accordance with NFPA 252 or UL 10B. The pressure in the furnace shall be maintained as nearly equal to the atmospheric pressure as possible. Once established, the pressure shall be maintained during the entire test period.

716.2.1.3 Glazing in transoms lights and sidelights in corridors and smoke barriers. Glazing material in transom lights and sidelights of fire door assemblies shall be tested in accordance with NFPA 257 or UL 9, including the hose stream test, in accordance with Section 716.3.1.1.

716.2.1.4 Smoke and draft control. Smoke and draft control door assemblies shall be tested in accordance with UL 1784.

716.2.2 Performance requirements. Fire door assemblies shall be installed in the assemblies specified in Table 716.1.B and shall comply with the fire-protection rating specified.

716.2.2.1 Door assemblies in corridors and smoke barriers. Fire door assemblies required to have a minimum fire protection rating of 20 minutes where located in corridor walls or smoke barrier walls having a *fire-resistance rating* in accordance with Table 716.1.B shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

Exceptions:

- 1. Viewports that require a hole not larger than 1 inch (25 mm) in diameter through the door, have not less than a 0.25-inch-thick (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).
- 2. Corridor door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.
- 3. Unprotected openings shall be permitted for corridors in multitheater complexes where each motion picture auditorium has not fewer than one-half of its required exit or exit access doorways opening directly to the exterior or into an exit passageway.
- 4. Horizontal sliding doors in *smoke barriers* that comply with Sections 408.6 and 408.8.4 in occupancies in Group I-3.

716.2.2.1.1 Smoke and draft control. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 m3/s m2) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited.

716.2.2.2 Door assemblies in other fire partitions. Fire door assemblies required to have a

minimum fire protection rating of 20 minutes where located in other fire partitions having a fire-resistance rating of 0.5 hour in accordance with Table 716.1.B shall be tested in accordance with NFPA 252, UL 10B or UL 10C with the hose stream test.

716.2.2.3 Doors in interior exit stairways and ramps and exit passageways. Fire door assemblies in interior exit stairways and ramps and exit passageways shall have a maximum transmitted temperature rise of not more than 450°F (250°C) above ambient at the end of 30 minutes of standard fire test exposure.

Exception: The maximum transmitted temperature rise is not required in buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2.

716.2.2.3.1 Glazing in doors. Fire-protection-rated glazing in excess of 100 square inches (0.065 m2) is not permitted. Fire-resistance-rated glazing in excess of 100 square inches (0.065 m2) shall be permitted in fire doors. Listed fire-resistance-rated glazing in a fire door shall have a maximum transmitted temperature rise in accordance with Section 716.2.2.3 when the *fire door* is tested in accordance with NFPA 252, UL 10B or UL 10C.

716.2.3 Fire doors. Fire doors installed within a fire door assembly shall meet the fire rating indicated in Table 716.1.B.

716.2.4 Fire door frames. Fire door frames installed as part of a fire door assembly shall meet the fire rating indicated in Table 716.1.B.

716.2.5 Glazing in fire door assemblies. Fire-rated glazing and fire resistance-rated glazing conforming to the opening protection requirements in Section 716.2.2 shall be permitted in fire door assemblies.

716.2.5.1 Size limitations Fire-resistance-rated glazing shall comply with the size limitations in Section 716.2.5.1.1. Fire-protection-rated glazing shall comply with the size limitations of NFPA 80, and as provided in Section 716.2.5.1.2.

716.2.5.1.1 Fire-resistance-rated glazing in door assemblies in fire walls and fire barriers rated greater than 1 hour. Fire-resistance-rated glazing tested to ASTM E 119 or UL 263 and NFPA 252, UL 10B or UL 10C shall be permitted in *fire door assemblies* located in *fire walls* and in *fire bar*riers in accordance with Table 716.1.B to the maximum size tested and in accordance with their listings.

716.2.5.1.2 Fire-protection-rated glazing in door assemblies in fire walls and fire barriers rated greater than 1 hour. Fire-protection-rated glazing shall be prohibited in fire walls and fire barriers except as provided in Sections 716.2.5.1.2.1 and 716.2.5.1.2.2.

716.2.5.1.2.1 Horizontal exits. Fire-protection-rated glazing shall be permitted as vision panels in selfclosing swinging fire door assemblies serving as horizontal exits in fire walls where limited to 100 square inches (0.065 m2) with no dimension exceeding 10 inches (0.3 mm).

716.2.5.1.2.2 Fire barriers. Fire-protection-rated glazing shall be permitted in fire doors having a 1-1/2hour fire protection rating intended for installation in fire barriers, where limited to 100 square inches (0.065 m2).

716.2.5.2 Elevator, stairway and ramp protectives. Approved fire-protection-rated glazing used in fire door assemblies in elevator, stairway and ramp enclosures shall be so located as to furnish clear vision of the passageway or approach to the elevator, stairway or ramp.

716.2.5.3 Glazing in door assemblies in corridors and smoke barriers. In a 20-minute fire door assembly, the glazing material in the door itself shall have a minimum fire-protection-rated glazing of 20 minutes and shall be exempt from the hose stream test.

716.2.5.4] Glazing in fire door frames with transom lights and sidelights. Door frames with transom lights, sidelights or both, shall be permitted where a 3/4-hour fire protection rating or less is required in accordance with Table 716.1.B. Fire door frames with transom lights, sidelights, or both, installed

with fire-resistance-rated glazing tested as an assembly in accordance with ASTM E 119 or UL 263 shall be permitted where a fire protection rating exceeding 3/4 hour is required in accordance with Table 716.1.B.

<u>716.2.6 Fire door hardware and closures.</u> *Fire door* hardware and closures shall be installed on *fire door assemblies* in accordance with requirements of this section.

<u>716.2.6.1 Door closing.</u> *Fire doors* shall be latching and self- or automatic-closing in accordance with this section.

Exceptions:

- 1. Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without automatic- or self-closing devices.
- 2. The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.

716.2.6.2 Latch required. Unless otherwise specifically permitted, single *fire doors* and both leaves of pairs of side-hinged swinging *fire doors* shall be provided with an active latch bolt that will secure the door when it is closed.

<u>716.2.6.3 Chute intake door latching.</u> Chute intake doors shall be positive latching, remaining latched and closed in the event of latch spring failure during a fire emergency.

<u>716.2.6.4 Automatic-closing fire door assemblies.</u> Automatic-closing fire door assemblies shall be selfclosing in accordance with NFPA 80.

716.2.6.5 Smoke-activated doors. Automatic-closing doors installed in the following locations shall be automatic-closing by the actuation of smoke detectors installed in accordance with Section 907.3 or by loss of power to the smoke detector or hold-open device. Doors that are automatic-closing by smoke detection shall not have more than a 10-second delay before the door starts to close after the smoke detector is actuated:

- 1. Doors installed across a corridor.
- 2. <u>Doors installed in the enclosures of *exit access stairways* and *ramps* in accordance with Sections 1019 and 1023, respectively.</u>
- 3. <u>Doors that protect openings in exits or corridors required to be of fire-resistance-rated construction.</u>
- 4. <u>Doors that protect openings in walls that are capable of resisting the passage of smoke in accordance with Section 509.4.</u>
- 5. Doors installed in *smoke barriers* in accordance with Section 709.5.
- 6. Doors installed in *fire partitions* in accordance with Section 708.6.
- 7. Doors installed in a *fire wall* in accordance with Section 706.8.
- 8. Doors installed in shaft enclosures in accordance with Section 713.7.
- 9. Doors installed in waste and linen chutes, discharge openings and access and discharge rooms in accordance with Section 713.13. Loading doors installed in waste and linen chutes shall meet the requirements of Sections 716.2.6.1 and 716.2.6.3.
- 10. <u>Doors installed in the walls for compartmentation of underground buildings in accordance with</u> <u>Section 405.4.2.</u>
- 11. <u>Doors installed in the elevator lobby walls of underground buildings in accordance with Section</u> <u>405.4.3.</u>
- 12. Doors installed in *smoke partitions* in accordance with Section 710.5.2.3.

716.2.6.6 Doors in pedestrian ways. Vertical sliding or vertical rolling steel fire doors in openings through which pedestrians travel shall be heat activated or activated by smoke detectors with alarm verification.

716.2.7 Swinging fire shutters. Where fire shutters of the swinging type are installed in exterior openings, not less than one row in every three vertical rows shall be arranged to be readily opened from the outside, and shall be identified by distinguishing marks or letters not less than 6 inches (152 mm) high.

716.2.8 Rolling fire shutters. Were fire shutters of the rolling type are installed, such shutters shall include *approved* automatic-closing devices.

716.2.9 Labeled protective assemblies. Fire door assemblies shall be labeled by an approved agency. The labels shall comply with NFPA 80, and shall be permanently affixed to the door or frame.

716.2.9.1 Fire door labeling requirements. Fire doors shall be labeled showing the name of the manufacturer or other identification readily traceable back to the manufacturer, the name or trademark of the third party inspection agency, the fire protection rating and, where required for fire doors in interior exit stairways and ramps and exit passageways by Section 716.2.2.3, the maximum transmitted temperature end point. Smoke and draft control doors complying with UL 1784 shall be labeled as such and shall comply with Section 716.2.9.3. Labels shall be approved and permanently affixed. The label shall be applied at the factory or location where fabrication and assembly are performed.

716.2.9.1.1 Light kits, louvers and components. *Listed* light kits and louvers and their required preparations shall be considered as part of the *labeled* door where such installations are done under the listing program of the third-party agency. Fire doors and fire door assemblies shall be permitted to consist of components, including glazing, vision light kits and hardware that are *listed* or classified and labeled for such use by different third-party agencies.

716.2.9.2 Oversized doors. Oversized fire doors shall bear an oversized fire door label by an approved agency or shall be provided with a certificate of inspection furnished by an approved testing agency. Where a certificate of inspection is furnished by an approved testing agency, the certificate shall state that the door conforms to the requirements of design, materials and construction, but has not been subjected to the fire test.

716.2.9.3 Smoke and draft control door labeling requirements. Smoke and draft control doors complying with UL 1784 shall be labeled in accordance with Section 716.2.9.1 and shall show the letter "S" on the fire-rating label of the door. This marking shall indicate that the door and frame assembly are in compliance where listed or labeled gasketing is installed.

716.2.9.4 Fire door frame labeling requirements. Fire door frames shall be labeled showing the names of the manufacturer and the third-party inspection agency.

716.2.9.5 Fire door glazing labeling requirements. Fire-rated glazing shall bear a label or other identification showing the name of the manufacturer, the test standard and information required in Table 716.1.A that shall be issued by an *approved* agency and shall be permanently identified on the glazing. 716.2.9.6 Fire door operator labeling requirements. Fire door operators for horizontal sliding doors shall be *labeled* and *listed* for use with the assembly.

716.2.10 Installation of fire door assemblies and fire shutter assemblies. Fire door assemblies and shutters shall be installed in accordance with the provisions of this section and NFPA 80.

716.2.10.1 Doors assemblies in corridors and smoke barriers. Installation of smoke doors shall be in accordance with NFPA 105.

Copyright © 2017 ICC. ALL RIGHTS RESERVED. Accessed by Mohammed Madani on Dec 15, 2017 SOL-30 AM PARAMENT OF THE FEDERAL COPYRIGHT ACT ABC 2265 CENSE 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 716.3 Fire window assemblies. Fire window assemblies required by other sections of this code shall comply with the provisions of this Section.

716.3.1 Testing requirements. Fire window assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Section 716.3.1.1 and 716.3.1.2 and the *fire protection rating* indicated in Table 716.1.C.

716.3.1.1 Testing under positive pressure. NFPA 257 or UL 9 shall evaluate fire-protectionrated glazing under positive pressure. Within the first 10 minutes of a test, the pressure in the furnace shall be adjusted so not less than two-thirds of the test specimen is above the neutral pressure plane, and the neutral pressure plane shall be maintained at that height for the balance of the test.

716.3.1.2 Nonsymmetrical glazing systems. Nonsymmetrical fire-protection-rated glazing systems in fire partitions, fire barriers or in exterior walls with a fire separation distance of 5 feet (1524 mm) or less pursuant to Section 705 shall be tested with both faces exposed to the furnace, and the assigned fire protection rating shall be the shortest duration obtained from the two tests conducted in compliance with NFPA 257 or UL 9.

716.3.2 Performance requirements. Fire window assemblies shall be installed in the assemblies specified in Table 716.1.C and shall comply with the *fire-protection rating* specified.

716.3.2.1 Interior fire window assemblies. Fire-protection-rated glazing used in fire window assemblies located in fire partitions and fire barriers shall be limited to use in assemblies with a maximum *fire-resistance rating* of 1 hour in accordance with this section.

716.3.2.1.1 Where 3/4-hour fire protection window assemblies permitted. Fire-protectionrated glazing requiring 45-minute opening protection in accordance with Table 716.1.C shall be limited to fire partition designed in accordance with Section 708 and fire barriers utilized in the applications set forth in Sections 707.3.6 and 707.3.8 where the fire-resistance rating does not exceed 1 hour. Fireresistance-rated glazing assemblies tested in accordance with ASTM E 119 or UL 263 shall not be subject to the limitations of this section.

716.3.2.1.2 Area limitations. The total area of the glazing in *fire-protection-rated* window assemblies shall not exceed 25 percent of the area of a common wall with any room.

716.3.2.1.3 Where 1/3-hour fire-protection window assemblies permitted. Fire-protectionrated glazing shall be permitted in window assemblies tested to NFPA 257 or UL 9 in smoke *barriers* and *fire partitions* requiring 1/3-hour opening protection in accordance with Table 716.1.C.

716.3.3 Fire window frames. Fire window frames installed with a fire window assembly shall meet the *fire-protection rating* indicated in Table 716.1.C.

716.3.3.1 Window mullions. Metal mullions that exceed a nominal height of 12 feet (3658 mm) shall be protected with materials to afford the same *fire-resistance rating* as required for the wall construction in which the protective is located.

716.3.4 Glazing in fire window assemblies. Glazing in fire window assemblies shall be fire protection rated in accordance with this section and Table 716.1.C. Fire-protection-rated glazing in fire window assemblies shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257 or UL 9. Fire-protection-rated glazing shall comply with NFPA 80. Openings in nonfire-resistance-rated exterior wall assemblies that require protection in accordance with Section 705.3, 705.8, 705.8.5 or 705.8.6 shall have a fire protection rating of not less than 3/4 hour. Fire-protection-rated glazing in 0.5-hour fireresistance-rated partitions is permitted to have an 0.33-hour fire protection rating.

716.3.4.1 Glass and glazing. Glazing in fire window assemblies shall be fire-protection-rated glazing installed in accordance with and complying with the size limitations set forth in NFPA 80.

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716.3.5 Labeled protective assemblies. Glazing in fire window assemblies shall be labeled by an approved agency. The labels shall comply with NFPA 80, and shall comply with Section 716.3.5.2.

716.3.5.1 Fire window frames. Fire window frames shall be *approved* for the intended application.

716.3.5.2 Fire window glazing labeling requirements. Fire-protection-rated glazing shall bear a label or other identification showing the name of the manufacturer, the test standard and information required in Section 716.1.2.2.2 and Table 716.1.C that shall be issued by an *approved* agency and permanently identified on the glazing.

716.3.6 Installation. Fire window assemblies shall be installed in accordance with the provisions of this Section.

716.3.6.1 Closure. Fire-protection-rated glazing shall be in the fixed position or be automatic-closing and shall be installed in *approved* frames.

Reason: This proposal is submitted by the ICC Fire Code Action Committee (FCAC). This ICC committee 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 as well as the code content in terms of scope and application of referenced standards. The Fire-CAC has held 2 open meetings and numerous Regional Work Group and Task Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the FAC website at: http://www.iccsafe.org/cs/CAC/Pages/default.aspx?usertoken={token}&Site=icc

The FCAC opening protective work group included interested industry and testing lab representatives working together to make this section more user friendly. The work group unanimously agreed on a wide range of proposed changes to IBC Section 716.

This proposal is essentially a reorganization of Section 716 with no substantive changes, except for the some new titles and new charging statements to make the section flow smoother. The reorganization was needed because the current requirements are not in a logical order, and skip around between testing requirements, rating requirements, installation and labeling. The new Section 716 is organized into General (716.1), Fire door assemblies (716.2), and Fire window assemblies (716.3) sections.

For clarity, the above proposal shows how the new section is intended to appear. The following guide shows how the current 2015

IBC requirements were moved and modified to accomplish the above proposal.

Text Revision Key

- 1. Underlined - New or modified text added to enhance document flow
- Bold & underline Section or Table references which have been updated 2.
- Strikethrough Text which has been relocated, or deleted as not appropriate in the reorganized Section 3.
- (Parenthesis) 2015 IBC Section 716 source of text, or where deleted text has been relocated to in the reorganized Section Revised Text

716.1 General. (From 716.1) Opening protectives required by other sections of this code shall comply with the provisions of this section.

716.1.1 Alternative methods for determining fire protection ratings. (From 716.4) The application of any of the alternative methods listed in this section shall be based on the fire exposure and acceptance criteria specified in NFPA 252, NFPA 257 or UL 9. The required fire resistance of an opening protective shall be permitted to be established by any of the following methods or procedures:

- Designs documented in approved sources. 1.
- Calculations performed in an approved manner. 2.
- 3. Engineering analysis based on a comparison of opening protective designs having fire protection ratings as determined by the test procedures set forth in NFPA 252, NFPA 257 or UL 9.
- Alternative protection methods as allowed by Section 104.11. 4.

716.1.2 Glazing. (New) Glazing used in fire door assemblies and fire window assemblies shall comply with this section in addition to the requirements of Sections 716.2 and 716.3, respectively.

716.1.2.1 Safety glazing. (From 716.5.8.4 and 716.6.3) Fire-protection-rated glazing and fire-resistance-rated glazing installed in fire door assemblies and fire window assemblies shall comply with the safety glazing requirements of Chapter 24 where applicable.

716.1.2.2 Marking fire-rated glazing assemblies. (From 716.3) Fire-rated glazing assemblies shall be marked in accordance with Tables 716.3716.1.A, 716.5 716.1.B and 716.6716.1.C.

716.1.2.2.1 Fire-rated glazing identification. (From 716.3.1) For fire-rated glazing, the label shall bear the identification required in Tables 746.3716.1.A and 746.5716.1.B. "D" indicates that the glazing is permitted to be used in fire door assemblies and that the glazing meets the fire protection requirements of NFPA 252. "H" shall indicate that the glazing meets the hose stream requirements of NFPA 252. "T" shall indicate that the glazing meets the temperature requirements of Section 716.5.5.1716.2.2.3.1. The placeholder "XXX" represents the fire-rating period, in minutes.

716.1.2.2.2 Fire-protection-rated glazing identification. (From 716.3.2) For fire-protection-rated glazing, the label shall bear the following identification required in Tables 716.3716.1.A and 716.6716.1.C: "OH - XXX." "OH" indicates that the glazing meets both the fire protection and the hose-stream requirements of NFPA 257 or UL 9 and is permitted to be used in fire window openings. The placeholder "XXX" represents the fire-rating period, in minutes.

716.1.2.2.3 Fire-resistance-rated glazing identification. (New) For fire-resistance-rated glazing, the label shall bear the identification required in Section 703.6 and Table 716.1.A.

716.1.2.2.4 Fire-rated glazing that exceeds the code requirements. (From 716.3.3) Fire-rated glazing assemblies marked as complying with hose stream requirements (H) shall be permitted in applications that do not require compliance with hose stream requirements. Fire-rated glazing assemblies marked as complying with temperature rise requirements (T) shall be permitted in applications that do not require compliance with temperature rise requirements. Fire-rated glazing assemblies marked with ratings (XXX) that exceed the ratings required by this code shall be permitted.

716.1.2.3 Fire-resistance-rated glazing. (From 716.2) Fire-resistance-rated glazing tested as part of a fire-resistance-rated wall or floor/ceiling assembly in accordance with ASTM E 119 or UL 263 and labeled in accordance with Section 703.6 shall not otherwise be required to comply with this section where used as part of a wall or floor/ceiling assembly. Fire-resistance-rated glazing shall be permitted in fire door and fire window assemblies where tested and installed in accordance with their listings and where in compliance with the requirements of this section. (Relocated to new Section 716.1.2.3.1)

716.1.2.3.1 Glazing in fire door and fire window assemblies. (From 716.2) Fire-resistance-rated glazing shall be permitted in fire door and fire window assemblies where tested and installed in accordance with their listings and where in compliance with the requirements of Sections 716.2 and 716.3, respectively.

716.2 Fire door assemblies. (New) Fire door assemblies required by other sections of this code shall comply with the provisions of this Section. (From 716.5.6) Fire door frames with transom lights, sidelights or both shall be permitted in accordance with Section 716.5.6716.2.5.4.

716.2.1 Testing requirements. (From 716.5) Approved fire door and fire shutter assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of

Sections 716.5.1716.2.1.1,716.5.2716.2.1.2,716.5.3716.2.1.3 or 716.4716.2.1.4 and the fire protection rating indicated in Table 716.5716.1.B. Fire door frames with transom lights, sidelights or both shall be permitted in accordance with Section 716.5.6. (Relocated to new Section 716.2) Fire door assemblies and shutters shall be installed in accordance with the provisions of this section and NFPA 80. (Relocated to new Section 716.2.10)

Exceptions:

1. Labeled protective assemblies that conform to the requirements of this section or UL 10A, UL 14B, and UL 14C for tin-clad fire door assemblies.

2. Floor fire door assemblies in accordance with Section 712.1.13.1.

716.2.1.1 Side-hinged or pivoted swinging doors. (From 716.5.1) Fire door assemblies with side-hinged and pivoted swinging doors shall be tested in accordance with NFPA 252 or UL 10C. After 5 minutes into the NFPA 252 test, the neutral pressure level in the furnace shall be established at 40 inches (1016 mm) or less above the sill.

716.2.1.2 Other fire door assemblies. (From 716.5.2) Fire door assemblies with other types of doors, including swinging elevator doors, horizontal sliding fire door assemblies, and fire shutter assemblies, bottom and side-hinged chute intake doors, and tophinged chute discharge doors, shall be tested in accordance with NFPA 252 or UL 10B. The pressure in the furnace shall be maintained as nearly equal to the atmospheric pressure as possible. Once established, the pressure shall be maintained during the entire test period.

716.2.1.3 Glazing in transoms lights and sidelights in corridors and smoke barriers. (From 716.5.3.2) Glazing material in any other part of the door assembly, including (Deleted as not relevant to reorganized document) transom lights and sidelights of fire door assemblies, shall be tested in accordance with NFPA 257 or UL 9, including the hose stream test, in accordance with Section 716.6716.3.1.1.

716.2.1.4 Smoke and draft control. (From 716.5.3.1) Fire door assemblies shall meet the requirements for a s Smoke and draft control door-assembly assemblies shall be tested in accordance with UL 1784. The air leakage rate of the door assembly shall not

Copyright © 2017 ICC. ALL RIGHTS RESERVED. Accessed by Monammed Madanii on Dec 19, 2017 002.30 AUT parton of the Federal Copyright act and the second 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 exceed 3.0 cubic feet per minute per square foot (0.01524 m3/s m2) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. (Relocated to new Section

716.2.2.1.1) Installation of smoke doors shall be in accordance with NFPA 105. (Relocated to new Section 716.2.10.1)

T16.2.2 Performance requirements. (New) Fire door assemblies shall be installed in the assemblies specified in Table 716.1.B and shall comply with the fire-protection rating specified.

716.2.2.1 Door assemblies in corridors and smoke barriers. (From 716.5.3) Fire door assemblies required to have a minimum fire protection rating of 20 minutes where located in corridor walls or smoke barrier walls having a fire-resistance rating in accordance with Table 716.5 716.1.B shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

Exceptions:

Viewports that require a hole not larger than 1 inch (25 mm) in diameter through the door, have not less than a 0.25-inch-thick 1. (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).

Corridor door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.

Unprotected openings shall be permitted for corridors in multitheater complexes where each motion picture auditorium has not 3. fewer than one-half of its required exit or exit access doorways opening directly to the exterior or into an exit passageway.

Horizontal sliding doors in smoke barriers that comply with Sections 408.6 and 408.8.4 in occupancies in Group I-3.

716.2.2.1.1 Smoke and draft control. (From 716.5.3.1) The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 m3/s m2) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited.

716.2.2.2 Door assemblies in other fire partitions. (From 716.5.4) Fire door assemblies required to have a minimum fire protection rating of 20 minutes where located in other fire partitions having a fire-resistance rating of 0.5 hour in accordance with Table 716-5716.1.B shall be tested in accordance with NFPA 252, UL 10B or UL 10C with the hose stream test.

716.2.2.3 Doors in interior exit stairways and ramps and exit passageways. (From 716.5.5) Fire door assemblies in interior exit stairways and ramps and exit passageways shall have a maximum transmitted temperature rise of not more than 450°F (250°C) above ambient at the end of 30 minutes of standard fire test exposure.

