Proposed Code Modifications
This document created by the Florida Department of Business and Professional Regulation - 850-487-1824

WITHOUT COMMENTS
Sub Code: Fuel Gas

**Summary of Modification**
Expand the Appliance definition to include compressed fuel gas

**Rationale**
A new generation of residential CNG fueling systems are design certified to the new ANSI standard, NGV 5.1, Home Refueling Appliances. These appliances would not be considered an appliance under the current definition. They will consume electricity to compress fuels.

**Fiscal Impact Statement**
- **Impact to local entity relative to enforcement of code**
  Zero impact
- **Impact to building and property owners relative to cost of compliance with code**
  Zero impact
- **Impact to industry relative to the cost of compliance with code**
  Zero impact
- **Impact to small business relative to the cost of compliance with code**
  Zero impact

**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**
  Yes
- **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
  Does not discriminate against construction material, methods, products or systems.
- **Does not degrade the effectiveness of the code**
  Does not degrade the effectiveness of the code.

**Is the proposed code modification part of a prior code version?** No
FBC-Fuel Gas, Chapter 2, Definitions

Modify as follows:

[M] APPLIANCE. Any apparatus or device that utilizes a fuel or a raw material as a fuel to produce light, heat, power, refrigeration or air conditioning. Also, an apparatus that compresses fuel gases.
<table>
<thead>
<tr>
<th>Comment Period History</th>
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<tbody>
<tr>
<td><strong>P6849-G1</strong></td>
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<tr>
<td><strong>Proponent</strong></td>
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<td><strong>Comment:</strong></td>
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| **P6849-G2**                                                                         |
| **Proponent**                                                                         | Scott Ranck                           |
| **Submitted**                                                                         | 2/18/2016                             |
| **Attachments**                                                                       | No                                    |
| **Comment:**                                                                         | As chairman of the Florida Natural Gas Building and Energy Code Team, our team supports this modification. |

| **P6849-G3**                                                                         |
| **Proponent**                                                                         | Barry Calhoun                         |
| **Submitted**                                                                         | 2/19/2016                             |
| **Attachments**                                                                       | No                                    |
| **Comment:**                                                                         | The Florida Natural Gas Association supports this amendment which will continue to advance and support CNG vehicles. These efforts have been supported in other policy initiatives by the Legislature, Governor, Commissioner of Agriculture, and FDOT. |

| **P6849-G4**                                                                         |
| **Proponent**                                                                         | Barry Calhoun                         |
| **Submitted**                                                                         | 2/19/2016                             |
| **Attachments**                                                                       | No                                    |
| **Comment:**                                                                         | The Florida Natural Gas Association and the Florida Propane Gas Association both extend their support of this modification as it will continue to allow steel piping to be used in fuel gas systems. Steel piping is very important in commercial, industrial, and in most residential piping systems. |

| **P6849-G5**                                                                         |
| **Proponent**                                                                         | Daniel Lapato                          |
| **Submitted**                                                                         | 2/24/2016                             |
| **Attachments**                                                                       | No                                    |
| **Comment:**                                                                         | On behalf of the American Public Gas Association (APGA), we appreciate this opportunity to submit comments on the Florida Building Commission’s proposed code modifications.  
APGA is the national association for publicly owned natural gas distribution systems. With over 30 publicly owned natural gas utilities in Florida, APGA supports this modification and believes it provides additional clarity needed for the code to be more effective.  
Public gas systems’ primary focus is to provide a safe, reliable, and affordable service to their customers. Our members serve homeowners and small businesses, which rely upon affordable natural gas to heat their homes, cook their meals, power their restaurants, schools and hospitals, and businesses. |
[M] APPLIANCE. Any apparatus or device that utilizes a fuel or raw material to produce light, heat, power, refrigeration, or air conditioning, or compressed fuel gas. This definition also shall include a vented decorative appliance.
### P6831

<table>
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<th>12/28/2015</th>
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<tr>
<td>Chapter</td>
<td>4</td>
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<tr>
<td>Section</td>
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</tr>
<tr>
<td>Affects HVHZ</td>
<td>No</td>
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<tr>
<td>Commission Action</td>
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#### Comments

<table>
<thead>
<tr>
<th>General Comments</th>
<th>No</th>
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<tbody>
<tr>
<td>Alternate Language</td>
<td>No</td>
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#### Related Modifications

- **Summary of Modification**
  
  Provide additional clarity for the exceptions listed within

#### Rationale

**REASON:** The new exceptions are specific to schedule 40 steel pipe used in fuel gas installations. The new exceptions would allow the following:

1. Short lengths of steel pipe that are cut from longer pipe stock where the stock has identification markings. It is common practice to cut short lengths of pipe from longer pipe stock. In those cases the identification marks may not appear on the cut pieces. The UMC already contains an exception to permit nipples created from cutting and threading of approved pipe.

2. Small fittings such as bushings and couplings where markings have not been traditionally been included. These small diameter fittings are commonly used in low pressure gas piping systems and represent an extremely low risk of failure.

3. Where the packaging or documentation for the part has the manufacturer’s identification but the part does not. Very small fittings and accessories often come in packaging that have the manufacturer’s identification.

#### Fiscal Impact Statement

<table>
<thead>
<tr>
<th>Impact to local entity relative to enforcement of code</th>
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<tbody>
<tr>
<td>Impact to building and property owners relative to cost of compliance with code</td>
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#### Requirements

- **Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
  
  Yes, provides more clarity to section 401.9 of the code.

- **Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**
  
  Yes, provides more clarity to section 401.9 of the code.

- **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
  
  Does not discriminate against construction material, methods, products or systems.

- **Does not degrade the effectiveness of the code**
  
  Does not degrade the effectiveness of the code.

**Is the proposed code modification part of a prior code version?**  
No
FBC-Fuel Gas, Section 401.9

Modify as follows:

401.9 Identification. Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exceptions:

1. Steel pipe sections that are: two feet and less in length and cut from longer sections of pipe in the field and threaded in the field.
2. Steel pipe fittings 2 inch and less in size.
3. Where identification is provided on the product packaging or crating.
4. Where other approved documentation is provided.
As chairman of the Florida Natural Gas Building and Energy Code Team, our team supports this modification.

The Florida Natural Gas Association and the Florida Propane Gas Association both extend their support of this modification as it will continue to allow steel piping to be used in fuel gas systems. Steel piping is very important in commercial, industrial, and in most residential piping systems.

On behalf of the American Public Gas Association (APGA), we appreciate this opportunity to submit comments on the Florida Building Commission’s proposed code modifications. APGA is the national association for publicly owned natural gas distribution systems. With over 30 publicly owned natural gas utilities in Florida, APGA supports this modification and believes it provides additional clarity needed for the code to be more effective.

