

# Code Review

## 2018 Changes to International Codes

### IRC - PLUMBING - PLUMBING TAC

W A R N I N G

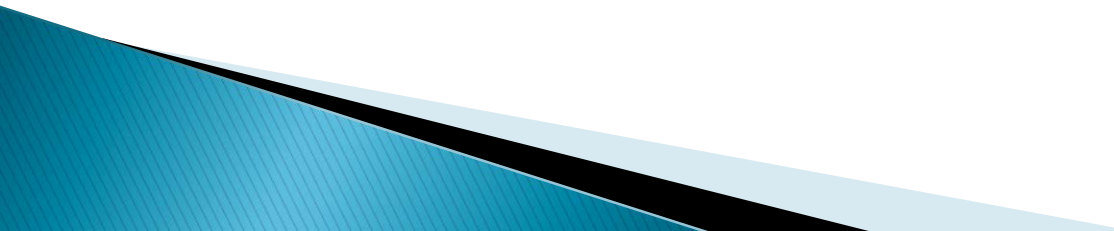
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W A R N I N G



# Residential Code (IRC)–(Plumbing)

## RCCIWG and Plumbing Technical Advisory Committee (TAC)



2018 International Residential Code – Plumbing

Plumbing TAC

| IRC-<br>Plumbing<br>Code<br>Change<br>No. | IRC-<br>Plumbing<br>Section   | Change Summary b/t 2015 IRC-P and 2018 IRC-P   | Change Summary<br>b/t 2017 FRC-P<br>and 2018 IRC-P | Staff comments |
|---|---|--|--|----------------|
| RB2-16                                    | R202,<br>M1305.1,<br>M1407.4,<br>M1503.4,<br>M1601.1.2,<br>M1601.4.1,<br>M1803.3.5,<br>M1803.4.3,<br>M2204.2,<br>M2301.2.1,<br>R1001.2.1,<br>R1003.9.2,<br>R202, R202<br>(New),<br>R301.5,<br>R302.7,<br>R308.4.3,<br>R308.4.6,<br>R308.6.2,<br>R308.6.5,<br>R310.5,<br>R311.3,<br>R807.1 | <p>Deletes definitions “ACCESSIBLE”, “ACCESSIBLE”. Adds definitions “READILY”, “ACCESS (TO)”, “READY ACESS (TO)”. Modifies Definitions “CLEANOUT”, “FIXTURE FITTING”. Modifies text of Table R301.5 “MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS”.</p> <p>Modifies text of Section R302.7 “Under-stair protection”, R308.4.3 “Glazing in windows”, R308.4.6 “Glazing adjacent to stairs and ramps”, R308.6.2 “Materials.” R308.6.5 “Screens not required”, R310.5 “Dwelling additions”, R311.3 “Floors and landings at exterior doors”, R807.1 “Attic access”, R1001.2.1 “Ash dump cleanout”, R1003.9.2 “Spark arrestors”, M1305.1 “Appliance access for inspection service, repair and replacement”, M1407.4 “Access”, M1503.4 “Makeup air required”, M1601.1.2 “Underground duct systems”, M1601.4.1 “Joints, seams and connections”, M1803.3.5 “Access,” M1803.4.3 “Connection to masonry fireplace flue,” M2204.2 “Shutoff valves”, M2301.2.1 “Access”.</p> <p>The intent of this proposal is for clarification of terminology. This proposal will clarify where the provisions are for access for repair, not accessibility for persons with disabilities. This clarifies the code by separating something that is accessible from something that is accessed.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. This is a <b>clarification of terminology</b> that will have no change on code requirements.</p> | Same as change between 2015 IRC-B and 2018 IRC-B   |                |

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

| RCCIWG – Comment                             |         | TAC Action  | Commission Action   |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> |         | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |         |   |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| RP5-15                                       | P2801.6 | <p>P2801.6 “Required pan.” The reason for the code proposal is to <b>remove a restriction against the installation</b> of all plastic pans beneath gas-fired hot water heaters and storage tanks, as there are some plastic pans that have been developed and successfully tested against tough industry standards and ratings for flammability and smoke, specifically ASTM E84 Class A standards.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. This code proposal has cost-savings implications to the construction industry and consumers. VizCO-US plastic pans will save distributors, contractors and homeowners anywhere from 10%-30% when installed beneath gas-fired water heaters, rather than installation of the higher-priced metal pans. Additionally, oftentimes there are replacement costs with the metal pans, especially the flimsier aluminum pans, that are easily dented and crushed during transportation from the manufacturer to the distributor, from the distributor to the contractor and from the contractor to the jobsite. Unlike metal pans which are dented and crushed during installation of the water tanks that roll over the sides of the pan, VizCO-US plastic pans are designed not to break, crack, split or crush. You can actually roll a tank over the side of a VizCO-US pan which is designed to aide in the installation process and keep the contractor from having to lift a tank up and over a sidewall of the pan. (See sales sheet attachment for product description.) {511} {512} VizCO-US pans offer cost-savings to everyone in the supply chain from the time it is released from the manufacturing plant until the time the tank is set in place. Due to the extreme strength of the product, there are cost-savings in shipping/delivery costs and financial cost-savings by not having to worry about replacement costs, or credits and returns for</p> | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |

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

damaged products like there are with metal pans.

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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |   |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |

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| RP8-15 | P2902.5.4, P2904.1. | <p>Modifies Section P2902.5.4 “Connections to automatic fire sprinkler systems,” P2904.1 “General.” The proposed revision clarifies the code by coordinating the requirements in Sections P2902.5.4 with P2904.1. The allowance to omit backflow protection for certain stand-alone systems currently permitted by Section P2904.1 was not previously correlated with Section P2902.5.4, which has caused confusion in applying the code.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. The <b>proposal will reduce the cost of construction</b> in cases where a backflow preventer would otherwise have been provided because of a misunderstanding of the current code provisions.</p> | Same as change between 2015 IRC and 2018 IRC |
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| RCCIWG – Comment                             | TAC Action  | Commission Action   |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
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| RP10-15 | P2903.5 | <p>Modifies Section P2903.5 “Water hammer.” This proposal re-aligns both the IRC P2903.5 with the IPC 604.9 Water Hammer paragraphs eliminating confusion and clearly spelling out the necessary requirement for water hammer control on all plumbing systems.</p> <p><b>Cost Impact:</b> Will increase the cost of construction</p> | Same as change between 2015 IRC and 2018 IRC |
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For the tens of thousands of new homes that are already being installed with AA arresters, there is NO cost impact. For the tens of thousands of new homes that are still being installed with old-fashioned plain air chambers, there is NO cost impact, and more likely a cost savings, due to the elimination of the cost of labor and material of installing 12-16 air chambers versus the cost of 3 to 5 AA arresters per home. Where the current IRC is being used and interpreted as requiring NO water hammer control, the initial installation cost impact of this code change will be roughly \$18 to \$30 per home, depending on local interpretation of required quick-closing valves. This cost impact is calculated using the most common practice of arrester installation, which is installing outlet boxes (such as laundry boxes) with integral arresters. Since the arresters are already factory-installed, the cost impact is simply the cost difference in boxes with and without arresters, roughly \$6 per single valve/arrester box (\$12 per laundry box since it includes two arresters per box). The second most popular AA arrester installation is the swivel compression tee arrester which easily and quickly hooks up to the compression supply stop that serves the quick-closing valve. The cost impact of this is roughly \$8. Depending on local enforcement, the total cost impact per home could be \$18-\$30, or an average of about \$24 per home. The LONG TERM cost impact of water hammer control, however, is immeasurable. yet very obvious. Just like many other required devices in a plumbing system, such as pressure reducing valves limiting static pressures to 80 psi, water hammer arresters will help protect the entire plumbing system and all of its necessary appurtenances and appliances from premature failure, saving the homeowner thousands of dollars in repairs and damage over the life of the home.

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| <b>RCCIWG – Comment</b><br>Impactful (Explain) <input type="checkbox"/> | <b>TAC Action</b><br>Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br> | <b>Commission Action</b><br>Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <b>TAC</b><br><input type="checkbox"/><br><input type="checkbox"/> | <b>Commission</b><br><input type="checkbox"/><br><input type="checkbox"/> |
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| RP12-15 | Table P2906.6, Chapter 44 | <p>Changes text of Table P2906.6 "Pipe fittings." Adds new standard "ASSE 1061-2011 Performance Requirements for Push-Fit Fittings (UPDATE of edition year)." ASSE 1061-2011 added PE-RT to the list of tubing that can be used with the fittings.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction.</p> | Same as change between 2015 IRC and 2018 IRC |  |
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| <p>RCCIWG – Comment</p> <p>Impactful (Explain) <input type="checkbox"/></p> | <p>TAC Action</p> <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p>Commission Action</p> <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p><input type="checkbox"/> No Action Needed</p> <p><input type="checkbox"/> Overlapping provisions</p> | TAC | Commission |
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| RP13-15 | P2906.6.1 | <p>Adds new section P2906.6.1 "Saddle tap fittings." Prohibits the use of Saddle tap fittings.</p> <p><b>Cost Impact: Will increase the cost of construction.</b></p> <p>This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. For those plumbing contractors that were trying to legally cut corners in every way possible, there will be the minor added cost for a tee installation. Can they convince the builder or developer that they should be paid more for their work because of this change? It would be very, very doubtful that the builder or developer will be impacted with this minor cost addition.</p> | Same as change between 2015 IRC and 2018 IRC |  |
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| <p>RCCIWG – Comment</p> <p>Impactful (Explain) <input type="checkbox"/></p> | <p>TAC Action</p> <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p>Commission Action</p> <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p><input type="checkbox"/> No Action Needed</p> <p><input type="checkbox"/> Overlapping provisions</p> | TAC | Commission |
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| RP14-15 | P2906.9.1.5, P2906.9.1.5.1, | Renumbers and modifies text of Sections P2906.10 "Cross-linked polyethylene plastic (PEX)." P2906.10.1 "Flared joints." | Same as change between 2015 IRC |  |
|---------|-----------------------------|---|---------------------------------|--|