Exception: The maximum transmitted temperature rise is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

716.2.2.3.1 Glazing in doors. (From 716.5.5.1) Fire-protection-rated glazing in excess of 100 square inches (0.065 m2) is not permitted. Fire-resistance-rated glazing in excess of 100 square inches (0.065 m2) shall be permitted in door fire doors. Listed fireresistance-rated glazing in a fire door shall have a maximum transmitted temperature rise in accordance with Section 716.5.5 716.2.2.3 when the fire door is tested in accordance with NFPA 252, UL 10B or UL 10C.

716.2.3 Fire doors. (New) Fire doors installed within a fire door assembly shall meet the fire rating indicated in Table 716.1.B.

716.2.4 Fire door frames. (New) Fire door frames installed as part of a fire door assembly shall meet the fire rating indicated in Table 716.1.B.

716.2.5 Glazing in fire doors assemblies. (From 716.5.8) Fire-rated glazing and fire resistance-rated glazing conforming to the opening protection requirements in Section 716.5716.2.2 shall be permitted in fire door assemblies.

716.2.5.1 Size limitations. (From 716.5.8.1) Fire-resistance-rated glazing shall comply with the size limitations in Section 716.5.8.1.1716.2.5.1.1. Fire-protection-rated glazing shall comply with the size limitations of NFPA 80, and as provided in Section 716.5.8.1.2716.2.5.1.2

716.2.5.1.1 Fire-resistance-rated glazing in door assemblies in fire walls and fire barriers rated greater than 1 hour. (From 716.5.8.1.1) Fire-resistance-rated glazing tested to ASTM E 119 or UL 263 and NFPA 252, UL 10B or UL 10C shall be permitted in fire door assemblies located in fire walls and in fire barriers in accordance with Table 716.5716.1.B to the maximum size tested and in accordance with their listings.

716.2.5.1.2 Fire-protection-rated glazing in door assemblies in fire walls and fire barriers rated greater than 1 hour. (From 716.5.8.1.2) Fire-protection-rated glazing shall be prohibited in fire walls and fire barriers except as provided in Sections 716.5.8.1.2.1 716.2.5.1.2.1 and 716.5.8.1.2.2716.2.5.1.2.2.

716.2.5.1.2.1 Horizontal exits. (From 716.5.8.1.2.1) Fire-protection-rated glazing shall be permitted as vision panels in self-closing swinging fire door assemblies serving as horizontal exits in fire walls where limited to 100 square inches (0.065 m2) with no dimension exceeding 10 inches (0.3 mm).

716.2.5.1.2.2 Fire barriers. (From 716.5.8.1.2.2) Fire-protection-rated glazing shall be permitted in fire doors having a 1-1/2-hour fire protection rating intended for installation in fire barriers, where limited to 100 square inches (0.065 m2).

716.2.5.2 Elevator, stairway and ramp protectives. (From 716.5.8.2) Approved fire-protection-rated glazing used in fire door

assemblies in elevator, stairway and ramp enclosures shall be so located as to furnish clear vision of the passageway or approach to the elevator, stairway or ramp.

716.2.5.3 Glazing in door assemblies in corridors and smoke barriers. (From 716.5.3.2) In a 20-minute fire door assembly, the glazing material in the door itself shall have a minimum fire-protection-rated glazing of 20 minutes and shall be exempt from the hose stream test. Glazing material in any other part of the door assembly, including transom lights and sidelights, shall be tested in accordance with NFPA 257 or UL 9, including the hose stream test, in accordance with Section 716.6. (Relocated to new Section 716.2.1.3)

716.2.5.4 Glazing in fire door frames with transom lights and sidelights. (From 716.5.6) Door frames with transom lights, sidelights or both, shall be permitted where a 3/4-hour fire protection rating or less is required in accordance with Table 716.5716.1.B. Fire door frames with transom lights, sidelights, or both, installed with fire-resistance-rated glazing tested as an assembly in accordance with ASTM E 119 or UL 263 shall be permitted where a fire protection rating exceeding 3/4 hour is required in accordance with Table 716.5716.1.B.

716.2.6 Fire door hardware and closures. (New) Fire door hardware and closures shall be installed on fire door assemblies in accordance with requirements of this section.

716.2.6.1 Door closing. (From 716.5.9) Fire doors shall be latching and self- or automatic-closing in accordance with this section. Exceptions:

1. Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without automatic- or selfclosing devices.

The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.

716.2.6.2 Latch required. (From 716.5.9.1) Unless otherwise specifically permitted, single fire doors and both leaves of pairs of sidehinged swinging fire doors shall be provided with an active latch bolt that will secure the door when it is closed.

716.2.6.3 Chute intake door latching. (From 716.5.9.1.1) Chute intake doors shall be positive latching, remaining latched and closed in the event of latch spring failure during a fire emergency.

716.2.6.4 Automatic-closing fire door assemblies. (From 716.5.9.2) Automatic-closing fire door assemblies shall be self-closing in accordance with NFPA 80.

716.2.6.5 Smoke-activated doors. (From 716.5.9.3) Automatic-closing doors installed in the following locations shall be automaticclosing by the actuation of smoke detectors installed in accordance with Section 907.3 or by loss of power to the smoke detector or hold-open device. Doors that are automatic-closing by smoke detection shall not have more than a 10-second delay before the door starts to close after the smoke detector is actuated:

1. Doors installed across a corridor.

Doors installed in the enclosures of exit access stairways and ramps in accordance with Sections 1019 and 1023, 2. respectively.

- Doors that protect openings in exits or corridors required to be of fire-resistance-rated construction. 3.
- Doors that protect openings in walls that are capable of resisting the passage of smoke in accordance with Section 509.4. 4.
- 5. Doors installed in smoke barriers in accordance with Section 709.5.
- Doors installed in fire partitions in accordance with Section 708.6. 6.
- Doors installed in a fire wall in accordance with Section 706.8. 7.
- Doors installed in shaft enclosures in accordance with Section 713.7. 8.

Doors installed in waste and linen chutes, discharge openings and access and discharge rooms in accordance with 9. Section

713.13. Loading doors installed in waste and linen chutes shall meet the requirements of Sections 716.5.9716.2.6.1 and 716.5.9.1.1716.2.6.3.

- 10. Doors installed in the walls for compartmentation of underground buildings in accordance with Section 405.4.2.
- 11. Doors installed in the elevator lobby walls of underground buildings in accordance with Section 405.4.3.
- 12. Doors installed in smoke partitions in accordance with Section 710.5.2.3.

716.2.6.6 Doors in pedestrian ways. (From 716.5.9.4) Vertical sliding or vertical rolling steel fire doors in openings through which pedestrians travel shall be heat activated or activated by smoke detectors with alarm verification.

716.2.7 Swinging fire shutters. (From 716.5.10) Where fire shutters of the swinging type are installed in exterior openings, not less than one row in every three vertical rows shall be arranged to be readily opened from the outside, and shall be identified by distinguishing marks or letters not less than 6 inches (152 mm) high.

716.2.8 Rolling fire shutters. (From 716.5.11) Where fire shutters of the rolling type are installed, such shutters shall include approved automatic-closing devices.



716.2.9 Labeled protective assemblies. (From 716.5.7) Fire door assemblies shall be labeled by an approved agency. The labels shall comply with NFPA 80, and shall be permanently affixed to the door or frame.

716.2.9.1 Fire door labeling requirements. (From 716.5.7.1) Fire doors shall be labeled showing the name of the manufacturer or other identification readily traceable back to the manufacturer, the name or trademark of the third party inspection agency, the fire protection rating and, where required for fire doors in interior exit stairways and ramps and exit passageways by Section 716.5.5716.2.2.3, the maximum transmitted temperature end point. Smoke and draft control doors complying with UL 1784 shall be labeled as such and shall comply with Section 716.5.7.3716.2.9.3. Labels shall be approved and permanently affixed. The label shall be applied at the factory or location where fabrication and assembly are performed.

716.2.9.1.1 Light kits, louvers and components. (From 716.5.7.1.1) Listed light kits and louvers and their required preparations shall be considered as part of the labeled door where such installations are done under the listing program of the third-party agency. Fire doors and door assemblies shall be permitted to consist of components, including glazing, vision light kits and hardware that are listed or classified and labeled for such use by different third-party agencies.

716.2.9.2 Oversized doors. (From 716.5.7.2) Oversized fire doors shall bear an oversized fire door label by an approved agency or shall be provided with a certificate of inspection furnished by an approved testing agency. Where a certificate of inspection is furnished by an approved testing agency, the certificate shall state that the door conforms to the requirements of design, materials and construction, but has not been subjected to the fire test.

716.2.9.3 Smoke and draft control door labeling requirements. (From 716.5.7.3) Smoke and draft control doors complying with UL 1784 shall be labeled in accordance with Section 716.5.7.1716.2.9.1 and shall show the letter "S" on the fire-rating label of the door. This marking shall indicate that the door and frame assembly are in compliance where listed or labeled gasketing is installed.

716.2.9.4 Fire door frame labeling requirements. (From 716.5.7.4) Fire door frames shall be labeled showing the names of the manufacturer and the third-party inspection agency.

716.2.9.5 Fire door glazing labeling requirements. (From 716.5.8.3) Fire-rated glazing shall bear a label or other identification showing the name of the manufacturer, the test standard and information required in Table 746.3716.1.A that shall be issued by an approved agency and shall be permanently identified on the glazing.

716.2.9.6 Fire door operator labeling requirements. (From 716.7.5) Fire door operators for horizontal sliding doors shall be labeled and listed for use with the assembly.

716.2.10 Installation of fire door assemblies and fire shutter assemblies. (From 716.5) Fire door assemblies and shutters shall be installed in accordance with the provisions of this section and NFPA 80.

716.2.10.1 Doors assemblies in corridors and smoke barriers. (From 716.5.3.1) Installation of smoke doors shall be in accordance with NFPA 105.

716.3 Fire window assemblies. (New) Fire window assemblies required by other sections of this code shall comply with the provisions of this Section.

716.3.1 Testing requirements. (New, but wording similar to 716.5) Fire window assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Section 716.3.1.1 and 716.3.1.2 and the fire protection rating indicated in Table 716.1.C.

716.3.1.1 Testing under positive pressure. (From 716.6.1) NFPA 257 or UL 9 shall evaluate fire-protection-rated glazing under positive pressure. Within the first 10 minutes of a test, the pressure in the furnace shall be adjusted so not less than two-thirds of the test specimen is above the neutral pressure plane, and the neutral pressure plane shall be maintained at that height for the balance of the test.

716.3.1.2 Nonsymmetrical glazing systems. (From 716.6.2) Nonsymmetrical fire-protection-rated glazing systems in fire partitions, fire barriers or in exterior walls with a fire separation distance of 5 feet (1524 mm) or less pursuant to Section 705 shall be tested with both faces exposed to the furnace, and the assigned fire protection rating shall be the shortest duration obtained from the two tests conducted in compliance with NFPA 257 or UL 9.

716.3.2 Performance requirements. (New) Fire window assemblies shall be installed in the assemblies specified in Table 716.1.C and shall comply with the fire-protection rating specified.

716.3.2.1 Interior fire window assemblies. (From 716.6.7) Fire-protection-rated glazing used in fire window assemblies located in fire partitions and fire barriers shall be limited to use in assemblies with a maximum fire-resistance rating of 1 hour in accordance with this section.

716.3.2.1.1 Where 3/4-hour fire protection window assemblies permitted. (From 716.6.7.1) Fire-protection-rated glazing requiring 45-minute opening protection in accordance with Table 716.6716.1.C shall be limited to fire partition designed in accordance with Section 708 and fire barriers utilized in the applications set forth in Sections 707.3.6 and 707.3.8 where the fire-resistance rating does not exceed 1 hour. Fire-resistance-rated glazing assemblies tested in accordance with ASTM E 119 or UL 263 shall not be subject to the limitations of this section.



Copyright © 2017 ICC. ALL RIGHTS RESERVED. Accessed by Monammed Madanii on Dec 19, 2017 002.30 AUT Parton of the Federal Copyright act and the second part of the federal Copyright act and the second part of the second par 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 716.3.2.1.2 Area limitations. (From 716.6.7.2) The total area of the glazing in fire-protection-rated window assemblies shall not exceed 25 percent of the area of a common wall with any room.

716.3.2.1.3 Where 1/3-hour fire-protection window assemblies permitted. (From 716.6.7.3) Fire-protection-rated glazing shall be permitted in window assemblies tested to NFPA 257 or UL 9 in smoke barriers and fire partitions requiring 1/3-hour opening protection in accordance with Table 716.6716.1.C.

716.3.3 Fire window frames. (New) Fire window frames installed with a fire window assembly shall meet the fire-protection rating indicated in Table 716.1.C.

716.3.3.1 Window mullions. (From 716.6.6) Metal mullions that exceed a nominal height of 12 feet (3658 mm) shall be protected with materials to afford the same fire-resistance rating as required for the wall construction in which the protective is located.

716.3.4 Glazing in fire window assemblies. (From 716.6) Glazing in fire window assemblies shall be fire protection rated in accordance with this section and Table 716.6716.1.C. Glazing in fire door assemblies shall comply with Section 716.5.8. (Deleted as not relevant to reorganized document) Fire-protection-rated glazing in fire window assemblies shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257 or UL 9. Fire-protection-rated glazing shall comply with NFPA 80. Openings in nonfire-resistance-rated exterior wall assemblies that require protection in accordance with Section 705.3, 705.8, 705.8.5 or 705.8.6 shall have a fire protection rating of not less than 3/4 hour. Fire-protection-rated glazing in 0.5-hour fire-resistance-rated partitions is permitted to have an 0.33-hour fire protection rating.

716.3.4.1 Glass and glazing. (From 716.6.4) Glazing in fire window assemblies shall be fire-protection-rated glazing installed in accordance with and complying with the size limitations set forth in NFPA 80.

716.3.5 Labeled protective assemblies. (New, but wording similar to 716.5.7) Glazing in fire window assemblies shall be labeled by an approved agency. The labels shall comply with NFPA 80, and shall comply with Section 716.3.5.2.

716.3.5.1 Fire window frames. (New) Fire window frames shall be approved for the intended application.

716.3.5.2 Fire window glazing labeling requirements. (From 716.6.8) Fire-protection-rated glazing shall bear a label or other identification showing the name of the manufacturer, the test standard and information required in Section 716.3.2716.1.2.2.2 and Table 716.6-716.1.C that shall be issued by an approved agency and permanently identified on the glazing.

716.3.6 Installation. (New) Fire window assemblies shall be installed in accordance with the provisions of this Section.

716.3.6.1 Closure. (From 716.6.5) Fire-protection-rated glazing shall be in the fixed position or be automatic-closing and shall be installed in approved frames.

Renumber Existing Tables as Follows

- Table 716.3 becomes Table 716.1.A
- Table 716.5 becomes Table 716.1.B 2
- 3. Table 716.6 becomes Table 716.1.C

Cost Impact: Will not increase the cost of construction

This code change is a reorganization of existing requirements. No new requirements for providing opening protectives have been added.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee agreed that the reorganization was editorial and provided for more effective application and enforcement of the provisions.

Assembly Action

Final Hearing Results

FS100-15

AS

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Approved as Submitted

None

Back

Code Change No: FS103-15

Original Proposal

Section: 717.1.2 (IMC 607.1.2)

Proponent: Homer Maiel, PE, representing ICC Tri-Chapter (Peninsula, East Bay, Monterey Bay) (hmaiel@gmail.com)

Revise as follows:

717.1.2 Ducts that penetrate fire-resistance-rated assemblies without dampers. Ducts that penetrate fire-resistance-rated assemblies walls and are not required by this section to have dampers shall comply with the requirements of Sections 714.2 through 714.3.3. Ducts that penetrate horizontal assemblies not required to be contained within a shaft and not required by this section to have *dampers* shall comply with the requirements of Sections 714.4 through 714.5.2.

Reason: The purpose of this proposal is to clarify that Section 714.3 is on rated walls and 714.3 is on horizontal assemblies. To say "fire-resistance-rated assemblies" may confuse some code users.

Cost Impact: Will not increase the cost of construction

This proposal will not increase cost of construction. Since this proposal is only clarification to the code language, it will not increase the cost of construction. Here, "assemblies" actually is alluding to "walls" all along. There are no newly added technical requirements that would trigger additional cost.



Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that this proposal clarifies that Section 714.3 is applicable to rated walls and 714.4 is on horizontal assemblies.

Assembly Action

Final Hearing Results

FS103-15

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Code Change No: FS104-15

Original Proposal

Section: 714.1.1, 717.1.2

Proponent: Tony Crimi, representing International Firestop Council (tcrimi@sympatico.ca)

Revise as follows:

717.1.2 Ducts that penetrate fire-resistance-rated assemblies without dampers. Ducts that penetrate fire-resistance-rated assemblies and are not required by this section to have *fire_dampers* shall comply with the requirements of Sections 714.2 through 714.3.3. Ducts that penetrate horizontal assemblies not required to be contained within a shaft and not required by this section to have *fire dampers* shall comply with the requirements of Sections 714.4 through 714.5.2.

Reason: This proposal is editorial in nature, but may have minor technical implications for some jurisdictions. The proposal clarifies that requirement to comply with 714.2 through 714.3.3, and 714.4 through 714.5.2 applies to all ducts that penetrate fire resistancerated assemblies, not contained within a shaft, and not required by this section to have fire dampers. This change would then employ the defined terminology "fire damper" instead of the term "damper", which can include "Ceiling radiation dampers," "Combination fire/smoke dampers," "Corridor dampers," "Fire dampers" and "Smoke dampers.".

The exception to the provisions for firestopping should not be applied when only smoke dampers, ceiling radiation dampers, corridor dampers are required to be installed.

Cost Impact: Will not increase the cost of construction The proposal switches between one of the two options already required. Either fire dampers or firestopping is currently required.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this proposal clarifies that only fire dampers are appropriate for the applications described in Section 717.1.2.

Assembly Action		None
	Final Hearing Results	

FS104-15

AS

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Code Change No: FS107-15

Original Proposal

Section: 717.3.1 (IMC 607.3.1)

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

717.3.1 Damper testing. Dampers shall be listed and labeled in accordance with the standards in this section.

- 1. Fire dampers shall comply with the requirements of UL 555. Only fire dampers and ceiling radiation dampers labeled for use in dynamic systems shall be installed in heating, ventilation and air-conditioning systems designed to operate with fans on during a fire.
- Smoke dampers shall comply with the requirements of UL 555S.
- Combination fire/smoke dampers shall comply with the requirements of both UL 555 and UL 555S.
- Ceiling radiation dampers shall comply with the requirements of UL 555C or shall be tested as part of a fire-resistance-rated floor/ceiling or roof/ceiling assembly in accordance with ASTM E119 or UL 263. Only ceiling radiation dampers labeled for use in dynamic systems shall be installed in heating, ventilation and air-conditioning systems designed to operate with fans on during a fire.
- 5. Corridor dampers shall comply with requirements of both UL 555 and UL 555S. Corridor dampers shall demonstrate acceptable closure performance when subjected to 150 feet per minute (0.76 mps) velocity across the face of the damper during the UL 555 fire exposure test.

Reason: The phrase "and ceiling radiation dampers" was added to Section 717.3.1, Provision 1 during the previous code cycle to differentiate ceiling radiation dampers labeled for use in dynamic systems. However, Provision 1 deals with fire dampers so the reference to ceiling radiation dampers is inappropriate. This proposal relocates the reference to ceiling radiation dampers labeled for use in dynamic systems to Provision 4 addressing ceiling radiation dampers.

Cost Impact: Will not increase the cost of construction This code change simply clarifies the current requirements.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this proposal appropriately relocates the reference to ceiling radiation dampers labeled for use in dynamic systems to item number 4 addressing ceiling radiation dampers.



Code Change No: FS108-15

Original Proposal

Section: 717.3.2.1 (IMC 607.3.2.1), 717.3.2.3 (IMC 607.3.2.3)

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

717.3.2.1 Fire damper ratings. Firedampers shall have the minimum fire protection-rating specified in Table 717.3.2.1 for the type of penetration.

717.3.2.3 Combination fire/smoke damper ratings. Combination fire/smokedampers shall have the minimum *fire protection-rating-specified for firedampers* in Table 717.3.2.1 for the type of penetration and shall have a the minimum rating specified for *smoke dampers* rating as specified in Section 717.3.2.2.

Reason: This proposal is intended to clarify the requirements in this section. The term "fire-protection rating" is being changed to "rating" because fire dampers carry an hourly rating, not a "fire-protection rating". The term "for the type of penetration" was deleted because it is not needed.

Cost Impact: Will not increase the cost of construction This simply clarifies the existing requirements.

> **Report of Committee Action** Hearings

Committee Action:

Modify as follows:

717.3.2.1 Fire damper ratings. Firedampers shall have the minimum rating specified in Table 717.3.2.1 for the type of penetration.

Committee Reason: The committee agreed that the correct terminology is reflected in the proposal for dampers ratings. Further the proposal removes unnecessary language. The modification removes the same unnecessary language from Section 717.3.2.1.

Assembly Action

Final Hearing Results

FS108-15

AM

Approved as Modified

None

Code Change No: FS111-15

Original Proposal

Section: 717.5.2 (IMC 607.5.2), 717.5.3 (IMC 607.5.5)

Proponent: Jonathan Roberts, UL LLC, representing UL LLC (jonathan.roberts@ul.com)

Revise as follows:

717.5.2 Fire barriers. Ducts and air transfer openings of *fire barriers* shall be protected with <u>listed</u> *approved_fire dampers* installed in accordance with their listing. Ducts and air transfer openings shall not penetrate enclosures for *interior exit* stairways and ramps and exit passageways, except as permitted by Sections 1023.5 and 1024.6, respectively.

Exception: *Fire dampers* are not required at penetrations of *fire barriers* where any of the following apply:

- 1. Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fire-resistance-rated assembly.
- Ducts are used as part of an *approved* smoke control system in accordance with Section 909 and where the use of a *fire damper* would interfere with the operation of a smoke control system.
- 3. Such walls are penetrated by ducted HVAC systems, have a required *fire-resistance rating* of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than No. 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals. 1.

717.5.3 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with *approved*listed fire and smoke *dampers* installed in accordance with their listing.

Exceptions:

- 1. *Firedampers* are not required at penetrations of shafts where any of the following criteria are met:
 - 1.1 Steel exhaust subducts are extended not less than 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside.
 - 1.2 Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fireresistance-rated assembly.
 - 1.3 Ducts are used as part of an *approved* smoke control system designed and installed in accordance with Section 909 and where the *firedamper* will interfere with the operation of the smoke control system.
 - 1.4 The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.
- 2. In Group B and R occupancies equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, *smokedampers* are not required at penetrations of shafts where all of the following criteria are met:



- 2.1 Kitchen, clothes dryer, bathroom and toilet room exhaust openings are installed with steel exhaust subducts, having a minimum wall thickness of 0.0187-inch (0.4712 mm) (No. 26 gage).
- 2.2 The subducts extend not less than 22 inches (559 mm) vertically.
- 2.3 An exhaust fan is installed at the upper terminus of the shaft that is powered continuously in accordance with the provisions of Section 909.11, so as to maintain a continuous upward airflow to the outside.
- 3. Smoke dampers are not required at penetration of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistancerated construction.
- 4. Smoke dampers are not required at penetrations of shafts where ducts are used as part of an approved mechanical smoke control system designed in accordance with Section 909 and where the *smoke damper* will interfere with the operation of the smoke control system.
- 5. Fire dampers and combination fire/smoke dampers are not required in kitchen and clothes dryer exhaust systems where installed in accordance with the International Mechanical Code.

Reason: Section 717.3.1 of the 2015 International Building Code is very clear that all five types of dampers shall be listed and labeled. However there are two provisions within Section 717 which reference "approved" dampers instead of "listed" dampers. This intent of this proposal is simply to bring consistency in terminology within Section 717. This does not represent a technical change, as Section 717.3.1 already requires dampers to be listed and labeled.

Cost Impact: Will not increase the cost of construction

This does not represent a technical change, as Section 717.3.1 already requires dampers to be listed and labeled.

Report of Committee Action Hearings

Committee Action:

Committee Reason: The committee agreed that this proposal creates consistency in terminology within Section 717, by requiring listed fire dampers and listed smoke dampers.

Assembly Action

Final Hearing Results

FS111-15

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Approved as Submitted

None

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Code Change No: FS117-15

Original Proposal

Section: 717.5.3 (IMC 607.5.5)

Proponent: Maureen Traxler, Seattle Dept of Planning & Development, representing Seattle Dept of Planning & Development (maureen.traxler@seattle.gov)

Revise as follows:

717.5.3 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

- 1. Firedampers are not required at penetrations of shafts where any of the following criteria are met:
 - 1.1 Steel exhaust subducts are extended not less than 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside.
 - 1.2 Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fireresistance-rated assembly.
 - 1.3 Ducts are used as part of an *approved* smoke control system designed and installed in accordance with Section 909 and where the *firedamper* will interfere with the operation of the smoke control system.
 - 1.4 The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.
- 2. In Group B and R occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, smokedampers are not required at penetrations of shafts where all of the following criteria are met:
 - 2.1 Kitchen, clothes dryer, bathroom and toilet room exhaust openings are installed with steel exhaust subducts, having a minimum wall thickness of 0.0187-inch (0.4712 mm) (No. 26 gage).
 - 2.2 The subducts extend not less than 22 inches (559 mm) vertically.
 - 2.3 An exhaust fan is installed at the upper terminus of the shaft that is powered continuously in accordance with the provisions of Section 909.11, so as to maintain a continuous upward airflow to the outside.
- 3. Smoke dampers are not required at penetration of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistancerated construction.
- 4. Smoke dampers are not required at penetrations of shafts where ducts are used as part of an approved mechanical smoke control system designed in accordance with Section 909 and where the *smoke damper* will interfere with the operation of the smoke control system.
- 5. Fire dampers and combination fire/smokedampers are not required in kitchen and clothes dryer exhaust systems where installed in accordance with dampers are prohibited by the International Mechanical Code.