Public gas systems’ primary focus is to provide a safe, reliable, and affordable service to their customers. Our members serve homeowners and small businesses, which rely upon affordable natural gas to heat their homes, cook their meals, power their restaurants, schools and hospitals, and businesses.
401.9 Identification.

Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exceptions:

1. Steel pipe sections that are two feet and less in length and cut from longer sections of pipe in the field and threaded in the field.

2. Steel pipe fittings 2 inch and less in size.

3. Where identification is provided on the product packaging or crating.

4. Where other approved documentation is provided.
### Sub Code: Residential

<table>
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<tr>
<td>TAC Recommendation</td>
<td>Commission Action</td>
<td>Pending Review</td>
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</tbody>
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#### Comments
- **General Comments**: No
- **Alternate Language**: No

#### Related Modifications
- 6849, 6853

#### Summary of Modification
Expand the Appliance definition to include compressed fuel gas

#### Rationale
A new generation of residential CNG fueling systems are design certified to the new ANSI standard, NGV 5.1, Home Refueling Appliances. These appliances would not be considered an appliance under the current definition. They will consume electricity to compress fuels.

#### Fiscal Impact Statement
- **Impact to local entity relative to enforcement of code**: Zero impact
- **Impact to building and property owners relative to cost of compliance with code**: Zero Impact
- **Impact to industry relative to the cost of compliance with code**: Zero Impact
- **Impact to small business relative to the cost of compliance with code**: Zero Impact

#### 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**: Yes
- **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**: Does not discriminate against construction material, methods, products or systems
- **Does not degrade the effectiveness of the code**: Does not degrade the effectiveness of the code.

**Is the proposed code modification part of a prior code version?** No
FBC-Residential, Section G2403, General Definitions

Modify as follows:

[M] APPLIANCE. Any apparatus or device that utilizes a fuel or a raw material as a fuel to produce light, heat, power, refrigeration or air conditioning. Also, an apparatus that compresses fuel gases.
APPLIANCE. Any apparatus or device that utilizes a fuel or raw material to produce light, heat, power, refrigeration or air conditioning.

APPLIANCE. Any apparatus or device that utilizes a fuel or raw material to produce light, heat, power, refrigeration or air conditioning, or compressed fuel.
### Comments

<table>
<thead>
<tr>
<th>General Comments</th>
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<td>Alternate Language</td>
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#### Related Modifications

- 6831

#### Summary of Modification

Provide additional clarity to the Exception language

#### Rationale

The new exceptions are specific to schedule 40 steel pipe used in fuel gas installations. The new exceptions would allow the following:

1. Short lengths of steel pipe that are cut from longer pipe stock where the stock has identification markings. It is common practice to cut short lengths of pipe from longer pipe stock. In those cases the identification marks may not appear on the cut pieces.
2. Small fittings such as bushings and couplings where markings have not been traditionally been included. These small diameter fittings are commonly used in low pressure gas piping systems and represent an extremely low risk of failure.
3. Where the packaging or documentation for the part has the manufacturer's identification but the part does not. Very small fittings and accessories often come in packaging that have the manufacturer's identification.

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#### Requirements

- Has a reasonable and substantial connection with the health, safety, and welfare of the general public
  - Yes, provides more clarity to section 401.9 of the code.
- Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction
  - Yes, provides more clarity to section 401.9 of the code.
- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
  - Does not discriminate against construction material, methods, products or systems.
- Does not degrade the effectiveness of the code
  - Does not degrade the effectiveness of the code.

#### Is the proposed code modification part of a prior code version?

- No
FBC-Residential, Section 2412.9

Modify as follows:

G2412.9 (401.9) Identification. Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exceptions:

1. Steel pipe sections that are: two feet and less in length and cut from longer sections of pipe in the field and threaded in the field.
2. Steel pipe fittings 2 inch and less in size.
3. Where identification is provided on the product packaging or crating.
4. Where other approved documentation is provided.
G2412.9 (401.9) Identification.
Each length of pipe and tubing and each pipe fitting, utilized in a fuel
gas system, shall bear the identification of the manufacturer.

Exceptions:

1. Steel pipe sections that are: two feet and less in length and
cut from longer sections of pipe in the field and threaded in the field.

2. Steel pipe fittings 2 inch and less in size

3. Where identification is provided on the product packaging or crating

4. Where other approved documentation is provided.
TAC: Plumbing

Total Mods for Plumbing in Approved as Submitted: 8

Total Mods for report: 18

Sub Code: Fuel Gas

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<th>P6833</th>
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<th>Joseph Eysie</th>
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**Comments**

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**Related Modifications**

**Summary of Modification**
Replace the 2015 ICC base code language with the 2018 ICC base code language and add an exception.

**Rationale**

This requirement in the International Fuel Gas Code has far ranging impact that wasn’t anticipated at the code development hearings. In many cases, there are no certification or testing requirements to use for flare nuts, tees, pipe nipples, etc. The current requirement in section 401.10 is extremely onerous to the fuel gas industry with very little, if any, benefit to society. Piping, tubing and fittings are fabricated to various materials standards, such as those published by the American Society for Testing and Materials (ASTM) and the American Society of Mechanical Engineers (ASME). The material standards are shown in Section 403 of the IFGC. Third party testing or certification is a needless and unjustified expense to the industry. There has been no data presented to indicate that piping and fittings have been failing in the field.

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**
Zero impact to enforcement

**Impact to building and property owners relative to cost of compliance with code**
Zero impact to building & property owners

**Impact to industry relative to the cost of compliance with code**

- Manufacturers will not be required to pay for a needless exercise of obtaining a third party certification to verify that their manufactured products comply with the appropriate material standards.

**Impact to small business relative to the cost of compliance with code**
Zero impact to small business

**Requirements**

- Has a reasonable and substantial connection with the health, safety, and welfare of the general public
  - Will not impact health, safety or welfare of general public.
- Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction
  - Improves the accuracy of the code.
- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
  - Does not discriminate against construction material, products or systems.
- Does not degrade the effectiveness of the code
  - Does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version? No
<table>
<thead>
<tr>
<th>Proponent</th>
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<tr>
<td>Scott Ranck</td>
<td>2/18/2016</td>
<td>No</td>
</tr>
<tr>
<td>Barry Calhoun</td>
<td>2/19/2016</td>
<td>No</td>
</tr>
<tr>
<td>Daniel Lapato</td>
<td>2/24/2016</td>
<td>No</td>
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**Comment:**

- **P6833-G1**
  
  As chairman of the Florida Natural Gas Building and Energy Code Team, our team supports this modification.