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|  | P2906.9.1.5.2 | <p>P2906.10.2 "Mechanical joints." Per the proposal the section for "PEX Plastic" (P2906.9.1.5) should never have been subcategorized under "Solvent cementing" Section P2906.9.1. Like other specific piping material types, "PEX plastic" should have had its own section. This proposal also brings the IRC in consistent alignment with how the IPC is now organized by renumbering the sections for PEX.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction.</p> <p>This proposal will have no effect on the cost of construction and only seeks <b>to correct an oversight of organizational numbering.</b></p> | and 2018 IRC |  |
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| RCCIWG – Comment                             | TAC Action  | Commission Action   |  |   |     |            |                          |                          |                          |                          |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <table border="1"> <thead> <tr> <th>TAC</th> <th>Commission</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> | TAC | Commission | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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| RP15-15 | P2906.9.1.4 (error) | <p>Renumbers and modifies text of Sections P2906.10 "Cross-linked polyethylene plastic (PEX)." P2906.10.1 "Flared joints." P2906.10.2 "Mechanical joints." The Section for "PEX Plastic" (P2906.9.1.5) should never have been subcategorized under "Solvent cementing" Section P2906.9.1. Like other specific piping material types, "PEX plastic" should have had it's own section like that of Polypropylene (PP), PEX/AL/PEX, Stainless Steel, Press-connect, and PE-RT to name a few.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction.</p> <p>This proposal will have no effect on the cost of construction and only seeks <b>to correct an oversight of organizational numbering.</b></p> | Same as change between 2015 IRC and 2018 IRC | This mentions 2906.9.1.4 but is the same text as Code Change RP14-15 |
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| Impactful (Explain) <input type="checkbox"/> |   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |   |  |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| RP16-15                                      | Table P2906.4, Table P2906.5, Table P2906.6, P2906.19, P2906.19.2 (New), P2906.19.3 | Modifies text of Table P2906.4 “Water Service Pipe,” Table P2906.5 “Water Distribution Pipe,” Table P2906.6 “Pipe Fittings,” Section P2906.19 “Polyethylene of raised temperature plastic.” Adds new sections P2906.19.2 “Heat fusion Joints,” and Section P2906.19.3 “Electrofusion Joints.” Adds new standard “CSA B137.18 - 2013 - Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications.” This change will permit PE-RT pipe to be joined by fusing methods and will permit pipe and fittings meeting CSA B137.18 to be used in accordance with the Code.<br><br><b>Cost Impact:</b> Will not increase the cost of construction.<br><br><b>This proposal adds additional standards for use with PERT pipe</b> and fittings. These new standards are similar to existing referenced standards and product are similar so there is no increase in the cost of the PERT system by referencing these standards and adding standards to permit fusion of PERT. | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |
| Impactful (Explain) <input type="checkbox"/> |   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
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| RP17-15                                      | P3003.9.2   | Modifies texts of section P3003.9.2 “Solvent cementing.” this change is to incorporate the use of clear as well as UV-light visible primers.   | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |

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|  |  | <p><b>Cost Impact:</b> Will not increase the cost of construction.</p> <p>This proposal will not impact cost as it <b>simply allows another primer option.</b></p> |  |  |
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| RCCIWG – Comment                             | TAC Action   | Commission Action  |   | TAC                      | Commission               |
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|  |  |  | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |

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| P3-15, Part II | R202 (IRC) | <p>Adds new definition “FULL-OPEN VALVE.”</p> <p>This definition encompasses all type of valves that do not appreciably restrict the flow of water.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.</p> | Same as change between 2015 IRC and 2018 IRC |  |  |
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| RCCIWG – Comment                             | TAC Action   | Commission Action  |   | TAC                      | Commission               |
|--|--|--|---|--------------------------|--------------------------|
| Impactful (Explain) <input type="checkbox"/> | <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |  |  | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |

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| P19-15 Part II | P2605.1 (IRC) | <p>Revises section P2605.1 “General” to require rigid bracing for drainage piping systems necessary to control movement where pipes downstream are no longer horizontal. Also, this <b>provides consistency with the IPC.</b></p> <p><b>Cost Impact:</b> Will not increase the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.</p> | Same as change between 2015 IRC and 2018 IRC |  |  |
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Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

| RCCIWG – Comment                             |                              | TAC Action   | Commission Action   |  | TAC  | Commission   |
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| Impactful (Explain) <input type="checkbox"/> |                              | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/>  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/> |
| P20-15, Part II                              | P2503.7 (IRC)                | Revises section P2503.7 “Water-supply system testing” to allow for some limited air testing of plastic piping systems, if a number of conditions are met. Code change further modified by public comments for air testing PEX piping systems.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal simply <b>adds another option</b> for air testing some specific piping materials into the code and as such, the option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase. | Same as change between 2015 IRC and 2018 IRC  |  |  |  |
| Impactful (Explain) <input type="checkbox"/> |                              | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/>  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/> |
| P51-15, Part II                              | Table P2701.1, P2702.4 (IRC) | Revise Table P2701.1 and section P2702.4 to update the text by removing the reference to ASME A112.6.1M since the requirements from standard are now covered in A112.6.2. The A112.6.1M standard is longer published by ASME.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This will not increase the cost of construction since the proposal is <b>editorial/updating</b> in nature.  | Same as change between 2015 IRC and 2018 IRC  |  |  |  |

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

| RCCIWG – Comment                             |                               | TAC Action   | Commission Action   |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> |                               | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                               |  |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| P53-15 Part II                               | P2704, P2704.1, P3201.1 (IRC) | Revise sections P2704, P2704.1, and P3201.1 to clarify the application of slip joints connections based on common plumbing industry practice.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |
| Impactful (Explain) <input type="checkbox"/> |                               | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                               |  |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| P55-15 Part II                               | P2713.1 (IRC)                 | Revises section P2713.1 “Bathtub waste outlets and overflows” to remove the requirement for an overflow for every bathtub, thus, making the requirement optional.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This will <b>decrease</b> the cost of construction by not requiring an overflow for every bathtub.  | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |
| Impactful (Explain) <input type="checkbox"/> |                               | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                               |  |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |

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

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| <p>P93-15 Part II</p> | <p>P2804.6.1<br/>(IRC)</p> | <p>Revises section P2804.6.1 "Requirements for discharge pipe" to ensure the relief-valve discharge piping is installed with insert fittings. The code change was further modified by the Committee. The modification inserts fittings into "same size as the valve outlet" piping will cause a restriction in flow from the relief valve which could affect the safety of the equipment.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.</p> | <p>Same as change between 2015 IRC and 2018 IRC</p> |  |
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| <p>RCCIWG – Comment</p> <p>Impactful (Explain) <input type="checkbox"/></p> | <p>TAC Action</p> <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p>Commission Action</p> <p>Accommodate Florida Specific Need:</p> <p>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/></p> <p>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/></p> <p>Others (Explain):</p> | <p><input type="checkbox"/> No Action Needed</p> <p><input type="checkbox"/> Overlapping provisions</p> | <p>TAC</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> | <p>Commission</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> |
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| <p>P98-15 Part 2</p> | <p>P2602.1<br/>(IRC)</p> | <p>Revises section P2602.1 "General" to require individual water supplies to be constructed and installed in accordance with the requirements set forth in NGWA-01 where state and local laws do not address such requirements. Also, adds new standard ANSI/NGWA-01-14.</p> <p><b>Cost Impact: Will increase the cost of construction.</b> This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, in situations where state or local laws don't exist for the construction of wells, these requirements could add additional costs over those cost for a well that would be constructed to a quality level less than what this standard requires. Where a standard for construction does not exist, there could be ways to "cut corners" to lessen costs of construction such as not installing a well casing, not performing tests and generally, expending less labor to construct a well that might not be safe or provide a reliable supply of water.</p> | <p>Same as change between 2015 IRC and 2018 IRC</p> |  |
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Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

| RCCIWG – Comment                             |                                   | TAC Action  | Commission Action   |  | TAC  | Commission   |
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| Impactful (Explain) <input type="checkbox"/> |                                   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/>   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/> |
| P113-15 Part II                              | Table P2906.4, Table 2906.5 (IRC) | Revises tables P2906.4 “water service pipe” and table P2906.5” water distribution pipe” to delete standard ASTM F877 from both tables because standard is no longer pipe or tubing related.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal simply <b>deletes a standard</b> that is no longer pipe or tubing related from the code. The piping material is now covered by a different standard, and as such, the option is not deleting or adding a material. Thus the code with this proposal added will not cause the cost of construction to increase. | Same as change between 2015 IRC and 2018 IRC  |  |  |  |
| Impactful (Explain) <input type="checkbox"/> |                                   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/>   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/> |
| P115-15 Part II                              | P2906.5 (IRC)                     | Revises section P2906.5 “Water distribution pipe” to remove “hot” and “cold” because they are unnecessary as the intent is all water distributing piping must comply. Modified by committee, to remove terms “hot” and “cold”.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal has absolutely no impact on the cost of construction and only attempts to address a technicality which has existed for many years.  | Same as change between 2015 IRC and 2018 IRC  |  |  |  |

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

| RCCIWG – Comment                             |                                  | TAC Action  | Commission Action   |  | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> |                                  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/>   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| P124-15 Part II                              | Table P2903.9.4 Chapter 44 (IRC) | Revises table P2903.9.4 “Valves” to add MSS SP-122 and MSS SP-138-9 to table because these are additional standards for valves that should be considered in the valve table.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. <b>Adding additional options</b> will not increase the cost of construction   | Same as change between 2015 IRC and 2018 IRC  |  |                          |                          |
| Impactful (Explain) <input type="checkbox"/> |                                  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/>   | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| P132-15 Part II                              | P2906.20 (IRC)                   | Adds new section P2906.20 “Push-fit joints.” This proposal is not adding this standard to the code but is only adding section that should have been added several cycles ago when ASSE 1061 was added.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. | Same as change between 2015 IRC and 2018 IRC  |  |                          |                          |

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



| RCCIWG – Comment                             |                        | TAC Action   | Commission Action   |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> |                        | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed   | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                        |  |   | <input type="checkbox"/> Overlapping provisions   | <input type="checkbox"/> | <input type="checkbox"/> |
| P135-15 Part II                              | P2906.17.2 (New) (IRC) | Adds new section 2906.17.2 “Joint between PVC water service and CPVC water distribution” to give the option of using a solvent-cemented transition joint to connect a PVC water service pipe to a CPVC water distribution system.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal allows for <b>an optional method</b> of joining not in this code. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase.   | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |
| Impactful (Explain) <input type="checkbox"/> |                        | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed   | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                        |  |   | <input type="checkbox"/> Overlapping provisions   | <input type="checkbox"/> | <input type="checkbox"/> |
| P166-15, Part II                             | P2602.1 (IRC)          | Modifies Section P2602.1 “General.” Adds Exception to 2602.1. Some jurisdictions do not have state and local laws for private sewage disposal systems. Therefore in those cases, the IPSDC provides regulations for waste disposal. The section language (existing or revised) presents a roadblock for utilizing gray water systems. The exception was added to allow for gray water to be diverted from the sewer or private sewage disposal system so that it can be processed by systems in accordance with Chapters P2910 or P2911.<br><br><b>Cost Impact:</b> <b>Will not increase the cost of construction.</b> This proposal <b>will increase</b> the cost of construction because additional labor, materials, equipment, appliances or devices are | Same as change between 2015 IRC and 2018 IRC  | Added text is in conflict with DOH waste disposal regulation Rule 64E-6. The IPSDC is not part of the FBC |                          |                          |

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|  |  | <p>mandated beyond what is currently required by the code. Specifically, where private sewage disposal is not regulated by state and local laws, builders could do anything with sewage. They might not provide a large enough private sewage disposal system or one made of materials having long life. In those situations, there will be the extra cost for properly sized systems and better materials. Possibly there would be some additional labor for a larger installation.</p> |  |  |
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| RCCIWG – Comment                             |  | TAC Action  |  | Commission Action   |  | TAC   |  | Commission               |  |
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| Impactful (Explain) <input type="checkbox"/> |  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | <input type="checkbox"/> No Action Needed       |  | <input type="checkbox"/> |  |
|  |  |   |  |   |  | <input type="checkbox"/> Overlapping provisions |  | <input type="checkbox"/> |  |