Reason: The purpose of exception 5 is to eliminate an inconsistency between the IBC & IMC. Without the exception, the IBC would require dampers while the IMC specifically prohibits them for clothes dryers (IMC Sec. 504.2), multistory domestic kitchen exhaust (IMC Sec. 505.3), and in grease ducts (IMC Sec. 505.3). However, the exception as written goes beyond that to allow undampered shaft penetrations in all kitchen exhausts that comply with the IMC.



Cost Impact: Will not increase the cost of construction

This proposal merely clarifies existing language and will not increase the cost of construction.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that the revisions to exception 5 eliminate an inconsistency between the IBC & IMC, with respect to the prohibition of dampers in kitchen and clothes dryer exhaust.

Assembly Action

None

Final Hearing Results

FS117-15

AS

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Code Change No: FS119-15

Original Proposal

Section: 717.6.2 (IMC 607.6.2), 717.6.2.1 (IMC 607.6.2.1)

Proponent: Homer Maiel, PE, representing ICC Tri-Chapter (Peninsula, East Bay, Monterey Bay) (hmaiel@gmail.com)

Revise as follows:

717.6.2 Membrane penetrations. Ducts and air transfer openings constructed of approved materials in accordance with the International Mechanical Code that penetrate the ceiling membrane of a fireresistance-rated floor/ceiling or roof/ceiling assembly shall be protected with one of the following:

- 1. A shaft enclosure in accordance with Section 713.
- 2. A listed ceiling radiation damper installed at the ceiling line where a duct penetrates the ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly.

Exceptions:

- 1. A fire resistance rated assembly tested in accordance with ASTM E 119 or UL 263 showing that ceiling radiation dampers are not required in order to maintain the fire resistance rating of the assembly.
- 2. Where exhaust duct penetrations are protected in accordance with Section 714.4.1.2 are located within the cavity of a wall and do not pass through another dwelling unit or tenant space.
- Where duct and air transfer openings are protected with a duct outlet penetration system 3. tested as part of a fire-resistance-rated assembly in accordance with ASTM E 119 or UL 263.
- 3. A listed ceiling radiation damper installed at the ceiling line where a diffuser with no duct attached penetrates the ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly.

Exceptions:

- 1. A fire resistance rated assembly tested in accordance with ASTM E 119 or UL 263 showing that ceiling radiation dampers are not required in order to maintain the fire resistance rating of the assembly.
- Where duct and air transfer openings are protected with a duct outlet penetration system tested as part of a fire-resistance-rated assembly in accordance with ASTM E 119 or UL 263.

717.6.2.1 Ceiling radiation dampers testing and installation. Ceiling radiation dampers shall be tested in accordance with Section 717.3.1. Ceiling radiation dampers shall be installed in accordance with the details *listed* in the fire-resistance-rated assembly and the manufacturer's instructions and the listing. Ceiling radiation dampers are not required where one of the following applies:

- 1. Tests in accordance with ASTM E 119 or UL 263 have shown that ceiling radiation dampers are not necessary in order to maintain the *fire-resistance rating* of the assembly.
- Where exhaust duct penetrations are protected in accordance with Section 714.4.2, are located within the cavity of a wall and do not pass through another dwelling unit or tenant space.



3. Where duct and air transfer openings are protected with a duct outlet protection system tested as part of a fire-resistance-rated assembly in accordance with ASTM E 119 or UL 263.

Reason: This proposal combines Section 717.6.2 and 717.6.2.1 in a way that the requirements could be understood better. The changes are merely editorial and not technical.

Cost Impact: Will not increase the cost of construction

The proposal will not increase the cost of construction since the code change, as mentioned under "reason", is merely editorial for the code user to understand it better.



Committee Action:

Approved as Submitted

None

Committee Reason: The committee agreed that this proposal combines Section 717.6.2 and 717.6.2.1 in a way that the requirements could be understood better and more enforceable.

Assembly Action

Final Hearing Results

FS119-15

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Code Change No: FS120-15

Original Proposal

Section: 717.6.2.1 (IMC 607.6.2.1)

Proponent: Mike Moore, Newport Ventures, representing Broan-NuTone, representing Newport (mmoore@newportventures.net)

Revise as follows:

717.6.2.1 Ceiling radiation dampers. Ceiling radiation dampers shall be tested in accordance with Section 717.3.1. Ceiling radiation dampers shall be installed in accordance with the details listed in the fire-resistance-rated assembly and the manufacturer's instructions and the listing. Ceiling radiation *dampers* are not required where one of the following applies:

- 1. Tests in accordance with ASTM E 119 or UL 263 have shown that ceiling radiation dampers are not necessary in order to maintain the *fire-resistance rating* of the assembly.
- 2. Where exhaust duct or outdoor air duct penetrations are protected in accordance with Section 714.4.2, are located within the cavity of a wall and do not pass through another dwellingunit or tenant space.
- 3. Where duct and air transfer openings are protected with a duct outlet protection system tested as part of a fire-resistance-rated assembly in accordance with ASTM E 119 or UL 263.

Reason: This section provides multiple exemptions for ceiling radiation dampers. Exception 2 exempts exhaust air ducts that meet certain requirements. There is no apparent reason to not also exempt outdoor air ducts meeting the same requirements. This appears to simply be an oversight.

Cost Impact: Will not increase the cost of construction

This proposal will reduce costs by reducing the number of applications requiring a ceiling radiation damper. The cost reduction expected is \$50-\$130 per instance. Prices estimates are retail based on Google shopping search, key words "ceiling radiation damper", conducted December 19, 2014.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee felt that this was an equivalent system to an exhaust duct and this allowance could benefit current construction practices.

Assembly Action

None

Final Hearing Results

FS120-15

AS

Back

Code Change No: FS122-15

Original Proposal

Section: 718.3.2

Proponent: Carl Baldassarra, P.E., FSFPA, P.E., FSFPE, Chair, ICC Code Technology Committee, representing Code Technology Committee (CTC@iccsafe.org)

Revise as follows:

718.3.2 Groups R-1, R-2, R-3-and R-4. Draftstopping shall be provided in floor/ceiling spaces in Group R-1 buildings, in Group R-2 buildings with three or more dwelling units, in Group R-3 buildings with two dwelling units and in Group R-4 buildings. Draftstopping shall be located above and in line with the dwelling unit and sleeping unit separations.

Exceptions:

- 1. Draftstopping is not required in buildings equipped throughout with an *automatic sprinkler* system in accordance with Section 903.3.1.1.
- 2. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are installed in the combustible concealed spaces where the draftstopping is being omitted.

Reason: Group R-4 congregate residences are groups of sleeping units that operate as a single-family home. Requiring draftstopping between bedrooms is a significantly higher requirement than specified for any other occupancy. By letting the provisions for Group R-4 fall back to the Group R-3 requirements, there would be draftstopping between dwellings.

Sections 903.2.8.3 through 903.2.8.3.2 were added in 2015 IBC/IFC for attic protection in Group R-4 Condition 2 facilities to address the issue of the possibility of fires within an attic space.

[shall be protected in accordance with one of the following:

- 1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.
- 2. Attics constructed of noncombustible materials. .
- Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2. 3.
- 4 The automatic sprinkler system shall be extended to provide protection throughout the attic space.

The ICC Code Technology Committee (CTC) has just completed its 10th year. The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. 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 at: http://www.iccsafe.org/cs/CTC/Pages/default.aspx.

Cost Impact: Will not increase the cost of construction

Clarification of the intent of draft stopping could reduce the requirements for the number of draft stops.

Report of Committee Action
Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that draftstopping in R-4 occupancies should not be required considering the protection afforded by Sections 903.2.8.3 through 903.2.8.3.2 of the IBC/IFC that were added in 2015 IBC/IFC.

Assembly Action

None



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	Final Hearing Results		
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Code Change No: FS123-15

Original Proposal

Section: 720.1

Proponent: Marcelo Hirschler, representing GBH International (gbhint@aol.com)

Revise as follows:

720.1 General. Insulating materials, including facings such as vapor retarders and vapor-permeable membranes, similar coverings and all layers of single and multilayer reflective foil insulations, shall comply with the requirements of this section. Where a flame spread index or a smoke-developed index is specified in this section, such index shall be determined in accordance with ASTM E 84 or UL 723. Any material that is subject to an increase in flame spread index or smoke-developed index beyond the limits herein established through the effects of age, moisture or other atmospheric conditions shall not be permitted. Insulating materials include but are not limited to facings such as vapor retarders, vapor permeable membranes and similar coverings, and all layers of single and multilayer reflective foil insulations.

Exceptions:

- 1. Fiberboard insulation shall comply with Chapter 23.
- 2. Foam plastic insulation shall comply with Chapter 26.
- 3. Duct and pipe insulation and duct and pipe coverings and linings in plenums shall comply with the International Mechanical Code.
- 4. All layers of single and multilayer reflective plastic core insulation shall comply with Section 2613-2614.

Reason: This is simple clarification and language cleanup. Section 720.1 is intended to apply to all insulating materials but the sentence as is causes confusion because it refers to two types of insulation materials, namely (1) facings such as vapor retarders and vapor-permeable membranes and similar coverings and (2) all layers of single and multilayer reflective foil insulations. Therefore it is better if they are shown in a separate sentence at the end of the section that way the sentence is clearer. The other change is that the correct section for reflective plastic core insulation materials (which are a subset of reflective insulation materials) is 2614 and not 2613.

Cost Impact: Will not increase the cost of construction No change in requirements - simple clarification.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

720.1 General. Insulating materials shall comply with the requirements of this section. Where a flame spread index or a smokedeveloped index is specified in this section, such index shall be determined in accordance with ASTM E 84 or UL 723. Any material that is subject to an increase in flame spread index or smoke-developed index beyond the limits herein established through the effects of age, moisture or other atmospheric conditions shall not be permitted. Insulating materials, when tested in accordance with the requirements of this section, shall include but are not limited to facings facings, when used, such as vapor retarders, vapor permeable membranes and similar coverings, and all layers of single and multilayer reflective foil insulations insulation, and similar materials.

(no changes to the exceptions)

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Committee Reason: The committee agreed that moving the list of materials to the end of the paragraph clarified that Section 720.1 is applicable to all insulating materials. The modification adds other appropriate insulating materials and includes facings on the insulating materials.

Assembly Action

None

Final Hearing	g Results	
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Code Change No: FS129-15

Original Proposal

Section: Table 721.1 (3)

Proponent: David Tyree, representing American Wood Council (dtyree@awc.org)

Revise as follows:

					of fl		MINIMUM THICKNESS			
				0	R		OF			
FLOOR OR ROOF		CEILING CONSTRUCTION	ROOF SLAB (inches)				CEILING (inches)			
CONSTRUCTION	NUMBER		4	3	2	1	4	3	2	1
			hours	hours	hours	hour	hours	hours	hours	hour
		Minimum 0.019" thick								
		resilient channel 16" o.c.								
		(channels doubled at								
		wallboard end joints), placed								
		perpendicular to the joists								
30. Wood I-joist		and attached to each joist by								
(minimum I-joist		$1^1/_4$ " Type S drywall								
depth $9^1/_2$ " with a		screws. Two layers of $^1/_2$ "								
minimum flange		Type X gypsum wallboard								
depth of $1^1/_2$ " and a		applied with the long								
minimum flange		dimension perpendicular to								
cross-sectional area		the I-joists <u>r</u>esilient								
of 2.25 square	30-1.1	channels with end joints	—	—	—	Varies	_	—	—	1
inches; minimum web		staggered. The base layer is								
thickness of $^3/_8$ ") @		fastened with 1 ¹ / ₄ " Type S								
24" o.c. Fiberglass		drywall screws spaced 12"								
insulation placed		o.c. and the face layer is								
between I-joists		fastened with $1^5/_8$ " Type S								
supported by the		drywall screws spaced 12"								
resilient channels.		o.c. Face layer end joints								
		shall not occur on the same								
		I-joist as base layer end								
		joints and edge joints shall								
		be offset 24" from base layer								
		joints. Face layer to be								

 TABLE 721.1 (3)

 MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a, q}

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attached to base layer with $1^{1}/_{2}$ " Type G drywall screws spaced 8" o.c. placed 6" from face layer end joints. Face layer wallboard joints to be taped and covered with joint				
 and covered with joint compound.				

(Portions of table and footnotes not shown remain unchanged)

Reason: This proposal, in our opinion, is an editoral change as it simply is provided to correct what is currently specified in the 2015 IBC. The current text entry as published in the 2015 IBC is not correctly shown as the current code does not specify the resilient channel requirement as shown in the following link and the figure shown in the reason. This figure was referenced in the AWC code proposal submitted last code cycle and approved by the membership. (http://www.awc.org/publications/dca/dca3/WIJ-1.7.I-joist_2layers_with_RCs.htm)

The reason statement for including this proposal previously in the 2015 IBC stated:

Many code officials have come to rely upon Table 720 as the preferred source of information regarding fire resistance rated assemblies. Because of its importance, we believe that the table should offer the most common generic assemblies. Floor systems utilizing I-joists have increased from less than 10 percent in 1990 to more than 50 percent. With the increased prevalence of I-joist floor/ceiling assemblies, including this assembly in the table will make the IBC more complete and it will be more useful to code officials. It is also expected that the document will be "user friendly", particularly for designers. In an effort to fulfill this expectation, we propose this common assembly for incorporation into Table 720.1(3). It is supported by ASTM E-119 test results as shown on the attached page. The following information and test results are provided with the understanding that their inclusion does not place them within the copyright release requirements of the signature statement.

For a complete list of AWC code change proposals and additional information please go to http://www.awc.org/Code-Officials/2015-IBC-Code-Changes.

WIJ-1.7 One-Hour Fire-Resistive Ceiling Assembly

Floor^a/Ceiling - 100% Design Load - 1 Hour Rating - ASTM E 119 / NFPA 251



1. Floor Topping (optional, not shown): Gypsum concrete, lightweight or normal concrete topping.

2. Floor Sheathing: Minimum 23/32 inch thick tongue-and-groove wood sheathing (Exposure 1). Installed per code requirements with minimum 8d common nails.

3. Insulation: Fiberglass insulation placed between I-joists supported by the resilient channels.

4. Structural Members: Wood I-joists spaced a maximum of 24 inches on center.

Minimum I-joist flange depth: 1-1/2 inches Minimum I-joist web thickness: 3/8 inch

Minimum I-joist flange area: 2.25 inches2 Minimum I-joist depth: 9-1/2 inches

See ASTM D 5055-07 for qualification requirements.

5. Resilient Channels: Minimum 0.019 inch thick galvanized steel resilient channel attached perpendicular to the bottom flange of the I-joists with one 1-1/4 inch drywall screw. Channels spaced a maximum of 16 inches on center [24 inches on center when I-joists are spaced a maximum of 16 inches on center].

6. Gypsum Wallboard: Two layers of minimum 1/2 inch Type X gypsum wallboard attached with the long dimension perpendicular to the resilient channels as follows:

6a. Wallboard Base Layer: Base layer of wallboard attached to resilient channels using 1-1/4 inch Type S drywall screws at 12 inches on center.

6b. Wallboard Face Layer: Face layer of wallboard attached to resilient channels through base layer using 1-5/8 inch Type S drywall screws spaced 12 inches on center. Edge joints of wallboard face layer offset 24 inches from those of base layer. Additionally, wallboard face layer attached to base layer with 1-1/2 inch Type G drywall screws spaced 8 inches on center, placed 1-1/2 inches from face layer end joints.

7. Finish System (not shown); Face layer joints covered with tape and coated with joint compound. Screw heads covered with joint compound

Fire Test conducted at National Research Council of Canada

Report No: A-4219.13.2

March 23, 1998

	Without Gypsus	n Concrete			With Gypsum	Concrete	
Cushione	d Vinyl	Carpet	& Pad	Cushione	d Vinyl	Carpet	& Pad
STC	IIC	STC	IIC	STC	IIC	STC	пс
59	50	55 b	68 ^b	65	51	63 b	65

* This assembly may also be used in a fire-rated roof/ceiling application, but only when constructed exactly as described.

^b STC and IIC values estimated by David L. Adams Associates, Inc.

AMERICAN WOOD COUNCIL

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ary 2009

Cost Impact: Will not increase the cost of construction An editorial correction to the existing code.

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Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed that the proposal corrects the construction requirements by requiring the gypsum wallboard to be secured to the resilient channels rather than the I-joists.

Assembly Action

Final Hearing Results

FS129-15

None

Approved as Submitted

AS

Code Change No: FS130-15

Original Proposal

Section: Table 721.1 (3)

Proponent: David Tyree, representing American Wood Council (dtyree@awc.org)

Revise as follows:

				KNESS	OF FL		MINI	NUM TI OF	HICKN	ESS
FLOOR OR ROOF	ITEM NUMBER	CEILING CONSTRUCTION	ROOF SLAB (inches)				CEILING (inches)			
CONSTRUCTION			4 hours	3 hours	2 hours	1 hour	4 hours	3 hours	2 hours	1 hour
27. Wood I-joist (minimum I-joist depth $9^{1/2}$ " with a minimum flange depth of $1^{5/16}$ " and a minimum flange cross- sectional area of 1.95 square inches; minimum web thickness of $^{3}/_{8}$ ") @ 24" o.c.	27-1.1	Minimum 0.019" thick resilient channel 16" o.c. (channels doubled at wallboard end joints), placed perpendicular to the joist and attached to each joist by $1^{1}/_{4}$ " Type S drywall screws. Two layers of $1/_{2}$ " Type X gypsum wallboard applied with the long dimension perpendicular to the 1-joists <u>resilient channels</u> with end joints staggered. The base layer is fastened with $1^{1}/_{4}$ " Type S drywall screws spaced 12" o.c. and the face layer is fastened with $1^{5}/_{8}$ " Type S drywall screws spaced 12" o.c. Face layer end joints shall not occur on the same I-joist as base layer end joints and edge joints shall be offset 24" from base layer joints. Face layer to also be attached to base layer with $1^{1}/_{2}$ " Type G drywall screws				Varies				1

 TABLE 721.1 (3)

 MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a, q}

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FLOOR OR ROOF CONSTRUCTION	ITEM NUMBER	CEILING CONSTRUCTION	THICKNESS OF FLOOR OR ROOF SLAB (inches)			MINIMUM THICKNESS OF CEILING (inches)				
			4 hours	3 hours	2 hours	1 hour	4 hours	3 hours	2 hours	1 hour
		spaced 8" o.c. placed 6" from face layer end joints. Face layer wallboard joints to be taped and covered with joint compound.								

(Portions of table and footnotes not shown remain unchanged)

Reason: This proposal, in our opinion, is an editoral change as it simply is provided to correct what is currently specified in the 2015 IBC. The current text entry as published in the 2015 IBC is not correctly shown as the current code does not specify the resilient channel requirement as shown in the following link and the figure shown in the reason. This figure was referenced in the AWC code proposal submitted last code cycle and approved by the membership. (http://www.awc.org/publications/dca/dca3/WIJ-1.6.I-joist_2layers_with_RCs.htm)

The reason statement for including this proposal previously in the 2015 IBC stated:

Reason: Many code officials have come to rely upon Table 720 as the preferred source of information regarding fire resistance rated assemblies. Because of its importance, we believe that the table should offer the most common generic assemblies. Floor systems utilizing I-joists have increased from less than 10 percent in 1990 to more than 50 percent. With the increased prevalence of I-joist floor/ceiling assemblies, including this assembly in the table will make the IBC more complete and it will be more useful to code officials. It is also expected that the document will be "user friendly", particularly for designers. In an effort to fulfill this expectation, we propose this common assembly for incorporation into Table 720.1(3). It is supported by ASTM E-119 test results as shown on the attached page. The following information and test results are provided with the understanding that their inclusion does not place them within the copyright release requirements of the signature statement. For a complete list of AWC code change proposals and additional information please go to http://www.awc.org/Code-Officials/2015-IBC-Code-Changes. For more information concerning CLT lumber and construction, please go to http://www.rethinkwood.com/tall-wood-survey.

For a complete list of AWC code change proposals and additional information please go to http://www.awc.org/Code-Officials/2015-IBC-Code-Changes.

WIJ-1.6 One-Hour Fire-Resistive Ceili Floor ^a /Ceiling - 100% Design Load - 1 Hour Rating - ASTM	•
 Finar Tayping (aptional, not show a): Gyptum concrete, lightweight or norm il concrete Floor Sheathing: Minanum 21/02 inch thick tongue and groove wood investming (Expose with minanum 34 dom non nale Startural Members: Wood-Joint speed a maximum of 24 inches on center Minanum I-joint Barge depts 1-5/16 inches Minanum I-joint Barge depts 2-5/16 inches Minanum I-joint dept 	es 1). Transfalad per code requiremente 9 sees 1.93 michae ² 1: 0:1/2 institue
 Bee ASTNA D 5005-07 for qualification requirement Resilient Channels⁵: Minim un 0.019 insth tlack gabranzed steal resilient observal stacks the Ljusta with one 1.14 inch dryweil screw Channels spaced a maximum of 16 inches on are spaced a maximum of 16 inches on center. G system Walk search 'two layers of minimum 1/2 inch Type X gypeum wallboard stacks to the scaliner channels using statement of base Layer: Face layer of Walkboard stacks to realised channels through the tracks are affected at walkboard attacked to realised channels through the scale on center. S. Walkboard Face Layer: Face layer of walkboard attacked to realised channels through the or of walkboard face layer attacked to realised channels through the or of such take. Layer: Face layer of walkboard attacked to realised channels through the or of such stacks, which walkboard face layer attacked to itself at the layer of the layer of attacks. S. Walkboard Face Layer: Face layer of a walkboard attacked to realised channels through the or of such stacks, which walkboard face layer attacked to itself at the layer of the layer. Additionally, walkboard face layer attacked to have layer with 1.1/2 in pace of such stacks. Flads System (next shown): Face layer joints coviered with tape and coated with joint con compound. Eite Text conducted at National Research Council of Canada 	d perpendicular to the Unition flings of center [24 inches on enter when 1-joints d with the long dimension perpendicular 5-1/4 inch Type 3 drywell In base layer using 1-3/6 en offset 24 inches from nut Type 3 drywell screwe ground 3 crew heade (overed with joint).
STC and tiC Sound Ratings for Listed Assemb	iv .
Cushin and Vinyi Carpet & Pad Cuthin and Viny	Gypsun Camerry 1 Carpent & Pad RC STC RC
Ed Ed Ed * Tabi unitably may also be true & R is the mini-in-develop application, but may want in instructed emoty is discribed. ************************************	
Cost Impact: Will not increase the cost of construction Editorial correction to existing code language.	
Cost Impact: Will not increase the cost of construction An editorial correction to the existing code.	
-	ommittee Action arings
Committee Action:	Approved as Submitted
Committee Reason: The committee agreed that the propos wallboard to be secured to the resilient channels rather than the	al corrects the construction requirements by requiring the gypsum elipists.
Assembly Action	None
Final Hea	aring Results
FS130-15	AS



Back

Code Change No: FS132-15

Original Proposal

Section: 803.3

Proponent: David Tyree, representing American Wood Council (dtyree@awc.org)

Revise as follows:

803.3 Heavy timber exemption. Exposed portions of building elements complying with the requirements for buildings of Type IV construction in Section 602.4 shall not be subject to interior finish requirements except in interior exit stairways, interior exit ramps, and exit passageways.

Reason: Cross laminated timber may be used to form the entire interior surfaces of egress elements and should be regulated in those circumstances. The requirement is the same for any other material used in those circumstances. For a complete list of AWC code change proposals and additional information please go to http://www.awc.org/Code-Officials/2015-IBC-Code-Changes.

Cost Impact: Will increase the cost of construction

May increase cost of construction as a higher flamespread requirement would be required in these new areas.

Report of Committee Action				
Hearings				

Committee Action:

Committee Reason: The committee agreed that when heavy timber is used to form the interior surfaces of egress elements they should be subject to the interior finish requirements for that location.

Assembly Action

Final Hearing Results

FS132-15

Approved as Submitted

AS

None

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Code Change No: FS134-15

Original Proposal

Section: Table 803.11

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

Revise as follows:

	SI	PRINKLERED		NONSPRINKLERED				
GROUP	Interior exit stairways, interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c	Interior exit stairways, interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c		
A-1 & A- 2	В	В	С	А	A ^d	B ^e		
A-3 [†] , A- 4, A-5	В	В	С	А	A ^d	С		
B, E, M, R-1	В	C ^m	С	А	В	С		
R-4	В	С	С	А	В	В		
F	С	С	С	В	С	С		
Н	В	В	C ^g	A	А	В		
I-1	В	С	С	A	В	В		
I-2	В	В	B ^{h, ı}	A	А	В		
I-3	А	A ^j	С	A	А	В		
I-4	В	В	B ^{h, i}	A	А	В		
R-2	С	С	С	В	В	С		
R-3	С	С	С	С	С	С		
S	С	С	С	В	В	С		

TABLE 803.11 (803.11) INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY^k

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929m2.

