



Plumbing

Proposed Code Modifications

This document created by the Florida Department of Community Affairs -
850-487-1824

TAC: Plumbing

Sub Code: Existing Building

Total Mods for Plumbing: 6

Date Submitted	4/1/2010	Section	New 613 and 613.1	Proponent	Duren Gary
Chapter	6	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Approved as Modified				
Commission Action	Pending Review				

Related Modifications

See companion modifications to chapter 3 and 5

Summary of Modification

Add language to address residential swimming pool and spa issues

Rationale

This code change is intended address residential swimming pools and spas under the existing residential building code - there are many pools and spas that do not meet the current FBC requirements entrapment prevention.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

local authorities having jurisdiction will need to implement measures to permit swimming pool and spa repair and renovations

Impact to building and property owners relative to cost of compliance with code

there will be moderate costs associated with bringing existing pools and spas up to current minimum safety standards

Impact to industry relative to the cost of compliance with code

Industry will not be adversely impacted by this code change

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Public safety and welfare will be improved as many sub-standard pools and spas will be brought into compliance with existing rules

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The existing building code is improved by including swimming pools and spas in its scope

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

The code change does not discriminate against any product, method, system of construction or material

Does not degrade the effectiveness of the code

The inclusion of swimming pool and spa verbiage improves the effectiveness of the existing building code

Delete the proposed modification language and replace it with the following:

Section 613 RESIDENTIAL SWIMMING POOLS AND SPAS

R613 Existing Pool and Spa Components and Systems. A pool or spa component or system undergoing alteration shall comply with Section R4101 of the Florida Building Code, Residential.

R613.1 Pool or Spa Suction Fittings. When any pool or spa circulation system or component under goes an alteration, all suction fittings of that pool or spa shall comply with ANSI/ASME A112.19.8 - 2007 and shall be installed in accordance with the manufacturers' instructions.

Note – the ASME standard will need to be inserted into the referenced standard section of the code.

R613 Existing Pool and Spa Components and Systems. A pool or spa component or system undergoing alteration shall comply with Section R4101 of the Florida Building Code, Residential.

R613.1 Pool or Spa Suction Fittings. Pool or spa circulation systems or components undergoing alteration shall comply with Section 6, Existing Pools and Spas, of the ANSI/APSP-7 Standard referenced in Section 4101.6.1 of the Florida Building Code, Residential.

Alternate Language

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Jennifer Hatfield **Submitted** 10/18/2010 **Attachments** Yes

P4339-A2

Rationale

The original modification and the language ultimately approved by the TAC was the initial step in outlining how to address existing pools and spas. This comment provides additional clarification that is needed. Section 613 can be broadly interpreted - this comment begins to narrow down what is required. Additional work on this new section will undoubtedly be needed in future code cycles.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

AHJ will have to implement measures to permit these alterations, minus the exceptions laid out in this alternate language comment.

Impact to building and property owners relative to cost of compliance with code

There will be additional costs, the amount of which will depend on what alteration is being made.

Impact to industry relative to the cost of compliance with code

Permits that are not currently required (not enforced consistently) when making alterations to existing pools and spas, will now most likely be required/enforced more consistently, amounting to an additional cost to the industry/contractor.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

This language, like the language that was originally voted favorably on, improves public safety and welfare by requiring certain alterations to an existing pool or spa follow current code requirements.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The alternative language further strengthens and improves the code by making needed clarifications to the language originally voted on.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

The alternative language does not discriminate against any materials, products, methods, or systems of construction.

Does not degrade the effectiveness of the code

The alternative language does not degrade the effectiveness of the code.

Alternate Language

1st Comment Period History

04/15/2010 - 06/01/2010

Proponent Jennifer Hatfield **Submitted** 6/1/2010 **Attachments** Yes

P4339-A1

Rationale

This language addresses all parts of the existing pool or spa, whereas the original language applied only to circulation components, leaving out other important components of the pool & spa such as barriers and electrical requirements. This language also addresses a specific safety component, drain covers, which would need to be installed when altering a circulation component or system. The federal VGB Pool and Spa Safety Act references ASME A112.19.8 – 2007, the suction fittings for swimm

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

AHJ will have to implement measures to permit these alterations.

Impact to building and property owners relative to cost of compliance with code

There will be moderate costs depending on what alteration is being made and to install the drain cover.

Impact to industry relative to the cost of compliance with code

This alternative language should not adversely impact the industry.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

The alternative language improves public safety and welfare by requiring that any alterations to an existing pool or spa follow current code requirements and requiring new ASME drain covers be installed when altering the circulation system.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The alternative language strengthens and improves the code.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

The alternative language does not discriminate against any materials, products, methods, or systems of construction.

Does not degrade the effectiveness of the code

The alternative language does not degrade the effectiveness of the code.

Proponent	Jennifer Hatfield	Submitted	10/18/2010	Attachments	No
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Comment:

Revision 1 submitted to reflect the TAC "As Modified" action inaccurately refelcts what the TAC adopted. The revision provides both the alternate language comment that was submitted and vetted, along with the actual language that was adopted. The first part of the revision needs to be removed, leaving only the language voted on by both the Plumbing TAC and Swimming Pool Subcommittee. The second set of R613 and R613.1 is what accurately reflects the TAC action.