- **P6833-G2**
  
  The Florida Natural Gas Association and the Florida Propane Gas Association both extend their support of this modification as it will continue to allow steel piping to be used in fuel gas systems. Steel piping is very important in commercial, industrial, and in most residential piping systems.

- **P6833-G3**
  
  On behalf of the American Public Gas Association (APGA), we appreciate this opportunity to submit comments on the Florida Building Commission's proposed code modifications.

  APGA is the national association for publicly owned natural gas distribution systems. With over 30 publicly owned natural gas utilities in Florida, APGA supports this modification and believes it provides additional clarity needed for the code to be more effective.

  Public gas systems' primary focus is to provide a safe, reliable, and affordable service to their customers. Our members serve homeowners and small businesses, which rely upon affordable natural gas to heat their homes, cook their meals, power their restaurants, schools and hospitals, and businesses.
401.10 Third Party Testing and Certification - Piping Materials Standards.

Piping, tubing and fittings shall comply with applicable referenced standards, specification and performance criteria of this code and shall be identified in accordance with Section 401.9. Piping, tubing and fittings shall either be tested by an approved third-party testing agency or certified by an approved third-party certification agency.

Piping, tubing and fittings shall be manufactured to the applicable referenced standards, specifications and performance criteria listed in Section 403 of this code and shall be identified in accordance with Section 401.9.
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<tr>
<th>Date Submitted</th>
<th>12/7/2015</th>
<th>Section</th>
<th>312.2</th>
<th>Proponent</th>
<th>Gary Kozan</th>
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<td>Chapter</td>
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<td>Approved as Submitted</td>
<td>Commission Action</td>
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</table>

### Comments

**General Comments**

No

**Alternate Language**

No

### Related Modifications

- Plumbing Code 312.6 - for consistency with sewer testing
- Residential Code 2503.4 - for consistency between the Residential and the Plumbing codes

### Summary of Modification

Reinstates the traditional 5-foot head testing for DWV systems, making it consistent with the Residential Code

### Rationale

The base code 2015 IRC now recognizes 5-foot head testing for DWV systems. However, no companion change was proposed for the 2015 IPC. This creates inconsistency between the IRC and IPC. This modification would reinstate the 5-foot head test that was used in Florida for decades prior to being removed automatically in the last code cycle.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**

Creates consistency between the Plumbing and Residential Codes. Promotes uniformity in enforcement.

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

No cost impact

**Impact to industry relative to the cost of compliance with code**

Reinstates 5-foot head testing to Florida again, which had fallen victim to the indiscriminate removal of all Florida-specific amendments in the last code cycle.

**Impact to small business relative to the cost of compliance with code**

No cost impact

### Requirements

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

Florida has a 50 year history of allowing 5-foot head testing for DWV systems. The IRC now officially recognizes this as an acceptable practice.

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

A 5-foot head test is preferred by most Florida code officials and contractors, because it provides actual visual verification of watertight-ness without resorting to ladders or "shaking the stack.'quod;

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

5-foot head testing is now referenced in the IRC.

**Does not degrade the effectiveness of the code**

Simply reinstates a proven Florida practice

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

YES
The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

YES

1st Comment Period History

<table>
<thead>
<tr>
<th>Proponent</th>
<th>Don Whitehead</th>
<th>Submitted</th>
<th>2/3/2016</th>
<th>Attachments</th>
<th>No</th>
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Comment:
Residential piping is currently tested with a 5-foot head pressure; however, Commercial and Industrial piping have heavier loads and therefore require the higher 10-foot head test pressure.
312.2 Drainage and vent water test.
A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 405-foot (3048 mm) head of water. In testing successive sections, at least the upper 495 feet (3048 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a 405-foot (3048 mm) head of water. This pressure shall be held for not less than 15 minutes. The system shall then be tight at all points.
## Comments

### Related Modifications
- Plumbing Code 312.2 - for consistency with interior DWV testing
- Residential Code 2503.4 - for consistency between the Residential and the Plumbing Codes

### Summary of Modification
Modifies building sewer testing to 5-foot head, making it consistent with interior DWV testing and with IRC requirements

### Rationale
The base code 2015 IRC now recognizes 5-foot head testing for DWV systems. However, no companion changes were proposed for the 2015 IPC. This creates inconsistency between the IRC and IPC. This modification would reinstate the 5-foot head test that was used in Florida for decades prior to being removed automatically in the last code cycle.

### Fiscal Impact Statement
- **Impact to local entity relative to enforcement of code**: Creates consistency between the Plumbing and Residential Codes. Promotes uniformity in enforcement.
- **Impact to building and property owners relative to cost of compliance with code**: No cost impact
- **Impact to industry relative to the cost of compliance with code**: Reinstates 5-foot head testing to Florida again, which had fallen victim to the indiscriminate removal of all Florida-specific amendments in the last code cycle.
- **Impact to small business relative to the cost of compliance with code**: No cost impact

### Requirements
- **Has a reasonable and substantial connection with the health, safety, and welfare of the general public**: Florida has a 50 year history of allowing 5-foot head testing for DWV systems. The IRC no officially recognizes this as an acceptable practice.
- **Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**: A 5-foot head test is preferred by most Florida code officials and contractors, because it provides actual visual verification of watertight-ness without resorting to ladders or "shaking the stack.
- **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**: 5-foot head testing is now referenced in the IRC.
- **Does not degrade the effectiveness of the code**: Simply reinstates a proven Florida practice.

### Is the proposed code modification part of a prior code version? No

## 1st Comment Period History

<table>
<thead>
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<tbody>
<tr>
<td>Don Whitehead</td>
<td>2/3/2016</td>
<td>No</td>
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</table>

**Comment:**
The base code 2015 IRC, 2503.4 and the base code 2015 IPC, 312.6 both recognize a 10-foot head for sewer pipe pressure testing, not 5-foot as stated in the rationale.
312.6 Gravity sewer test.
Gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, filling the building sewer with water, testing with not less than a 495-foot (3048 mm) head of water and maintaining such pressure for 15 minutes.
### Related Modifications
- Residential Code P2709.2 - Same criteria needed in Residential Code for consistency

### Summary of Modification
Adds requirements for recessed shower compartments, and provides an exception for shower linings in such.

### Rationale
The base I-Codes do not address recessed shower compartments, which are common throughout Florida. Shower pans linings are not necessary in a properly-constructed shower recess. Beginning with the Fifth Edition (2014) of the FBC, previous Florida-specific amendments were automatically removed. Adding exception 3 reinstates the identical Florida-specific modification found in the previous four editions of the Florida Building Code.