Class C interior finish materials shall be permitted for wainscotting or paneling of not more than 1,000 square feet of applied a. surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.13.1.

In other than Group I-3 occupancies in buildings less than three stories above grade plane, Class B interior finish for b. nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted in interior exit stairways and ramps.

Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance c. rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered enclosing spaces and the rooms or spaces on both sides shall be considered one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.

Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials. d

Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less. e.

For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted. f.

Class B material is required where the building exceeds two stories. g.

Class C interior finish materials shall be permitted in administrative spaces. h.

Class C interior finish materials shall be permitted in rooms with a capacity of four persons or less. i.



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- Class B materials shall be permitted as wainscotting extending not more than 48 inches above the finished floor in corridors j. and exit access stairways and ramps.
- Finish materials as provided for in other sections of this code. k.
- Applies when protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. Ι.

Corridors in ambulatory care facilities shall be provided with Class A or B materials. m.

Reason: This footnote increases the corridor finish requirements for ambulatory care facilities, eliminated the Class C option for sprinklered facilities. The sub-group of Group contains occupants who are incapable of self-preservation. While it is not a defend-inplace scenario, where occupants are expected to stay inside of the building, it is a staged evacuation scenario. Occupants will stay in the building for a short period of time, but the ultimate goal is complete evacuation. This upgrade is to ensure that the corridor are tenable until evacuation is complete. This also matches the current requirements for certification under Medicaid and Medicare. 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 increase the cost of construction

Increasing the finish rating on a corridor will add new construction cost over what is required currently in the IBC/IFC. Any Medicare certified ambulatory care facilities are required by federal CMS regulations to have this system, therefore, the cost of construction will not increase for those facilities. Note that not all ambulatory care facilities are Medicare certified.

Report of Committee Action
Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that corridor finish requirements for ambulatory care facilities should be increased as ambulatory care facilities contain occupants who are incapable of self-preservation. The goal for these facilities is complete evacuation. This upgrade is to ensure that the corridors are tenable until evacuation is complete.

Assembly Action			None
	Final Hearing	Results	
	FS134-15	AS	

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Code Change No: FS135-15

Original Proposal

Section: 803.11 (New)

Proponent: Marcelo Hirschler, representing GBH International (gbhint@aol.com)

Add new text as follows:

803.11 Laminated products factory-produced with a wood substrate Laminated products factoryproduced with a wood substrate shall comply with one of the following:

- 1. The laminated product shall meet the criteria of Section 803.1.1 when tested in accordance with NFPA 286 using the product mounting system, including adhesive, of actual use, as described in Section 5.8 of NFPA 286.
- 2. The laminated product shall have a Class A, B, or C flame spread index and smoke developed index, based on the requirements of Table 803.1.1, in accordance with ASTM E84 or UL 723. Test specimen preparation and mounting shall be in accordance with ASTM E2579.

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

ASTM E2579-13 Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning

Reason: This language has not yet been incorporated into the IFC (which did incorporate the language dealing with on site applied facings in IFC section 803.7), because it wanted the IBC to take the lead. ASTM has developed mounting methods for both "facings or wood veneer intended to be applied on site over a wood substrate" and laminated products that are factory-produced and have a wood substrate. The concept is that facings that are produced as part of a commercial (factory-produced) panel are finished products and the manufacturer should be responsible to ensure that the product itself (the full panel) is safe and there is no need to discuss a substrate. It has been shown that, when veneers are applied over a wood substrate the resulting flame spread is much higher than when applied over gypsum board or over a non-combustible substrate. Therefore the requirement in ASTM E2579 is that the testing be done with the full product and, thus, there will no need to retest for different substrates. Similarly, NFPA 286 contains a section that addresses testing of wall covering materials, including facings applied on site and laminated products produced in the factory. Facings applied on site over wood substrates are tested using ASTM E2404.

Note that this proposal is not intended to replace existing section 803.11 but to be incorporated between existing sections 803.10 and 803.12. Note also that the proposal to add a clarification of the requirements for facings or wood veneers intended to be applied on site over a wood substrate is also intended to be incorporated as a new section between existing sections 803.10 and 803.12.

NFPA 286 language

5.8 Wall or Ceiling Covering Materials.

5.8.2 Where the wall or ceiling covering system is a factory produced wall panel, the adhesive shall be the same one used in the manufacture of the factory-produced wall or ceiling panel.

ASM E2579 - Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning

1. Scope

- 1.1 This practice describes procedures for specimen preparation and mounting when testing wood products to assess flame spread and smoke development as surface burning characteristics using Test Method E84.
- 1.2 This practice applies also to laminated products factory produced with a wood substrate (see 8.6). This practice does not apply to wood veneers or facings intended to be applied on site over a wood substrate, which are covered by Practice E2404.
- 1.3 Testing is conducted with Test Method E84.

ASTM E2404 - Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) Wall or Ceiling Coverings, and of Facings and Wood Veneers Intended to be Applied on Site Over a Wood Substrate, to Assess Surface **Burning Characteristics**



1. Scope

- 1.1 This practice describes procedures for specimen preparation and mounting when testing textile, paper or polymeric (including vinyl and expanded vinyl) wall or ceiling covering materials to assess flame spread and smoke development as surface burning characteristics using Test Method E84.
- 1.2 This practice applies also to facings or wood veneers intended to be applied on site over a wood substrate (see 8.7). This practice does not apply to laminated products factory produced with a wood substrate, which are covered by Practice E2579.
- 1.3 Testing is conducted with Test Method E84.

Cost Impact: Will not increase the cost of construction Clarifies the mounting method for factory produced panels mounted on wood substrates.

Analysis: A review of the standard proposed for inclusion in the code, ASTM E2579, 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 that ASTM E2579 would be more appropriate for these products as it would be completely representative of the product makeup. Further, enforcement of these provisions is less burdensome as the code official and plan reviewer do not need to look at what specific substrate has been tested.

Assembly Action

None

Final Hearing Results

AS

FS135-15

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Code Change No: FS136-15

Original Proposal

Section: 803.11 (New)

Proponent: Marcelo Hirschler, representing GBH International (gbhint@aol.com)

Add new text as follows:

803.11 Facings or wood veneers intended to be applied on site over a wood substrate Facings or veneers intended to be applied on site over a wood substrate shall comply with one of the following:

- 1. The facing or veneer shall meet the criteria of Section 803.1.1 when tested in accordance with NFPA 286 using the product-mounting system, including adhesive, as described in Section 5.9 of NFPA 286.
- 2. The facing or veneer shall have a Class A, B or C flame spread index and smoke-developed index, based on the requirements of Table 803.11, in accordance with ASTM E 84 or UL 723. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.

Reason: This language has already been approved by the IFC (section 803.7). ASTM has developed mounting methods for both "facings or wood veneer intended to be applied on site over a wood substrate" and laminated products that are factory-produced and have a wood substrate. The IFC agreed to move ahead with this one (dealing with on site facings) but wanted the IBC to take the lead with the factory-produced ones. The concept is that these facings (applied on site) are basically the same as wall coverings and the manufacturer should be responsible for the facing only and needs to ensure that the material is safe and should test over the appropriate substrate. It has been shown that, when veneers are applied over a wood substrate the resulting flame spread is much higher than when applied over gypsum board or over a non-combustible substrate. Therefore the requirement in ASTM E2404 is that the testing be done over a standard wood substrate and, thus, there will no need to retest for different types of wood. Similarly, NFPA 286 contains a section that addresses testing of wall covering materials, including facings applied on site and laminated products produced in the factory. Panels including factory applied facings with wood substrates are tested using ASTM E2579

Note that this proposal is not intended to replace existing section 803.11 but to be incorporated between existing sections 803.10 and 803.12. Note also that the proposal to add a clarification of the requirements for laminated products factory-produced with a wood substrate is also intended to be incorporated as a new section between existing sections 803.10 and 803.12.

NFPA 286 language

5.9 Laminated Products with Wood Substrates.

- 5.9.1 Laminated products shall be tested as they are intended to be installed.
 - 5.9.1.1 The test specimens shall consist of the finished product, namely the combination of the facing or veneer, the adhesives or fasteners used, and the specific wood substrate that will be used.
- 5.9.2 If the laminated product consists of a facing or veneer intended to be applied on-site over a wood substrate, the facing or veneer shall be tested as described in 5.9.2.1 and 5.9.2.2.
 - 5.9.2.1* The test specimens shall comply with the following:
 - (1) Specimens shall consist of the facing or veneer mounted on the "A" face of nominal 12 mm (15/32 in.) untreated plywood with a face veneer of Douglas fir.
 - The plywood shall comply with NIST Voluntary Product Standard PS 1, Structural Plywood.
 - The plywood shall carry one of the following grade stamps: (a) APA-The Engineered Wood Association (b) (3) TECO, indicating that the plywood has been graded PS 1 A-B and is for exterior exposure (c) CSA Standard O121, Douglas Fir Plywood.

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5.9.2.2 The adhesive used to attach the facing or veneer to the wood substrate in 5.9.2.1 shall be that specified by the manufacturer of the facing or veneer and applied in accordance with manufacturer's application instructions. Also, for information, from NFPA 286:

5.8.9 Wall or Ceiling Coverings Intended to Be Applied over a Wood Substrate. If the wall or ceiling coverings are intended to be applied over a wood substrate, the specimens shall consist of the wall or ceiling covering mounted on untreated plywood, with a face veneer of Douglas fir. The plywood shall have the same thickness as the wood substrate used in actual installations, and shall comply with NIST Voluntary Product Standard PS 1-07, Structural Plywood. The plywood shall be marked with a grade stamp indicating that the plywood has been graded PS 1-07 A-B and is for exterior exposure. The grade stamp shall be issued by a quality control

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agency. Alternatively, the plywood shall be permitted to be stamped as conforming to CSA Standard O121, Douglas Fir Plywood.

ASTM E2404 - Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) Wall or Ceiling Coverings, and of Facings and Wood Veneers Intended to be Applied on Site Over a Wood Substrate, to Assess Surface **Burning Characteristics**

1. Scope

- 1.1 This practice describes procedures for specimen preparation and mounting when testing textile, paper or polymeric (including vinyl and expanded vinyl) wall or ceiling covering materials to assess flame spread and smoke development as surface burning characteristics using Test Method E84.
- 1.2 This practice applies also to facings or wood veneers intended to be applied on site over a wood substrate (see 8.7). This practice does not apply to laminated products factory produced with a wood substrate, which are covered by Practice E2579.
- 1.3 Testing is conducted with Test Method E84.

ASM E2579 - Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning Characteristics

1. Scope

- 1.1 This practice describes procedures for specimen preparation and mounting when testing wood products to assess flame spread and smoke development as surface burning characteristics using Test Method E84.
- 1.2 This practice applies also to laminated products factory produced with a wood substrate (see 8.6). This practice does not apply to wood veneers or facings intended to be applied on site over a wood substrate, which are covered by Practice E2404.
- 1.3 Testing is conducted with Test Method E84.

Cost Impact: Will not increase the cost of construction This clarifies the testing protocol.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this proposal provides consistency with the International Fire Code and that testing in accordance with ASTM E2404 was appropriate in that facings are required to be tested over a wood substrate, which will yield conservative results.

Assembly Action

None

Final Hearing Results

FS136-15

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Code Change No: FS137-15

Original Proposal

Section: 803.13.1, 803.13.1.1

Proponent: Lee Kranz, City of Bellevue, WA, representing Washington Association of Building Officials **Technical Code Development Committee**

Revise as follows:

803.13.1 Direct attachment and furred construction. Where walls-and, ceilings or structural elements are required by any provision in this code to be of fire-resistance-rated or noncombustible construction, the *interior finish* material shall be applied directly against such construction or to furring strips not exceeding $1^{3}/_{4}$ inches (44 mm), applied directly against such surfaces.

803.13.1.1 Furred construction. If the interior finish material is applied to furring strips, the intervening spaces between such furring strips shall comply with one of the following:

- 1. Be filled with material that is inorganic or noncombustible;
- 2. Be filled with material that meets the requirements of a Class A material in accordance with Section 803.1.1 or 803.1.2; or
- 3. Be fireblocked at a maximum of 8 feet (2438 mm) in every direction in accordance with Section 718.

Exception: Concealed spaces created with noncombustible furring strips.

Reason: Currently, Section 803.13.1.1 could be interpreted to require fire stopping or fire blocking materials even if there were no combustible materials within the concealed spaces created by the furring stripes. The proposed exception clarifies that there is no need for fire stopping or fire blocking when there is nothing combustible within the concealed space. The term "structural elements" is added to Section 803.13.1 for consistency with Section 803.13.

Cost Impact: Will not increase the cost of construction

This code change will save money because there will be no need to provide fire blocking or fire stopping unless there are combustible materials within a fire-resistance rated wall assembly.

Report of Committee Action
Hearings

Committee Action:

Approved as Modified

Modify as follows:

803.13.1.1 Furred construction. If the interior finish material is applied to furring strips, the intervening spaces between such furring strips shall comply with one of the following:

1. Be filled with material that is inorganic or noncombustible;

2. Be filled with material that meets the requirements of a Class A material in accordance with Section 803.1.1 or 803.1.2; or

3. Be fireblocked at a maximum of 8 feet (2438 mm) in every direction in accordance with Section 718.

Exception: Concealed spaces created Compliance with items 1, 2 or 3 is not required where the materials used to create the space are noncombustible furring strips.

(no changes to the exceptions)







Committee Reason: The committee felt the change adding structural elements to Section 803.13.1 is consistent with the provisions of Section 803.13. The revisions to Section 803.13.1.1 are also appropriate and reflect common practice. The modification further clarifies the exception to Section 803.13.1.1 to require all materials in the concealed space to be noncombustible.

Assembly Action

None

	Final Hearing Results	
FS137-	5 A	Μ

Code Change No: FS138-15

Original Proposal

Section: 803.13.2

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

Revise as follows:

803.13.2 Set-out construction. Where walls and ceilings are required to be of fire-resistance-rated or noncombustible construction and walls are set out or ceilings are dropped distances greater than specified in Section 803.13.1, Class A finish materials, in accordance with Section 803.1.1 or 803.1.2, shall be used.

Exceptions:

- 1. Where *interior finish* materials are protected on both sides by an *automatic sprinkler* system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Where *interior finish* materials are attached to noncombustible backing or furring strips installed as specified in Section 803.13.1.1.
- 3. Where the combustible void is filled with an approved noncombustible material.

Reason: The proposed third exception meets the intent of the code in that noncombustible material, while not structural, meets the combustibility requirements of Section 803.13.1. The applicability of this solution is codified in 803.13.1 item 2. This proposal simply allows larger areas to be filled. This would reduce the complexity of framing small pop-outs and covering with gypsum board or plaster.

Cost Impact: Will not increase the cost of construction

This proposal adds an additional option when addressing set-out construction, but does not change the current code requirements, so the cost of construction is not affected by this proposal.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

803.13.2 Set-out construction. Where walls and ceilings are required to be of fire-resistance-rated or noncombustible construction and walls are set out or ceilings are dropped distances greater than specified in Section 803.13.1, Class A finish materials, in accordance with Section 803.1.1 or 803.1.2, shall be used.

Exceptions:

- Where interior finish materials are protected on both sides by an automatic sprinkler system in accordance 1. with Section 903.3.1.1 or 903.3.1.2.
- Where interior finish materials are attached to noncombustible backing or furring strips installed as 2. specified in Section 803.13.1.1.
- 3. Where the combustible void is filled with an approved a noncombustible material.

Committee Reason: The committee agreed that this proposal adds an additional option when addressing set-out construction, but does not change the current code requirements. The modification appropriately removes the term "approved" from item 3 as noncombustible materials are regulated in the code.

Assembly Action

None





Final Hearing Results

FS138-15

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Code Change No: FS139-15

Original Proposal

Section: 803.1, 803.1.1, 803.1.1.1 (New), 803.1.2, 803.1.2.1, 803.1.3, 803.1.3.1, 803.1.4, 803.11, 803.5, 803.5.1 (New), 803.5.1.1 (New), 803.5.2 (New), 803.6, 803.7, 803.8, 803.9

Proponent: Marcelo Hirschler, representing GBH International (gbhint@aol.com)

Revise as follows:

803.1 General. Interior wall and ceiling finish materials shall be classified for fire performance and smoke development in accordance with Section 803.1.1 or 803.1.2, except as shown in Sections 803.2 803.1.3 through 803.13. Materials tested in accordance with Section 803.1.2 803.1.1 shall not be required to be tested in accordance with Section 803.1.1-803.1.2.

803.1.1 Interior wall and ceiling finish materials. tested in accordance with NFPA 286 Interior wall and ceiling finish materials shall be classified in accordance with ASTM E 84 or UL 723 NFPA 286 and comply with Section 803.1.1.1. Such interior finish materials Materials complying with Section 803.1.1.1 shall be grouped in considered to also comply with the following classes in accordance with their flame spread and smoke-developed indexes requirements of a Class A:- Flame spread index 0-25; smoke developed index 0-450.

Class B:= Flame spread index 26-75; smoke developed index 0-450. Class C:= Flame spread index 76-200; smoke developed index 0-450.

Exception: Materials tested, in accordance with Section 803.1.2.

Add new text as follows:

803.1.1.1 Acceptance Criteria for NFPA 286 The interior finish shall comply with the following:

- 1. During the 40 kW exposure, flames shall not spread to the ceiling.
- 2. The flame shall not spread to the outer extremity of the sample on any wall or ceiling.
- 3. Flashover, as defined in NFPA 286, shall not occur.
- 4. The peak heat release rate throughout the test shall not exceed 800 kW.
- 5. The total smoke released throughout the test shall not exceed 1,000 m².

Revise as follows:

803.1.2 Room corner test for interior Interior wall or ceiling finish materials- tested in accordance with ASTM E84 or UL 723. Interior wall or and ceiling finish materials shall be permitted to classified in accordance with ASTM E 84 or UL 723. Such interior finish materials shall be grouped in the following classes in accordance with their flame spread and smoke-developed indexes.

Class A: = Flame spread index 0-25; smoke-developed index 0-450. Class B: = Flame spread index 26-75; smoke-developed index 0-450. Class C: - Flame spread index 76-200; smoke-developed index 0-450.

Exception: Materials tested in accordance with NFPA 286. Interior wall or ceiling finish materials tested-Section 803.1.1 and as indicated in accordance with NFPA 286 shall comply with Section 803.1.2.1 Sections 803.1.3 through 803.13.





803.1.2.1 Acceptance criteria for NFPA 286. The interior finish shall comply with the following:

- 1. During the 40 kW exposure, flames shall not spread to the ceiling.
- 2. The flame shall not spread to the outer extremity of the sample on any wall or ceiling.
- 3. Flashover, as defined in NFPA 286, shall not occur.
- 4. The peak heat release rate throughout the test shall not exceed 800 kW.
- 5. The total smoke released throughout the test shall not exceed 1,000 m².

803.1.3 Room corner test for textile Interior wall coverings and expanded vinyl wall coverings. ceiling finish materials with different requirements Textile wall coverings and expanded vinyl wall coverings The materials indicated in Sections 803.2 through 803.13 shall meet the criteria of Section 803.1.3.1 when be tested as indicated in the manner intended for use in accordance with the Method B protocol of NFPA 265 using the product-mounting system, including adhesive corresponding sections.

803.1.3.1 Acceptance criteria for NFPA 265. The interior finish shall comply with the following:

- 1. During the 40 kW exposure, flames shall not spread to the ceiling.
- The flame shall not spread to the outer extremities of the samples on the 8-foot by 12-foot (203) by 305 mm) walls.
- 3. Flashover, as defined in NFPA 265, shall not occur.
- 4. The total smoke released throughout the test shall not exceed 1,000 m².

803.1.4 Acceptance criteria for textile and expanded vinyl wall or ceiling coverings tested to ASTM E 84 or UL 723. Textile wall and ceiling coverings and expanded vinyl wall and ceiling coverings shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723 and be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.

803.5 Textile wall coverings. Where used as interior wall finish materials, textile wall coverings, including materials having woven or nonwoven, napped, tufted, looped or similar surface and carpet and similar textile materials, shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of one of the following: Section 803.1.2-803.1.1, 803.1.3-Section 803.5.1 or 803.1.4-Section 803.5.2.

Add new text as follows:

803.5.1 Room corner test for textile wall coverings and expanded vinyl wall coverings Textile wall coverings and expanded vinyl wall coverings shall meet the criteria of Section 803.5.1.1 when tested in the manner intended for use in accordance with the Method B protocol of NFPA 265 using the product mounting system, including adhesive.

803.5.1.1 Acceptance Criteria for NFPA 265 The interior finish shall comply with the following:

- 1. During the 40 kW exposure, flames shalln ot spread to the ceiling.
- 2. The flame shall not spread to the outer extremities of the samples on the 8-foot by 12-foot (203 by 305 mm) walls.
- 3. Flashover, as defined in NFPA 265, shall not occur.
- 4. The total smoke release throughout the test shall not exceed 1,000 m².

803.5.2 Acceptance Criteria for textile and expanded vinyl wall or ceiling coverings tested to ASTM E 84 or UL 723 Textile wall and ceiling coverings and expanded vinyl wall and ceiling coverings shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723 and be protected by an automatic sprinkler system installed in accordance with Section 903.1.1 or 903.1.2. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.



Revise as follows:

803.6 Textile ceiling coverings. Where used as interior ceiling finish materials, textile ceiling coverings, including materials having woven or nonwoven, napped, tufted, looped or similar surface and carpet and similar textile materials, shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of Section 803.1.2 803.1.1 or 803.1.4 of Section 803.5.2.

803.7 Expanded vinyl wall coverings. Where used as interior wall finish materials, expanded vinyl wall coverings shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of one of the following: Section 803.1.2 803.1.1, 803.1.3 Section 803.5.1 or 803.1.4 Section 803.5.2.

803.8 Expanded vinyl ceiling coverings. Where used as interior ceiling finish materials, expanded vinyl ceiling coverings shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of Section 803.1.2 803.1.1 or 803.1.4 Section 803.5.2.

803.9 High-density polyethylene (HDPE) and polypropylene (PP). Where high-density polyethylene or polypropylene is used as an interior finish it shall comply with Section 803.1.2.803.1.1.

803.11 Interior finish requirements based on group. Interior wall and ceiling finish shall have a flame spread index not greater than that specified in Table 803.11 for the group and location designated. Interior wall and ceiling finish materials tested in accordance with NFPA 286 and meeting the acceptance criteria of Section 803.1.2.1-803.1.1.1, shall be permitted to be used where a Class A classification in accordance with ASTM E 84 or UL 723 is required.

Reason: This reorganizes section 803 to make it follow the testing logic, but it does not change any of the requirements. Any interior wall and ceiling finish material is permitted to be tested to NFPA 286 and therefore this should come first, as section 803.1.1. This needs to be followed by the criteria for NFPA 286 testing. The section also needs to say that anything that passes NFPA 286 (i.e. the corresponding criteria) is acceptable as a Class A in accordance with ASTM E84 and does not need retesting. Then comes the section on ASTM E84, with the corresponding criteria, as section 803.1.2.

The next section, 803.1.3, addresses the materials that have other requirements and cannot simply be tested to either one of the above without further details. That includes all of the materials in sections 803.2 through 803.13.

Textile wall coverings and expanded vinyl wall coverings are covered in 803.5 and 803.7. Therefore the testing in accordance with NFPA 265 needs to move to those sections and that is being done. When dealing with expanded vinyl wall coverings the criteria are not repeated but just reference the textile wall coverings section.

Textile and expanded vinyl ceiling coverings stay as is, just with the section reference changed. The same is true for HDPE and PP.

The only other change is the section reference in 803.11, again without changing requirements.

Table 803.1 does not need any changes.

In order to ensure that the proposed reorganization appears in the correct order, I attach a copy of the final text as it should read, legislative language. The text as it should read, in its final form is shown below:

Section 803, as proposed for IBC 2018, in final form

803.1 General. Interior wall and ceiling finish materials shall be classified for fire performance and smoke development in accordance with Section 803.1.1 or 803.1.2, except as shown in Sections 803.1.3 through 803.13. Materials tested in accordance with Section 803.1.1 shall not be required to be tested in accordance with Section 803.1.2.

803.1.1 Interior wall and ceiling finish materials tested in accordance with NFPA 286. Interior wall and ceiling finish materials shall be classified in accordance with NFPA 286 and comply with Section 803.1.1.1. Materials complying with Section 803.1.1.1 shall be considered also to comply with the requirements of a Class A in accordance with Section 803.1.2.

803.1.1.1 Acceptance criteria for NFPA 286. The interior finish shall comply with the following:

- During the 40 kW exposure, flames shall not spread to the ceiling. 1.
- 2. The flame shall not spread to the outer extremity of the sample on any wall or ceiling.
- Flashover, as defined in NFPA 286, shall not occur. 3.
- The peak heat release rate throughout the test shall not exceed 800 kW. 4
- 5. The total smoke released throughout the test shall not exceed 1,000 m².