P4339-G1

ADD A NEW SECTION TO CHAPTER 6 ALTERATIONS- LEVEL 1, OF THE *FLORIDA BUILDING CODE, EXISTING BUILDINGS*

Section 613 RESIDENTIAL SWIMMING POOL AND SPAS

613.1. Existing Pool and Spa Circulation System Components. Pool or spa circulation components undergoing alteration, including suction fittings, pumps, skimmers, filters, and the like shall comply with Section R4101 of the *Florida Building Code, Residential.*

Delete the proposed modification language and replace it with the following:

Section 613 RESIDENTIAL SWIMMING POOLS AND SPAS

R613 Existing Pool and Spa Components and Systems. A pool or spa component or system undergoing alteration shall comply with Section R4101 of the Florida Building Code, Residential.

R613.1 Pool or Spa Suction Fittings. When any pool or spa circulation system or component under goes an alteration, all suction fittings of that pool or spa shall comply with ANSI/ASME A112.19.8 - 2007 and shall be installed in accordance with the manufacturers' instructions.

Note – the ASME standard will need to be inserted into the referenced standard section of the code.

****Changes to TAC "As Modified" language is in red.**

R613 Existing Pool and Spa Components and Systems. A pool or spa component or system undergoing alteration shall comply with Section R4101 of the Florida Building Code, Residential.

Exceptions: A level one alteration, as described in section 403, shall not require compliance with section R4101.17 of the Florida Building Code, Residential. The following alterations shall not require compliance with Section R4101 of the Florida Building Code, Residential:

1. Installation of pavers or coatings to an existing pool or spa deck.
2. Retiling a pool or spa.
3. Re-plastering or re-lining a pool or spa, except the drain cover must comply with the 2007 ASME A112.19.8 Standard.
4. Installation of a water filtration or sanitization component or system.
5. Installation of an automation or a time switch component or system.
6. Installation of a heating component or system.

~~R613.1 Pool or Spa Suction Fittings. Pool or spa circulation systems or components undergoing alteration shall comply with Section 6, Existing Pools and Spas, of the ANSI/APSP-7 Standard referenced in Section 4101.6.1 of the Florida Building Code, Residential.~~

R613.1 Pool or Spa Circulation Systems. When the suction side of a pool circulation system is undergoing alteration the pool or spa shall comply with Section 6, Existing Pools and Spas, of the ANSI/APSP-7 Standard referenced in Section 4101.6.1 of the Florida Building Code, Residential.

Exception: If the performance curve of a newly installed pump or pump motor demonstrates that the flow rate is equal to or lower than the existing pump's performance curve.

Date Submitted 4/2/2010	Section New appendix	Proponent Doug Harvey
Chapter 2711	Affects HVHZ No	Attachments Yes
TAC Recommendation No Affirmative Recommendation with a Second		
Commission Action Pending Review		

Related Modifications

Add code reference to chapter 35 including the edition date.

Summary of Modification

Add a new Appendix "XX" (Designation to be assigned)

Rationale

Please see support document for rationale.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

This proposed change does not impact local enforcement, it merely provides an alternate path for design that adhere to the Florida Building Code

Impact to building and property owners relative to cost of compliance with code

No fiscal impact to the building owner is anticipated

Impact to industry relative to the cost of compliance with code

No fiscal impact to the industry is anticipated

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

This proposed change protects the health, safety and welfare by allowing the code compliant use of "green" ideas and technologies

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This proposed change improves the code for design consistency

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This proposed code change does not discriminate

Does not degrade the effectiveness of the code

This proposed change does not degrade the effectiveness of the code.

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Arlene Stewart	Submitted 10/18/2010	Attachments No
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Comment:

TAC action should be reconsidered. Reason for disapproval was that the code was not yet final. However, the IGCC is available at <http://www.iccsafe.org/cs/IGCC/Pages/default.aspx?r=IGCC>. It is listed as the public version and not listed as a draft.

P4391-G3

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Thomas Allen	Submitted 10/18/2010	Attachments No
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Comment:

Support: IGCC to be included in the Florida Building Code in an appendix.
An appendix is adopted locally
This would provide an easily adopted green code that is designed to work with the building code

P4391-G4

1st Comment Period History

04/15/2010 - 06/01/2010

Proponent	Doug Harvey	Submitted	6/1/2010	Attachments	No
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Comment:

P4391-G1 BOAF has suggested the International Green Construction Code (IGCC) be included as an adoptable appendix. While many ideas for "green" and green construction are present in the marketplace today, no other document has been through the process the IgCC has. This document has been compared to the base codes for Building, Mechanical, Plumbing, Fuel Gas and Energy. The code has been scrutinized so as to prevent conflicts between building code requirements and green/sustainable requirements. The IgCC has been evaluated and endorsed by the USGBC and ASHRAE as well through the national consensus process. Many areas are in the process of trying to adopt "green" standards for their communities. This will provide a method for jurisdictions looking to mandate greener and more sustainable requirements. In addition, this document was created in conjunction with ASHRAE, ICC and others, including public meetings, to ensure compatibility with many of the existing requirements in existence today and with a forward looking approach. While this is a relatively new document, inclusion as an adoptable appendix will offer an option that will help with code compliance, not code violation or putting different standards at odds with each other.