### Fiscal Impact Statement
- **Impact to local entity relative to enforcement of code**: Provides clear guidance and improves consistency of enforcement between AHJs
- **Impact to building and property owners relative to cost of compliance with code**: Reinstates a proven, cost-effective option
- **Impact to industry relative to the cost of compliance with code**: Provides clear guidance and improves consistency of code compliance for contractors working in different areas
- **Impact to small business relative to the cost of compliance with code**: No cost impact

### Requirements
- **Has a reasonable and substantial connection with the health, safety, and welfare of the general public**: Recessed shower compartments have a proven track record in Florida and there is less chance of water damage because the recess contains all of the water
- **Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**: Adds guidance and requirements for shower recesses that provide a proven, cost-effective option for builders
- **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**: Does not change the requirements for built-up showers, it just adds requirements for shower recesses
- **Does not degrade the effectiveness of the code**: This modification reinstates the Florida-specific code language found in the first four editions of the FBC. It clears up confusion in the field over the applicability and proper construction of shower recesses.

### Is the proposed code modification part of a prior code version?
YES

### The provisions contained in the proposed amendment are addressed in the applicable international code?
NO

### The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?
YES

### The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?
NO
417.5.2 Shower lining.
Floors under shower compartments, except where prefabricated receptors have been provided, shall be lined and made water tight utilizing material complying with Sections 417.5.2.1 through 417.5.2.6. Such liners shall turn up on all sides not less than 2 inches (51 mm) above the finished threshold level. Liners shall be recessed and fastened to an approved backing so as not to occupy the space required for wall covering, and shall not be nailed or perforated at any point less than 1 inch (25 mm) above the finished threshold. Liners shall be pitched one-fourth unit vertical in 12 units horizontal (2-percent slope) and shall be sloped toward the fixture drains and be securely fastened to the waste outlet at the seepage entrance, making a water-tight joint between the liner and the outlet. The completed liner shall be tested in accordance with Section 312.9.

Exceptions:

1. Floor surfaces under shower heads provided for rinsing laid directly on the ground are not required to comply with this section.

2. Where a sheet-applied, load-bearing, bonded, waterproof membrane is installed as the shower lining, the membrane shall not be required to be recessed.

3. Shower compartments where the finished shower drain is depressed a minimum of 2 inches (51 mm) below the surrounding finished floor on the first floor level and the shower recess is poured integrally with the adjoining floor.
Section 614 which regulated private potable water wells of the 2010 Florida Plumbing code was not adopted and removed from the 2014 5th Edition of the Florida Plumbing code. Requesting section 614 of the 2010 FBC-P be added to the 2017 6th Edition of the FBC-P.

Rationale

Hillsborough County has hundreds of private potable water wells which provide water to residential and commercial occupants. Without this code section we have no authority to inspect or codes to ensure the proper installation of private potable water wells. F.S 373 references the Florida plumbing code for installation. The SWWMD regulates the location and well casings, however they do no regulate the pumps, valves, relief valves, tank and other equipment required for private potable water wells. In other words without this code there is no regulation.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None - Prior to the adoption of the 5th Edition private potable water wells were permitted and inspected for code compliance.

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

Cost of a permit fee.

Impact to industry relative to the cost of compliance with code

Contractors would be required to obtain a permit for the installation of private potable water wells.

Impact to small business relative to the cost of compliance with code

Cost of permit fee.

Requirements

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

The proper installation of private potable water wells, pumps and related fittings and appurtenances is essential to the health, safety and welfare of the general public.

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

This code modification would strengthen and improve the code by setting the minimum requires for the installation of private potable water wells as previously adopted in earlier versions of the Plumbing code.

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

This code change does not discriminate against materials, products, methods or systems.

Does not degrade the effectiveness of the code

This code modification does not degrade the effectiveness it only improves it's effectiveness.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

NO

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO
SECTION 614 WELL PUMPS AND TANKS USED FOR PRIVATE POTABLE WATER SYSTEMS

.614.1 Pumps.

Well pumps used for potable water shall comply with Sections 614.1.1 and 614.1.2

TABLE 614.1 MINIMUM PRIVATE POTABLE WATER SYSTEM PUMP SIZE

<table>
<thead>
<tr>
<th>MINIMUM PUMP SIZE</th>
<th>BATHROOMS IN HOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 – 1 1/2</td>
</tr>
<tr>
<td>7 gpm</td>
<td>2 – 2 1/2</td>
</tr>
<tr>
<td>10 gpm</td>
<td>3 – 4</td>
</tr>
<tr>
<td>14 gpm</td>
<td>5 – 6</td>
</tr>
</tbody>
</table>

Notes:
1. Values given are average and do not include higher or low extremes.
2. Installations over 6 bathrooms shall be approved by the code official.

.614.1.1 Pump installation.

Pumps shall be installed for operation without repriming or breaking suction. Pumps shall be connected to the well head by means of a union, companion flange or compression coupling in such a manner that it is accessible for maintenance, repair and removal.

.614.1.2 Pump sizing.

Minimum pump size shall be determined by Table 614.1.

.614.2 Pressure tanks.

Tanks relying on expansion of a flexible membrane within a restricting container, or tanks with direct water-to-air interface to provide pressure in the water system, shall be used. All pressure tanks for storing potable water under pressure, including those having an air-space for pressure for expansion, shall be identified by seal, label or plate indicating the manufacturer’s name and model number and shall meet the following specifications:

.1. Pressure tank drawdown shall be a minimum of 1 gallon (3.8 L) for every gallon per minute produced by the pump.

Exception: Pump start applications, constant pressure devices and variable speed pumps.

.2. Pressure tanks shall be constructed of steel, fiberglass or comparable materials. Tanks to be buried shall be built by the manufacturer specifically for underground use. Fiberglass or other nonmetallic tanks to be buried shall have the structural strength to prevent collapse.

.614.3 Piping.

Piping associated with pumps and tanks shall comply with Sections 614.3.1 through 614.3.3.

.614.3.1 Drop pipe.

The drop pipe from the submersible pump to the first fitting past the well seal shall be either galvanized steel, stainless steel or PVC Schedule 80 threaded/coupled or lock joint pipe. The drop pipe for a single pipe, deep well jet pump shall be either galvanized steel or stainless steel. The drop pipe for a double pipe, deep well jet pump shall be either galvanized steel on the suction side and/or minimum PVC schedule 40 on the pressure side.

.614.3.2 Pump discharge pipe sizing.
For submersible pumps, pipe size shall be equal to the pump discharge. Piping for all other types of pumps shall be sized in accordance with the pump manufacturer's specifications.

- **614.3.3 Pressure tank pipe sizing.**

Piping size for the offset of the pressure tank shall use the piping friction loss charts for the piping material used.

- **614.4 Electrical wiring.**

All wiring shall be installed in accordance with Chapter 27 of the *Florida Building Code, Building*.

- **614.5 Disinfection.**

The pump installer shall disinfect any potable well and water system in accordance with Section 610.