803.1.2 Interior wall and ceiling finish materials tested in accordance with ASTM E84 or UL 723. Interior wall and ceiling finish materials shall be classified in accordance with ASTM E 84 or UL 723. Such interior finish materials shall be grouped in the following classes in accordance with their flame spread and smoke-developed indexes.

Class A: = Flame spread index 0-25; smoke developed index 0-450. Class B: = Flame spread index 26-75; smoke developed index 0-450. Class C: = Flame spread index 76-200; smoke developed index 0-450.

Exception: Materials tested in accordance with Section 803.1.1 and as indicated in Section 803.1.3 through 803.13.

803.1.3 Interior wall and ceiling finish materials with different requirements. The materials indicated in Sections 803.2 through 803.13 shall be tested as indicated in the corresponding sections.

803.2 Thickness exemption. Materials having a thickness less than 0.036 inch (0.9 mm) applied directly to the surface of walls or ceilings shall not be required to be tested.

803.3 Heavy timber exemption. Exposed portions of building elements complying with the requirements for buildings of Type IV construction in Section 602.4 shall not be subject to interior finish requirements.

803.4 Foam plastics. Foam plastics shall not be used as interior finish except as provided in Section 2603.9. This section shall apply both to exposed foam plastics and to foam plastics used in conjunction with a textile or vinyl facing or cover.

803.5 Textile wall coverings. Where used as interior wall finish materials, textile wall coverings, including materials having woven or nonwoven, napped, tufted, looped or similar surface and carpet and similar textile materials, shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of one of the following: Section 803.1.1, Section 803.5.1 or Section 803.5.2.

803.5.1 Room corner test for textile wall coverings and expanded vinyl wall coverings. Textile wall coverings and expanded vinyl wall coverings shall meet the criteria of Section 803.5.1.1 when tested in the manner intended for use in accordance with the Method B protocol of NFPA 265 using the product-mounting system, including adhesive.

803.5.1.1 Acceptance criteria for NFPA 265. The interior finish shall comply with the following:

- During the 40 kW exposure, flames shall not spread to the ceiling. 1.
- 2. The flame shall not spread to the outer extremities of the samples on the 8-foot by 12-foot (203 by 305 mm) walls.
- Flashover, as defined in NFPA 265, shall not occur. 3.
- 4. The total smoke released throughout the test shall not exceed 1,000 m2.

803.5.2 Acceptance criteria for textile and expanded vinyl wall or ceiling coverings tested to ASTM E 84 or UL 723. Textile wall and ceiling coverings and expanded vinyl wall and ceiling coverings shall have a Class A flame spread index in accordance with ASTM E 84 or UL 723 and be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. Test specimen preparation and mounting shall be in accordance with ASTM E 2404.

803.6 Textile ceiling coverings. Where used as interior ceiling finish materials, textile ceiling coverings, including materials having woven or nonwoven, napped, tufted, looped or similar surface and carpet and similar textile materials, shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of Section 803.1.1 or of Section 803.5.2.

803.7 Expanded vinyl wall coverings. Where used as interior wall finish materials, expanded vinyl wall coverings shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of one of the following: Section 803.1.1, Section 803.5.1 or Section 803.5.2.

803.8 Expanded vinyl ceiling coverings. Where used as interior ceiling finish materials, expanded vinyl ceiling coverings shall be tested in the manner intended for use, using the product mounting system, including adhesive, and shall comply with the requirements of Section 803.1.1 or of Section 803.5.2.

803.9 High-density polyethylene (HDPE) and polypropylene (PP). Where high-density polyethylene or polypropylene is used as an interior finish it shall comply with Section 803.1.1.

803.10 Site-fabricated stretch systems. Where used as interior wall or interior ceiling finish materials, site-fabricated stretch systems containing all three components described in the definition in Chapter 2 shall be tested in the manner intended for use, and shall comply with the requirements of Section 803.1.1 or 803.1.2. If the materials are tested in accordance with ASTM E 84 or UL 723, specimen preparation and mounting shall be in accordance with ASTM E 2573.

803.11 Interior finish requirements based on group. Interior wall and ceiling finish shall have a flame spread index not greater than that specified in Table 803.11 for the group and location designated. Interior wall and ceiling finish materials tested in accordance with NFPA 286 and meeting the acceptance criteria of Section 803.1.1.1, shall be permitted to be used where a Class A classification in accordance with ASTM E 84 or UL 723 is required.

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803.12 Stability. Interior finish materials regulated by this chapter shall be applied or otherwise fastened in such a manner that such materials will not readily become detached where subjected to room temperatures of 200°F (93°C) for not less than 30 minutes.

803.13 Application of interior finish materials to fire resistance-rated or noncombustible building elements.

Where interior finish materials are applied on walls, ceilings or structural elements required to have a fire-resistance rating or to be of noncombustible construction, these finish materials shall comply with the provisions of this section.

803.13.1 Direct attachment and furred construction. Where walls and ceilings are required by any provision in this code to be of fire-resistance-rated or noncombustible construction, the interior finish material shall be applied directly against such construction or to furring strips not exceeding 13/4 inches (44 mm), applied directly against such surfaces.

803.13.1.1 Furred construction. If the interior finish material is applied to furring strips, the intervening spaces between such furring strips shall comply with one of the following:

- 1. Be filled with material that is inorganic or noncombustible;
- Be filled with material that meets the requirements of a Class A material in accordance with Section 803.1.1 or 803.1.2; or 2
- 3. Be fire-blocked at a maximum of 8 feet (2438 mm) in every direction in accordance with Section 718.

803.13.2 Set-out construction. Where walls and ceilings are required to be of fire-resistance-rated or noncombustible construction and walls are set out or ceilings are dropped distances greater than specified in Section 803.13.1, Class A finish materials, in accordance with Section 803.1.1 or 803.1.2, shall be used.

Exceptions:

- 1. Where interior finish materials are protected on both sides by an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- Where interior finish materials are attached to noncombustible backing or furring strips installed as specified in 2. Section 803.13.1.1.

803.13.2.1 Hangers and assembly members. The hangers and assembly members of such dropped ceilings that are below the horizontal fire-resistance-rated floor or roof assemblies shall be of noncombustible materials. The construction of each set-out wall and horizontal fire-resistance-rated floor or roof assembly shall be of fire-resistance-rated construction as required elsewhere in this code.

Exception: In Type III and V construction, fire retardant-treated wood shall be permitted for use as hangers and assembly members of dropped ceilings.

803.13.3 Heavy timber construction. Wall and ceiling finishes of all classes as permitted in this chapter that are installed directly against the wood decking or planking of Type IV construction or to wood furring strips applied directly to the wood decking or planking shall be fire-blocked as specified in Section 803.13.1.1.

803.13.4 Materials. An interior wall or ceiling finish material that is not more than 1/4 inch (6.4 mm) thick shall be applied directly onto the wall, ceiling or structural element without the use of furring strips and shall not be suspended away from the building element to which that finish material it is applied.

Exceptions:

- 1. Noncombustible interior finish materials.
- Materials that meet the requirements of Class A materials in accordance with Section 803.1.1 or 803.1.2 where the 2. qualifying tests were made with the material furred out from the noncombustible backing shall be permitted to be used with furring strips.
- 3. Materials that meet the requirements of Class A materials in accordance with Section 803.1.1 or 803.1.2 where the qualifying tests were made with the material suspended away from the noncombustible backing shall be permitted to be used suspended away from the building element.

Cost Impact: Will not increase the cost of construction This is simply a reorganization without changing requirements.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee approved this change based on the following: moving NFPA 286 to the beginning of the section is editorial, is appropriate for more product and removes redundant language: ASTM E84 remains an option for materials to meet; and the section as a whole becomes more enforceable as it is more easily understood.

Assembly Action

None



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Code Change No: FS140-15

Original Proposal

Section: 406.8.3, 424.2, 804.2, 804.3, Chapter 35

Proponent: Tim Earl, GBH International, representing GBH International (tearl@gbhinternational.com)

Revise as follows:

406.8.3 Floor surface.

Repair garage floors shall be of concrete or similar noncombustible and nonabsorbent materials.

Exception: Slip-resistant, nonabsorbent, interior floor finishes having a critical radiant flux not more than 0.45 W/cm², as determined by ASTM E648 or NFPA 253, shall be permitted.

424.2 Materials. Children's play structures shall be constructed of noncombustible materials or of combustible materials that comply with the following:

- 1. *Fire-retardant-treated* wood complying with Section 2303.2.
- 2. Light-transmitting plastics complying with Section 2606.
- 3. Foam plastics (including the pipe foam used in softcontained play equipment structures) having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289, using the 20 kW ignition source.
- 4. Aluminum composite material (ACM) meeting the requirements of Class A interior finish in accordance with Chapter 8 when tested as an assembly in the maximum thickness intended for use.
- Textiles and films complying with the fire propagation performance criteria contained in Test Method 1 or Test Method 2, as appropriate, of NFPA 701.
- Plastic materials used to construct rigid components of soft-contained play equipment structures (such as tubes, windows, panels, junction boxes, pipes, slides and decks) exhibiting a peak rate of heat release not exceeding 400 kW/m² when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation at a thickness of 6 mm.
- 7. Ball pool balls, used in soft-contained play equipment structures, having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289, using the 20 kW ignition source. The minimum specimen test size shall be 36 inches by 36 inches (914 mm by 914 mm) by an average of 21 inches (533 mm) deep, and the balls shall be held in a box constructed of galvanized steel poultry netting wire mesh.
- Foam plastics shall be covered by a fabric, coating or film meeting the fire propagation performance criteria contained in Test Method 1 or Test Method 2, as appropriate, of NFPA 701.
- 9. The floor covering placed under the children's play structure shall exhibit a Class I interior floor finish classification, as described in Section 804, when tested in accordance with ASTM E648 or NFPA 253.

804.2 Classification. Interior floor finish and floor covering materials required by Section 804.4.2 to be of Class I or II materials shall be classified in accordance with ASTM E648 or NFPA 253. The classification referred to herein corresponds to the classifications determined by ASTM E648 or NFPA 253 as follows: Class I, 0.45 watts/cm² or greater; Class II, 0.22 watts/cm² or greater.

804.3 Testing and identification. Interior floor finish and floor covering materials shall be tested by an agency in accordance with ASTM E648 or NFPA 253 and identified by a hang tag or other suitable



method so as to identify the manufacturer or supplier and style, and shall indicate the interior floor finish or floor covering classification in accordance with Section 804.2. Carpet-type floor coverings shall be tested as proposed for use, including underlayment. Test reports confirming the information provided in the manufacturer's product identification shall be furnished to the building official upon request.

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

E648-14c Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source

Reason: ASTM E648 is technically equivalent to NFPA 253. Since the flooring industry routinely references ASTM E648, this proposal will remove confusion when people reference the ASTM test instead of the NFPA test.

Cost Impact: Will not increase the cost of construction

This change simply adds a reference to another standard, allowing users to reference either ASTM E648 or NFPA 253, so there is no impact on cost.

Analysis: A review of the standard proposed for inclusion in the code, ASTM E648, 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 that ASTM E648 is technically equivalent to NFPA 253. Further, the flooring industry routinely references ASTM E648 and this proposal will indicate that these products comply without needing to get a comparison to NFPA 253.

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Final Hearing Results

FS140-15

None

Approved as Submitted

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Code Change No: FS141-15

Original Proposal

Section: 707.3.10, 901.7

Proponent: Maureen Traxler, City of Seattle (maureen.traxler@seattle.gov)

Revise as follows:

901.7 Fire areas. Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire walls constructed in accordance with Section 706, fire barriers constructed in accordance with Section 707, exterior walls constructed in accordance with Section 705, or horizontal assemblies constructed in accordance with Section 711, or both, having a fire-resistance rating of not less than that determined in accordance with Section 707.3.10 combination.

Reason: The definition of "fire area" specifically includes areas "enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies." Section 901.7 seems to conflict with that by specifying only fire barriers and horizontal assemblies to create fire areas. The reference to the fire-resistance rating of the wall is deleted because the reference to Section 707 includes Table 707.3.10.

Cost Impact: Will not increase the cost of construction This is an editorial proposal that will not affect the cost of construction.

Report of Committee Action
Hearings

Committee Action:

Approved as Modified

Modify as follows:

TABLE 707.3.10 FIRE-RESISTANCE RATING REQUIREMENTS FOR FIRE BARRIER ASSEMBLIES BARRIERS, FIRE WALLS OR HORIZONTAL ASSEMBLIES BETWEEN FIRE AREAS

707.3.10 Fire areas. The fire barriers, fire walls or horizontal assemblies, or both-combination thereof, separating a single occupancy into different fire areas shall have a fire-resistance rating of not less than that indicated in Table 707.3.10. The fire barriers, fire walls or horizontal assemblies, or both combination thereof, separating fire areas of mixed occupancies shall have a fire-resistance rating of not less than the highest value indicated in Table 707.3.10 for the occupancies under consideration.

901.7 Fire areas. Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire walls constructed in accordance with Section 706, fire barriers constructed in accordance with Section 707, exterior walls constructed in accordance with Section 705, or horizontal assemblies constructed in accordance with Section 711, or a combination thereof having a fire-resistancerating of not less than that determined in accordance with Section 707.3.10.

Committee Reason: The committee agreed that this proposal correctly removes a conflict with the definition of fire area. The modification also provides a positive correlation with Section and Table 707.3.10 regarding fire areas.

Assembly Action

None

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Code Change No: FS146-15

Original Proposal

Section: 1403.5

Proponent: Henry Green, National Institute of Building Sciences, representing National Institute of Building Sciences (hgreen@nibs.org)

Revise as follows:

1403.5 Vertical and lateral flame propagation. Exterior walls on buildings of Type I, II, III or IV construction that are greater than 40 feet (12 192 mm) in height above grade plane and contain a combustible water-resistive barrier in accordance with Section 1404.2 shall be tested in accordance with and comply with the acceptance criteria of NFPA 285. For the purposes of this section, fenestration products-and, flashing of fenestration products and water resistive barrier flashing and accessories at other locations, including through-wall flashings, shall not be considered part of the water-resistive barrier.

Exceptions:

- 1. Walls in which the water-resistive barrier is the only combustible component and the exterior wall has a wall covering of brick, concrete, stone, terra cotta, stucco or steel with minimum thicknesses in accordance with Table 1405.2.
- 2. Walls in which the *water-resistive barrier* is the only combustible component and the *water*resistive barrier has a peak heat release rate of less than 150 kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E 1354 and has a flame spread index of 25 or less and a smokedeveloped index of 450 or less as determined in accordance with ASTM E 84 or UL 723. The ASTM E 1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m².

Reason: This proposal clarifies the intention of the current code that the trigger for requiring NFPA 285 testing is the water-resistive barrier material and not its accessories. It extends to the excepted accessories specifically mentioned to include flashings that are not associated with fenestration.

Cost Impact: Will not increase the cost of construction This proposal will not increase the cost of construction. The proposal seeks to clarify only, not to alter or increase requirements.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Modified

Modify as follows:

1403.5 Vertical and lateral flame propagation. Exterior walls on buildings of Type I. II. III or IV construction that are greater than 40 feet (12 192 mm) in height above grade plane and contain a combustible water-resistive barrier-in accordance with Section 1404.2 shall be tested in accordance with and comply with the acceptance criteria of NFPA 285. For the purposes of this section, fenestration products flashing of fenestration products and water resistive barrier flashing and accessories at other locations, including through-wall flashings, shall not be considered part of the water-resistive barrier.

Exceptions:

Walls in which the water-resistive barrier is the only combustible component and the exterior wall has a 1. wall covering of brick, concrete, stone, terra cotta, stucco or steel with minimum thicknesses in accordance with Table 1405.2.



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2. Walls in which the water-resistive barrier is the only combustible component and the water-resistive barrier has a peak heat release rate of less than 150 kW/m2, a total heat release of less than 20 MJ/m2 and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E 1354 and has a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E 84 or UL 723. The ASTM E 1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m2.

Committee Reason: The committee agreed that this proposal clarifies the intent of Section 1403.5 in that the trigger for requiring NFPA 285 testing is the water-resistive barrier material and not its accessories. It extends to the excepted accessories specifically mentioned to include flashings that are not associated with fenestration. The modification further clarifies that all water-resistive barriers need to be included in this requirement.

Assembly Action

None

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Code Change No: FS157-15

Original Proposal

Section: Table 1405.2

Proponent: Charles Clark, Jr, Brick Industry Association, representing Brick Industry Association (cclark@bia.org)

Revise as follows:

TABLE 1405.2
MINIMUM THICKNESS OF WEATHER COVERINGS

COVERING TYPE	MINIMUM THICKNESS (inches)
Anchored masonry veneer	<u>2.0</u> 2.625

(Portions of table and footnotes not shown remain unchanged)

Reason: For more than 30 years, the minimum nominal thickness of anchored masonry veneer allowed by the most prevalent residential model code available at the time has been 2 inches. The IRC has allowed a minimum nominal thickness of 2 inches since its inception in the year 2000. All editions of the CABO One and Two Family Dwelling Code in our office library that go back as far as the year 1983 have allowed a minimum nominal thickness of 2 inches. In short, anchored masonry veneer has performed well for thirty years with an allowable minimum nominal dimension of 2 inches on residential structures and should be permitted as the minimum dimension on all structures.

Cost Impact: Will not increase the cost of construction

This change will not result in an increase to the cost of construction. In fact, this change may result in a reduction in the cost of construction as brick shelves in foundations could be slightly smaller, lintels and shelf angles supporting brick could be slightly smaller, and the seismically-induced load of brick veneer would be slightly lower.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: The committee agreed that anchored masonry veneer should have an allowable minimum nominal dimension of 2 inches based on historical use and residential code recognition.

Assembly Action

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None

Approved as Submitted

Code Change No: FS158-15

Original Proposal

Section: Table 1405.2

Proponent: Jason Thompson, representing National Concrete Masonry Association (jthompson@ncma.org)

Revise as follows:

MINIMUM THICKNESS OF WEATHER COVERINGS	
COVERING TYPE	MINIMUM THICKNESS (inches)
Adhered masonry veneer Architectural Cast Stone Other	<u>0.75</u> 0.25
Anchored masonry veneer <u>Stone (natural)</u> <u>Architectural Cast Stone</u> <u>Other</u>	<u>2</u> <u>1.25</u> 2.625
Stone (cast artificial, anchored)	1.5
Stone (natural)	2

TABLE 1405.2

(Portions of table and footnotes not shown remain unchanged)

Reason: Table 1405.2 addresses several types of masonry veneer systems; including both anchored (attached to a backup system using ties or anchors) as well as adhered (bonded to a backup system using mortar or other approved adhesive material). This change proposes to reorganize the minimum veneer thickness requirements in Table 1405.2 to clarify which minimum thickness requirements apply to specific products depending upon whether they are used as an anchored or adhered veneer. While mostly a reorganization, there are some minor substantive revisions proposed, including:

The term "stone (cast artificial)" is replaced with "architectural cast stone" as this is consistent with industry practices and the terminology used in Chapter 21.

A minimum thickness of 0.75 inches for adhered architectural cast stone products has been added. The default thickness of 0.25 inches for adhered veneer systems is not appropriate for architectural cast stone due to production, transportation, and installation constraints. The minimum thickness of 0.75 inches is consistent with industry practices and recommendations from the Cast Stone Institute.

The minimum thickness of anchored architectural cast stone is reduced slightly from 1.5 inches to 1.25 inches, also consistent with industry practices and recommendations from the Cast Stone Institute. While minor, the changes proposed here bring the requirements of Table 1405.2 in line with referenced standards and industry practice.

Cost Impact: Will not increase the cost of construction

The changes proposed are primarily to clarify the requirements of Table 1405.2 and make them consistent with referenced standards and industry recommendations.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this was mostly a reorganization of the current requirements. The committee also agreed with the minimum thickness revisions based on current industry standards.

Assembly Action

None



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Code Change No: FS160-15

Original Proposal

Section: 1405.3.1

Proponent: Maureen Traxler, representing Seattle Dept of Planning & Development (maureen.traxler@seattle.gov)

Revise as follows:

1405.3.1 Class I and II vapor retarders. Class I and II vapor retarders shall not be provided on the interior side of frame walls in Zones 1 and 2. Class I vapor retarders shall not be provided on the interior side of frame walls in Zones 3 and 4 other than Marine 4. Class I or II vapor retarders shall be provided on the interior side of frame walls in Zones 5, 6, 7, 8 and Marine 4. The appropriate zone shall be selected in accordance with Chapter 3 of the International Energy Conservation Code.

Exceptions:

- 1. Basement walls.
- 2. Below-grade portion of any wall.
- 3. Construction where moisture or its freezing will not damage the materials.
- 4. Conditions where Class III vapor retarders are required in Section 1405.3.2.

Reason: This proposal clarifies the vapor retarder requirement for Zone Marine 4. The second sentence of the paragraph forbids Class I vapor retarders on the interior side of walls in Zone 4, but the thrid sentence requires either Class I or II vapor retarder on the interior side in Zone Marine 4. We propose that the prohibition applies to Zone 4 except in Marine areas.

Cost Impact: Will not increase the cost of construction

This proposal will not increase the cost of construction because it is a clarification of existing code language.

Committee Action:

Committee Reason: The committee agreed that this proposal clarifies the vapor retarder requirement for Zone Marine 4.

Assembly Action

None

Approved as Submitted

Final Hearing Results

FS160-15

AS



Code Change No: FS162-15

Original Proposal

Section: 202, Table 1405.3.2

Proponent: Mike Fischer, Kellen Company, representing The Center for the Polyurethanes Industry of the American Chemistry Council and Polyisocyanurate Insulation Manufacturers Association (PIMA) (mfischer@kellencompany.com)

Add new definition as follows:

CONTINUOUS INSULATION (ci) Insulating material that is continuous across all structural members without thermal bridges other than fasteners and service openings. It is installed on the interior or exterior or is integral to any opague surface of the building envelope.

Revise as follows:

TABLE 1405.3.2 (1405.3.2) CLASS III VAPOR RETARDERS			
ZONE	CLASS III VAPOR RETARDERS PERMITTED FOR: ^a		
Marine 4	Vented cladding over wood structural panels Vented cladding over fiberboard Vented cladding over gypsum <u>Continuous insulation</u> Insulated sheathing with <i>R</i> - value \geq R2.5 over 2 × 4 wall <u>Continuous insulation</u> Insulated sheathing with <i>R</i> - value \geq R3.75 over 2 × 6 wall		
5	Vented cladding over wood structural panels Vented cladding over fiberboard Vented cladding over gypsum <u>Continuous insulation</u> Insulated sheathing with <i>R</i> -value \geq R5 over 2 × 4 wall <u>Continuous insulation</u> Insulated sheathing with <i>R</i> -value \geq R7.5 over 2 × 6 wall		
6	Vented cladding over fiberboard Vented cladding over gypsum <u>Continuous</u> insulation Insulated sheathing with <i>R</i> -value \ge R7.5 over 2 × 4 wall <u>Continuous</u> insulation Insulated sheathing with <i>R</i> -value \ge R11.25 over 2 × 6 wall		
7 and 8	<u>Continuous insulation</u> Insulated sheathing with <i>R</i> -value \ge R10 over 2 × 4 wall <u>Continuous insulation</u> Insulated sheathing with <i>R</i> -value \ge R15 over 2 × 6 wall		

For SI: 1 pound per cubic foot = 16 kg/m3.

a. Sprayfoam with a maximum permeance of 1.5 perms at the installed thickness, minimum density of 2lbs/ft applied to the interior cavity side of wood structural panels, fiberboard, insulating sheathing or gypsum is deemed to meet the continuous insulation insulating sheathing requirement where the spray foam R-value meets or exceeds the specified insulating sheathing Rvalue.

Reason: The 2015 International Codes have introduced a new term, continuous insulation, which has replaced the previous term "insulated sheathing" in the codes. Insulated sheathing generally refers to a rigid board product; the intent of the product is to provide an insulation material that contains limited thermal bridging- particularly at framing members (see definition below). While all insulated sheathing meets the criteria for continuous insulation, not all continuous insulation is a "sheathing" product.

The proposal revises the table to broaden the available product solutions to include all types of continuous insulation in order to meet the intent of the code as it related to the appropriate use of vapor retarders, and adds the definition of continuous insulation from the IRC and IECC.

The proposal further modifies the footnote to remove the density requirement, and replace it with a vapor permeance requirement that more appropriately addresses the intent of the footnote.

These changes are consistent with changes made to the 2015 IRC, Table R702.7.1.

[RE] CONTINUOUS INSULATION (ci). Insulating material that is continuous across all structural members without thermal bridges other than fasteners and service openings. It is installed on the interior or exterior or is integral to any opaque surface of the building envelope.



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Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that the terminology change was necessary (insulating sheathing to continuous insulation). Further, the definition is consistent with what is currently in the IRC.

Assembly Action

None

Final Hearing Results

FS162-15

AS

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Code Change No: FS163-15

Original Proposal

Section: 1405.3.4

Proponent: Matthew Dobson, representing Vinyl Siding Institute (mdobson@vinylsiding.org)

Revise as follows:

1405.3.4 Minimum clear airspaces and vented openings for vented cladding. For the purposes of this section, vented cladding shall include the following minimum clear airspaces:

- 1. Vinyl, polypropylene, or insulated vinyl lap or horizontal aluminum siding applied over a weatherresistive barrier as specified in this chapter.
- 2. Brick veneer with a clear airspace as specified in this code.
- 3. Other approved vented claddings.