1st Comment Period History

04/15/2010 - 06/01/2010

Proponent	Jack Glenn	Submitted	6/1/2010	Attachments	No
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Comment:

P4391-G2 The new appendix is based on a proposed standard that is not yet approved.

APPENDIX 'XX' (Designation to be assigned)International Green Construction Code (IGCC)

The provisions in this appendix are not mandatory unless specifically referenced in the adopting ordinance

SECTION (XX) 101GENERAL

(XX) 101.1 Scope. The provisions of this appendix are applicable to all occupancies covered by the International Green Construction Code (IGCC).

(XX) 101.2 Intent. The intent of this appendix is to provide direction for communities having a desire to preserve natural resources, especially water, and lessen the impact of construction on the built environment. Adoption of this standard is to safeguard the environment, public health, safety and general welfare through the establishment of requirements to reduce the negative potential impacts and increase the potential positive impacts of the built environment and building occupants, by means of minimum requirements to: conservation of natural resources, materials and energy; the employment of renewable energy technologies, indoor and outdoor air quality; and building operations and maintenance.

(XX) 101.3 Requirements. The design of buildings shall be in accordance with the International Green Construction Code (IGCC).

Add the Following to Chapter 35 – references:

ICC

International Code Council, Inc.

500 New Jersey Avenue, NW

6th Floor

Washington, DC 20001

Standard Referenced: IGCC

Title: **International Green Construction Code (IGCC)**

Reference in code section number: Appendix L

<i>Date Submitted</i>	April 2, 2010
<i>Mod Number</i>	
<i>Code Version</i>	2010
<i>Code Change Cycle</i>	2010 Triennial Original Modifications 03/01/2010/-/04/02/2010
<i>Sub-code</i>	Building
<i>Chapter Topic</i>	Appendix, International Green Construction Code
<i>Section</i>	Appendix
<i>Related Modification</i>	Add code reference to chapter 35 including the edition date.
<i>Affects HVHZ</i>	No
<i>Summary of modification</i>	Add a new Appendix "XX" (Designation to be assigned)
<i>Text of Modification</i>	<p>APPENDIX 'XX' (Designation to be assigned)</p> <p>International Green Construction Code (IGCC)</p> <p>The provisions in this appendix are not mandatory unless specifically referenced in the adopting ordinance</p> <p>SECTION (XX) 101</p> <p>GENERAL</p> <p>(XX) 101.1 Scope. The provisions of this appendix are applicable to all occupancies covered by the International Green Construction Code (IGCC).</p> <p>(XX) 101.2 Intent. The intent of this appendix is to provide direction for communities having a desire to preserve natural resources, especially water, and lessen the impact of construction on the built environment. Adoption of this standard is to safeguard the environment, public health, safety and general welfare through the establishment of requirements to reduce the negative potential impacts and increase the potential positive impacts of the built environment and building occupants, by means of minimum requirements to: conservation of natural resources, materials and energy; the employment of renewable energy technologies, indoor and outdoor air quality; and building operations and maintenance.</p> <p>(XX) 101.3 Requirements. The design of buildings shall be in accordance with the International Green Construction Code (IGCC).</p> <p>Add the Following to Chapter 35 – references:</p> <p>ICC</p> <p>International Code Council, Inc.</p>

	<p>500 New Jersey Avenue, NW</p> <p>6th Floor</p> <p>Washington, DC 20001</p> <p>Standard Referenced: IGCC</p> <p>Title: International Green Construction Code (IGCC)</p> <p>Reference in code section number: Appendix L</p>
Rational	<ol style="list-style-type: none"> 1. The purpose of this proposed change is to add a new optional appendix to the FBC. 2. The proposed appendix will reference the International Green Construction Code (IGCC). This newly-developed, consensus-based standard may be used in conjunction with local code requirements specific to green buildings covered in the scope. 3. Green buildings are currently being designed and constructed nationwide using different programs guidelines, rating systems, and standards. The IGCC was developed under the direction of ICC, in conjunction with representatives from other nationally-recognized organizations with experience and expertise in this field, including ASHRAE members. In many cases, limited guidance is given as to the criteria to be used to determine if the building project meets the expectations. The IGCC provides a path using a publicly-reviewed resource for local jurisdictions to adopt and use in the administration of green residential building design.
Fiscal impact statement	
<i>Impact to Local Enforcement</i>	This proposed change does not impact local enforcement, it merely provides an alternate path for design that adhere to the Florida Building Code
<i>Impact to Building owner</i>	No fiscal impact to the building owner is anticipated
<i>Impact to Industry</i>	No fiscal impact to the industry is anticipated
Requirements	
<i>Has connection to health safety and Welfare</i>	This proposed change protects the health, safety and welfare by allowing the code compliant use of "green" ideas and technologies
<i>Strengths or improves Code</i>	This proposed change improves the code for design consistency
<i>Does not discriminate</i>	This proposed change does not discriminate
<i>Does not degrade effectiveness of code</i>	This proposed change does not degrade the effectiveness of the code.