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| P170-15, Part II | Table P3002.1 (IRC) | <p>Modifies TABLE P3002.1 “UNDERGROUND BUILDING DRAINAGE AND VENT PIPE.” ASTM F714 polyethylene pipe is sometimes used to rehabilitate piping sewers under buildings. Currently the code does not list the product for that use</p> <p><b>Cost Impact: Will increase the cost of construction.</b></p> <p>This proposal allows for an optional pipe material to be used under buildings. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase, and the material may even cost less than other options.</p> | Same as change between 2015 IRC and 2018 IRC |  |
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| RCCIWG – Comment                             |  | TAC Action  |  | Commission Action   |  | TAC   |  | Commission               |  |
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| Impactful (Explain) <input type="checkbox"/> |  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | <input type="checkbox"/> No Action Needed       |  | <input type="checkbox"/> |  |
|  |  |   |  |   |  | <input type="checkbox"/> Overlapping provisions |  | <input type="checkbox"/> |  |

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| P174-15, Part II | Table P3002.3 (IRC) | <p>Modifies TABLE P3002.3 “PIPE FITTINGS.” Polyethylene pipe is already in IRC table for Building Sewer Pipe. However, a corresponding entry for pipe fittings of this material was not</p> | Same as change between 2015 IRC and 2018 IRC |  |
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Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

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|  |  | installed in the fittings table.   |  |  |
|  |  | <p><b>Cost Impact:</b> Will not increase the cost of construction<br/>                 This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.</p> |  |  |

| RCCIWG – Comment                             | TAC Action   | Commission Action  | TAC  | Commission   |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input style="width: 100%; height: 20px;" type="text"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input style="width: 100%; height: 20px;" type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> |

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| P178-15, Part II | P3005.1.6 (IRC) | Modifies P3005.1.6 “Change in size.” Addition of language concerning water closet bend fitting and offset closet flange. Code change per public comment, removing language for “approved” per PMGCAC.<br><br><p><b>Cost Impact:</b> Will not increase the cost of construction<br/>                 This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.</p> | Same as change between 2015 IRC and 2018 IRC |  |
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| RCCIWG – Comment                             | TAC Action   | Commission Action  | TAC  | Commission   |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input style="width: 100%; height: 20px;" type="text"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input style="width: 100%; height: 20px;" type="text"/> | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> |

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| P181-15, Part II | P3003.13.1, P3003.13.2, P3003.13.3 (IRC) | Modifies text of Section P3003.13.1 “Copper pipe or tubing to cast-iron hub pipe,” Section P3003.13.2 “Copper pipe or tubing to galvanized steel pipe,” Section P3003.13.3 Cast-iron pipe to galvanized steel or copper-alloy pipe. Modification to remove copper alloy from text of sections P3003.13.1 and P3003.13.2. Adds copper-alloy to P3003.13.3. | Same as change between 2015 IRC and 2018 IRC |  |
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**Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following:**a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

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|  |  | <p><b>Cost Impact:</b> Will not increase the cost of construction<br/>                 This proposal will not increase the cost of construction as this change is only <b>to update the name of a material</b> that is already in the code.</p> |  |  |
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| RCCIWG – Comment                             | TAC Action   | Commission Action  |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |  |  | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |

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| P184-15, Part II | P3003.2, P3003.13.4, Chapter 44 (IRC) | Modifies text of Section P3003.2 “Prohibited joints,” Section P3003.13.4 “Plastic pipe or tubing to other piping material.” Adds new standard “ASTM D3138-04(2011) Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Components”<br><br>Modification to enable the use of a special transition cement for this application<br><br><b>Cost Impact:</b> Will not increase the cost of construction<br>This proposal allows for <b>an optional method</b> of joining used elsewhere, but not in this code. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase. | Same as change between 2015 IRC and 2018 IRC |  |  |
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| RCCIWG – Comment                             | TAC Action   | Commission Action  |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |  |  | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |

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| P191-15, Part II | P3005.2.6 (IRC) | Modifies text of P3005.2.6 “Cleanout plugs.” Copper alloy is the term used to identify materials manufactured where copper is | Same as change between 2015 IRC |  |  |
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Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

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|  |  | the base metal and it includes brass and bronze  | and 2018 IRC |  |
|  |  | <p><b>Cost Impact:</b> Will not increase the cost of construction<br/>This proposal will not increase the cost of construction as this change is only <b>to update</b> the name of a material that is already in the code.</p> |              |  |

| RCCIWG – Comment                             | TAC Action   | Commission Action  | TAC  | Commission   |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> |

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| P194-15, Part II | P3007.3.2 (IRC) | Modifies section P3007.3.2 “Sump pit.” The purpose of this code change is to make the IPC consistent with the IRC where the sump cover is installed not more than 2 inches below grade.<br><br><p><b>Cost Impact:</b> Will not increase the cost of construction<br/>There is no change to the requirements of this section. This proposal is <b>for correlation</b> purposes only.</p> | Same as change between 2015 IRC and 2018 IRC |  |
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| RCCIWG – Comment                             | TAC Action   | Commission Action  | TAC  | Commission   |
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| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br>_____ | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> |

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| P195-15, Part II | P3007.3.3 (IRC) | Modifies Section P3007.3.3 “Discharge pipe and fittings.” Per reasoning Subsections 712.3.3.1 and 712.3.3.1 provide enough guidance to the designer and installer for proper selection of discharge piping components such that there is not a need for the code official to further approve the selections.<br><br><p><b>Cost Impact:</b> Will not increase the cost of construction<br/>This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices</p> | Same as change between 2015 IRC and 2018 IRC |  |
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Rule 61G20-2.002 2. Technical amendments needed to accommodate the specific needs of this state include but are not limited to amendments to the Florida Building Code that provide for the following: a. Establish minimum life safety construction requirements to protect buildings and their occupants from fire, wind, flood, and storm surge using the latest technical research and engineering standards for buildings and materials products. b. Provide for flood protection provisions that are consistent with the latest flood protection requirements of the National Flood Insurance Program. c. Maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development. d. Provide for energy efficiency standards for buildings that meet or exceed the national energy standards as mandated by Title III of the Energy Conservation and Protection Act. e. Maintain coordination with the Florida Fire Prevention Code. f. Provide for the latest industry standards and design

|  |   | are mandated beyond what is currently required by the code.  |   |  |  |  |  |
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| RCCIWG – Comment                             | TAC Action  |  | Commission Action   |  |  | TAC  | Commission   |
| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/> |
| P197-15, Part II                             | P3007.6 (IRC)   | Modifies text of Section P3007.6 “Capacity.” Many pumps do not comply with the 1 inch minimum requirement, especially smaller pump systems used for individual fixtures such as pantry sinks, etc. Modification to address this.<br><br><b>Cost Impact:</b> Will not increase the cost of construction<br>Allowing a slightly smaller pump will not increase the cost of construction.   |   | Same as change between 2015 IRC and 2018 IRC |  |  |  |
| RCCIWG – Comment                             | TAC Action  |  | Commission Action   |  |  | TAC  | Commission   |
| Impactful (Explain) <input type="checkbox"/> | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):<br><input type="text"/> |  | <input type="checkbox"/> No Action Needed<br><input type="checkbox"/> Overlapping provisions | <input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/> |
| P198-15, Part II                             | P3007.6 (IRC)   | Modifies text of P3007.6 “Capacity.” There are smaller pump systems used for individual fixtures such as pantry sinks and bar sinks that are only capable of passing ½ inch solids. These pumps have been successfully used in jurisdictions where these pumps were approved as an alternative method.<br><br><b>Cost Impact:</b> Will not increase the cost of construction<br>This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code |   | Same as change between 2015 IRC and 2018 IRC |  |  |  |

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

| RCCIWG – Comment                             |                        | TAC Action   | Commission Action   |   | TAC                      | Commission               |
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| Impactful (Explain) <input type="checkbox"/> |                        | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                        |  |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| P202-15, Part II                             | P3008.1, P3008.2 (IRC) | Modifies Section P3008.1 “Where required.” Adds Section P3008.2 “Allowable installation.” This change merely adds a distinction between the use of a normally closed backwater valve and a normally open backwater valve. The requirements for normally closed backwater valve remain the same. The second half of the original section has been split into a new section entitled, "Allowable installation."<br><br><b>Cost Impact:</b> Will not increase the cost of construction This change <b>provides options</b> for the code user. There is no additional language mandating the use of backwater valves.  | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |
| Impactful (Explain) <input type="checkbox"/> |                        | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain):  | Accommodate Florida Specific Need:<br>YES (Select Criteria) <input type="checkbox"/> NO: <input type="checkbox"/><br>a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br>Others (Explain): | <input type="checkbox"/> No Action Needed       | <input type="checkbox"/> | <input type="checkbox"/> |
|  |                        |  |   | <input type="checkbox"/> Overlapping provisions | <input type="checkbox"/> | <input type="checkbox"/> |
| P204-15, Part II                             | P3010.4, P3010 (IRC)   | Revises Section P3010.4 “Pipe” and Section P3010.5 “Pipe fittings.” ASTM F714, Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter, only refers to pipe, not fittings. Fittings are not made in SDR's. And calling out resin designation codes is not necessary. This change has a companion change in the IPC to get the requirements to match this language. Modified by the committee, to allow for the use of larger piping systems.<br><br><b>Cost Impact:</b> Will not increase the cost of construction This proposal is modifying language to coordinate with each other in multiple code sections and does not impact costs. Thus | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |

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



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| <p>P203-15<br/>Part II</p> | <p><b>P3008.2,<br/>P3008.3,<br/>P3008.4,<br/>P3008.5</b></p> | <p>This change cleans up the language in the section. Backwater valves, like all plumbing products, are required to be third party listed requirements that are proposed to be stricken in the section. Furthermore, plumbing inspectors are not checking on the dimensions or working parts of a listed backwater valve. Paragraph 2.1.1 of ASME A112.14.1 requires the backwater valve to comply with the opening dimensions of Table 1. The opening dimensions equal the pipe dimensions. Hence, Section P3008.4 is unnecessary. Paragraph 2.4 of the ASME standard goes into great detail regarding the material requirements for the backwater valve. Not only are the bearing parts corrosion resistant, the quality of the corrosion resistance is listed. Hence the first sentence in Section P3008.2 is unnecessary. Paragraph 3.2 of the ASME standard specifies water tightness requirements for the backwater valve. Hence, Section P3008.3 is unnecessary. The last section has been cleaned up to identify that the internal moving components are what must be accessible. The movement in the code has been s opposed to accessible. The term "accessible" is more associated with requirements for the physically challenged. The sentence would become identical to the wording in the IPC.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. There is no change in the requirements. The proposal cleans up the language with reliance on the standard and the listing.</p> | <p>Same as change between 2015 IPC and 2018 IPC</p> |  |
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| RCCIWG – Comment                                    | TAC Action   | Commission Action  |   | TAC | Commission |
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| <p>Impactful (Explain) <input type="checkbox"/></p> | <p>Accommodate Florida Specific Need:<br/> <b>YES (Select Criteria)</b> <input type="checkbox"/> <b>NO:</b> <input type="checkbox"/><br/>                     a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br/>                     Others (Explain):<br/> <input type="text"/></p> | <p>Accommodate Florida Specific Need:<br/> <b>YES (Select Criteria)</b> <input type="checkbox"/> <b>NO:</b> <input type="checkbox"/><br/>                     a. <input type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/> e. <input type="checkbox"/> f. <input type="checkbox"/><br/>                     Others (Explain):<br/> <input type="text"/></p> | <p><input type="checkbox"/> No Action Needed</p> <p><input type="checkbox"/> Overlapping provisions</p> |     |            |

|   |                               | the code with this proposal added will not cause the cost of construction to increase.   |  |   |  |     |            |   |                          |                          |   |                          |                          |
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| RCCIWG – Comment                                |                               | TAC Action   | Commission Action  |   |  |     |            |   |                          |                          |   |                          |                          |
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|   | TAC                           | Commission   |  |   |  |     |            |   |                          |                          |   |                          |                          |
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| P205-15, Part II                                | P3011 (New), Chapter 44 (IRC) | <p>Adds Section 3011 “REPLACEMENT OF UNDERGROUND SEWERS BY PVC FOLD AND FORM METHODS.” Adds new standards “ASTM F1871 - 2011 Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation,” “ASTM F1504 - 2014 Standard Specification for Folded Poly(Vinyl Chloride) (PVC) Pipe for Existing Sewer and Conduit Rehabilitation,”</p> <p>The current IPC includes provisions for replacement of underground sewers by pipe bursting or the installation of new pipe in an open cut trench. This proposal introduces a different method for sewer rehabilitation which is similar to pipe bursting. The code change was further modified by the Committee. For the modification only: The size of piping that this process can be used on was corrected to allow its use for larger piping systems that could exist for IRC buildings.</p> <p><b>Cost Impact:</b> Will not increase the cost of construction. No cost impact. It is estimated that pipe bursting and fold and form methods are approximately 60% of the cost of open cut installations. These methods <b>offer significant savings</b> as well as less impact on the surrounding area.</p> | Same as change between 2015 IRC and 2018 IRC   |   |  |     |            |   |                          |                          |   |                          |                          |

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

| RCCIWG – Comment                             |  | TAC Action  | Commission Action   |   | TAC                      | Commission               |
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| P215-15, Part II                             | P3101.1.2 (New), P3103.1, P3103.1.1 (New), P3103.1.3 (New), P3103.1.4 (New), P3103.6 (IRC) | Modifies Section P3103.1 “Vent pipes terminating outdoors.” Adds new Sections P3103.1.1 “Roof extension,” P3101.1.2 “Roof used for recreational purposes,” P3103.1.3 “Roof extension covered,” “P3103.1.4 Side wall vent terminal.” Deletes Section P3103.6. This proposed change reorganizes the section regarding the vent terminal. There are currently three options for a vent terminal, the three requirements are separated between multiple sections, also adds another section. This proposal presents all the options in one section.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This change <b>provides options</b> . As such, there is no cost implication. | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |
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| P220-15, Part II                             | P3111.1 (IRC)  | Modifies Section P3111.1 “Type of fixtures.” Deletes text “A combination waste and vent system shall not receive the discharge of a food waste disposer.”<br><br><b>Cost Impact:</b> Will not increase the cost of construction. It’s going <b>to allow</b> an installation that previously wasn’t permitted thus lowering the cost of production.  | Same as change between 2015 IRC and 2018 IRC  |   |                          |                          |

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| P221-15, Part II                             | P3111.1, P3111.1.1 (New), P3111.2, P3111.2.1, P3111.2.2, P3111.2.3, P3111.2.4, P3111.3 (IRC) | Revises text of Section P3111.1 “Type of fixtures.” Adds new Section “P3111.1.1 Single fixture systems.” Modifies text of Section P3111.2 “Installation,” Section P3111.2.2 “Vent connection,” Section P3111.2.3 “Vent size,” Section P3111.3 “Size and length.” Deletes section P3111.2.4 Fixture branch or drain. Proposal is to add new Section 915.1.1 to cover the very special situation of a single fixture combination waste and vent system.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. |  | Same as change between 2015 IRC and 2018 IRC  |  |   |                          |                          |
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| P226-15, Part I                              | Section 918.8  | Modifies Section 918.8 “Prohibited installations.” This proposal attempts to circumvent the installation of Air admittance valves against its' intended use as air admittance valves are a mechanical devices that will eventually fail.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. There is no additional cost that would normally occur to correct a non-code compliant installation. This proposal attempts to circumvent the installation of a product against its' intended use as air admittance valves are a mechanical devices that will   |  | Same as change between 2015 IPC and 2018 IPC  |  |   |                          |                          |

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|  |   |  |   |  |
|--|---|--|---|--|
|  |   | eventually fail.   |   |  |
| <b>RCCIWG – Comment</b>                      |   | <b>TAC Action</b>  | <b>Commission Action</b>  |  |
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| P279-15<br>Part II                           | P3002.1,<br>P3010,<br>P3010.1,<br>P3010.2,<br>P3010.6<br><b>(IRC)</b> | Modifies Table P3002.1 to add ASTM F714. Section P3010 “REPLACEMENT OF UNDERGROUND BUILDING SEWERS AND BUILDING DRAINS BY PIPE BURSTING METHODS.” P3010.1 General, P3010.2 Applicability, P3010.6 Cleanouts. The changes as seen above will allow pipe bursting of underground building drainage piping meeting all of the other necessary requirements under these sections. The addition of PE pipe to the underground building drain and vent piping table provides the suitable material for pipe bursting sections of underground building drains.<br><br><b>Cost Impact:</b> Will not increase the cost of construction. The addition of pipe bursting of existing building drains will lead to repair/renovation cost that will most likely be less than by using conventional pipe replacement methodology | Same as change between 2015 IPC and 2018 IPC  |  |
| <b>RCCIWG – Comment</b>                      |   | <b>TAC Action</b>  | <b>Commission Action</b>  |  |
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## Code Change No: **RB2-16**

### Original Proposal

**Section:** R202, M1305.1, M1407.4, M1503.4, M1601.1.2, M1601.4.1, M1803.3.5, M1803.4.3, M2204.2, M2301.2.1, R1001.2.1, R1003.9.2, R202, R202 (New), R301.5, R302.7, R308.4.3, R308.4.6, R308.6.2, R308.6.5, R310.5, R311.3, R807.1

**Proponent:** David Collins (dcollins@preview-group.com); Dan Buuck (dbuuck@nahb.org); Steven Orłowski (sorłowski@boma.org)

#### Delete and substitute as follows:

~~**ACCESSIBLE.** Signifies access that requires the removal of an access panel or similar removable obstruction.~~

~~**ACCESS (TO)** That which enables a device, appliance or equipment to be reached by *ready access* or by a means that first requires the removal or movement of a panel, door or similar obstruction.~~

~~**ACCESSIBLE, READILY.** Signifies access without the necessity for removing a panel or similar obstruction.~~

~~**READY ACCESS (TO)** That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel, door or similar obstruction.~~

#### Revise as follows:

~~**CLEANOUT.** An *accessible* opening in the drainage system used for the removal of possible obstruction and located to allow for *access*.~~

#### **FIXTURE FITTING.**

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

**Waste fitting.** A combination of components that conveys the sanitary waste from the outlet of a fixture to the connection of the sanitary drainage system.

**TABLE R301.5**  
**MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (in pounds per square foot)**

| USE  | LIVE LOAD        |
|--|------------------|
| Uninhabitable attics without storage <sup>b</sup>        | 10               |
| Uninhabitable attics with limited storage <sup>b,g</sup> | 20               |
| Habitable attics and attics served with fixed stairs     | 30               |
| Balconies (exterior) and decks <sup>e</sup>              | 40               |
| Fire escapes   | 40               |
| Guards and handrails <sup>d</sup>                        | 200 <sup>h</sup> |
| Guard in-fill components <sup>f</sup>                    | 50 <sup>h</sup>  |
| Passenger vehicle garages <sup>a</sup>                   | 50 <sup>a</sup>  |
| Rooms other than sleeping rooms                          | 40               |
| Sleeping rooms   | 30               |
| Stairs   | 40 <sup>c</sup>  |

For SI: 1 pound per square foot = 0.0479 kPa, 1 square inch = 645 mm<sup>2</sup>, 1 pound = 4.45 N.

- a. Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-inch area.
- b. Uninhabitable *attics* without storage are those where the clear height between joists and rafters is not more than 42 inches, or where there are not two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses. This live load need not be assumed to act concurrently with any other live load requirements.
- c. Individual stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.
- d. A single concentrated load applied in any direction at any point along the top.
- e. See Section R507.1 for decks attached to *exterior walls*.
- f. *Guard* in-fill components (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.
- g. Uninhabitable *attics* with limited storage are those where the clear height between joists and rafters is not greater than 42 inches, or where there are two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses. The live load need only be applied to those portions of the joists or truss bottom chords where all of the following conditions are met:
  1. The *attic* area is accessible accessed from an opening not less than 20 inches in width by 30 inches in length that is located where the clear height in the *attic* is not less than 30 inches.
  2. The slopes of the joists or truss bottom chords are not greater than 2 inches vertical to 12 units horizontal.
  3. Required insulation depth is less than the joist or truss bottom chord member depth.
 The remaining portions of the joists or truss bottom chords shall be designed for a uniformly distributed concurrent live load of not less than 10 pounds per square foot.
- h. Glazing used in handrail assemblies and *guards* shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the in-fill components. These loads shall be determined independent of one another, and loads are assumed not to occur with any other live load.

**R302.7 Under-stair protection.** Enclosed ~~accessible~~ space under stairs that is accessed by a door or access panel, shall have walls, under-stair surface and any soffits protected on the enclosed side with <sup>1</sup>/<sub>2</sub>-inch (12.7 mm) gypsum board.

**R308.4.3 Glazing in windows.** Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:

1. The exposed area of an individual pane is larger than 9 square feet (0.836 m<sup>2</sup>),
2. The bottom edge of the glazing is less than 18 inches (457 mm) above the floor,
3. The top edge of the glazing is more than 36 inches (914 mm) above the floor; and
4. One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

**Exceptions:**

1. Decorative glazing.
2. Where glazing is adjacent to a walking surface and a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than 1<sup>1</sup>/<sub>2</sub> inches (38 mm).
3. Outboard panes in insulating glass units and other multiple glazed panels where the bottom edge of the glass is 25 feet (7620 mm) or more above *grade*, a roof, walking surfaces or other horizontal [within 45 degrees (0.79 rad) of horizontal] surface adjacent to the glass exterior.