- **614.6 Valves.**

A pressure relief valve shall be installed on any pumping system that can produce pressures of 75 psi (517 kPa) or greater. A check valve shall be installed at the well head of submersible pumps.
### Comments

<table>
<thead>
<tr>
<th>General Comments</th>
<th>Alternate Language</th>
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<tbody>
<tr>
<td>No</td>
<td>No</td>
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</tbody>
</table>

#### Related Modifications

**Summary of Modification**

Provides options for thermal expansion control - as per code all editions prior to and subsequent to the 2015 IPC

**Rationale**

Earlier editions of the IPC had always permitted multiple "means" for the control of thermal expansion. This changed in the 2015 edition, which limited thermal expansion control solely to thermal expansion tanks. The 2018 IPC committee recognized this as being overly-restrictive, and adopted revised language in the 2018 IPC. This modification updates this section to the most recent language of the 2018 IPC. It restores options for the designer and installer.

**Fiscal Impact Statement**

- **Impact to local entity relative to enforcement of code**
  - No cost impact
- **Impact to building and property owners relative to cost of compliance with code**
  - No cost impact
- **Impact to industry relative to the cost of compliance with code**
  - No cost impact - it increases the options available for thermal expansion control
- **Impact to small business relative to the cost of compliance with code**
  - No cost impact

**Requirements**

- **Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
  - Restores multiple options for control of thermal expansion.
- **Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**
  - Allows designers and contractors to make the best selection for thermal expansion control.
- **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
  - Opens the marketplace to more products
- **Does not degrade the effectiveness of the code**
  - Simply restores the options available under previous code editions.

**Is the proposed code modification part of a prior code version?**

No
607.3 Thermal expansion control.
Where a storage water heater is supplied with cold water that passes through a check valve, pressure reducing valve or backflow preventer, a thermal expansion tank control device shall be connected to the water heater cold water supply pipe at a point that is downstream of all check valves, pressure reducing valves and backflow preventers. Thermal expansion tank control devices shall be sized in accordance with the tank manufacturer’s instructions and shall be sized such that the pressure in the water distribution system shall not exceed that required by Section 604.8.
<table>
<thead>
<tr>
<th>Date Submitted</th>
<th>Section</th>
<th>Affects HVHZ</th>
<th>Proponent</th>
<th>TAC Recommendation</th>
<th>Commission Action</th>
<th>Comments</th>
<th>Alternate Language</th>
<th>Related Modifications</th>
<th>Summary of Modification</th>
<th>Rationale</th>
<th>Fiscal Impact Statement</th>
<th>Requirements</th>
<th>Is the proposed code modification part of a prior code version?</th>
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</thead>
<tbody>
<tr>
<td>12/7/2015</td>
<td>2503.4</td>
<td>No</td>
<td>Gary Kozan</td>
<td>Approved as Submitted</td>
<td>Pending Review</td>
<td>No</td>
<td>No</td>
<td>Plumbing Code 312.6 - same criteria needed in Plumbing Code for consistency</td>
<td>Modifies building sewer testing to 5-foot head, making it consistent with interior DWV testing</td>
<td>The base code 2105 IRC finally recognizes 5-foot head testing for DWV systems, but unfortunately, a companion change was not made to the outside sewer testing, which remains at 10-foot head. It makes no sense to allow a 5-foot head test for piping inside a building, yet require a 10-foot head test for outside piping. This proposal makes interior and exterior testing consistent.</td>
<td>Impact to local entity relative to enforcement of code</td>
<td>Eliminates an unintended oversight in the base code and improves consistency of enforcement between AHJs</td>
<td>Impact to building and property owners relative to cost of compliance with code</td>
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</table>
P2503.4 Building sewer testing.
The building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer, filling the building sewer with water and pressurizing the sewer to not less than 405-foot (3048 mm) head of water. The test pressure shall not decrease during a period of not less than 15 minutes. The building sewer shall be watertight at all points.

A forced sewer test shall consist of pressurizing the piping to a pressure of not less than 5 psi (34.5 kPa) greater than the pump rating and maintaining such pressure for not less than 15 minutes. The forced sewer shall be water tight at all points.
<table>
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<tbody>
<tr>
<td>Chapter</td>
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<tr>
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<td>Gary Kozan</td>
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<tr>
<td>Attachments</td>
<td>No</td>
</tr>
<tr>
<td>TAC Recommendation</td>
<td>Approved as Submitted</td>
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<tr>
<td>Commission Action</td>
<td>Pending Review</td>
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</tbody>
</table>

**Comments**

<table>
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<tr>
<th>General Comments</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>Alternate Language</td>
<td>No</td>
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</tbody>
</table>

**Related Modifications**

- Plumbing Code 417.5.2 - Same criteria needed in Plumbing Code for consistency

**Summary of Modification**

- Adds requirements for recessed shower compartments, and provides an exception for shower lining in such compartments.

**Rationale**

The base I-codes do not address recessed shower compartments, which are common throughout Florida. Shower pan linings are not necessary in a properly-constructed shower recess. Beginning with the Fifth Edition (2014) of the FBC, previous Florida-specific amendments were automatically removed. Adding these exceptions reinstates the Florida-specific modification found in the previous four editions of the Florida Building Code. It also brings the FBC-P and FBC-R codes into alignment.

**Fiscal Impact Statement**

- **Impact to local entity relative to enforcement of code**
  - Provides clear guidance and improves consistency of enforcement between AHJs
- **Impact to building and property owners relative to cost of compliance with code**
  - Reinstates a proven, cost-effective option
- **Impact to industry relative to the cost of compliance with code**
  - Provides clear guidance and improves consistency of code compliance for contractors working in different areas
- **Impact to small business relative to the cost of compliance with code**
  - No cost impact

**Requirements**

- Has a reasonable and substantial connection with the health, safety, and welfare of the general public
  - Recessed shower compartments have a proven track record in Florida and there is less chance of water damage because the recess contains all of the water
- Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction
  - Adds guidance and requirements for shower recesses that provide a proven, cost-effective option for builders
- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
  - Does not change the requirements for built-up showers, it just adds requirements for shower recesses
- Does not degrade the effectiveness of the code
  - This modification reinstates the Florida-specific code language found in the first four editions of the FBC. It clears up confusion in the field over the applicability and proper construction of shower recesses.

**Is the proposed code modification part of a prior code version?**

YES

**The provisions contained in the proposed amendment are addressed in the applicable international code?**

NO

**The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?**

YES

**The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?**

NO
P2709.2 Lining required.
The adjoining walls and floor framing enclosing on-site built-up shower receptors shall be lined with one of the following materials:

1. Sheet lead.
2. Sheet copper.
3. Plastic liner material that complies with ASTM D 4068 or ASTM D 4551.
4. Hot mopping in accordance with Section P2709.2.3
5. Sheet-applied load-bearing, bonded waterproof membranes that comply with ANSI A118.10.