Date Submitted 4/2/2010	Section All	Proponent Doug Harvey
Chapter 1	Affects HVHZ No	Attachments Yes
TAC Recommendation	No Affirmative Recommendation with a Second	
Commission Action	Pending Review	

Related Modifications

None

Summary of Modification

Replace the Florida Building Code-Fuel Gas with the 2009 International Fuel Gas Code in its entirety.

Rationale

There are no Florida specific problems that are not covered by the regulations contained within the 2009 International Fuel Gas Code.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

There is no impact to local enforcement other than gaining consistency and putting inspection and review personnel in line with the Code that certification is attained under and used throughout the nation

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

Allows for a code that is more up to date with the new standards, practices and materials. Improves consistency and compliance in design, construction and enforcement. Saves money and time by allowing for a single place to request code modifications.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

No change

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Improves

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This change does not discriminate

Does not degrade the effectiveness of the code

This change does not degrade the effectiveness of the code and should improve effectiveness as consistency will be increased.

Alternate Language

2nd Comment Period

09/03/2010 - 10/18/2010

P4381-A1

Proponent Thomas Allen **Submitted** 10/18/2010 **Attachments** Yes

Rationale

this provides the answers to the questions raised by the TAC Committees this would eliminate the FFGC and simplify the Florida Code process this would save the citizens of Florida the cost of developing a code for 6 pages of changes. this change follows the Commissions request to return to the base code.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Simplifys enforcement

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

none

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Yes

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Provides equivalent products, methods, or systems

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

does not discriminate

Does not degrade the effectiveness of the code

does not degrade the effectiveness of code

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent	Submitted	Attachments
Thomas Allen	10/18/2010	Yes

Comment:

With the changes brought forward in the update of the base code, the attached shows the changes based on review of the 2007 FFGC, the 2009 IFGC. Basically there are 6 pages of code differences, plus an introductory page and adding the Florida Reference Standards to the 2009 IFGC. This clearly shows that we do not need to publish an entirely new book for this few differences. This follows the mandate from the Florida Building Commission to return to the base code. Thank You.

P4381-G2

1st Comment Period History

04/15/2010 - 06/01/2010

Proponent	Submitted	Attachments
Doug Harvey	6/1/2010	No

Comment:

We, the Building Officials Association of Florida (BOAF), believe this modification may require some additional explanation. The BOAF executive board has been consulted regarding this code proposal and they are in agreement that the proposal appears to go along the line of the vote taken by the Commission last fall to remove non-Florida specific items, return to the base documents and have a separate Florida supplement, if needed. The International Code is the base code for the Florida Codes. As such, a strike-through/underline version of the document has not been attached to this modification. Due to the length and file sizes needed, as well as the proposed document being familiar as the base code, this did not seem necessary. Since the base document is the root document for the Florida code, and the Commission voted to return to the base documents over the next two (2) code cycles, we ask the Commission to accept the proposal and allow it to move forward. This is based on the vote taken by the Commission during a public meeting in the Fall of 2009. BOAF supports taking the very specific items modifying the base code to meet Florida Statutes or rules into a smaller and easier to manage stand alone Florida supplement.

P4381-G1

Replace the ~~Florida Building Code Fuel Gas~~ with the 2009 International Fuel Gas Code in its entirety.

Florida Supplement to the I Codes:

This draft is prepared under the following assumption:

- The flood provisions in the base code will be brought forward as recommended by the Floodplain Workgroup and approved by the Commission.

Florida Building Code, Fuel Gas:

For the purposes of using this supplement the following references apply throughout:

International Building Code, use the current Florida Building Code, Building

International Residential Code, use the current Florida Building Code, Residential

International Plumbing Code, use the current Florida Building Code, Plumbing

International Mechanical Code, use the current Florida Building Code, Mechanical

International Fire Code, use the current Florida Fire Prevention Code.

International Fuel Gas Code, use the current International Fuel Gas Code with the Florida Supplement to the I Codes
Florida Building Code, Fuel Gas Section.

The Florida Supplement lists the Florida Code Changes and ~~the sections that do not apply in Florida.~~

FLORIDA BUILDING CODE FUEL GAS SUPPLEMENT 2010

CHAPTER 1 ADMINISTRATION

101.1 Scope. The provisions of Chapter 1, Florida Building Code, Building shall govern the administration and enforcement of the Florida Building Code, Fuel Gas.

The rest of Chapter 1 is Reserved.

CHAPTER 2 DEFINITIONS

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have the meanings as defined in Webster's Third New International Dictionary of the English Language Unabridged. ~~ordinarily accepted meanings such as the context implies.~~

CHAPTER 3 GENERAL REGULATIONS

~~**301.1.1 Other fuels.** The requirements for combustion and dilution air for gas fired appliances shall be governed by Section 304. The requirements for combustion and dilution air for appliances operating with fuels other than fuel gas shall be regulated by the International Mechanical Code.~~

301.1.1 This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:

1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment (see "Point of delivery").

2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.

Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge).

LP-gas piping systems with an operating pressure of 20 psig (140 kPa) or less.