**R308.4.6 Glazing adjacent to stairs and ramps.** Glazing where the bottom exposed edge of the glazing is less than 36 inches (914 mm) above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps shall be considered to be a hazardous location.

**Exceptions:**

1. Where glazing is adjacent to a walking surface and a horizontal rail is installed on the accessible side(s) of the glazing at 34 to 38 inches (864 to 965 mm) above the walking



- surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than 1 1/2 inches (38 mm).
2. Glazing 36 inches (914 mm) or more measured horizontally from the walking surface.

**R308.6.2 Materials.** The following types of glazing shall be permitted to be used:

1. Laminated glass with not less than a 0.015-inch (0.38 mm) polyvinyl butyral interlayer for glass panes 16 square feet (1.5 m<sup>2</sup>) or less in area located such that the highest point of the glass is not more than 12 feet (3658 mm) above a walking surface ~~or other accessible area~~; for higher or larger sizes, the interlayer thickness shall be not less than 0.030 inch (0.76 mm).
2. Fully tempered glass.
3. Heat-strengthened glass.
4. Wired glass.
5. *Approved rigid plastics.*

**R308.6.5 Screens not required.** Screens shall not be required where fully tempered glass is used as single glazing or the inboard pane in multiple glazing and either of the following conditions are met:

1. Glass area 16 square feet (1.49 m<sup>2</sup>) or less. Highest point of glass not more than 12 feet (3658 mm) above a walking surface ~~or other accessible area~~, nominal glass thickness not more than 3/16 inch (4.8 mm), and (for multiple glazing only) the other pane or panes fully tempered, laminated or wired glass.
2. Glass area greater than 16 square feet (1.49 m<sup>2</sup>). Glass sloped 30 degrees (0.52 rad) or less from vertical, and highest point of glass not more than 10 feet (3048 mm) above a walking surface ~~or other accessible area~~.

**R310.5 Dwelling additions.** Where *dwelling additions* occur that contain sleeping rooms, an emergency escape and rescue opening shall be provided in each new sleeping room. Where *dwelling additions* occur that have *basements*, an emergency escape and rescue opening shall be provided in the new *basement*.

**Exceptions:**

1. An emergency escape and rescue opening is not required in a new *basement* that contains a sleeping room with an emergency escape and rescue opening.
2. An emergency escape and rescue opening is not required in a new *basement* where there is an emergency escape and rescue opening in an existing *basement* that is accessible accessed from the new *basement*.

**R311.3 Floors and landings at exterior doors.** There shall be a landing or floor on each side of each exterior door. The width of each landing shall be not less than the door served. Every landing shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed 1/4 unit vertical in 12 units horizontal (2 percent).

**Exception:** Exterior balconies less than 60 square feet (5.6 m<sup>2</sup>) and only accessible accessed from a door are permitted to have a landing less than 36 inches (914 mm) measured in the direction of travel.

**R807.1 Attic access.** Buildings with combustible ceiling or roof construction shall have an *attic* access opening to *attic* areas that have a vertical height of 30 inches (762 mm) or greater over an area of not less than 30 square feet (2.8 m<sup>2</sup>). The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.

The rough-framed opening shall be not less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other ~~readily accessible~~ location with ready access. Where located in a wall, the opening shall be not less than 22 inches wide by 30 inches high (559 mm wide by 762 mm high). Where the access is located in a ceiling, minimum unobstructed headroom in the *attic* space shall be 30

inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See Section M1305.1.3 for access requirements where mechanical *equipment* is located in *attics*.

**R1001.2.1 Ash dump cleanout.** Cleanout openings located within foundation walls below fireboxes, when provided, shall be equipped with ferrous metal or masonry doors and frames constructed to remain tightly closed except when in use. Cleanouts shall be ~~accessible~~ located to allow access and ~~located~~ so that ash removal will not create a hazard to combustible materials.

**R1003.9.2 Spark arrestors.** Where a spark arrestor is installed on a masonry chimney, the spark arrestor shall meet all of the following requirements:

1. The net free area of the arrestor shall be not less than four times the net free area of the outlet of the chimney flue it serves.
2. The arrestor screen shall have heat and corrosion resistance equivalent to 19-gage galvanized steel or 24-gage stainless steel.
3. Openings shall not permit the passage of spheres having a diameter greater than  $1\frac{1}{2}$  inch (12.7 mm) nor block the passage of spheres having a diameter less than  $\frac{3}{8}$  inch (9.5 mm).
4. The spark arrestor shall be ~~accessible~~ located with access for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue.

**M1305.1 Appliance access for inspection service, repair and replacement.** *Appliances* shall be ~~accessible~~ located to allow for access for inspection, service, repair and replacement without removing permanent construction, other *appliances*, or any other piping or ducts not connected to the *appliance* being inspected, serviced, repaired or replaced. A level working space not less than 30 inches deep and 30 inches wide (762 mm by 762 mm) shall be provided in front of the control side to service an *appliance*.

**M1407.4 Access.** Duct heaters shall be ~~accessible~~ located to allow access for servicing, and clearance shall be maintained to permit adjustment, servicing and replacement of controls and heating elements.

**M1503.4 Makeup air required.** Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m<sup>3</sup>/s) shall be mechanically or naturally provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not less than one damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be ~~accessible~~ located to allow access for inspection, service, repair and replacement without removing permanent construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced.

**M1601.1.2 Underground duct systems.** Underground *duct systems* shall be constructed of *approved* concrete, clay, metal or plastic. The maximum duct temperature for plastic ducts shall not be greater than 150°F (66°C). Metal ducts shall be protected from corrosion in an *approved* manner or shall be completely encased in concrete not less than 2 inches (51 mm) thick. Nonmetallic ducts shall be installed in accordance with the manufacturer's instructions. Plastic pipe and fitting materials shall conform to cell classification 12454-B of ASTM D 1248 or ASTM D 1784 and external loading properties of ASTM D 2412. Ducts shall slope to ~~an accessible~~ a point for drainage that has access. Where encased in concrete, ducts shall be sealed and secured prior to any concrete being poured. Metallic ducts having an *approved* protective coating and nonmetallic ducts shall be installed in accordance with the manufacturer's instructions.

**M1601.4.1 Joints, seams and connections.** Longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in SMACNA HVAC *Duct Construction Standards—Metal and Flexible* and NAIMA *Fibrous Glass Duct Construction Standards*. Joints, longitudinal and transverse seams, and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric systems, liquid sealants or tapes. Tapes and mastics used to seal fibrous glass ductwork shall be *listed* and *labeled* in accordance with UL

181A and shall be marked "181A-P" for pressure-sensitive tape, "181 A-M" for mastic or "181 A-H" for heat-sensitive tape.

Tapes and mastics used to seal metallic and flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181 B-FX" for pressure-sensitive tape or "181 BM" for mastic. Duct connections to flanges of air distribution system equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metallic ducts shall have a contact lap of not less than 1 inch (25 mm) and shall be mechanically fastened by means of not less than three sheet-metal screws or rivets equally spaced around the joint.

Closure systems used to seal all ductwork shall be installed in accordance with the manufacturers' instructions.

#### Exceptions:

1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially ~~inaccessible~~ without access, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams of other than the snap-lock and button-lock types.

**M1803.3.5 Access.** The entire length of a connector shall ~~be accessible~~ allow access for inspection, cleaning and replacement.

**M1803.4.3 Connection to masonry fireplace flue.** A connector shall extend from the *appliance* to the flue serving a masonry fireplace to convey the flue gases directly into the flue. The connector shall ~~be accessible~~ allow access or removable for inspection and cleaning of both the connector and the flue. *Listed* direct-connection devices shall be installed in accordance with their *listing*.

**M2204.2 Shutoff valves.** A ~~readily accessible~~ manual shutoff valve shall be installed to allow for ready access and be located between the oil supply tank and the burner. Where the shutoff valve is installed in the discharge line of an oil pump, a pressure-relief valve shall be incorporated to bypass or return surplus oil. Valves shall comply with UL 842.

**M2301.2.1 Access.** Solar energy collectors, controls, dampers, fans, blowers and pumps shall be ~~accessible~~ located to allow access for inspection, maintenance, repair and replacement.

**Reason:** The intent of this proposal is for clarification of terminology. This proposal will clarify where the provisions are for access for repair, not accessibility for persons with disabilities.

The term 'accessible' is defined in the IBC and relates to elements and facilities that serve or have special accommodations for persons with mobility impairments. This term is used that way in IRC Section R320 and R321.3. The IPC, IFGC and IMC use the defined term "Access (to)" or "Ready Access" for access to equipment. Using those terms are proposed here for the IRC where applicable.

The phrase "other accessible area" has been removed from Sections R308.4.6, R308.6.2 and R308.6.5. This is confusing and not uniformly enforceable.

There is a similar proposal for the IECC, including Chapter 11 of the IRC. A similar proposal was approved for the International Plumbing Code as part of Group A - P84-15.

**Cost Impact:** Will not increase the cost of construction

This is a clarification of terminology that will have no change on code requirements.

[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** This clarifies that code by separating something that is accessible from something that is accessed.

**Assembly Action:**

**Final Action Results**

**None**

**RB2-16**

**AS**

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## Code Change No: **RP5-15**

### Original Proposal

#### Section: P2801.6

**Proponent:** Kari Hebrank, Wilson & Associates, representing VizCO-US (khebrank@wilsonmgmt.com)

#### Revise as follows:

**P2801.6 Required pan.** Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

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

A plastic pan shall not be installed beneath a gas-fired water heater shall be constructed of material having a flame spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723.

**Reason:** The reason for this code proposal is that there should not be a restriction against the installation of all plastic pans beneath gas-fired hot water heaters and storage tanks as there are some plastic pans that have been developed and successfully tested against tough industry standards and ratings for flammability and smoke, specifically ASTM E84 Class A standards, thus making these type of pans perfectly suitable for water leakage protection for gas-fired hot water heaters.

One such product is manufactured by VizCO-US, Inc., and their proprietary SECUREFLX material, which was tested and met both UL94 V2 flammability rating and ASTM E84 Class A standards for flame spread and smoke development, has been used and approved in furnace drain pans for years. The heat and distortion thresholds of this material and the accompanying proven test and rating standards make VizCO-US pans an extremely safe product for use with either gas or electric water heaters. The VizCO-US product test reports are included in an attachment to this code proposal {510} {509} and it is important to note that the UL94 flammability rating for plastic materials --to which the VizCO-US plastic pan adheres--states that specimens may not burn with flaming combustion for more than 30 seconds after either application of the test flame.

Another reason for this code change is that without it, there would be a restriction of trade for manufacturers who produce plastic drip pans that meet the mandated UL and ASTM standards for flammability and smoke. Furthermore, the building code is intended to accommodate new products and new technology as innovative ideas and products emerge, rather than discriminate against products that meet current industry building standards. Without this code change, there will be discrimination against one segment of the building product manufacturing industry.

Moreover, with ZERO CLEARANCE gas water heater models, the manufacturers have approved a zero clearance between the bottom of the tank and any flammable surface, so a plastic pan that meets flammability ratings should be allowed upon the manufacturers approval.