The lining material shall extend not less than 2 inches (51 mm) beyond or around the rough jambs and not less than 2 inches (51 mm) above finished thresholds. Sheet-applied load bearing, bonded waterproof membranes shall be applied in accordance with the manufacturer’s instructions.

Exceptions:

1. Floor surfaces under shower heads provided for rinsing laid directly on the ground are not required to comply with this section.
2. Where a sheet-applied, load-bearing, bonded, waterproof membrane is installed as the shower lining, the membrane shall not be required to be recessed.
3. Shower compartments where the finished shower drain is depressed a minimum of 2 inches (51 mm) below the surrounding finished floor on the first floor level and the shower recess is poured integrally with the adjoining floor.
Sub Code: Fuel Gas

P6845

<table>
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<th>Date Submitted</th>
<th>12/28/2015</th>
<th>Section</th>
<th>401.9</th>
</tr>
</thead>
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<tr>
<td>Chapter</td>
<td>4</td>
<td>Affects HVHZ</td>
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<tr>
<td>TAC Recommendation</td>
<td>Withdrawn</td>
<td>Proponent</td>
<td>Joseph Eysie</td>
</tr>
<tr>
<td>Commission Action</td>
<td>Pending Review</td>
<td>Attachments</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Comments

General Comments | No
Alternate Language | No

Related Modifications

6831-This Mod is being submitted as an alternative to 6831 which deals with this same issue. Mod 6831 is the preferred option by the proponent

Summary of Modification

Provide additional clarity for the exception listed within

Rationale

Short lengths of steel pipe that are cut from longer pipe stock where the stock has identification markings. It is common practice to cut short lengths of pipe from longer pipe stock. In those cases the identification marks may not appear on the cut pieces. The UMC already contains an exception to permit nipples created from cutting and threading of approved pipe.

Small fittings such as bushings and couplings where markings have not been traditionally been included. These small diameter fittings are commonly used in low pressure gas piping systems and represent an extremely low risk of failure.

Where the packaging or documentation for the part has the manufacturer’s identification but the part does not. Very small fittings and accessories often come in packaging that have the manufacturer’s identification.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code
Zero impact

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

Impact to industry relative to the cost of compliance with code
Zero impact

Impact to small business relative to the cost of compliance with code
Zero impact

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
Yes, provides more clarity to section 401.9 of the code.

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

Does not degrade the effectiveness of the code
Does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version?
YES

The provisions contained in the proposed amendment are addressed in the applicable international code?
NO
The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?
YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?
NO

### 1st Comment Period History

<table>
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<tr>
<th>Proponent</th>
<th>Scott Ranck</th>
<th>Submitted</th>
<th>2/18/2016</th>
<th>Attachments</th>
<th>No</th>
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</thead>
</table>

**Comment:**
As chairman of the Florida Natural Gas Building and Energy Code Team, our team supports this modification.
401.9 Identification-

Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exception: The manufacturer identification for fittings and pipe nipples shall be on each piece or shall be printed on the fitting or nipple packaging or provided documentation.
401.3 Modifications to existing systems.
In modifying or adding to existing piping systems, sizes shall be maintained in accordance with this chapter.

401.4 Additional appliances.
Where an additional appliance is to be served, the existing piping shall be checked to determine if it has adequate capacity for all appliances served. If inadequate, the existing system shall be enlarged as required or separate piping of adequate capacity shall be provided.

401.5 Identification.
For other than steel pipe, exposed piping shall be identified by a yellow label marked “Gas” in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the appliance served.

401.6 Interconnections.
Where two or more meters are installed on the same premises but supply separate consumers, the piping systems shall not be interconnected on the outlet side of the meters.

401.7 Piping meter identification.
Piping from multiple meter installations shall be marked with an approved permanent identification by the installer so that the piping system supplied by each meter is readily identifiable.

401.8 Minimum sizes.
All pipe utilized for the installation, extension and alteration of any piping system shall be sized to supply the full number of outlets for the intended purpose and shall be sized in accordance with Section 402.

401.9 Identification.
Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exception: The manufacturer identification for fittings and pipe nipples shall be on each piece or shall be printed on the fitting or nipple packaging or provided documentation

401.10 Third-party testing and certification.
Reserved.
## Comments

| General Comments | No | Alternate Language | No |

### Related Modifications

6833- This mod is being submitted as an alternative to Mod 6837, with 6837 being the preferred Mod by proponent

### Summary of Modification

Continue the current (5th edition FBC, Fuel Gas) requirement for 401.10

### Rationale

This requirement in the International Fuel Gas Code has far ranging impact that wasn't anticipated at the code development hearings. In many cases, there are no certification or testing requirements to use for are nuts, tees, pipe nipples, etc. The current requirement in section 401.10 is extremely onerous to the fuel gas industry with very little, if any, benefit to society. Piping, tubing and fittings are fabricated to various materials standards, such as those published by the American Society for Testing and Materials (ASTM) and the American Society of Mechanical Engineers (ASME). The material standards are shown in Section 403 of the IFGC. Third party testing or certification is a needless and unjustified expense to the industry. There has been no data presented to indicate that piping and fittings have been failing in the field.

### Fiscal Impact Statement

- **Impact to local entity relative to enforcement of code**
  
  Zero impact

- **Impact to building and property owners relative to cost of compliance with code**
  
  Zero impact

- **Impact to industry relative to the cost of compliance with code**
  
  Zero impact

- **Impact to small business relative to the cost of compliance with code**
  
  Zero impact

### 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
  
  Maintains current code

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

- Does not degrade the effectiveness of the code
  
  Does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO
401.10 Third-party testing and certification.
Piping, tubing and fittings shall comply with the applicable referenced standards, specifications and performance criteria of this code and shall be identified in accordance with Section 401.9. Piping, tubing and fittings shall either be tested by an approved third-party testing agency or certified by an approved third-party certification agency. (Reserved)
Screen shot of 5th Edition FBC, Fuel Gas

Fire Prevention Code and NFPA 58.

401.3 Modifications to existing systems.
In modifying or adding to existing piping systems, sizes shall be maintained in accordance with this chapter.

401.4 Additional appliances.
Where an additional appliance is to be served, the existing piping shall be checked to determine if it has adequate capacity for all appliances served. If inadequate, the existing system shall be enlarged as required or separate piping of adequate capacity shall be provided.

401.5 Identification.
For other than steel pipe, exposed piping shall be identified by a yellow label marked “Gas” in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the appliance served.