3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.

4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

This code shall not apply to the following:

1. Portable LP-gas equipment of all types that are not connected to a fixed fuel piping system.

2. Installation of farm equipment such as brooders, dehydrators, dryers and irrigation equipment.

3. Raw material (feedstock) applications except for piping to special atmosphere generators.

4. Oxygen-fuel gas cutting and welding systems.

5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.

6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.

7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.

8. LP-gas installations at utility gas plants.

9. Liquefied natural gas (LNG) installations.

10. Fuel gas piping in power and atomic energy plants.

11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors and calorimeters.

12. LP-gas equipment for vaporization, gas mixing and gas manufacturing.

13. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.

14. Installation of LP-gas systems for railroad switch heating.

15. Installation of LP-gas and compressed natural gas (CNG) systems on vehicles.

16. Gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.

17. Building design and construction, except as specified herein.

301.12 Seismic resistance. ~~Reserved. When earthquake loads are applicable in accordance with the International Building Code, the supports shall be designed and installed for the seismic forces in accordance with that code.~~

305.5 Private garages. ~~Reserved—Appliances located in private garages shall be installed with a minimum clearance of 6 feet (1829 mm) above the floor.~~

~~**Exception:** The requirements of this section shall not apply where the appliances are protected from motor vehicle impact and installed in accordance with Section 305.3.~~

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306.3 Appliances in attics. Attics containing appliances requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than ~~20 feet (6096 mm)~~ 6 feet (1829 mm) in length measured along the centerline of the passageway from the attic access opening to the appliance's service panel. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.
2. ~~Where the passageway is not less than 6 feet (1829 mm) high for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.~~

306.3.1 Electrical requirements. ~~A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the appliance location in accordance with NEPA 70. [M] A lighting fixture with receptacle outlet, controlled by a switch located at the required passageway opening, shall be provided so as to light the passageway and service area and installed in accordance with Chapter 27 of the Florida Building Code, Building~~

306.3.2 Air-handling units. Air-handling units shall be allowed in residential attics if the following conditions are met:

1. The service panel of the equipment is located within 6 feet (1829 mm) feet of an attic access.
2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
3. The attic access opening is of sufficient size to replace the air handler.
4. A notice is posted on the electric service panel indicating to the homeowner that the air handler is located in the attic. Said notice shall be in all capitals, in 16-point type, with the title and first paragraph in bold:

NOTICE TO HOMEOWNER

A PART OF YOUR AIR-CONDITIONING SYSTEM, THE AIR HANDLER, IS LOCATED IN THE ATTIC. FOR PROPER, EFFICIENT, AND ECONOMIC OPERATION OF THE AIR-CONDITIONING SYSTEM, YOU MUST ENSURE THAT REGULAR MAINTENANCE IS PERFORMED. YOUR AIR-CONDITIONING SYSTEM IS EQUIPPED WITH ONE OR BOTH OF THE FOLLOWING: 1) A DEVICE THAT WILL ALERT YOU WHEN THE CONDENSATION DRAIN IS NOT WORKING PROPERLY, OR 2) A DEVICE THAT WILL SHUT THE SYSTEM DOWN WHEN THE CONDENSATION DRAIN IS NOT WORKING. TO LIMIT POTENTIAL DAMAGE TO YOUR HOME, AND TO AVOID DISRUPTION OF SERVICE, IT IS RECOMMENDED THAT YOU ENSURE PROPER WORKING ORDER OF THESE DEVICES BEFORE EACH SEASON OF PEAK OPERATION.

309.1 Grounding. Gas piping shall not be used as a grounding electrode. Each above-ground portion of a gas piping system upstream from the equipment shutoff valve shall be electrically continuous and bonded to any grounding electrode, as defined by Chapter 27 of the Florida Building Code, Building.

310.1 Pipe and tubing other than CSST. Each above-ground portion of a gas piping system ~~other than corrugated stainless steel tubing (CSST)~~ that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping ~~other than CSST~~ shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance.

310.1.1 CSST. ~~Corrugated stainless steel tubing (CSST) gas piping systems shall be bonded to the electrical service grounding electrode system at the point where the gas service enters the building. The bonding jumper shall be not smaller than 6 AWG copper wire or equivalent.~~

SECTION 311

CARBON MONOXIDE CONTROL SYSTEMS

311 Carbon monoxide control systems. See Section 916 of the Florida Building Code, Building.

CHAPTER 4 GAS PIPING INSTALLATIONS

404.15.3 Tracer. An ~~yellow~~ insulated copper tracer wire or other approved conductor shall be installed adjacent to underground nonmetallic gas piping. Access shall be provided to the tracer wire or the tracer wire shall terminate above ground at each end of the nonmetallic gas piping. The tracer wire size shall not be less than 18 AWG and the insulation type shall be suitable for direct burial.

CHAPTER 5 CHIMNEYS AND VENTS

503.10.14 Passage through ceilings, floors or walls. Single-wall metal pipe connectors shall not pass through any wall, floor or ceiling except as permitted by Sections 503.7.4 and 503.10.15.