Without this code change, only metal pans would be allowed to be installed beneath a gas-fired water heater, thus limiting choice for both the contractor and the consumer, and ultimately increasing costs. VizCO-US plastic pans meet or exceed ASTM E-84 and UL 94 testing and performance standards and contain the following characteristics: self-extinguishing, low smoke, flexible, extreme strength, affordability and perform without failure at a higher temperature range than any other non-metallic solution. (See sales sheet attachment for product characteristics.) {511} {512}

The standards UL 723 and ASTM 84 are standards that characterize the relative rate at which flame will spread as the subject material burns. Testing reports for the VizCO-US plastic pans are attached to this code proposal.





VizCO Corporate office in Bradenton, Florida.



Extrusion line at the Monticello, Florida factory.

SecureFLX is designed to be safer and physically outperform every other drain pan at a superior price point.

Our goal is to provide a product with the following characteristics: self extinguishing, low smoke, flexibility, extreme strength and to perform without failure at a higher temperature range than any other non-metallic solution.

The result is a cost effective material unlike anything on the market.

Independent laboratories have tested and rated our material to meet or exceed ASTM E-84 class A and UL-94 testing and performance standards.

Meets or Exceeds

Meets ASTM E84 class A rating.

**ASTM E 84 - CLASS A RATING:**

|         | Flame Spread Index | Smoke Developed Index |
|---------|--------------------|-----------------------|
| Class A | 0-25               | 0-450                 |

**Material Properties**

| PROPERTIES                 | ASTM METHOD | VALUE          |
|----------------------------|-------------|----------------|
| Izod Impact                | D-256       | 12.0 ft-lbs/in |
| Tensile Strength           | D-638       | 8,900 psi      |
| Flexural Strength          | D-790       | 13,500 psi     |
| Flexural Modulus           | D-790       | 345,000 psi    |
| Rockwell Hardness          | D-785       | 112 R          |
| HDTUL Unannealed (264 psi) | D-648       | 270°F          |

USED BY CODE OFFICIALS AND REGULATORY AGENCIES IN THE ACCEPTANCE OF INTERIOR FINISH MATERIALS FOR VARIOUS APPLICATIONS.

THE MOST WIDELY ACCEPTED CLASSIFICATION SYSTEM DESCRIBED IN THE NATIONAL FIRE PROTECTION ASSOCIATION PUBLICATION NFPA 101 LIFE SAFETY CODE. CHARACTERIZES THE RELATIVE RATE AT WHICH FLAME WILL SPREAD AS THE SUBJECT MATERIAL BURNS.

**Mechanical Properties**

- TEMPERATURE RANGE: -20°F TO 260°F
- DISTORTION TEMPERATURE: 310°F
- LOAD SUPPORT (LBS): 1000+
- FLAME RETARDANT
- SELF-EXTINGUISHING
- LOW SMOKE



**UL94 FLAMMABILITY RATING:**

SPECIMENS MAY NOT BURN WITH FLAMING COMBUSTION FOR MORE THAN 30 SECONDS AFTER EITHER APPLICATION OF THE TEST FLAME.

THE STANDARD FOR SAFETY OF FLAMMABILITY OF PLASTIC MATERIALS



www.VizCo.com • (941) 753-3333  
3500 9th Street West • Bradenton, FL 34205

**Bibliography:** The referenced testing standards and ratings are included in the attachments. {509} {510}

**Cost Impact:** Will not increase the cost of construction

This code proposal has cost-savings implications to the construction industry and consumers. VizCO-US plastic pans will save distributors, contractors and homeowners anywhere from 10%-30% when installed beneath gas-fired water heaters, rather than installation of the higher-priced metal pans. Additionally, oftentimes there are replacement costs with the metal pans, especially the flimsier aluminum pans, that are easily dented and crushed during transportation from the manufacturer to the distributor, from the distributor to the contractor and from the contractor to the jobsite.

Unlike metal pans which are dented and crushed during installation of the water tanks that roll over the sides of the pan, VizCO-US plastic pans are designed not to break, crack, split or crush. You can actually roll a tank over the side of a VizCO-US pan which is designed to aide in the installation process and keep the contractor from having to lift a tank up and over a sidewall of the pan. (See sales sheet attachment for product description.) {511} {512}

VizCO-US pans offer cost-savings to everyone in the supply chain from the time it is released from the manufacturing plant until the time the tank is set in place. Due to the extreme strength of the product, there are cost-savings in shipping/delivery costs and financial cost-savings by not having to worry about replacement costs, or credits and returns for damaged products like there are with metal pans.

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**RP5-15**

**AS**



## Code Change No: **RP8-15**

### Original Proposal

**Section: P2902.5.4, P2904.1.**

**Proponent:** Jeffrey Shapiro, representing International Residential Code Fire Sprinkler Coalition (jshapiro@ircfiresprinkler.org)

**Revise as follows:**

**P2902.5.4 Connections to automatic fire sprinkler systems.** The potable water supply to automatic fire sprinkler systems shall be protected against backflow by a double check backflow prevention assembly, a double check fire protection backflow prevention assembly, a reduced pressure principle backflow prevention assembly or a reduced pressure principle fire protection backflow prevention assembly.

~~**Exception:** Where systems are installed as a portion of the water distribution system in accordance with the requirements of this code and are not provided with a fire department connection, backflow protection for the water supply system shall not be required.~~

**Exception:** Where sprinkler systems are installed in accordance with Section P2904.1, backflow protection for the water supply system shall not be required.

**P2904.1 General.** The design and installation of residential fire sprinkler systems shall be in accordance with NFPA 13D or Section P2904, which shall be considered equivalent to NFPA 13D. Partial residential sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with a residential sprinkler system. Section P2904 shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A stand-alone sprinkler system shall be separate and independent from the water distribution system.

A backflow preventer shall not be required to separate a ~~stand-alone~~ sprinkler system from the water distribution system, provided that the sprinkler system complies with all of the following:

1. The system complies with NFPA 13D or Section P2904.
2. The piping material complies with Section P2905.
3. The system does not contain antifreeze.
4. The system does not have a fire department connection.

**Reason:** The proposed revision clarifies the code by coordinating the requirements in Sections P2902.5.4 with P2904.1. The allowance to omit backflow protection for certain stand-alone systems currently permitted by Section P2904.1 was not previously correlated with Section P2902.5.4, which has caused confusion in applying the code. The proposed text further improves usability of the code by placing a complete backflow preventer exception in Section P2904.1 rather than the current approach, which covers multipurpose systems in Section P2902.5.4 and standalone systems in Section P2904.1.

The proposed revision also makes it clear that the permissible exception to backflow protection applies to systems installed to either Section P2904 or NFPA 13D, and it corrects an oversight in the current code text related to fire department connections, making it clear that backflow protection may not be omitted on any system, stand-alone or multipurpose, that is provided with a fire department connection. Although fire department connections aren't required by Section P2904 and aren't ordinarily installed on home fire sprinkler systems, the possibility that such a connection might be voluntarily provided must be addressed.

**Cost Impact:** Will not increase the cost of construction

The proposal will reduce the cost of construction in cases where a backflow preventer would otherwise have been provided because of a misunderstanding of the current code provisions.

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**RP8-15**

**AS**

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## Code Change No: **RP10-15**

### Original Proposal

#### Section: P2903.5

**Proponent:** Michael Meagher, representing Sioux Chief Mfg (michael.meagher@siouxchief.com)

#### Revise as follows:

**P2903.5 Water hammer.** The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with the manufacturer's instructions. Water-hammer arrestors shall conform to ASSE 1010.

**Reason:** This proposal re-aligns both the IRC P2903.5 with the IPC 604.9 Water Hammer paragraphs as they were when they were first created, eliminating confusion and clearly spelling out the necessary requirement for water hammer control on all plumbing systems. Originally, these two code paragraphs on water hammer control were identical. Then, the 2009 IRC P2903.5 was edited, striking a single sentence that contained the mandatory language. This same edit proposal did not make it through to the 2009 IPC 604.9. It was voted down, keeping the mandatory language as is. Confusion amongst code officials throughout the country has ensued over this discrepancy in the two codes ever since.

Water hammer control has been a part of our plumbing codes and practices ever since plain air chambers were introduced over a hundred years ago. Today, modern plumbing systems require water hammer control even more so than in the past. In regards to the science of water hammer, the laws of physics do not change when comparing the pressure surge in a 1-or-2 family dwelling to the surge in a multi-family system. They are the same. In addition, the advent of plastic piping systems, with various designs of metal and hard-plastic mechanical fitting systems, do not eliminate this need for water hammer control, as some may have assumed. Rather, the need to protect these systems from damaging pressure surges is even greater due to their lower pressure ratings compared to traditional metal piping systems.

Over the years, the plumbing industry has developed a wide variety of ASSE 1010 certified AA size arresters, even laundry boxes with certified integral arresters, which have become very popular throughout the country, making water hammer control very easy and affordable. Other model codes requiring arresters have been successfully welcomed and easily enforced throughout much of the United States, Canada, and in many parts of the world, for many years now. The installation of AA arresters is now common practice for well over half the residential construction in North America, in both single-family and multi-family.

**Bibliography:** [Link to website for additional information] This link to the ASSE website verifies the many arrester manufacturers and the wide variety of ASSE certified AA arrester options available in the plumbing industry.  
[http://www.asse-plumbing.org/prodlist\\_new.asp](http://www.asse-plumbing.org/prodlist_new.asp)

#### **Cost Impact:** Will increase the cost of construction

For the tens of thousands of new homes that are already being installed with AA arresters, there is NO cost impact.

For the tens of thousands of new homes that are still being installed with old-fashioned plain air chambers, there is NO cost impact, and more likely a cost savings, due to the elimination of the cost of labor and material of installing 12-16 air chambers versus the cost of 3 to 5 AA arresters per home.

Where the current IRC is being used and interpreted as requiring NO water hammer control, the initial installation cost impact of this code change will be roughly \$18 to \$30 per home, depending on local interpretation of required quick-closing valves. This cost impact is calculated using the most common practice of arrester installation, which is installing outlet boxes (such as laundry boxes) with integral arresters. Since the arresters are already factory-installed, the cost impact is simply the cost difference in boxes with and without arresters, roughly \$6 per single valve/arrester box (\$12 per laundry box since it includes two arresters per box). The second most popular AA arrester installation is the swivel compression tee arrester which easily and quickly hooks up to the compression supply stop that serves the quick-closing valve. The cost impact of this is roughly \$8. Depending on local enforcement, the total cost impact per home could be \$18-\$30, or an average of about \$24 per home.

The LONG TERM cost impact of water hammer control, however, is immeasurable. yet very obvious. Just like many other required devices in a plumbing system, such as pressure reducing valves limiting static pressures to 80 psi, water hammer arresters will help protect the entire plumbing system and all of its necessary appurtenances and appliances from premature failure, saving the homeowner thousands of dollars in repairs and damage over the life of the home.