401.6 Interconnections.
Where two or more meters are installed on the same premises but supply separate consumers, the piping systems shall not be interconnected on the outlet side of the meters.

401.7 Piping meter identification.
Piping from multiple meter installations shall be marked with an approved permanent identification by the installer so that the piping system supplied by each meter is readily identifiable.

401.8 Minimum sizes.
All pipe utilized for the installation, extension and alteration of any piping system shall be sized to supply the full number of outlets for the intended purpose and shall be sized in accordance with Section 402.

401.9 Identification.
Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exception: The manufacturer identification for fittings and pipe nipples shall be on each piece or shall be printed on the fitting or nipple packaging or provided documentation.

401.10 Third-party testing and certification.
Reserved.
P6818

Date Submitted: 12/28/2015

Section: 417.5.2

Commission Action: Pending Review

Proponent: Joseph Belcher

Attachments: Yes

TAC Recommendation: Withdrawn

Comments

General Comments: No

Alternate Language: No

Related Modifications

Summary of Modification
- Reinstates shower lining exception for depressed shower on first floor.

Rationale
- The proposal reinstates a Florida specific amendment that appeared in all editions of the FBC-P except the 5th Edition. Exception 3 was an approved Florida specific amendment in all previous editions of the code. According to the original proponent, the Exceptions were inadvertently not submitted for the FBC-P, 5th Edition; there was no intent to eliminate the Exception.
- The climate and high water table of Florida precludes the proliferation of basements in Florida and slabs-on-ground are a popular method of constructing the first floor. This type of construction is ideal for the use of the cost-effective alternate of recessed shower compartments. The provisions for recessed shower compartments have been widely used in Florida for many years with no reported problems.

Fiscal Impact Statement

- Impact to local entity relative to enforcement of code
  - No impact to local entities for code enforcement. Most inspectors are familiar with the system as it has been in use for many years throughout Florida.

- Impact to building and property owners relative to cost of compliance with code
  - Approval of the proposal will have a positive impact on building and property owners by readopting a Florida specific amendment that provides a well proven cost-effective method of construction for shower compartments.

- Impact to industry relative to the cost of compliance with code
  - Approval of the proposal will have a positive impact on building and property owners by bringing back a Florida specific amendment that provides a well proven cost-effective method of construction for shower compartments.

- Impact to small business relative to the cost of compliance with code
  - No fiscal impact to small business.

Requirements

- Has a reasonable and substantial connection with the health, safety, and welfare of the general public
  - Yes, reinstates a time proven cost-effective alternate method of constructing shower compartments in Florida.

- Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction
  - Yes, reinstates a time proven cost-effective alternate method of constructing shower compartments in Florida.

- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
  - No, does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

- Does not degrade the effectiveness of the code
  - No, does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

YES
The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO
417.5.2 Shower lining.

Floors under shower compartments, except where prefabricated receptors have been provided, shall be lined and made water tight utilizing material complying with Sections 417.5.2.1 through 417.5.2.5. Such liners shall turn up on all sides at least 2 inches (51 mm) above the finished threshold level. Liners shall be recessed and fastened to an approved backing so as not to occupy the space required for wall covering, and shall not be nailed or perforated at any point less than 1 inch (25 mm) above the finished threshold. Liners shall be pitched one-fourth unit vertical in 12 units horizontal (2-percent slope) and shall be sloped toward the fixture drains and be securely fastened to the waste outlet at the seepage entrance, making a water-tight joint between the liner and the outlet. The completed liner shall be tested in accordance with Section 312.9.

Exceptions:

1. Floor surfaces under shower heads provided for rinsing laid directly on the ground are not required to comply with this section.

2. Where a sheet-applied, load-bearing, bonded, waterproof membrane is installed as the shower lining, the membrane shall not be required to be recessed.

3. Shower compartments where the finished shower drain is depressed a minimum of 2 inches (51 mm) below the surrounding finished floor on the first floor level and the shower recess is poured integrally with the adjoining floor.
Yes, the climate and high water table in Florida allows the use of a proven alternate method previously permitted by all editions of the Florida Building Code.
**P6858**

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<td>Chapter</td>
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<td>Section</td>
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<tr>
<td>Proponent</td>
<td>Joseph Eysie</td>
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### Comments

**General Comments:** No  
**Alternate Language:** No

### Related Modifications

6857-This Mod is being submitted as an alternative to 6857 which deals with this same issue. Mod 6857 is the preferred option by the proponent.

### Summary of Modification

Provide Exception language from the current 5Th Edition of the FBC

### Rationale

Short lengths of steel pipe that are cut from longer pipe stock where the stock has identification markings. It is common practice to cut short lengths of pipe from longer pipe stock. In those cases the identification marks may not appear on the cut pieces. The UMC already contains an exception to permit nipples created from cutting and threading of approved pipe.

Small fittings such as bushings and couplings where markings have not been traditionally been included. These small diameter fittings are commonly used in low pressure gas piping systems and represent an extremely low risk of failure.

Where the packaging or documentation for the part has the manufacturer’s identification but the part does not. Very small fittings and accessories often come in packaging that have the manufacturer’s identification.

### Fiscal Impact Statement

- **Impact to local entity relative to enforcement of code**
  - Zero impact
- **Impact to building and property owners relative to cost of compliance with code**
  - Zero impact
- **Impact to industry relative to the cost of compliance with code**
  - Zero impact
- **Impact to small business relative to the cost of compliance with code**
  - Zero impact

### 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
  - Yes, provides more clarity to section 401.9 of the code.
- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
  - Does not discriminate against construction material, methods, products or systems.
- **Does not degrade the effectiveness of the code**
  - Does not degrade the effectiveness of the code.

*Is the proposed code modification part of a prior code version?*

YES

*The provisions contained in the proposed amendment are addressed in the applicable international code?*

NO
The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?
YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?
NO
G2412.10 (401.10) Third-party testing and certification.
Piping, tubing and fittings shall comply with the applicable referenced standards, specifications and performance criteria of this code and shall be identified in accordance with Section G2412.9. Piping, tubing and fittings shall either be tested by an approved third-party testing agency or certified by an approved third-party certification agency.

**Exception:** The manufacturer identification for fittings and pipe nipples shall be on each piece or shall be printed on the fitting or nipple packaging or provided documentation.
Screen shot of 5th Edition FBC, Fuel Gas

401.3 Modifications to existing systems.
In modifying or adding to existing piping systems, sizes shall be maintained in accordance with this chapter.

401.4 Additional appliances.
Where an additional appliance is to be served, the existing piping shall be checked to determine if it has adequate capacity for all appliances served. If inadequate, the existing system shall be enlarged as required or separate piping of adequate capacity shall be provided.

401.5 Identification.
For other than steel pipe, exposed piping shall be identified by a yellow label marked “Gas” in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the appliance served.