CHAPTER 6 SPECIFIC APPLIANCES

Section 615. Sauna Heaters Reserved

615.1 General. Sauna heaters shall be installed in accordance with the manufacturer's installation instructions.

615.2 Location and protection. Sauna heaters shall be located so as to minimize the possibility of accidental contact by a person in the room.

615.2.1 Guards. Sauna heaters shall be protected from accidental contact by an approved guard or barrier of material having a low coefficient of thermal conductivity. The guard shall not substantially affect the transfer of heat from the heater to the room.

615.3 Access. Panels, grilles and access doors that are required to be removed for normal servicing operations shall not be attached to the building.

615.4 Combustion and dilution air intakes. Sauna heaters of other than the direct vent type shall be installed with the draft hood and combustion air intake located outside the sauna room. Where the combustion air inlet and the draft hood are in a dressing room adjacent to the sauna room, there shall be provisions to prevent physically blocking the combustion air inlet and the draft hood inlet, and to prevent physical contact with the draft hood and vent assembly, or warning notices shall be posted to avoid such contact. Any warning notice shall be easily readable, shall contrast with its background and the wording shall be in letters not less than $\frac{3}{4}$ inch (6.4 mm) high.

615.5 Combustion and ventilation air. Combustion air shall not be taken from inside the sauna room. Combustion and ventilation air for a sauna heater not of the direct vent type shall be provided to the area in which the combustion air inlet and draft hood are located in accordance with [Section 304](#).

615.6 Heat and time controls. Sauna heaters shall be equipped with a thermostat which will limit room temperature to 194°F (90°C). If the thermostat is not an integral part of the sauna heater, the heat sensing element shall be located within 6 inches (152 mm) of the ceiling. If the heat sensing element is a capillary tube and bulb, the assembly shall be attached to the wall or other support, and shall be protected against physical damage.

~~615.6.1 Timers.~~ A timer, if provided to control main burner operation, shall have a maximum operating time of 1 hour. The control for the timer shall be located outside the sauna room.

~~615.7 Sauna room.~~ A ventilation opening into the sauna room shall be provided. The opening shall be not less than 4 inches by 8 inches (102 mm by 203 mm) located near the top of the door into the sauna room.

~~615.7.1 Warning notice.~~ The following permanent notice, constructed of approved material, shall be mechanically attached to the sauna room on the outside:

~~WARNING: DO NOT EXCEED 30 MINUTES IN SAUNA. EXCESSIVE EXPOSURE CAN BE HARMFUL TO HEALTH. ANY PERSON WITH POOR HEALTH SHOULD CONSULT A PHYSICIAN BEFORE USING SAUNA.~~

The words shall contrast with the background and the wording shall be in letters not less than $\frac{3}{4}$ inch (6.4 mm) high.

~~Exception:~~ This section shall not apply to one and two family dwellings.

Chapter 8 - Referenced Standards

Florida Codes	Florida Building Commission c/o Florida Department of Community Affairs Building Codes and Standards 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100	Referenced in code section number
Standard reference number	Title	
FBC-B-10	Florida Building Code, Building	101.1, 201.3, 301.14, 302.1, 302.2, 305.6, 306.6, 401.1.1, 412.6, 413.3, 413.3.1, 501.1, 501.3, 501.12, 501.15.4, 609.3,

		614.2, 706.2
Chapter 13	Florida Building Code, Building: Energy Efficiency	301.2
Chapter 27	Florida Building Code, Building: Electrical (NEC/NFPA 70)	201.3, 306.3.1,
306.4.1,	1, 309.2, 703.6,	
306.5.2, 309		
FBC-M-10	Florida Building Code, Mechanical	201.3, 301.13, 304.11, 501.1, 614.2 618.5, 621.1, 624.1, 631.2, 632.1, 703.1.2
FBC-P-10	Florida Building Code, Plumbing	201.3, 301.6, 624.1.1, 624.2
FBC-R-10	Florida Building Code, Residential	703.2.1
FFPC-10-	Florida Fire Prevention Code	201.3, 303.4, 401.2, 412.1, 412.6, 412.7, 412.7.3, 412.8, 413.1, 413.3, 413.3.1, 701.1, 701.2, 703.2, 703.2.2, 703.3.8, 703.4, 703.5, 704.1.2, 704.3, 704.4, 706.2, 707.1, 707.2, 708.1

Appendix C - (IFGS) Exit Terminals of Mechanical Draft and Direct-Venting Systems

RESERVED (not to be adopted or utilized)

Appendix D - (IFGS) Recommended Procedure for Safety Inspection of an Existing Appliance Installation

RESERVED (not to be adopted or utilized)

Florida Supplement to the I Codes:

This draft is prepared under the following assumption:

- The flood provisions in the base code will be brought forward as recommended by the Floodplain Workgroup and approved by the Commission.

Florida Building Code, Fuel Gas:

For the purposes of using this supplement the following references apply throughout:

International Building Code, use the current Florida Building Code, Building
International Residential Code, use the current Florida Building Code, Residential
International Plumbing Code, use the current Florida Building Code, Plumbing
International Mechanical Code, use the current Florida Building Code, Mechanical
International Fire Code, use the current Florida Fire Prevention Code.
International Fuel Gas Code, use the current International Fuel Gas Code with the Florida Supplement to the I Codes Florida Building Code, Fuel Gas Section.