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**RP10-15**

**AS**

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[←BACK](#)

## Code Change No: **RP12-15**

### Original Proposal

**Section:** Table P2906.6, Chapter 44

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

**Revise as follows:**

**TABLE P2906.6  
PIPE FITTINGS**

| MATERIAL   | STANDARD  |
|--|---|
| Fittings for polyethylene of raised temperature (PE-RT) plastic tubing | ASSE 1061; ASTM F 1807; ASTM F2098; ASTM F 2159; ASTM F 2735; ASTM F 2769 |

*(Portions of table not shown remain unchanged)*

**Reference standards type:**

**Add new standard(s) as follows:**

ASSE 1061-2011 Performance Requirements for Push-Fit Fittings (UPDATE of edition year).

**Reason:** ASSE 1061-2011 added PE-RT to the list of tubing that can be used with the fittings.

**Cost Impact:** Will not increase the cost of construction

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

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**RP12-15**

**AS**

## Code Change No: **RP13-15**

### Original Proposal

#### Section: P2906.6.1 (New)

**Proponent:** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org) William Chapin, representing Professional Code Consulting, LLC (bill@profcc.us)

#### Add new text as follows:

**P2906.6.1 Saddle tap fittings.** The use of saddle tap fittings and combination saddle tap and valve fittings shall be prohibited.

**Reason:** As PEX, PE-RT and CPVC tubings are becoming even more popular than ever for water distribution systems in residential buildings, there are more reports of saddle tap fittings being installed on these types of tubing. This just doesn't work out very well. The IRC does not require that refrigerator ice maker water supply connection boxes be installed at rough-in. And the installation of reverse osmosis drinking water systems is becoming quite popular. Where can someone tap into the water distribution system for the supply of water? A saddle tap is quick and easy but is subject to being bumped and twisted. Where the tap is a combination tap and valve, operation of the valve makes the potential for leakage problems greater.

This connection method should be prohibited just like it has been prohibited in the IPC for some time.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 130.

#### **Cost Impact:** Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. For those plumbing contractors that were trying to legally cut corners in every way possible, there will be the minor added cost for a tee installation. Can they convince the builder or developer that they should be paid more for their work because of this change? It would be very, very doubtful that the builder or developer will be impacted with this minor cost addition.

### Report of Committee Action Hearings

#### Committee Action:

**Approved as Submitted**

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

#### Assembly Action:

**None**

### Final Action Results

**RP13-15**

**AS**

[←BACK](#)

## Code Change No: **RP14-15**

### Original Proposal

**Section:** P2906.9.1.5, P2906.9.1.5.1, P2906.9.1.5.2

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

**Revise as follows:**

**~~P2906.9.1.5~~ **P2906.10** Cross-linked polyethylene plastic (PEX).** Joints between cross-linked polyethylene plastic tubing or fittings shall comply with Section ~~P2906.9.1.5.1~~ **P2906.10.1** or Section ~~P2906.9.1.5.2~~ **P2906.10.2**.

**~~P2906.9.1.5.1~~ **P2906.10.1** Flared joints.** *No change to text.*

**~~P2906.9.1.5.2~~ **P2906.10.2** Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer's instructions. Fittings for cross-linked polyethylene (PEX) plastic tubing shall comply with the applicable standards indicated in Table P2906.6 and shall be installed in accordance with the manufacturer's instructions. PEX tubing shall be factory marked with the applicable standards for the fittings that the PEX manufacturer specifies for use with the tubing.

**Reason:** This proposal fixes an oversight that has existed for several years in this code in that the Section for "PEX Plastic" (P2906.9.1.5) should never have been subcategorized under "Solvent cementing" Section P2906.9.1. Like other specific piping material types, "PEX plastic" should have had it's own section like that of Polypropylene (PP), PEX/AL/PEX, Stainless Steel, Press-connect, and PE-RT to name a few.

This proposal also brings the IRC in consistent alignment with how the IPC is now organized by renumbering the sections for PEX.

**Cost Impact:** Will not increase the cost of construction

This proposal will have no effect on the cost of construction and only seeks to correct an oversight of organizational numbering.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**RP14-15**

**AS**

## Code Change No: **RP15-15**

### Original Proposal

**Section: P2906.9.1.4**

**Proponent:** Tim Earl, GBH International, representing The Oatey Company, representing The Oatey Company (tearl@gbhinternational.com)

**Revise as follows:**

**~~P2906.9.1.5~~ P2906.10 Cross-linked polyethylene plastic (PEX).** Joints between cross-linked polyethylene plastic tubing or fittings shall comply with Section ~~P2906.9.1.5.1~~ P2906.10.1 or Section ~~P2906.9.1.5.2~~ P2906.10.2.

**~~P2906.9.1.5.1~~ P2906.10.1 Flared joints.** *No change to text.*

**~~P2906.9.1.5.2~~ P2906.10.2 Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer's instructions. Fittings for cross-linked polyethylene (PEX) plastic tubing shall comply with the applicable standards indicated in Table P2906.6 and shall be installed in accordance with the manufacturer's instructions. PEX tubing shall be factory marked with the applicable standards for the fittings that the PEX manufacturer specifies for use with the tubing.

**Reason:** This proposal fixes an oversight that has existed for several years in this code in that the Section for "PEX Plastic" (P2906.9.1.5) should never have been subcategorized under "Solvent cementing" Section P2906.9.1. Like other specific piping material types, "PEX plastic" should have had it's own section like that of Polypropylene (PP), PEX/AL/PEX, Stainless Steel, Press-connect, and PE-RT to name a few.

This proposal also brings the IRC in consistent alignment with how the IPC is now organized by renumbering the sections for PEX.

**Cost Impact:** Will not increase the cost of construction

This proposal will have no effect on the cost of construction and only seeks to correct an oversight of organizational numbering.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**RP15-15**

**AS**



## Code Change No: **RP16-15**

### Original Proposal

**Section:** Table P2906.4, Table P2906.5, Table P2906.6, P2906.19, P2906.19.2 (New), P2906.19.3 (New)

**Proponent:** Tim Earl, GBH International, representing The Oatey Company, representing The Oatey Company (tearl@gbhinternational.com)

**Revise as follows:**

**TABLE P2906.4  
WATER SERVICE PIPE**

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

*(Portions of table not shown remain unchanged)*

**TABLE P2906.5  
WATER DISTRIBUTION PIPE**

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

*(Portions of table not shown remain unchanged)*

**TABLE P2906.6  
PIPE FITTINGS**

| MATERIAL   | STANDARD  |
|--|---|
| Fittings for polyethylene of raised temperature (PE-RT) plastic tubing | ASTM F 1807; ASTM F2098; ASTM F 2159; ASTM F 2735; ASTM F 2769; <u>ASTM F1055;</u> ASTM D2683; ASTM D3261; <u>CSA B137.18</u> |

*(Portions of table not shown remain unchanged)*

**P2906.19 Polyethylene of raised temperature plastic.** Joints between polyethylene of raised temperature plastic tubing and fittings shall be in accordance with ~~Section~~ Sections P2906.19.1, P2906.19.2 and P2906.19.3.

**Add new text as follows:**

**P2906.19.2 Heat fusion Joints** Joints shall be of the socket-fusion, saddle-fusion, or butt-fusion type, and shall be joined in accordance with ASTM D2657. Joint surfaces shall be clean and free of moisture. Joint surfaces shall be heated to melt temperatures and joined. The joint shall remain undisturbed until cool. Fittings shall be manufactured in accordance with ASTM D2683 or ASTM D3261.

**P2906.19.3 Electrofusion Joints** Joints shall be of the electrofusion type. Joint surfaces shall be clean and free of moisture and scoured to expose virgin resin. Joint surfaces shall be heated to melt temperatures for a period of time specified by the manufacturer and joined. The joint shall remain undisturbed until cool. Fittings shall be manufactured in accordance with ASTM F1055.

[←BACK](#)

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

CSA B137.18 - 2013 - Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications.

**Reason:** Add new CSA B137.18 Polyethylene of raised temperature resistance (PE-RT) tubing systems for pressure applications to tables P2906.4, P2906.5 and P2906.6. This standard includes both pipe and fittings for water service and water distribution. This change will permit pipe and fittings meeting CSA B137.18 to be used in accordance with the Code.

Add new sections P2906.19.2 and P2906.19.3 for PE-RT fusion joints. Also add corresponding reference standards for PE-RT fusion - ASTM F1055, ASTM D2683 and ASTM D3261. This change will permit PE-RT pipe to be joined by fusing methods.

**Cost Impact:** Will not increase the cost of construction

This proposal adds additional standards for use with PERT pipe and fittings. These new standards are similar to existing referenced standards and product are similar so there is no increase in the cost of the PERT system by referencing these standards and adding standards to permit fusion of PERT.

**Analysis:** A review of the standard proposed for inclusion in the code, CSA B137.18 - 2013, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

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| <b>Report of Committee Action<br/>Hearings</b> |
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**Committee Action:**

**Approved as Submitted**

**Committee Reason:** More options for pipe and joints provides for greater flexibility.

**Assembly Action:**

**None**

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| <b>Final Action Results</b> |
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**RP16-15**

**AS**

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## Code Change No: **RP17-15**

### Original Proposal

#### Section: P3003.9.2

**Proponent:** Tim Earl, GBH International (tearl@gbhinternational.com)

#### Revise as follows:

**P3003.9.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer, or other approved primer, that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3 or CSA B181.2 shall be applied to all joint surfaces. The joint shall be made while the cement is wet, and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be installed above or below ground.

**Exception:** A primer shall not be required where all of the following conditions apply:

1. The solvent cement used is third-party certified as conforming to ASTM D 2564.
2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in non-pressure applications in sizes up to and including 4 inches (102 mm) in diameter.

**Reason:** The market place has already begun using clear as well as UV-light visible primers where local inspectors allow. Many users prefer this as spilled purple primers can permanently stain surfaces and cause added expenses in repair/replacement of stained items. Also, there are some installations (under sinks, basements) where the PVC will be exposed and the primer visible after installation. This simply meets a market condition and gives broader authority for these applications to occur. This would also be consistent with language in the IPC and other proposals in the IRC.