Reason: This change recognizes the similar characteristics polypropylene siding and insulated vinyl siding have to vinyl siding as vented cladding. Polypropylene siding is very similar to vinyl siding as it has similar profiles and is installed by hanging it on the wall. Insulated vinyl siding has been studied closely and has shown to have as good if not better performance as a vented cladding like vinyl siding. Here is the link to this

study: http://web.ornl.gov/sci/buildings/2012/2010%20B11%20papers/49_Drumheller.pdf.

Bibliography: http://web.ornl.gov/sci/buildings/2012/2010%20B11%20papers/49_Drumheller.pdf

Cost Impact: Will not increase the cost of construction This a simple recognition of performance, it will not impact cost.



Committee Action:

Approved as Modified

Modify as follows:

1405.3.4 Minimum clear airspaces and vented openings for vented cladding. For the purposes of this section, vented cladding shall include the following minimum clear airspaces:

- Vinyl, polypropylene, or insulated vinyl lap or horizontal aluminum siding applied over a weather-resistive barrier as 1. specified in this chapter.
- 2. Brick veneer with a clear airspace as specified in this code.
- 3. Other approved vented claddings.

Committee Reason: The committee agreed that polypropylene siding should be recognized as a vented cladding based on its similar characteristics to vinyl siding as vented cladding. The modification removes insulated vinyl as it has not been established as a vented cladding.





Code Change No: FS164-15

Original Proposal

Section: 1405.4, Chapter 35

Proponent: Theresa Weston, DuPont Building Innovations, representing DuPont Building Innovations (theresa.a.weston@usa.dupont.com)

Revise as follows:

1405.4 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting trim. When self-adhered membranes are used as flashings, those self-adhered flashings shall comply with AAMA 711.

Add new standard(s) as follows:

AAMA 711-13 Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products

Reason: Self-adhered membranes are a growing segment of the flashing material market, but no material property or performance requirements for these materials are currently included in the code. AAMA 711 was developed to insure that this type of material meet minimum performance specifications. This proposal incorporates this industry standard by reference into the code, as was previously done in the 2012 International Residential Code. The properties and quality of flashing materials are crucial to successful implementation of the water management in wall systems.

Cost Impact: Will not increase the cost of construction

The proposal does not mandate the use of a specific material, and therefore does not increase code requirements or associated costs.

Analysis: A review of the standard proposed for inclusion in the code, AAMA 711, 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:

Modify as follows:

1405.4 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting trim. When self-adhered membranes are used as flashings of fenestration in wall assemblies, those self-adhered flashings shall comply with AAMA 711.

Committee Reason: The committee agreed that AAMA 711 was a proper standard to reference in the code as a specification for self-adhering flashing that is widely used in building construction. The modification properly limits the application to self-adhered membranes that are used as flashings of fenestration in wall assemblies.

Assembly Action

None

Approved as Modified



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Final Hearing Results FS164-15 AM

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Code Change No: FS165-15

Original Proposal

Section: 1405.4, Chapter 35

Proponent: Theresa Weston, DuPont Building Innovations, representing DuPont Building Innovations (theresa.a.weston@usa.dupont.com)

Revise as follows:

1405.4 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting trim. When fluid applied membranes are used as flashing, those fluid applied membrane flashings shall comply with AAMA 714.

Add new standard(s) as follows:

AAMA 714-15 Voluntary Specification for Liquid Applied Flashing Used to Create a Water-Resistive Seal around Exterior Wall Openings in Buildings

Reason: Fluid applied membranes are gaining in use in the market, but no material property or performance requirements for these materials are currently included in the code. Industry has developed standard AAMA 714 to insure that this type of material meets minimum performance specifications. This proposal incorporates AAMA 714 by reference into the code. The properties and quality of flashing materials are crucial to the successful implementation of the water management in building envelopes.

Cost Impact: Will not increase the cost of construction

This proposal does not mandate the use of any material, and therefore does not increase code requirements or have associated costs.

Analysis: A review of the standard proposed for inclusion in the code, AAMA 714, 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 as follows:

1405.4 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting trim. When fluid applied membranes are used as flashing for exterior wall openings, those fluid applied membrane flashings shall comply with AAMA 714.

Committee Reason: Despite the lack of data to show that currently manufactured liquid applied flashing meet this new standard, the committee agreed that AAMA 714 was a proper standard to reference in the code as a specification for liquid applied flashing. The modification properly limits the application to liquid applied flashings that are used as flashings of fenestration in wall assemblies.

Assembly Action

None



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Code Change No: FS166-15

Original Proposal

Section: 1405.4.2

Proponent: Charles Clark, Jr, representing Masonry Alliance for Codes and Standards (cclark@bia.org)

Revise as follows:

1405.4.2 Masonry. Flashing and weep holes in anchored veneer designed in accordance with Section 1405.6 shall be located in the first course of masonry not more than 16 inches (407 mm) above finished ground level above the foundation wall or slab, and. At other points of support, including structural floors, shelf angles and lintels-where anchored veneers are designed, flashing and weep holes shall be located in accordance with Section 1405.6the first course of masonry above the support.

Reason: Far too often, flashing and weep holes in anchored masonry veneer are located in the base of the wall such that they end up below the finished grade making them ineffective. This code change removes the text that indicates that they must be installed in the first course above grade at the base of a wall and instead requires that they be installed within a minimum distance above the finished grade. Flashing and weep holes supported on shelf angles or lintels would still be required to be in the first course of masonry located immediately above the support.

Cost Impact: Will not increase the cost of construction

If anything, this should lower the cost of construction as it would alleviate relocation of the grade to ensure that flashing and weep holes are indeed above grade.

> **Report of Committee Action** Hearings

Committee Action:

Modify as follows:

1405.4 Flashing. Flashing and weep holes in anchored veneer designed in accordance with Section 1405.6 shall be located not more than 16-10 inches (407 245 mm) above finished ground level above the foundation wall or slab. At other points of support, including structural floors, shelf angles and lintels, flashing and weep holes shall be located in the first course of masonry above the support.

Committee Reason: The committee agreed that the flashing and weep holes in anchored masonry need to be at a minimum height above finished grade to function properly. The modification reduces the original height from 16 to 10 inches, which is a more reasonable height to reduce the amount of waterproofing that would be required below the flashing.

Final Hearing Results

Assembly Action

None

Approved as Modified

FS166-15

AM



Code Change No: FS167-15

Original Proposal

Section: 1406.3, 2612.5

Proponent: John Woestman, Kellen Company, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com)

Revise as follows:

1406.3 Balconies and similar projections. Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated where required by Table 601 for floor construction or shall be of Type IV construction in accordance with Section 602.4. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

Exceptions:

- 1. On buildings of Type I and II construction, three stories or less above grade plane, fireretardant-treated wood shall be permitted for balconies, porches, decks and exterior stairways not used as required exits.
- 2. Untreated wood is, and plastic composites that comply with ASTM D7032 and Section 2612, are permitted for pickets and rails or similar guardrail devices that are limited to 42 inches (1067 mm) in height.
- 3. Balconies and similar projections on buildings of Type III, IV and V construction shall be permitted to be of Type V construction, and shall not be required to have a fire-resistance rating where sprinkler protection is extended to these areas.
- 4. Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited.

2612.5 Construction requirements. Plastic composites meeting the requirements of Section 2612 shall be permitted to be used as exterior deck boards, stair treads, handrails and guards in buildings of Type VB-where combustible construction is permitted.

Reason: In Section 1406.3, plastic composites which comply with ASTM D7032 and Section 2612.3 are required to be tested to ASTM E84 and achieve a flame spread index of not more than 200. While most untreated wood has an ASTM E84 flame spread index below 200, a few species of untreated wood has a FSI of potentially over 200 (Ponderosa Pine, Northern White Pine), and a few species have FSI approaching 200 (Southern Pine, Poplar). Source:

http://www.fpl.fs.fed.us/documnts/fplgtr/fplgtr190/chapter_18.pdf. This proposal, in 1406.3, seeks to allow plastic composites meeting the specified criteria to be used in the same applications where untreated wood may be used in balcony construction. Regarding Section 2612.5: In the IBC, there are several specific exterior applications where combustible construction is allowed, or where noncombustible construction is not required, with buildings of other than Type VB. This proposal seeks to allow plastic composites which comply with the requirements of Section 2612 in those applications. IBC Section 1403.6 Balconies, is one of those applications. IBC 3104.3 Pedestrian walkways, is another.

Cost Impact: Will not increase the cost of construction

No mandatory cost increase. This proposal would allow additional materials (plastic composites) to be used in several specific applications. It may be noted plastic composites generally cost more than wood but the use of plastic composites is at the discretion of the building owner.



Report of Committee Action		
Hearings		

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that plastic composites that comply with ASTM D7032 have been shown to be equivalent to untreated wood, including flame spread characteristics, and therefore should be allowed in the applications set forth in Section 1406.3, exception 2.

Assembly Action

None

Final Hearing Results

FS167-15

AS

Back

Code Change No: FS168-15

Original Proposal

Section: 1409.2

Proponent: Jesse Beitel, representing Trespa NA (ibeitel@haifire.com)

Revise as follows:

1409.2 Exterior wall finish. HPL used as exterior wall covering or as elements of balconies and similar projections and bay and oriel windows to provide cladding or weather resistance shall comply with Sections 1409.4 and through 1409.14.

Reason: This code proposal is a correction to the original proposal. When the Section for High Pressure Laminates was added to the IBC via FS164-09/10, there was an error in the submitted proposal. In the reason statement, it was stated that FS164 was to add language for HPL the paralled Section 1407. Section 1407.2 reads "....shall comply with Sections 1407.4 through 1407.14." The error that occurred in Section 1409.2 was ".....shall comply with Sections 1407.4 and 1407.14." In both the 2012 and the 2015 Codes the "and" is used versus the "through" which was the original intent. The use of the "and" eliminates fire testing, etc. that are needed for the application of the HPLs.

Currently HPL manufacturers do use the "through" intent to evaluate their products.

Cost Impact: Will not increase the cost of construction

The manufacturers of the HPLs currently test as if the "through" was in the code.

Report of Committee	Action
Hearings	

Committee Action:

Approved as Submitted

None

Committee Reason: The proposal appropriately requires HPL used in the applications described in Section 1409.2 to comply with the requirements of Sections 1409.4 through 1409.14, rather than just the two sections.

Final Hearing Results

Assembly Action

FS168-15

AS

Code Change No: S294-16

Original Proposal

Section: IBC: 1406.3, 1410.1, 2407.1; IFC: 804.1.

Proponent: Maureen Traxler, City of Seattle Dept of Construction & Inspections, representing City of Seattle Dept of Construction & Inspections (maureen.traxler@seattle.gov)

Revise as follows:

2407.1 Materials. Glass used in a handrail, guardrail or a guard section shall be laminated glass constructed of fully tempered or heat-strengthened glass and shall comply with Category II or CPSC 16 CFR Part 1201 or Class A of ANSI Z97.1. Glazing in railing in-fill panels shall be of an approved safety glazing material that conforms to the provisions of Section 2406.1.1. For all glazing types, the minimum nominal thickness shall be 1/4 inch (6.4 mm).

Exception: Single fully tempered glass complying with Category II of CPSC 16 CFR Part 1201 or Class A of ANSI Z97.1 shall be permitted to be used in handrails and guardrails guards where there is no walking surface beneath them or the walking surface is permanently protected from the risk of falling glass.

1406.3 Balconies and similar projections. Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated where required by Table 601 for floor construction or shall be of Type IV construction in accordance with Section 602.4. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

Exceptions:

- 1. On buildings of Type I and II construction, three stories or less above grade plane, fireretardant-treated wood shall be permitted for balconies, porches, decks and exterior stairways not used as required exits.
- 2. Untreated wood is permitted for pickets, rails and rails or similar guardrail devices guard components that are limited to 42 inches (1067 mm) in height.
- 3. Balconies and similar projections on buildings of Type III, IV and V construction shall be permitted to be of Type V construction, and shall not be required to have a *fire-resistance* rating where sprinkler protection is extended to these areas.
- 4. Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited.

1410.1 Plastic composite decking. Exterior deck boards, stair treads, handrails and guardrail systems guards constructed of plastic composites, including plastic lumber, shall comply with Section 2612.

2015 International Fire Code

Revise as follows:

804.1 Interior trim. Material, other than foam plastic, used as interior trim in new and existing buildings shall have minimum Class C flame spread and smoke-developed indices, when tested in accordance with ASTM E 84 or UL 723, as described in Section 803.1.1. Combustible trim, excluding handrails




and guardrails guards, shall not exceed 10 percent of the specific wall or ceiling areas to which it is attached.

Reason: This proposal changes the term "guardrail" to "guard" in several code sections. "Guard" is defined in the IBC and should be used consistently throughout the codes. The term is defined as "a building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level." This definition is appropriate for each of the code sections addressed in this proposal.

There is one other use of the term "guardrail," in IFC Section 2306.7.9.2.2.2, regarding physical protection for vapor-processing equipment. Because the requirement is not related to fall protection, we determined that "guard" as defined in the IBC is not the appropriate term, and we did not include that section in this proposal.

Cost Impact: Will not increase the cost of construction

This proposal will have no effect on the cost of construction. It changes the term "guardrail" to "guard" in several code sections.

Report of Committee Action	
Hearings	

Committee Action:

Committee Reason: There is a difference between a guard and guardrail. This proposal clarifies these code provisions by substituting guard which is the code-defined term.

Assembly Action

None

Approved as Submitted

Final Action Results

S294-16

AS

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Code Change No: FS169-15

Original Proposal

Section: 2603.3

Proponent: Mike Fischer, Kellen Company (mfischer@kellencompany.com)

Revise as follows:

2603.3 Surface-burning characteristics. Unless otherwise indicated in this section, foam plastic insulation and foam plastic cores of manufactured assemblies shall have a flame spread index of not more than 75 and a smoke-developed index of not more than 450 where tested in the maximum thickness intended for use in accordance with ASTM E 84 or UL 723. Loose fill-type foam plastic insulation shall be tested as board stock for the flame spread and smoke-developed indexes.

Exceptions:

- 1. Smoke-developed index for interior trim as provided for in Section 2604.2.
- 2. In cold storage buildings, ice plants, food plants, food processing rooms and similar areas, foam plastic insulation where tested in a thickness of 4 inches (102 mm) shall be permitted in a thickness up to 10 inches (254 mm) where the building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1. The approved automatic sprinkler system shall be provided in both the room and that part of the building in which the room is located.
- 3. Foam plastic insulation that is a part of a Class A, B or C roof-covering assembly provided the assembly with the foam plastic insulation satisfactorily passes NFPA 276 or UL 1256. The smoke-developed index shall not be limited for roof applications.
- 4. Foam plastic insulation greater than 4 inches (102 mm) in thickness shall have a maximum flame spread index of 75 and a smoke-developed index of 450 where tested at a minimum thickness of 4 inches (102 mm), provided the end use is approved in accordance with Section 2603.9 using the maximum thickness and density intended for use.
- 5. Flame spread and smoke-developed indexes for foam plastic interior signs in covered and open mall buildings provided the signs comply with Section 402.6.4.

Reason: This change is a clarification only; it provides consistency with the IRC and clarifies that testing at a maximum thickness is appropriately applied to installations of thicknesses at or less than the tested specimen.

Cost Impact: Will not increase the cost of construction The change is a clarification only; it does not add in new requirements.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this proposal provides consistency with the IRC and clarifies that testing at a maximum thickness is appropriately applied to installations of thicknesses at or less than the tested specimen.

Assembly Action			None
	Final Hearing	g Results	
	FS169-15	AS	



Code Change No: FS172-15

Original Proposal

Section: 2603.4

Proponent: Marcelo Hirschler, representing GBH International (gbhint@aol.com)

Revise as follows:

2603.4 Thermal barrier. Except as provided for in Sections 2603.4.1 and 2603.9, foam plastic shall be separated from the interior of a building by an approved thermal barrier of 1/2-inch (12.7 mm) gypsum wallboard, heavy timber in accordance with Section 602.4, or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275. Combustible concealed spaces shall comply with Section 718.

Reason: Thermal barriers are materials that comply with NFPA 275. In order to comply with NFPA 275 thermal barrier materials (in combination with the foam plastic insulation they are supposed to protect) are supposed to resist flashover after exposure to a roomcorner test (using a test specimen that covers 3 walls and the ceiling of an 8 ft. by 12 ft. by 8 ft. room) such as NFPA 286, as well as comply with a number of other requirements (peak heat release rate of no more than 800 kW, flames that don't reach the extremities of the test specimen, total smoke release of no more than 1,000 m²).

As an alternative to testing to NFPA 286 the thermal barriers are allowed to be tested to FM 4880, UL 1040 or UL 1715, all severe large scale tests.

Beyond the test just mentioned, thermal barriers must also be able to pass a fire resistance test using a time-temperature curve like the one in ASTM E119 for 15 minutes.

It is clear (and fire test data have shown this) that thin wood panel materials will not comply with these requirements, because if a thin wood panel, covering a foam plastic insulation material, is exposed to the fire source in NFPA 286, it will reach flashover well before the end of the 15 minute test period.

Discussions held during the IRC hearings for the 2015 edition addressed the interest by some proponents that a wood material be permitted to be used as a thermal barrier without testing. Therefore, this proposal suggests that heavy timber is a wood material that could safely be used as a thermal barrier, while thin wood panels are not appropriate thermal barriers.

Cost Impact: Will not increase the cost of construction

This provides an alternate option for use as a thermal barrier and does not mandate any material.

Report of Committee Action
Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee approved this change based on the following: the code already allows 1/2 inch wood panel to provide this protection - heavy timber can more than meet this protection; Table 602 allows heavy timber for a 1-hour fire resistance construction - this should more than qualify it as a thermal barrier.

Assembly Action

None

Final Hearing Results

FS172-15

AS



Back

Code Change No: FS175-15

Original Proposal

Section: 2603.5

Proponent: Mike Fischer, Kellen Company, representing the Center for the Polyurethanes Industry of the American Chemistry Council (mfischer@kellencompany.com)

Add new text as follows:

2603.5.8 Concealed spaces. Concealed spaces of exterior walls and exterior wall coverings shall comply with Section 718.

Reason: This proposal seeks to provide language referencing the Section 718 fireblocking requirements for concealed spaces of exterior walls and exterior wall coverings.

Cost Impact: Will not increase the cost of construction The proposal is a clarification and adds no new requirements.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Modified

Modify as follows:

2603.5 Exterior walls of buildings of any height. Exterior walls of buildings of Type I, II, III or IV construction of any height shall comply with Sections 2603.5.1 through 2603.5.7. Exterior walls of cold storage buildings required to be constructed of noncombustible materials, where the building is more than one story in height, shall comply with the provisions of Sections 2603.5.1 through 2603.5.7. Exterior walls of buildings of Type V construction shall comply with Sections 2603.2, 2603.3 and 2603.4. Fireblocking shall be in accordance with Section 718.2.

2603.5.8 Concealed spaces. Concealed spaces of exterior walls and exterior wall coverings shall comply with Section 718.

Committee Reason: The committee agreed that Section 2603.5 should also refer code users to Section 718 for concealed space protection. The modification clarifies that it is the fireblocking requirements that is needed and appropriately locates the requirement within the general section 2603.5 rather than creating a new section.

Final Hearing Results

Assembly Action

None

FS175-15

AM



Code Change No: FS178-15

Original Proposal

Section(s): 2603.7, 2603.7.1, 2603.7.2, 2603.7.3; IMC: 602.2.1.6, 602.2.1.6.1, 602.2.1.6.2, 602.2.1.6.3

Proponent: Tony Crimi, representing North American Insulation Manufacturers Association (tcrimi@sympatico.ca)

2603.7 Foam plastic insulation used as interior finish or interior trim in plenums. Foam plastic insulation used as interior wall or ceiling finish or as interior trim in plenums shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 and shall comply with one or more of Sections 2603.7.1, 2603.7.2 and 2607.3.

2603.7.1 Separation required. The foam plastic insulation shall be separated from the plenum by a thermal barrier complying with Section 2603.4 and shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use.

Revise as follows:

2603.7.2 Approval. The foam plastic insulation shall exhibit a flame spread index of 25 or less and a smoke-developed index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use and shall meet the acceptance criteria of Section 803.1.2 when tested in accordance with NFPA 286. The feam plastic insulation shall be approved based on tests conducted in accordance with Section 2603.9.

Reason: The last sentence of 2603.7.2 creates a conflict with the remainder of the requirement.

IBC 2603.7 and 2603.7.1 are clear in stating that ASTM E84 or UL 723 are to be used to determine the flame spread index and smoke developed index. This is very typical in the IBC. IBC 2603.7.2 also identifies the required test methods as ASTM E 84 and UL 723, and the required ratings to be derived from those tests, and identifies NFPA 286 and the acceptance criteria in 803.1.2 (which includes smoke measurement) as a requirement.

The problem is then with the last sentence of 2603.7.2 which directs the Code official to "approve" the insulation based on a different set of room fire tests, which do not all provide a flame spread and smoke developed value. It is not clear if this is to be in addition to the flame spread and smoke developed results, or in place of those tests.

Since 2603.9 does not exempt the material from compliance with 2603.7, it appears that both sets of criteria must be met. This is reasonable in that 3 of the 4 large-scale tests identified in 2603.9 do not have limitations on smoke development. Furthermore, based on the language in 2603.9, alternative tests could also be permitted, and what those do or do not measure is not known. However, since compliance with NFPA 286 is already required in 2603.7.2, and NFPA 286 and the acceptance criteria in 803.1.2 are also identified in 2603.9, it appears this sentence is redundant.

Cost Impact: Will not increase the cost of construction The proposal will potentially eliminate redundant testing to additional standards other than UL 723, ASTM E84, and NFPA 286

Report of Committee Action	
Hearings	

Committee Action:

Approved as Modified

Modify as follows:

2603.7.2 Approval. The foam plastic insulation shall exhibit a flame spread index of 25 or less and a smoke-developed index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use and shall meet the acceptance criteria of Section 803.1.2 when tested in accordance with NFPA 286. Alternatively, the foam plastic insulation shall be approved based on tests conducted in accordance with Section 2603.9.



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Committee Reason: The committee agrees that compliance with Section 2603.9 should not be mandated as there are other paths to compliance. The modification keeps reference to compliance with Section 2603.9 as an alternative.

Public Comments

Assembly	Action:		
ASSCIIDI			

None

Public Comment 1:

Marcelo Hirschler, representing GBH International (gbhint@aol.com) requests Approve as Modified by this Public Comment.

2603.7Foamplasticinsulationused <u>inplenums</u> as interior finish or interior trim <u>inplenums</u>. Foam plastic <u>insulation in</u> <u>plenums</u> used as interior wall or ceiling finish, or <u>interior trim</u>, <u>shall exhibit a flame spread</u> <u>index of 25 or less and a</u> <u>smoke-developed index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the maximum thickness</u> and <u>density intended for use</u>, and shall be tested in accordance with NFPA 286 and meet the acceptance criteria of S ection 803.1.2. As an alternative to testing to NFPA 286, the foam plastic shall be approved based on tests conducted in accordance with Section 2603.9.

Exceptions:

- Foam plastic in plenums used as interior wall or ceiling finish, or interior trim in plenums, shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E-84-E84 or UL 723 at the maximum thickness and density intended for use, where it is separated from the airflowin the plenum by a thermal barrier complying with Section 2603.4.
- 2. Foam plastic in plenums used as interior wall or ceiling finish, or interior trim, shall comply exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with one ASTM E84 or more UL 723 at the maximum thickness and density intended for use, where it is separated from the airflow in the plenum by corrosion-resistant steel having a base metal thickness of Sections 2603.7.1 not less than 0.0160 inch (0.4 mm).
- 3. Foam plastic in plenums used as interior wall or ceiling finish, 2603.7.2 or interior trim, shall exhibit a flame spread index of 75 or less and 2607.3 a smoke-developed index of 450 or less when tested in accordance with ASTM E84 or UL 723 at the maximum thickness and density intended for use, where it is separated from the airflow in the plenum by not less than a 1 inch (25 mm) thickness of masonry or concrete.

2603.7.1-Separation required. The foam plastic insulation shall be separated from the plenum by a thermal barrier complying with Section 2603.4 and shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use.

2603.7.2 Approval. The foam plastic insulation shall exhibit a flame spread index of 25 or less and a smoke developed index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use and shall meet the acceptance criteria of Section 803.1.2 when tested in accordance with NFPA 286. The foam plastic insulation shall be approved based on tests conducted in accordance with Section 2603.9.

2603.7.3 Covering. The foam plastic insulation shall be covered by corrosion-resistant steel having a base metal thickness of not less than 0.0160 inch (0.4 mm) and shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use.

2015 International Mechanical Code

602.2.1.6Foamplastic insulation inplenums as interior finishor interior trim. Foam plastic insulation used in plenums used as interior wall or ceiling finish or interior trim, shall exhibit a flame spread index of 25 or less and a smokedeveloped index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the maximum thickness and density intended for use and shall be tested in accordance with NFPA 286 and meet the acceptance criteria of Section 803.1.2 of the International Building Code. As an alternative to testing to NFPA 286, the foam plastic shall be approved based on tests conducted in accordance with Section 2603.9 of the International Building Code.