The Florida Supplement lists the **Florida Code Changes** and **the sections that do not apply in Florida.**

Date Submitted	4/2/2010
Mod Number	
Code Version	2010
Code Change Cycle	2010 Triennial Original Modifications 03/01/2010-04/02/2010
Sub-code	Fuel Gas
Chapter Topic	Publication
Section	All
Related Modification	
Affects HVHZ	No
Summary of modification	Replace the Florida Building Code-Fuel Gas with the 2009 International Fuel Gas Code in its entirety.
Text of Modification	The 2009 International Fuel Gas Code text in its entirety.
Rational	There are no Florida specific problems that are not covered by the regulations contained within the 2009 International Fuel Gas Code.
Fiscal Impact statement	There is no fiscal impact by this change
Impact to Local Enforcement	There is no impact to local enforcement other than gaining consistency and putting inspection and review personnel in line with the Code that certification is attained under and used throughout the nation
Impact to Building owner	None
Impact to Industry	Allows for a code that is more up to date with the new standards, practices and materials. Improves consistency and compliance in design, construction and enforcement. Saves money and time by allowing for a single place to request code modifications.
Requirements	None
Has connection to health safety and Welfare	No change
Strengths or improves Code	Improves
Does not discriminate	This change does not discriminate
Does not degrade effectiveness of code	This change does not degrade the effectiveness of the code and should improve effectiveness as consistency will be increased.

Date Submitted 3/18/2010	Section 504.6	Proponent Ben Bentley
Chapter 5	Affects HVHZ No	Attachments No
TAC Recommendation	No Affirmative Recommendation with a Second	
Commission Action	Pending Review	

Related Modifications

3647, 3648, 3649

Summary of Modification

Add exception to this section of code for a solar system that can have multiple PRV's. Discharging a 1/2" relief device in the solar loop into the T&P tank discharge should be acceptable.

Rationale

Maximum discharge flow through all the discharge piping can not be more than the maximum discharge of the largest relief device discharge size. If this relief device(thermal expansion valve) opens only a cup of water is discharged. Therefore, discharging this 1/2" relief device(thermal expansion valve) located in the solar loop into the T&P tank discharge meets all discharge sizing requirements.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None, easily recognized.

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Meets all requirements like the discharge from a T&P valve.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Provides equivalent products at a lower cost to the consumer.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Ben Bentley	Submitted 10/8/2010	Attachments No
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Comment:

No, it will not create confusion for several reasons.

1) If the tank T&P leaks, hot water is discharged readily indicating this valve is leaking, if the PRV leaks, only a cup of water will discharge.

2) Solar technicians are trained to recognize these differences.

3) Solar technicians readily recognize the differences in the system relief valves so no confusion is created. The confusion occurs when untrained individuals do not recognize the differences between a solar system and a regular plumbing system. So, if these untrained individuals must work on a solar system, they should be trained to do so. This is the solar code, not the plumbing code.

4) Connecting the discharge of these two relief devices causes no safety or health issue because they serve exactly the same source and the PRV is completely redundant except when required valves under section M2301.2.8 are both manually closed.

5) The additional PRV is not required to protect the solar system as long as the system is operational since the existing tank T&P protects the entire system against excessive temperature and pressure, the redundant pressure relief valve installed in the solar loop never functions unless the solar collector portion of the system is isolated, (service call where system is being repaired), by closing both isolation valves, (code requirement section M2301.2.8). The normal procedure for servicing is to turn off the electrical portion of the system, close both ball valves to and from the collector, open one of the boiler drains above the ball valves (which renders the PRV useless by depressurizing the solar loop.) However, if the service tech forgets to open the boiler drain, the PRV, can, on occasion, open due to pressure, discharge about a cup of water and reseats causing no safety or health issues.

P3603-G1

Proponent	Wayne Wallace	Submitted	10/14/2010	Attachments	No
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P3603-G2

Comment:

1) I agree with this Mod, if the PRV is located in the house around the tank, discharge from this valve into the tank T&P could never overload the T&P discharge.

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

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: in a solar direct water heating system, the PRV discharge may connect directly into the T&P relief discharge drainage piping.

No change to the remaining text.

Date Submitted 3/18/2010	Section P2803.6.1.2	Proponent Ben Bentley
Chapter 28	Affects HVHZ No	Attachments No
TAC Recommendation No Affirmative Recommendation with a Second		
Commission Action Pending Review		

Related Modifications

3603, 3647, 3649

Summary of Modification

Add exception to this section of code for a solar system that can have multiple PRV's. Discharging a 1/2" relief device from the solar loop into the T&P tank discharge should be acceptable.

Rationale

Maximum discharge flow through all the discharge piping can not be more than the maximum discharge of the largest relief device discharge size. Section M2301.2.8 requirement is the only reason a pressure relief device must be installed in the collector loop. If this relief device opens only a cup of water is discharged. Therefore, discharging a 1/2" relief device in the solar loop into the T&P tank discharge meets all discharge requirements.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None, easily recognized.