401.6 Interconnections.
Where two or more meters are installed on the same premises but supply separate consumers, the piping systems shall not be interconnected on the outlet side of the meters.

401.7 Piping meter identification.
Piping from multiple meter installations shall be marked with an approved permanent identification by the installer so that the piping system supplied by each meter is readily identifiable.

401.8 Minimum sizes.
All pipe utilized for the installation, extension and alteration of any piping system shall be sized to supply the full number of outlets for the intended purpose and shall be sized in accordance with Section 402.

401.9 Identification.
Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exception: The manufacturer identification for fittings and pipe nipples shall be on each piece or shall be printed on the fitting or nipple packaging or provided documentation

401.10 Third-party testing and certification.
Reserved.
**Comments**

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<td>Alternate Language</td>
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**Related Modifications**

- 6859 - This Mod is being submitted as an alternative to 6859 which deals with the same issue. Mod 6859 is the preferred option by the proponent.

**Summary of Modification**

Continue the current (5th edition FBC, Fuel Gas) requirement for 401.10 (G2412.10)

**Rationale**

This requirement in the International Fuel Gas Code has far ranging impact that wasn’t anticipated at the code development hearings. In many cases, there are no certification or testing requirements to use for flare nuts, tees, pipe nipples, etc. The current requirement in section 401.10 is extremely onerous to the fuel gas industry with very little, if any, benefit to society. Piping, tubing and fittings are fabricated to various materials standards, such as those published by the American Society for Testing and Materials (ASTM) and the American Society of Mechanical Engineers (ASME). The material standards are shown in Section 403 of the IFGC. Third party testing or certification is a needless and unjustified expense to the industry. There has been no data presented to indicate that piping and fittings have been failing in the field.

**Fiscal Impact Statement**

- **Impact to local entity relative to enforcement of code**
  - Zero Impact
- **Impact to building and property owners relative to cost of compliance with code**
  - Zero Impact
- **Impact to industry relative to the cost of compliance with code**
  - Zero Impact
- **Impact to small business relative to the cost of compliance with code**
  - Zero Impact

**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
- Does not discriminate against materials, products, methods, or systems of construction or demonstrated capabilities
  - Does not discriminate against construction material, methods, products or systems.
- Does not degrade the effectiveness of the code
  - Does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO
G2412.10 (401.10) Third-party testing and certification.

Piping, tubing and fittings shall comply with applicable referenced standards, specification and performance criteria of this code and shall be identified in accordance with Section 401.9. Piping, tubing and fittings shall either be tested by an approved third-party testing agency or certified by an approved third-party certification agency. (Reserved)
Screen shot of 5th Edition FBC, Fuel Gas

Fire Prevention Code and NFPA 58.

401.3 Modifications to existing systems.
In modifying or adding to existing piping systems, sizes shall be maintained in accordance with this chapter.

401.4 Additional appliances.
Where an additional appliance is to be served, the existing piping shall be checked to determine if it has adequate capacity for all appliances served. If inadequate, the existing system shall be enlarged as required or separate piping of adequate capacity shall be provided.

401.5 Identification.
For other than steel pipe, exposed piping shall be identified by a yellow label marked “Gas” in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the appliance served.

401.6 Interconnections.
Where two or more meters are installed on the same premises but supply separate consumers, the piping systems shall not be interconnected on the outlet side of the meters.

401.7 Piping meter identification.
Piping from multiple meter installations shall be marked with an approved permanent identification by the installer so that the piping system supplied by each meter is readily identifiable.

401.8 Minimum sizes.
All pipe utilized for the installation, extension and alteration of any piping system shall be sized to supply the full number of outlets for the intended purpose and shall be sized in accordance with Section 402.

401.9 Identification.
Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

Exception: The manufacturer identification for fittings and pipe nipples shall be on each piece or shall be printed on the fitting or nipple packaging or provided documentation.

401.10 Third-party testing and certification.
Reserved.
Summary of Modification

 Adds Exceptions for shower liners.

Rationale

The proposal reinstates a Florida specific amendment that appeared in all editions of the FBC-R except the 5th Edition and brings the FBC-R in agreement with the FBC-P. Exceptions 1 and 3 were approved Florida specific amendments in all previous editions. According to the original proponent, the Exceptions were inadvertently not submitted for the FBC-R or FBC-P, 5th Edition; there was no intent to eliminate the Exceptions. Exception 2 brings the FBC-R into agreement with Section 417.5.2 of the Florida Building Code-Plumbing.

The climate and high water table of Florida precludes the proliferation of basements in Florida and slabs-on-ground are a popular method of constructing the first floor. This type of construction is ideal for the use of the cost-effective alternate of recessed shower compartments. The provisions for recessed shower compartments have been widely used in Florida for many years with no reported problems.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code
No impact to local entities for code enforcement. Most inspectors are familiar with the system as it has been in use for many years throughout Florida.

Impact to building and property owners relative to cost of compliance with code
Approval of the proposal will have a positive impact on building and property owners by bringing back a Florida specific amendment that provides a well proven cost-effective method of construction for shower compartments.

Impact to industry relative to the cost of compliance with code
Approval of the proposal will have a positive impact on building and property owners by bringing back a Florida specific amendment that provides a well proven cost-effective method of construction for shower compartments.

Impact to small business relative to the cost of compliance with code
No fiscal impact to small business.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public
Yes, reinstates a time proven cost-effective alternate method of constructing shower compartments in Florida.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction
Yes, reinstates a time proven cost-effective alternate method of constructing shower compartments in Florida.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
No, does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

Does not degrade the effectiveness of the code
No, does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version? No
P2709.2 Lining required.

The adjoining walls and floor framing enclosing on-site built-up shower receptors shall be lined with one of the following materials:

1. Sheet lead,

2. Sheet copper,

3. Plastic liner material that complies with ASTM D 4068 or ASTM D 4551,

4. Hot mopping in accordance with Section P2709.2.3 or

5. Sheet-applied load-bearing, bonded waterproof membranes that comply with ANSI A118.10.

The lining material shall extend not less than 2 inches (51 mm) beyond or around the rough jambs and not less than 2 inches (51 mm) above finished thresholds. Sheet-applied load bearing, bonded waterproof membranes shall be applied in accordance with the manufacturer's installation instructions.

Exceptions:

1. Floor surfaces under showerheads provided for rinsing laid directly on the ground.

2. Where a sheet-applied, load-bearing, bonded, waterproof membrane is installed as the shower lining, the membrane shall not be required to be recessed.

3. Shower compartments where the finished shower drain is depressed a minimum of 2 inches (51 mm) below the surrounding finished floor on the first floor level and the shower recess is poured integrally with the adjoining floor.