Exceptions:

- 1.. <u>Foam plastic in plenums used</u> as interior <u>wall or ceiling finish</u>, <u>or interior</u> trim, shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM <u>E-84</u> <u>E84</u> or UL 723 <u>at the maximum thickness</u> and <u>density intended for use</u>, <u>where it is separated from the</u> <u>airflow in the plenum by a thermal barrier complying with Section 2603.4 of the</u> <u>International Building Code</u>.
- 2. Foam plastic in plenums used as interior wall or ceiling finish, or interior trim, shall also comply exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with one ASTM E84 or more-UL 723 at the maximum thickness and density intended for use, where it is

separated from the airflowin the plenum by corrosion-resistant steel having a base metal thickness of Sections 602.2.1.6.1 not less than 0.0160 inch (0.4 mm).

Foam plastic in plenums used as interior wall or ceiling finish, 602.2.1.6.2 or interior trim, shall exhibit a 3. flame spread index of 75 or less and 602.2.1.6.3 a smoke- developed index of 450 or less when tested in accordance with ASTM E84 or UL 723 at the maximum thickness and density intended for use, where it is separated from the airflow in the plenum by not less than a 1 inch (25 mm) thickness of masonry or concrete.

602.2.1.6.1 Separation required. The foam plastic insulation shall be separated from the plenum by a thermal barrier complying with Section 2603.4 of the International Building Code and shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use.

602.2.1.6.2 Approval. The foam plastic insulation shall exhibit a flame spread index of 25 or less and a smoke-developed index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use and shall meet the acceptance criteria of Section 803.1.2 of the International Building Code when tested in accordance with NFPA 286.

The foam plastic insulation shall be approved based on tests conducted in accordance with Section 2603.9 of the International Building Code.

602.2.1.6.3 Covering. The foam plastic insulation shall be covered by corrosion-resistant steel having a base metal thickness of not less than 0.0160 inch (0.4 mm) and shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use-

Commenter's Reason: During the code cycle that led to the approval of the 2015 IBC and 2015 IMC Agreement was reached that section 2603.7 of the IBC and section 602.2.1.6 of the IMC (via FS 189-12) would have identical language. Unfortunately, proposals were allowed separately to each code section in this cycle. Code proposal M70 was handled by the IMC committee and accepted as modified and it introduced improved language into both IBC 2603.7 and IMC 602.2.1.6, meaning that both would retain identical language. In the same section proposal FS 178 was approved as modified by the IBC FS committee and it introduced some new language into IBC 2603.7 but not into IMC 602.2.1.6. This public comment simply combines both proposals, as accepted by the technical committees and generates identical language into both code sections. A slight change in language was needed for the added sentence from FS 178 because it needed to clarify that the alternate testing refers only to NFPA 286 testing and does not exclude the foam plastic to having to be tested to ASTM E84 (each with the appropriate criteria).

Final Hearing Results

FS178-15

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Code Change No: FS180-15

Original Proposal

Section: 2606.11

Proponent: Mike Fischer, Kellen Company, representing the Plastic Glazing Coalition of the American Chemistry Council (mfischer@kellencompany.com)

Revise as follows:

2606.11 Greenhouses. Light-transmitting plastics shall be permitted in lieu of plain-glass in greenhouses.

Reason: The use of the word "plain" glass is not defined. Does plain glass refer to non-tempered? Clear (as in non-coated, or as in non-tinted?) Non-wired? The proposal removes the ambiguous and unnecessary adjective.

Cost Impact: Will not increase the cost of construction The proposal is editorial only. There is no change in requirements.

> **Report of Committee Action** Hearings

Committee Action:

Committee Reason: The committee agreed that "plain" glass is not defined and that the term should be removed as being ambiguous and unnecessary.

Assembly Action

Final Hearing Results

FS180-15

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Approved as Submitted

None

Back

Code Change No: FS181-15

Original Proposal

Section: 2609.4

Proponent: David Kulina, representing Engel Architects (david@engelarch.com)

Revise as follows:

2609.4 Area limitations. Roof panels shall be limited in area and the aggregate area of panels shall be limited by a percentage of the floor area of the room or space sheltered in accordance with Table 2609.4.

Exceptions:

- 1. The area limitations of Table 2609.4 shall be permitted to be increased by 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. Low-hazard occupancy buildings, such as swimming pool shelters, shall be exempt from the area limitations of Table 2609.4, provided that the buildings do not exceed 5,000 square feet (465 m²) in area and have a minimum fire separation distance of 10 feet (3048 mm).
- 3. Greenhouses that are occupied for growing plants on a production or research basis maintaining plants, without public access, shall be exempt from the area limitations of Table 2609.4 provided they have a minimum fire separation distance of 4 feet (1220 mm).
- 4. Roof coverings over terraces and patios in occupancies in Group R-3 shall be exempt from the area limitations of Table 2609.4 and shall be permitted with light-transmitting plastics.

Reason: Light transmitting plastics are necessary in most greenshoues used for plants, irregardless of whether those plants are grown or simply maintained. For example, many retailers have greenhouses not open to the public in which they keep plants until ready for sale. Also, many colleges have greenhouses to hold plants during winter months. Furthermore, current plastics are actually safer than glass in the event of large hail.

Cost Impact: Will not increase the cost of construction

This change will actually decrease the cost of construction by allowing for the use of light transmitting plastics in lieu of glass.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that this was an editorial change that clarified what types of greenhouses should be included in this exception.

Assembly Action

None

Final Hearing Results

FS181-15

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Code Change No: FS182-15

Original Proposal

Section: 2611.1, 2611.2, 2611.3, 2611.3 (New), 2611.4

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

Revise as follows:

2611.1 General. Light-transmitting plastic interior-wall signs shall be limited as specified in Section 2606 and Sections 2611.2 through 2611.4.

Exception: Light-transmitting plastic interior wall signs in covered and open mall buildings shall comply with Section 402.6.4. Light-transmitting plastic interior signs shall also comply with Section 2606

Delete without substitution:

2611.2 Aggregate area. The sign shall not exceed 20 percent of the wall area.

Revise as follows:

2611.3-2611.2 Maximum area. The sign-aggregate area of all light-transmitting plastics shall not exceed 24 square feet (2.23 m²).

Exception: In buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the aggregate area of light-transmitting plastics shall not exceed 100 square feet, provided all plastics are Class CC1 in accordance with Section 2606.4.

Add new text as follows:

2611.3 Separation Signs exceeding the aggregate area of 2611.2 shall be separated from each other by not less than 4 feet horizontally and 8 feet vertically.

Revise as follows:

2611.4 Encasement. Edges Backs of wall mounted signs and backs non-illuminated portions of the sign-all signs regulated by this section shall be fully encased in metal.

Reason: Base code is out of date and creates undue impact on interior signs. These allowances have been incorporated into the Southern Nevada Building Code for several code cycles without incident.

- The intent of this amendment is to codify an equivalent level of protection to allow larger signs. 1.
- It makes no sense to only regulate wall mounted signs inside buildings and not pole, and ceiling mounted signs too. 2. Deletion of the reference to "wall" in the first sentence of Section 2611.1 clarifies that Section 2611 applies to all lighttransmitting plastic interior signs, including wall-mounted, hanging, and base-supported signs.
- 3. The original proponent of this section, which is now 2611 of the IBC, intended it to apply to all plastic faced signs, not just wall mounted signs. In addition, the initial development of this requirement did not take into account a CC1 plastic, or fully sprinklered buildings.
- 4. A minimum CC1 plastic is required to limit the burning characteristics of the light-transmitting material.
- The way 2611.1 is written, and according to the original proponent of this section, mall signs are only regulated in Section 5. 402.6.4. Moving this stipulation into an exception provides clarification.
- The original Section 2611.2 has been replaced with reasonable separation distances as described in the following item. 6.



- 7. The separation requirements stipulated in 2611.2 eliminate the potential for multiple signs, each less than the allowable square footage (24 or 100), creating a single fuel package. The intent is to treat multiple signs in close proximity, or possibly multiple pieces/portions of the same sign, as a single fuel package. These separation distances were gleaned from Table 2607.4. This stipulation can be considered to be more conservative than base code and be used as partial justification for the increased sizes in the exceptions to Section 2611.3.
- The modification to Section 2611.3 is proposed to eliminate interpretations of what the 24 square feet maximum area 8. applies to. With the proposed modification, the 24 square feet limitation applies to the total area of light-transmitting plastics in the sign, regardless if the sign has a plastic facing on one or more sides. The intent is to treat the sign as a single fuel package regardless of configuration.
- The size limitation in the Exception to Section 2611.3 was partially based on Sections 2607 and 2608, along with Table 9 2607.4. Section 2607 does not allow light-transmitting plastic wall panels to be used in Groups A-1 or A-2 occupancies. Item 1 of Section 2608.2 has a basic limitation of 16 square feet with a vertical dimension not exceeding 4 feet for a single panel of light-transmitting plastic glazing. Other restrictions are listed in Section 2608.2, but are exempt in sprinklered buildings. The size allowances in Table 2607.4, along with the sprinkler allowances in Section 2607.5, allow a CC2 lighttransmitting plastic wall panel up to a maximum of 200 square feet with the required separation distances to an adjacent panel. Since 2611 requires compliance with 2606, at a minimum, a CC2 plastic would be required. Since 2607 is not applicable to A-1 or A-2 occupancies, it should be reasonable to allow light-transmitting plastic interior signs of Class CC1 with the additional mitigating aspects specified.
- 10. In addition to the preceding item, partial justification for the size limitations listed have been gleaned from Appendix H. Although the definition of sign in Section H102 appears to only apply to exterior signs, Appendix H can be used for guidance. Section H106 limits approved plastics in internally illuminated signs to 120 square feet. Section H107 appears to apply to externally illuminated plastic faced signs and has a basic limitation of 200 square feet. Therefore, the 120 square foot limitation appears to be the Appendix H reference most applicable to the intent of this amendment. With the additional separation requirements and protection specified, it seems reasonable to allow the increased area specified.
- 11. Under the base IBC language, all light-transmitting plastic interior signs are required to have metal on five sides (edges and backs). However, suspended or base supported multi-faced light-transmitting plastic interior signs are relatively common. The amendment clarifies that hanging or base supported signs that have metal encasement on the sides only are permitted.

Cost Impact: Will not increase the cost of construction

This proposal is intended to clarify requirements for interior light-transmitting plastic signs, and allow for flexibility in increasing the size of such signs.

Report of Committee Action	on
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The committee approved this proposal because it adds flexibility on the separation and area of lighttransmitting plastic interior signs by providing the additional requirements for Class CC1 plastic, fire suppression and separation.

Assembly Action

None

Final Hearing Results

FS182-15

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Code Change No: FS183-15

Original Proposal

Section: 1410.1, 2612.2, 2612.2.1, 2612.2.2, 2612.3, 2612.4, 2612.6

Proponent: John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com)

Revise as follows:

1410.1 Plastic composite decking. Exterior deck boards, stair treads, handrails and guardrail systems guards constructed of plastic composites, including plastic lumber, shall comply with Section 2612.

2612.2 Labeling-and identification. Packages Plastic composite deck boards and containers of plastic composites used in exterior applications stair treads, or their packaging, shall bear a label showing label that indicates compliance to ASTM D7032 and includes the manufacturer's name, product identification allowable load and information sufficient maximum allowable span determined in accordance with ASTM D7032. Plastic composite handrails and guards, or their packaging, shall bear a label that indicates compliance to determine that ASTM D7032 and includes the end use will comply maximum allowable span determined in accordance with code requirements ASTM D7032.

Delete without substitution:

2612.2.1 Performance levels. The label for plastic composites used in exterior applications as deck boards, stair treads, handrails and guards shall indicate the required performance levels and demonstrate compliance with the provisions of ASTM D 7032.

2612.2.2 Loading. The label for plastic composites used in exterior applications as deck boards, stair treads, handrails and guards shall indicate the type and magnitude of the load determined in accordance with ASTM D 7032.

Revise as follows:

2612.3 Flame spread index. Plastic composites composite deck boards, stair treads, handrails and guards shall exhibit a flame spread index not exceeding 200 when tested in accordance with ASTM E 84 or UL 723 with the test specimen remaining in place during the test.

Exception: Materials determined to be noncombustible in accordance with Section 703.5.

2612.4 Termite and decay resistance. Plastic composites Where required by Section 2304.12 plastic composite deck boards, stair treads, handrails and guards containing wood, cellulosic or any other biodegradable materials shall be termite and decay resistant as determined in accordance with ASTM D 7032.

2612.6 Plastic composite decking-deck boards, stair treads, handrails and guards. Plastic composite decking deck boards, stair treads, handrails and guards shall be installed in accordance with this code and the manufacturer's instructions.

Reason: This proposal is intended to be clarifications and simplification of the requirements for plastic composites identified in this section.

The 2015 IBC included, for the first time, specific requirements for plastic composite deck boards, stair treads, and guard systems. The existing language was developed and finalized during the 2012 code development cycle for the IBC. The following



year, the requirements in the IRC for these same products were revised, but the result is there are some differences between the IBC and the IRC. This code change proposal is an effort to move the language of the IBC to be in close alignment with the language of the IRC.

Cost Impact: Will not increase the cost of construction No cost implications. No technical changes to the code requirements.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: The committee approved this proposal based on the following: the reorganization provides for greater understanding, which will improve application and enforcement of the requirements; provides coordination with the IRC; and appropriately requires the product component or component packaging to be labeled to indicate compliance with ASTM D7032.

Assembly Action

None

Final Hearing Results

FS183-15

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Code Change No: FS1-16

Original Proposal

Section: 806.3 (New), [F] 806.1, [F] 806.2, [F] 806.3, [F] 806.4

Proponent: Carl Baldassarra, P.E., FSFPE, representing the Code Technology Committee; Michael O'Brian representing the Fire Code Action Committee (FCAC@iccsafe.org)

THIS CODE CHANGE WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

Revise as follows:

[F] 806.1 General. Combustible decorative materials, other than decorative vegetation, shall comply with Sections 806.2 through 806.8.

[F] 806.3-806.2 Combustible decorative materials. In other than Group I-3, curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall comply with Section 806.4 and shall not exceed 10 percent of the specific wall or ceiling area to which such materials are attached.

Fixed or movable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish shall comply with Section 803 and shall not be considered decorative materials or furnishings.

Exceptions:

- 1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.13 of this code.
- 2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and similar decorative materials suspended from walls or ceiling shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.
- 3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 806.4 and shall not be limited.

Delete without substitution:

[F] 806.2 Noncombustible materials. The permissible amount of noncombustible materials shall not be limited.

Add new text as follows:

806.3 Occupancy-based requirements. Occupancy-based requirements for combustible decorative materials not complying with Section 806.4 shall comply with Sections 807.5.1 through 807.5.6 of the International Fire Code.



[F] 806.4 Acceptance criteria and reports. Where required to exhibit improved fire performance, curtains, draperies, fabric hangings and similar combustible decorative materials suspended from walls or ceilings shall be tested by an approved agency and meet the flame propagation performance criteria of Test 1 or 2, as appropriate, of NFPA 701, or exhibit a maximum heat release rate of 100 kW when tested in accordance with NFPA 289, using the 20 kW ignition source. Reports of test results shall be prepared in accordance with the test method used and furnished to the building official upon request.

Reason: F109-13 deleted what is currently shown in IBC 806.2. Basically an exception for noncombustible materials is not needed in a section on combustible materials. The IBC and IFC should be consistent. It is not proposed to copy IFC 807.2 Limitations, because it includes maintenance issues, not construction requirements.

The reference for occupancy specific decorative materials in 806.4 is to make the code official aware of the provisions for Group A, E, I, and R-2 in the IFC. Another alternative would be to repeat the sections here and scope administration to the IFC. It should be noted that the current text in IBC Section 806.1, 806.3 and 806.4 are copies of the text in IFC 807.1, 807.3 and 807.4. IBC Section 806.5 through 806.8 are also direct copies of sections in the IFC.

IBC section	IFC Section
806.1	807.1
806.2	Text deleted from 2015 IFC by F109-13
806.3	807.3
806.4	807.4
806.5	804.2
806.6	807.5.1.4
806.7	804.1.1
806.8	804.4

This proposal is submitted by the ICC Code Technology Committee (CTC) and the ICC Fire Code Action Committee (FCAC). The ICC Board has decided to sunset the CTC. The sunset plan includes re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). The two remaining CTC Areas of Study are Care Facilities and Elevator Lobbies/WTC Elevator issues. This proposal falls under the Care Facilities Area of Study. In 2014 and 2015 ICC CTC Committee has held 4 open meetings and numerous Work Group meetings and conference calls for the current code development cycle which included members of the committees as well as any interested party to discuss and debate the proposed changes. 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 CTC.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2014 and 2015 the Fire-CAC has held 5 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: FCAC

Cost Impact: Will not increase the cost of construction This is a coordination with the requirement in the IFC. There are not changes to construction requirements

Report of Committee Action	
Hearings	

Committee Action:

Approved as Modified

Modify as follows:

806.3 Occupancy-based requirements. Occupancy-based requirements for combustible decorative materials, other than decorative vegetation, not complying with Section 806.4 shall comply with Sections 807.5.1 through 807.5.6 of the International Fire Code.

Committee Reason: Approval is based upon the proponent's published reason The committee stated that the proposal with the modification brings clarity and additional criteria for approval to the section.

Assembly Action:

None

	Final Action Results	
FS ⁴	1-16	AM

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Code Change No: FS6-16

Original Proposal

Section: [BS] 1405.18

Proponent: John Kozal, Universal Forest Products, representing Universal Forest Products (jkozal@ufpi.com)

Revise as follows:

[BS] 1405.18 Polypropylene siding. Polypropylene siding conforming to the requirements of this section and complying with Section 1404.12 shall be limited to exterior walls of Type VB construction located in areas where the wind speed specified in Chapter 16 does not exceed 100 miles per hour (45 m/s) and the building height is less than or equal to 40 feet (12 192 mm) in Exposure C. Where construction is located in areas where the basic wind speed exceeds 100 miles per hour (45 m/s), or building heights are in excess of 40 feet (12 192 mm), tests or calculations indicating compliance with Chapter 16 shall be submitted. Polypropylene siding shall be installed in accordance with the manufacturer's instructions. Polypropylene siding shall be secured to the building so as to provide weather protection for the exterior walls of the building.

Reason: Restricting Polypropylene Siding to Type VB construction is not appropriate when 2015 IBC Section 1406.2.1 allows combustible materials to be used as wall coverings for any type of construction if they pass NFPA 268 and meet fire separation distances as noted in Table 1406.2.1.1.2.

Bibliography: Our Company hired an independent third party testing firm by the name of SwRI to conduct an NFPA 268 test on our Polypropylene Siding that has a unique proprietary recipe. The siding passed the test requirement of NOT exhibiting any sustained flaming while being subjected to an incident heat energy of 12.5 kW/m^2. Please note that this test wall was only 2.75 feet away from the heat source.

Cost Impact: Will not increase the cost of construction

It would allow the building owner to have another exterior wall covering option to choose from that meets existing Code test requirements.

Report of Committee Action	
Hearings	

Committee Action:

Approved as Submitted

Committee Reason: The committee agreed that the chute access room compartment and door provide a minimum level of protection to the shaft enclosing the chute and the chute access doors. They also agreed that room should be designed to allow the room access door to close upon failure of the self-closing requirement of the chute access door.

Assembly Action:

None



FS6-16

AS



Code Change No: FS7-16

Original Proposal

Section: 2603.12, 2603.12.1, 2603.12.2

Proponent: Bonnie Manley, AISI, representing American Iron and Steel Institute (bmanley@steel.org)

THIS CODE CHANGE WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

Revise as follows:

2603.12 Cladding attachment over foam sheathing to cold-formed steel framing. Cladding shall be specified and installed in accordance with Chapter 14 and the cladding manufacturer's approved installation instructions, including any limitations for use over foam plastic sheathing, or an approved design. Where used, furring and furring attachments shall be designed to resist design loads determined in accordance with Chapter 16. In addition, the cladding or furring attachments through foam sheathing to cold-formed steel framing shall meet or exceed the minimum fastening requirements of Sections 2603.12.1 and 2603.12.2, or an approved design for support of cladding weight.

Exceptions:

- Where the cladding manufacturer has provided approved installation instructions for application over foam sheathing, those requirements shall apply.
- 2. For exterior insulation and finish systems, refer to Section 1408.
- 3. For anchored masonry or stone veneer installed over foam sheathing, refer to Section 1405.

2603.12.1 Direct attachment. Where cladding is installed directly over foam sheathing without the use of furring, cladding minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.12.1.

TABLE 2603.12.1 CLADDING MINIMUM FASTENING REQUIREMENTS FOR DIRECT ATTACHMENT OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^a

CLADDING	CLADDING	CLADDING	MAXIMUN	I THICKNESS	OF FOAM S	HEATHIN	NG ^c (inch	ies)		
FASTENER THROUGH FOAM	FASTENER TYPE AND	FASTENER	16″o.c. fast	ener horizonta	l spacing	24″o.c. fastener horizontal spacing				
SHEATHING	MINIMUM	SPACING	CI	adding weight		Cla	dding we	eight		
INTO:	SIZE ^b	(inches)	3 psf	11 psf	25 psf	3 psf	11 psf	25 psf		
	#8 screw into 33 mil steel or thicker	6	3	3	1.5	3	2	DR		
		8	3	2	0.5	3	1.5	DR		
Cold-formed		12	3	1.5	DR	3	0.75	DR		
<u>s</u> Steel framing		6	4	3	2	4	3	0.5		
(minimum penetration of	#10 screw into 33 mil steel	8	4	3	1	4	2	DR		
steel thickness		12	4	2	DR	3	1	DR		
plus 3 threads)	#10 screw into	6	4	4	3	4	4	2		
	43 mil steel or	8	4	4	2	4	3	1.5		
	thicker	12	4	3	1.5	4	3	DR		

For SI: 1 inch = 25.4 mm; 1 pound per square foot (psf) = 0.0479 kPa, 1 pound per square inch = 0.00689 MPa.

DR = design required ; o.c. = on center.

- Steel Cold-formed steel framing shall be minimum 33 ksi steel for 33 mil and 43 mil steel and 50 ksi steel for 54 mil steel or thicker.
- Screws shall comply with the requirements of AISI S200 S240. b.
- Foam sheathing shall have a minimum compressive strength of 15 pounds per square inch in accordance with ASTM C 578 or C. ASTM C 1289.

2603.12.2 Furred cladding attachment. Where steel or wood furring is used to attach cladding over foam sheathing, furring minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.12.2. Where placed horizontally, wood furring shall be preservative-treated wood in accordance with Section 2303.1.9 or naturally durable wood and fasteners shall be corrosion resistant in accordance Section 2304.10.5. Steel furring shall have a minimum G60 galvanized coating.

TABLE 2603.12.2 FURRING MINIMUM FASTENING REQUIREMENTS FOR APPLICATION OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^a

		FASTENER	INTO WALL	FASTENER SPACING IN	MAXIMUM THICKNESS OF FOAM SHEATHING ⁴ (inches)							
FURRING	FRAMING	TYPE AND			16	o.c. fur	ring ^e	24″ o.c. furring ^e				
MATERIAL	MEMBER	MINIMUM		FURRING	Cla	adding w	reight	C	Clade	ding weight		
		SIZE ^b	FRAMING (inches)	(inches)	3 psf	11 psf	25 psf	3 psf	11 psf	25 psf		
	33 mil <u>cold-</u> formed steel stud		Steel thickness plus 3 threads	12	3	1.5	DR	3	0.5	DR		
		#8 screw		16	3	1	DR	2	DR	DR		
				24	2	DR	DR	2	DR	DR		
		#10 screw	Steel thickness plus 3 threads	12	4	2	DR	4	1	DR		
Minimum 33 mil steel				16	4	1.5	DR	3	DR	DR		
furring or				24	3	DR	DR	2	DR	DR		
minimum				12	3	1.5	DR	3	0.5	DR		
1x wood furring ^c	43 mil or	#8 Screw	Steel thickness plus 3 threads	16	3	1	DR	2	DR	DR		
-	thicker <u>cold-</u>			24	2	DR	DR	2	DR	DR		
	formed steel		Steel thickness plus 3 threads	12	4	3	1.5	4	3	DR		
	stud			16	4	3	0.5	4	2	DR		
				24	4	2	DR	4	0.5	DR		

For SI: 1 inch = 25.4 mm; 1 pound per square foot (psf) = 0.0479 kPa, 1 pound per square inch = 0.00689 MPa.

DR = design required : o.c. = on center.

a. Wood furring shall be Spruce-Pine fir or any softwood species with a specific gravity of 0.42 or greater. Steel furring shall be minimum 33 ksi steel. Steel Cold-formed steel studs shall be minimum 33 ksi steel for 33 mil and 43 mil thickness and 50 ksi steel for 54 mil steel or thicker.