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Meets all requirements like the discharge from a T&P valve.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Provides equivalent products at a lower cost to the consumer.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No

Does not degrade the effectiveness of the code

No

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Ben Bentley	Submitted 10/8/2010	Attachments No
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Comment:

No, it will not create confusion for several reasons.

1) If the tank T&P leaks, hot water is discharged readily indicating this valve is leaking, if the PRV leaks, only a cup of water will discharge.

2) Solar technicians are trained to recognize these differences.

3) Solar technicians readily recognize the differences in the system relief valves so no confusion is created. The confusion occurs when untrained individuals do not recognize the differences between a solar system and a regular plumbing system. So, if these untrained individuals must work on a solar system, they should be trained to do so. This is the solar code, not the plumbing code.

4) Connecting the discharge of these two relief devices causes no safety or health issue because they serve exactly the same source and the PRV is completely redundant except when required valves under section M2301.2.8 are both manually closed.

5) The additional PRV is not required to protect the solar system as long as the system is operational since the existing tank T&P protects the entire system against excessive temperature and pressure, the redundant pressure relief valve installed in the solar loop never functions unless the solar collector portion of the system is isolated, (service call where system is being repaired), by closing both isolation valves, (code requirement section M2301.2.8). The normal procedure for servicing is to turn off the electrical portion of the system, close both ball valves to and from the collector, open one of the boiler drains above the ball valves (which renders the PRV useless by depressurizing the solar loop.) However, if the service tech forgets to open the boiler drain, the PRV, can, on occasion, open due to pressure, discharge about a cup of water and reseats causing no safety or health issues.

P3648-G1

Proponent	Wayne Wallace	Submitted	10/14/2010	Attachments	No
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Comment:

1) I agree with this Mod, if the PRV is located in the house around the tank, discharge from this valve into the tank T&P could never overload the T&P discharge.

P 3648-G2

P2803.6.1.2 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: in a solar direct water heating system, the PRV discharge may connect directly into the T&P relief discharge drainage piping.

No change to the remaining text.

Date Submitted 3/18/2010	Section P2803.6.2.1	Proponent Ben Bentley
Chapter 28	Affects HVHZ No	Attachments No
TAC Recommendation No Affirmative Recommendation with a Second		
Commission Action Pending Review		

Related Modifications

3603, 3648, 3649

Summary of Modification

An exception needs to be added to the code to clarify proper discharge of open loop potable water systems where the relief device is located on the roof near the solar collector(s).

Rationale

Roof pressure relief valve only operates if isolation on the collector occurs per M2301.2.8. Under that condition only a cup or so of water can be expeled from the system and flow onto the roof. This small amount of water causes no personal injury to occupants because it will evaporate before it can reach the roof edge, even if it's only a foot away. It can not cause structural damage to the building anymore so than rain hitting the roof.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None, inspection can be completed by visualization at ground level.

Impact to building and property owners relative to cost of compliance with code

None, if anything, system aesthetics will be improved.

Impact to industry relative to the cost of compliance with code

Very little, if anything, customer cost will be slightly reduced.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Yes, it does not pose any health or safety issues.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, it's a better method due to improvments in aesthetics.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No.

Does not degrade the effectiveness of the code

No, it does not pose health or safety hazards.

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Ben Bentley **Submitted** 10/8/2010 **Attachments** No

Comment:

The code does need to be clarified because every building department has it's own idea as to where the proper place to discharge is and it needs to be clarified. Clarity needs to come from the solar industry/manufactures of systems. Note: Here again, when this valve discharges, the total amount of discharge will be about one cup of water, not unlike normal rainwater, so the proper place to discharge can be the building roof as long as the roof can accept rainfall. This is a no-brainer and needs to be stated exactly as I did in the original Mod proposal.

P3647-G1

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Wayne Wallace **Submitted** 10/14/2010 **Attachments** No

Comment:

I wholeheartedly agree with the Mod, inspectors have made me return to jobsites and run the PRV discharge to the ground. What an aesthetic nightmare not to mention that the total discharge of this valve over the systems entire life would not discharge enough water to fill the discharge pipe to the ground.

P3647-G2

2nd Comment Period

09/03/2010 - 10/18/2010

Proponent Wayne Wallace **Submitted** 10/14/2010 **Attachments** No

Comment:

- 2) I agree with this Mod but over the last 10 years mot of my local inspectors have learned and just make sure when they inspect that the PRV discharge is pointing down towards the roof where no safety or material damage will occur.
- 3) I agree with this Mod, the exception as written is right on the money, no safety, health or property damage will occur if installed per Mod change.

P3647-G3

P2803.6.2.1 Discharge. The relief valve shall discharge full size to a safe place of disposal such as the floor, water heater pan, outside the building or an indirect waste receptor. The discharge pipe shall not have any trapped sections and shall have a visible air gap or air gap fitting located in the same room as the water heater. The discharge shall be installed in a manner that does not cause personal injury to occupants in the immediate area or structural damage to the building.

Exception: The relief valve discharge of an open loop potable water system may discharge directly on the roof no less than two inches nor more than six inches from roof surface, pointed downward towards the roof without additional discharge piping.