- Screws shall comply with the requirements of AISI S200 S240. b.
- Where the required cladding fastener penetration into wood material exceeds 3 / 4 inch and is not more than 1 1 / 2 inches, a c. minimum 2-inch nominal wood furring shall be used or an approved design.
- Foam sheathing shall have a minimum compressive strength of 15 pounds per square inch in accordance with ASTM C 578 or d. ASTM C 1289.
- Furring shall be spaced not more than 24 inches on center, in a vertical or horizontal orientation. In a vertical orientation, furring e. shall be located over wall studs and attached with the required fastener spacing. In a horizontal orientation, the indicated 8-inch and 12-inch fastener spacing in furring shall be achieved by use of two fasteners into studs at 16 inches and 24 inches on center, respectively.

Reference standards type: This contains both new and updated standards Add new standard(s) as follows:

Delete the following existing reference:

AISI S200—12, North American Standard for Cold-Formed Steel Framing-General Provisions, 2012, 2203.1, 2203.2, 2211.1, Table 2603.12.1, Table 2603.12.2



Add the following new reference:

AISI S240, North American Standard for Cold-Formed Steel Structural Framing, 2015

Reason: This proposal is one in a series adopting the latest generation of AISI standards for cold-formed steel. This particular proposal focuses on Chapter 26 by incorporating a reference to the new cold-formed steel structural framing standard - AISI S240. The standard is published and available for a free download at: www.aisistandards.org.

The new standard, AISI S240, North American Standard for Cold-Formed Steel Structural Framing, addresses requirements for construction with cold-formed steel structural framing that are common to prescriptive and engineered light frame construction. This comprehensive standard was formed by merging the following AISI standards:

- AISI S200, North American Standard for Cold-Formed Steel Framing-General Provisions •
- AISI S210, North American Standard for Cold-Formed Steel Framing–Floor and Roof System Design
- AISI S211, North American Standard for Cold-Formed Steel Framing–Wall Stud Design
- AISI S212, North American Standard for Cold-Formed Steel Framing–Header Design
- AISI S213, North American Standard for Cold-Formed Steel Framing- Lateral Design
- AISI S214, North American Standard for Cold-Formed Steel Framing-Truss Design •

Consequently, AISI S240 supersedes all previous editions of the above mentioned individual AISI standards. Both Table 2603.12.1 and Table 2603.12.2 previously referenced AISI S200 for cold-formed steel screw requirements. This reference is updated to AISI S240. Additionally, the term "cold-formed steel" is editorially corrected to reflect industry terminology in several locations.

Cost Impact: Will increase the cost of construction

This code change proposal adopts the latest industry standard for cold-formed steel. At this time, it is difficult to anticipate how cost of construction will be fully impacted, other than to note that some of the additional costs will be offset by new efficiencies in the design and installation of cold-formed steel.

Analysis: A review of the standard(s) proposed for inclusion in the code, ANSI S240-2015, 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 1, 2016.

Report of Committee Action Hearings

Committee Action:

Approved as Submitted

Committee Reason: In addition to making some editorial corrections relative to cold-formed steel framing, this code change updates the AISI referenced standard for cold-formed steel framing to the latest edition.

Assembly Action:

None

Final Action Results

FS7-16

AS



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Code Change No: FS8-16

Original Proposal

Section: 2603.12.1, 2603.12.2

Proponent: Jay Crandell, P.E., ARES Consulting, representing Foam Sheathing Committee of the American Chemistry Council

THIS CODE CHANGE WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

Revise as follows:

TABLE 2603.12.1 CLADDING MINIMUM FASTENING REQUIREMENTS FOR DIRECT ATTACHMENT OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^a

CLADDING			MAXI	ИИМ ТНІСК	NESS OF	FOAM S	SHEA ⁻	THING ^c (inches	5)	
FASTENER THROUGH	CLADDING FASTENER TYPE AND	CLADDING FASTENER VERTICAL	16″o.c. fa	astener hor	24"o.c. fastener horizontal spacing						
FOAM	MINIMUM SIZE ^b	SPACING (inches)		Cladding v	veight			Cladding	g weig	ht	
SHEATHING INTO:			3 psf	11 psf	<u>18 psf</u>	25 psf	3 psf	11 psf	<u>18</u> psf	25 psf	
	#8 screw into 33 mil steel or thicker	6	3 <u>.00</u>	<u>2.95</u> 3	2.20	1. <u>4</u> 5	3 <u>.00</u>	2 <u>.35</u>	<u>1.25</u>	DR	
			8	3 <u>.00</u>	2 <u>.55</u>	<u>1.60</u>	0. <u>60</u> 5	3 <u>.00</u>	1. <u>80</u> 5	DR	DR
		12	3 <u>.00</u>	1. <u>80</u> 5	<u>DR</u>	DR	3 <u>.00</u>	0. <u>65</u> 75	<u>DR</u>	DR	
Steel framing (minimum	#10 screw	6	4 <u>.00</u>	3 <u>.50</u>	<u>2.70</u>	<u>1.95</u> 2	4 <u>.00</u>	<u>2.90</u> 3	1.70	0.5 <u>5</u>	
penetration of	into 33 mil	8	4 <u>.00</u>	3 <u>.10</u>	<u>2.05</u>	1 <u>.00</u>	4 <u>.00</u>	2 <u>.25</u>	<u>0.70</u>	DR	
	steel	12	4 <u>.00</u>	2 <u>.25</u>	<u>0.70</u>	DR	3 <u>.70</u>	1 <u>.05</u>	DR	DR	
plus 3 threads)	#10 screw	6	4 <u>.00</u>	4 <u>.00</u>	<u>4.00</u>	3 <u>.60</u>	4 <u>.00</u>	4 <u>.00</u>	<u>3.45</u>	2 <u>.70</u>	
	into 43 mil	8	4 <u>.00</u>	4 <u>.00</u>	<u>3.70</u>	<u>3.00</u> 2	4 <u>.00</u>	3 <u>.85</u>	<u>2.80</u>	1. <u>80</u> 5	
	steel or thicker	12	4 <u>.00</u>	3 <u>.85</u>	<u>2.80</u>	1. <u>80</u> 5	4 <u>.00</u>	3 <u>.05</u>	<u>1.50</u>	DR	

For SI: 1 inch = 25.4 mm; 1 pound per square foot (psf) = 0.0479 kPa, 1 pound per square inch = 0.00689 MPa.

DR = design required ; o.c. = on center.

Steel framing shall be minimum 33 ksi steel for 33 mil and 43 mil steel and 50 ksi steel for 54 mil steel or thicker. a.

Screws shall comply with the requirements of AISI S200. b.

Foam sheathing shall have a minimum compressive strength of 15 pounds per square inch in accordance with ASTM C 578 or c. ASTM C 1289.

		FASTENER	MINIMUM PENETRATION INTO WALL FRAMING (inches)	FASTENER SPACING IN FURRING (inches)	MAXIMUM THICKNESS OF FOAM SHEATHING ⁴ (inches)									
FURRING	FRAMING				1	6″ o.c.	furrir	ıg ^e	24" o.c. furring ^e					
MATERIAL	MEMBER	AND MINIMUM SIZE ^b			С	laddin	g weig	ght	Cla	ddin	g weigl	ht		
					3 psf	11 psf	<u>18</u> psf	25 psf	3 psf	11 psf	<u>18 psf</u>	25 psf		
	33 mil steel stud		Steel thickness plus 3 threads	12	3 <u>.00</u>	1. <u>80</u> 5	<u>DR</u>	DR	3 <u>.00</u>	0. <u>6</u> 5	<u>DR</u>	DR		
		#8 screw		16	3 <u>.00</u>	1 <u>.00</u>	DR	DR	2 <u>.85</u>	DR	<u>DR</u>	DR		
				24	2 <u>.85</u>	DR	<u>DR</u>	DR	2 <u>.20</u>	DR	DR	DR		
		#10 screw	Steel thickness plus 3 threads	12	4 <u>.00</u>	2 <u>.25</u>	<u>0.70</u>	DR	3. <u>70</u> 4	1 <u>.05</u>	DR	DR		
Minimum 33 mil steel				16	<u>3.85</u> 4	1. <u>4</u> 5	DR	DR	3 <u>.40</u>	DR	DR	DR		
furring or				24	3 <u>.40</u>	DR	<u>DR</u>	DR	2 <u>.70</u>	DR	<u>DR</u>	DR		
minimum				12	3 <u>.00</u>	1. <u>80</u> 5	DR	DR	3 <u>.00</u>	0. <u>6</u> 5	DR	DR		
1x wood furring ^c		#8 Screw	Steel thickness plus 3 threads	16	3 <u>.00</u>	1 <u>.00</u>	<u>DR</u>	DR	2 <u>.85</u>	DR	<u>DR</u>	DR		
	43 mil or thicker			24	2 <u>.85</u>	DR	DR	DR	2 <u>.20</u>	DR	<u>DR</u>	DR		
	steel stud	#10 screw	Steel thickness plus 3 threads	12	4 <u>.00</u>	3 <u>.85</u>	<u>2.80</u>	1. <u>80</u> 5	4 <u>.00</u>	3 <u>.05</u>	<u>1.50</u>	DR		
				16	4 <u>.00</u>	3 <u>.30</u>	<u>1.95</u>	0. <u>60</u> 5	4 <u>.00</u>	2 <u>.25</u>	<u>DR</u>	DR		
				24	4 <u>.00</u>	2 <u>.25</u>	DR	DR	4 <u>.00</u>	0. <u>6</u> 5	DR	DR		

TABLE 2603.12.2 FURRING MINIMUM FASTENING REQUIREMENTS FOR APPLICATION OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT*

For SI: 1 inch = 25.4 mm; 1 pound per square foot (psf) = 0.0479 kPa. 1 pound per square inch = 0.00689 MPa.

DR = design required : o.c. = on center.

Wood furring shall be Spruce-Pine fir or any softwood species with a specific gravity of 0.42 or greater. Steel furring shall be a. minimum 33 ksi steel. Steel studs shall be minimum 33 ksi steel for 33 mil and 43 mil thickness and 50 ksi steel for 54 mil steel or thicker.

- b. Screws shall comply with the requirements of AISI S200.
- Where the required cladding fastener penetration into wood material exceeds 3/4 inch and is not more than 11/2 inches, a c. minimum 2-inch nominal wood furring shall be used or an approved design.
- Foam sheathing shall have a minimum compressive strength of 15 pounds per square inch in accordance with ASTM C 578 or d ASTM C 1289.
- Furring shall be spaced not more than 24 inches on center, in a vertical or horizontal orientation. In a vertical orientation, furring e. shall be located over wall studs and attached with the required fastener spacing. In a horizontal orientation, the indicated 8-inch and 12-inch fastener spacing in furring shall be achieved by use of two fasteners into studs at 16 inches and 24 inches on center, respectively.

Reason: This proposal updates the table values to a consistent rounding approach by rounding the values down to the nearest 0.05" to address thicknesses of foam sheathing materials that often vary from nominal dimensions such as 0.5", 1", 1.5", 2", 3", and 4" as used in the existing table. In addition, an 18 psf cladding weight category was added to accomodate common application of adhered veneers as requested by the brick industry. All of the values were evaluated using the same analysis approach used to derive the existing table values. In addition, the foam sheathing thicknesses remained capped at 4 inches in all cases and at 3 inches for #8 screws as was done in the existing table for practical reasons.

Cost Impact: Will not increase the cost of construction

This proposal adds an additional option (18 psf cladding weight) and does not increase cost.

Report of Committee Action
Hearings

Committee Action:

Committee Reason: This proposal increases the precision of the tables added in the last cycle for fastening requirements over foam sheathing. In addition the values for 18 psf cladding weight that have been added will accomodate application of adhered veneers.

Assembly Action:

None

Approved as Submitted



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Back

Code Change No: FS9-16

Original Proposal

Section: 2603.13 (New), 2603.13.1 (New), 2603.13.2 (New)

Proponent: Jay Crandell, P.E., ARES Consulting, representing Foam Sheathing Committee of the American Chemistry Council

THIS CODE CHANGE WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

Add new text as follows:

2603.13 Cladding attachment over foam sheathing to wood framing. Cladding shall be specified and installed in accordance with Chapter 14 and the cladding manufacturer's installation instructions. Where used, furring and furring attachments shall be designed to resist design loads determined in accordance with Chapter 16. In addition, the cladding or furring attachments through foam sheathing to framing shall meet or exceed the minimum fastening requirements of Section 2603.13.1, Section 2603.13.2, or an approved design for support of cladding weight.

Exceptions:

- Where the cladding manufacturer has provided approved installation instructions for application over foam sheathing, those requirements shall apply.
- For exterior insulation and finish systems, refer to Section 1408.
- 3. For anchored masonry or stone veneer installed over foam sheathing, refer to Section 1405.

2603.13.1 Direct attachment. Where cladding is installed directly over foam sheathing without the use of furring, cladding minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.13.1.

2603.13.2 Furred cladding attachment. Where wood furring is used to attach cladding over foam sheathing, furring minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.13.2. Where placed horizontally, wood furring shall be preservative treated wood in accordance with Section 2303.1.9 or naturally durable wood and fasteners shall be corrosion resistant in accordance with Section 2304.10.5.

CLADDING MINIMUN	CLADDING MINIMUM FASTENING REQUIREMENTS FOR DIRECT ATTACHMENT OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT ^a												
Cladding Fastener Through Foam	Cladding Fastener - Type and Minimum	Cladding Fastener Vertical Spacing	<u>Maximum Thickness of Foam</u> Sheathing ^c (inches)										
Sheathing into:	<u>Size^b</u>	<u>(inches)</u>	(<u>16" o.c. Fastener</u> Horizontal Spacing				24" o.c. Fastener Horizontal Spacin					
			Cladding Wei		ding Weight:			Cladding Weight:					
			<u>3</u> psf	<u>11</u> psf	<u>18</u> psf	<u>25</u> psf	<u>3</u> psf	<u>11</u> psf	<u>18</u> psf	<u>25</u> psf			
Wood Framing	0.113" diameter nail	6	2.00	1.45	0.75	DR	2.00	0.85	DR	DR			
(minimum 1- ¹ /4 inch penetration)		8	<u>2.00</u>	<u>1.00</u>	DR	DR	2.00	0.55	DR	DR			
		<u>12</u>	2.00	<u>0.55</u>	DR	DR	1.85	DR	DR	DR			

TABLE 2603.13.1

Cladding Fastener Through Foam	Cladding Fastener - Type and Minimum	<u>Maximum Thickness of Foam</u> Sheathing ^c (inches)									
Sheathing into:	<u>Size^b</u>	<u>(inches)</u>	16" o.c. Fastener Horizontal Spacing				24" o.c. Fastener Horizontal Spacing				
			Clade	ding	Weigl	<u>nt:</u>	Cladding Weight:				
			<u>3</u> psf	<u>11</u> psf	<u>18</u> psf	<u>25</u> psf	<u>3</u> psf	<u>11</u> psf	<u>18</u> psf	<u>25</u> psf	
-	0.120" diameter nail	<u>6</u>	3.00	1.70			3.00				
		8	3.00	1.20	0.60	DR	3.00	0.70	DR	DR	
		12	3.00	0.70	DR	DR	2.15	DR	DR	DR	
	0.131" diameter nail	6	4.00	2.15	1.20	0.75	4.00	1.35	0.70	DR	
		8	4.00	1.55	0.80	DR	4.00	0.90	DR	DR	
		<u>12</u>	4.00	0.90	DR	DR	<u>2.70</u>	0.50	DR	DR	
	0.162" diameter nail	<u>6</u>	<u>4.00</u>	<u>3.55</u>	2.05	<u>1.40</u>	<u>4.00</u>	<u>2.25</u>	1.25	0.80	
		<u>8</u>	4.00	<u>2.55</u>	1.45	<u>0.95</u>	4.00	1.60	0.85	0.50	
		<u>12</u>	4.00	1.60	0.85	0.50	4.00	0.95	DR	<u>DR</u>	

For SI: 1 inch = 25.4 mm; 1 pound per square foot (psf) = 0.0479 kPa

DR = design required

o.c. = on center

Wood framing shall be Spruce-Pine-Fir or any wood species with a specific gravity of 0.42 or greater in accordance with a. AFPA/NDS.

Nail fasteners shall comply with ASTM F 1667, except nail length shall be permitted to exceed ASTM F 1667 standard lengths. Foam sheathing shall have a minimum compressive strength of 15 psi in accordance with ASTM C 578 or ASTM C 1289. b

c.

TABLE 2603.13.2 (2603.13.2)

FURRING MINIMUM FASTENING REQUIREMENTS FOR APPLICATION OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT

<u>Furring</u> Material	Framing Member	Type	Penetration Spacing in S															
		<u>and</u> Minimum	into Wall Framing	ng (inches)	16" o	c Fur	<u>ring^e</u>		24"oc Furring ^e									
			(inches)		Sidir	ng We	eight:		Sidir	ng We	eight:	-						
					<u>3</u> psf	<u>11</u> psf	<u>18 psf</u>		<u>3</u> psf		<u>18</u> psf	<u>25</u> psf						
Minimum	Minimum 2x Wood	0.131"	1-1/4	8	4.00	2.45	1.45	0.95	4.00	1.60	0.85	<u>DR</u>						
<u>1x Wood</u>	<u>Wood</u> <u>Stud</u> urring ^c	<u>diameter</u>		12	4.00	1.60	0.85	DR	4.00	0.95	DR	DR						
		<u>nail</u>		16	4.00	1.10	DR	DR	3.05	0.60	DR	DR						
		<u>0.162"</u> diameter nail	<u>diameter</u>	1-1/4	8	4.00	4.00	2.45	1.60	4.00	2.75	1.45	0.85					
											12	4.00	2.75	1.45	0.85	4.00	1.65	0.75
			<u>411 _</u>		16	4.00	1.90	0.95	DR	4.00	1.05	DR	DR					
		<u>No. 10</u>	<u>1</u>	<u>12</u>	4.00	2.30	1.20	0.70	4.00	1.40	0.60	DR						
		wood		<u>16</u>	4.00	1.65	0.75	<u>DR</u>	4.00	<u>0.90</u>	DR	<u>DR</u>						
		screw		<u>24</u>	4.00	0.90	DR	DR	<u>2.85</u>	DR	DR	<u>DR</u>						
		1/4" lag		<u>12</u>	4.00	2.65	1.50	0.90	4.00	1.65	0.80	DR						
	<u>S(</u>	screw		<u>16</u>	<u>4.00</u>	<u>1.95</u>	0.95	0.50	4.00	<u>1.10</u>	DR	<u>DR</u>						
	$= 25.4 \text{ mm} \cdot 1$ pound pe			<u>24</u>	<u>4.00</u>	1.10	DR	DR	<u>3.25</u>	0.50	DR	<u>DR</u>						

For SI: 1 inch = 25.4 mm; 1 pound per square foot (psf) = 0.0479 kPa

DR = design required

o.c. = on center

Wood framing and furring shall be Spruce-Pine-Fir or any wood species with a specific gravity of 0.42 or greater in accordance а. with AFPA/NDS.

Nail fasteners shall comply with ASTM F 1667, except nail length shall be permitted to exceed ASTM F 1667 standard lengths. b. Where the required cladding fastener penetration into wood material exceeds 3/4 inch (19 mm) and is not more than 1-1/2 <u>C.</u>

inches (38 mm), a minimum 2x wood furring shall be used or an approved design.





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- Foam sheathing shall have a minimum compressive strength of 15 psi in accordance with ASTM C 578 or ASTM C 1289.
- Furring shall be spaced a maximum of 24 inches (610 mm) on center in a vertical or horizontal orientation. In a vertical orientation, furring shall be located over wall studs and attached with the required fastener spacing. In a horizontal orientation, the indicated 8 inch (203 mm) and 12 inch (305 mm) fastener spacing in furring shall be achieved by use of two fasteners into studs at 16 inches (406 mm) and 24 inches (610 mm) on center, respectively.

Reason: These same requirements for cladding attachment over foam sheathing to wood framing were approved in the 2015 IRC and similar requirements for steel framing were approved in the 2015 IBC and IRC. Similar requirements have also existed in the New York State Energy Code for several years. These requirements fill the only remaining information gap in the IBC provisions for exterior wall covering assemblies on wood frame walls that include foam plastic sheathing. This proposal includes the addition of an 18 psf cladding weight category at the request of the brick industry. In addition, the foam thickness values have been made more precise and rounded down to the nearest 0.05" thickness to more efficiently align with actual thicknesses of foam sheathing products which vary from nominal thicknesses. A similar coordinating proposal is provided for the IRC and also the connection table for steel framing in the IBC.

The proposed requirements are based on a project sponsored by the New York State Energy Research and Development Agency (NYSERDA) (Bowles, 2010). The project report explains the technical basis for the proposed requirements. The purpose of the NYSERDA project was to develop prescriptive fastening requirements for cladding materials installed over foam sheathing to ensure adequate performance. The project included testing of cladding attachments through various thicknesses of foam sheathing using various fastener types on steel frame wall assemblies, including supplemental test data to address attachments to wood framing sponsored by the FSC. The proposed cladding attachment requirements and foam sheathing thickness limits are based on rational analysis (based on the NDS yield equations) verified by extensive test data to control cladding connection movement to no more than 0.015" slip under cladding weight or dead load. This deflection controlled approach resulted in safety factors commonly in the range of 5 to 8 relative to the average shear capacity and demonstrates adequate long-term deflection control. Similar tests by other independent parties, such as Wiss, Janey, & Elsner and also Building Science Corporation for DOE's Building American program (Baker, 2014) have provided further confirmation.

Bibliography: Bowles, L. (2010). "Fastening Systems for Continuous Insulation", prepared by Newport Partners, LLC, Davidsonville, MD, prepared for New York State Energy Research and Development Authority, Albany, NY. www.nyserda.nv.gov Baker, P. (2014). Initial and Long Term Movement of Cladding Installed Over Exterior Rigid Insulation. Building America Report -1404, prepared for DOE Building America Program by Building Science Corporation, Somerville, MA. http://www.buildingscience.corp/documents/bareports/ba-1404-initial-long-term-movement-cladding-installed-over-exteriorrigid-insulation

Cost Impact: Will not increase the cost of construction

This proposal simply provides additional code-compliant options for attachment of cladding over foam sheathing and thus creates no cost impact.

> **Report of Committee Action** Hearings

Committee Action:

Approved as Submitted

None

Committee Reason: This code change adds provisions for cladding over foam sheathing connected to wood framing. Doing so coordinates the IBC with similar IRC provisions and fills an information gap for attachment of cladding over foam sheathing to wood framing.

Assembly Action:

Final Action Results

FS9-16

AS

FS164-15 Back

1405.4 Flashing.

Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of *exterior wall* assemblies, *exterior wall* intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting *trim*. When self-adhered membranes are used as flashing in wall assemblies, those self-adhered flashings shall comply with AAMA-711. When fluid applied membranes are used as flashing for exterior wall openings, those fluid applied membrane flashing shall comply with AAMA 714. Approved corrosion-resistant flashing shall be applied at the following locations:

1. Exterior window and door openings. Flashing at exterior window and door openings shall extend to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage. Flashing at exterior window and door openings shall be installed in accordance with one or more of the following:

1.1. The fenestration manufacturer's installation and flashing instructions, or for applications not addressed in the fenestration manufacturer's instructions, in accordance with the flashing manufacturer's instructions. Where flashing instructions or details are not provided, pan flashing shall be installed at the sill of exterior window and door openings. Pan flashing shall be sealed or sloped in such a manner as to direct water to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage. Openings using pan flashing shall also incorporate flashing or protection at the head and sides.

1.2. In accordance with the flashing design or method of a registered design professional.

1.3. In accordance with other approved methods.

1.4 In accordance with FMA/AAMA 100, FMA/AAMA 200, FMA/WDMA 250, FMA/AAMA/WDMA 300 or FMA/AAMA/WDMA 400.

2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.

3. Under and at the ends of masonry, wood or metal copings and sills.

4. Continuously above all projecting wood trim.

5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.

6. At wall and roof intersections.

7. At built-in gutters.

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1405.4 Flashing.

Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of *exterior wall* assemblies, *exterior wall* intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projecting flanges shall be installed on both sides and the ends of copings, under sills and continuously above projecting *trim*. When self-adhered membranes are used as flashing in wall assemblies, those self-adhered flashings shall comply with AAMA-711. When fluid applied membranes are used as flashing for exterior wall openings, those fluid applied membrane flashing shall comply with AAMA 714. Approved corrosion-resistant flashing shall be applied at the following locations:

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1.1. The fenestration manufacturer's installation and flashing instructions, or for applications not addressed in the fenestration manufacturer's instructions, in accordance with the flashing manufacturer's instructions. Where flashing instructions or details are not provided, pan flashing shall be installed at the sill of exterior window and door openings. Pan flashing shall be sealed or sloped in such a manner as to direct water to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage. Openings using pan flashing shall also incorporate flashing or protection at the head and sides.

1.2. In accordance with the flashing design or method of a registered design professional.

1.3. In accordance with other approved methods.

1.4 In accordance with FMA/AAMA 100, FMA/AAMA 200, FMA/WDMA 250, FMA/AAMA/WDMA 300 or FMA/AAMA/WDMA 400.

2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.

3. Under and at the ends of masonry, wood or metal copings and sills.

4. Continuously above all projecting wood trim.

5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.

6. At wall and roof intersections.

7. At built-in gutters.