Visible primer stains on pipe installation:

[Typical installation with visible primer](#)

[UV-visible primer:](#)

[UV visible primer](#)

Staining to floor from purple primer (after being wiped off, with less than one minute of exposure):

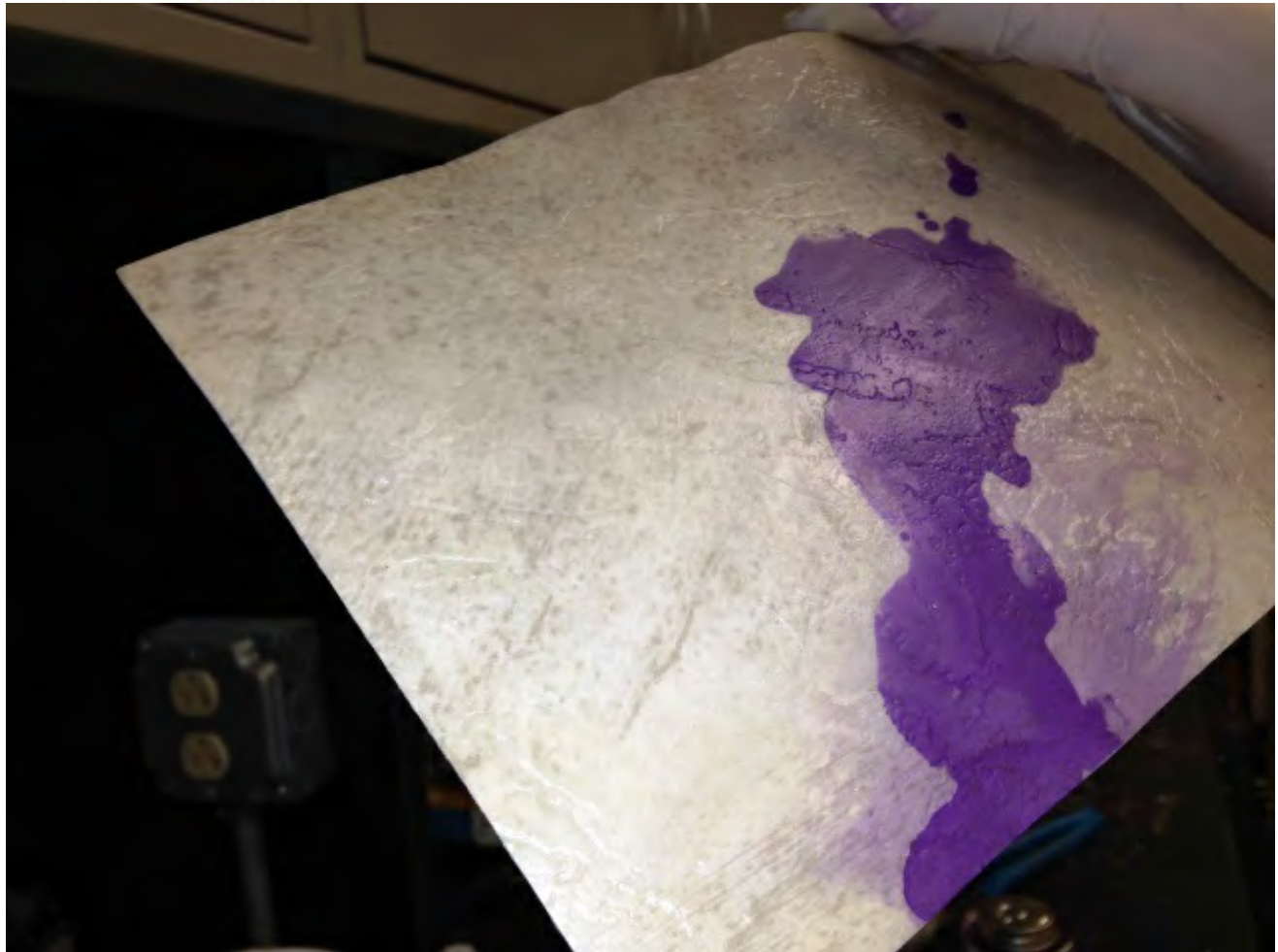
[Stained floor](#)

[Stained tile](#)





Inspector can verify the use of Primer with a UV flashlight.



[←BACK](#)



**Cost Impact:** Will not increase the cost of construction  
This proposal will not impact cost as it simply allows another primer option.

**Report of Committee Action Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**RP17-15**

**AS**

## Code Change No: P3-15, Part II

### Original Proposal

#### Section: IRC: 202 (New)

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

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

**Add new definition as follows:**

### SECTION 202 DEFINITIONS

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

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

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

**Cost Impact:** Will not increase the cost of construction

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P3-15, Part II**

**AS**



## Code Change No: P19-15 Part II

### Original Proposal

#### Section: P2605.1

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

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

#### Revise as follows:

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

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

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

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

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

**Cost Impact:** Will not increase the cost of construction

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

[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P19-15 Part II**

**AS**

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## Code Change No: P20-15 Part II

### Original Proposal

#### Section: P2503.7

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

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

#### Revise as follows:

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

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

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

#### Bibliography:

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

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

#### EXCEPTIONS:

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

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

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

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

#### Cost Impact:

Will not increase the cost of construction

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

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| <b>Report of Committee Action<br/>Hearings</b> |
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**Committee Action:****Disapproved**

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

**Assembly Action:****As Submitted**

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| <b>Public Comments</b> |
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*Public Comment 2:*

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

**Modify as follows:**

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

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

**Commenter's Reason:**

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

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

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

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

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

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

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| <b>Final Action Results</b> |
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**P20-15 Part II****AMPC2**

[←BACK](#)

## Code Change No: P51-15 Part II

### Original Proposal

**Section:** Table P2701.1, P2702.4

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

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

**Revise as follows:**

**TABLE P2701.1  
PLUMBING FIXTURES, FAUCETS AND FIXTURE FITTINGS**

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

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

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

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

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

**Cost Impact:**

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P51-15 Part II**

**AS**

## Code Change No: P53-15 Part II

### Original Proposal

**Section: P2704, P2704.1, P3201.1**

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

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

**Revise as follows:**

### **SECTION P2704 ACCESS TO SLIP JOINT CONNECTIONS**

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

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

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

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

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

**Cost Impact:**

Will not increase the cost of construction

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

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P53-15 Part II**

**AS**

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## Code Change No: **P55-15 Part II**

### Original Proposal

**Section: P2713.1**

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

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

**Revise as follows:**

**P2713.1 Bathtub waste outlets and overflows.** Bathtubs shall be equipped with a waste outlet ~~and an overflow outlet. The outlets shall be connected to waste tubing or piping that is~~ not less than  $1\frac{1}{2}$  inches (38 mm) in diameter. The waste outlet shall be equipped with a water-tight stopper. Where an overflow is installed, the overflow shall be not less than  $1\frac{1}{2}$  inches (38 mm) in diameter.

**Reason:** The Code is currently not coordinated with the referenced standards. The standards listed in Table 2701.1 do not require an overflow. An overflow is an optional connection for a bathtub. The reason the standard removed the mandate for overflows is because they cannot be properly cleaned. Furthermore, they are rarely if ever used, which is the only way to clean the overflow. Without proper cleaning, there is a build-up of contaminants in the overflow.

As the code currently reads, it prohibits certain tubs because they do not have an overflow. However, Table 2701.1 allows these tubs.

The national consensus product standard should be the document that regulates the construction requirements of a bathtub.

**Cost Impact:**

Will not increase the cost of construction.

This will decrease the cost of construction by not requiring an overflow for every bathtub.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** Tubs are being sold without overflow openings. The code should not be requiring plumbers to be drilling holes in tubs in the field in order to comply with the code.

**Assembly Action:**

**None**

### Final Action Results

**P55-15 Part II**

**AS**

## Code Change No: P93-15 Part II

### Original Proposal

#### Section: P2804.6.1.

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

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

#### Revise as follows:

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

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

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

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

#### Cost Impact:

Will not increase the cost of construction

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

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| <b>Report of Committee Action<br/>Hearings</b> |
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**Committee Action:**

**Approved as Modified**

**Modify proposal as follows:**

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

1. through 13. *Remain unchanged.*
14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is constructed of PEX or PE-RT tubing installed with insert fittings.

**Committee Reason:**

For the Modification only:

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

For the proposal As Modified:

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

**Assembly Action:**

**None**

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| <b>Final Action Results</b> |
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**P93-15 Part II**

**AM**

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## Code Change No: P98-15 Part II

### Original Proposal

#### Section: P2602.1, Chapter 44

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

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

#### Revise as follows:

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

#### Reference standards type:

#### Add new standard(s) as follows:

ANSI/NGWA-01-14 Water Well Construction Standard

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

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

#### Cost Impact:

Will increase the cost of construction

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

#### Analysis:

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

[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P98-15 Part II**

**AS**

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## Code Change No: P113-15 Part II

### Original Proposal

**Section:** Table P2906.4, Table P2906.5

**Proponent:** Michael Cudahy (mikec@cmservices.com)

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

**Revise as follows:**

**TABLE P2906.4  
WATER SERVICE PIPE**

| MATERIAL                                       | STANDARD                                       |
|--|--|
| Cross-linked polyethylene (PEX) plastic tubing | ASTM F 876; <del>ASTM F 877</del> ; CSA B137.5 |

*(Portions of table not shown remain unchanged)*

**TABLE P2906.5  
WATER DISTRIBUTION PIPE**

| MATERIAL                                       | STANDARD                                       |
|--|--|
| Cross-linked polyethylene (PEX) plastic tubing | ASTM F 876; <del>ASTM F 877</del> ; CSA B137.5 |

*(Portions of table not shown remain unchanged)*

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

**Cost Impact:**

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P113-15 Part II**

**AS**

## Code Change No: P115-15 Part II

### Original Proposal

**Section: P2906.5**

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

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

**Revise as follows:**

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

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

**Cost Impact:**

Will not increase the cost of construction

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Modified**

**Modify proposal as follows:**

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

**Committee Reason:**

For the Modification only:

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

For the proposal As Modified:

The committee agreed with the proponent's reason statement.

**Assembly Action:**

**None**

### Final Action Results

**P115-15 Part II**

**AM**

## Code Change No: P124-15 Part II

### Original Proposal

**Section:** Table P2903.9.4, Chapter 44

**Proponent:** Jeremy Brown, NSF International, representing NSF International

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

**Revise as follows:**

**TABLE P2903.9.4  
VALVES**

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

**Reference standards type:**

**Add new standard(s) as follows:**

MSS SP-122-2012 Plastic Industrial Ball Valves

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

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

**Cost Impact:**

Will not increase the cost of construction.

Adding additional options will not increase the cost of construction

**Analysis:**

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

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** The new standard provides more options.

**Assembly Action:**

**None**

**Final Action Results**

**P124-15 Part II**

**AS**

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[←BACK](#)

## Code Change No: **P132-15 Part II**

### Original Proposal

#### Section: **P2906.20 (New)**

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

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

#### Add new text as follows:

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

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

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

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

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

#### Cost Impact:

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P132-15 Part II**

**AS**



[←BACK](#)

## Code Change No: **P135-15 Part II**

### Original Proposal

#### Section: **P2906.17.2 (New)**

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

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

#### Add new text as follows:

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

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

#### **Cost Impact:**

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P135-15 Part II**

**AS**

## Code Change No: P166-15 Part II

### Original Proposal

#### Section: P2602.1

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

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

#### Revise as follows:

**P2602.1 General.** ~~The water-distribution and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public water supply or sewer system, respectively, if available. Where either a public water-supply or sewer system, or both, are is not available, or connection to them the supply is not feasible, an individual water supply or individual (private) sewage-disposal system, or both, shall be provided. Sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises shall be connected to a public sewer. Where a public sewer is not available, the sanitary drainage piping and systems shall be connected to a private sewage disposal system in compliance with state or local requirements. Where state or local requirements do not exist for private sewage disposal systems, the sanitary drainage piping and systems shall be connected to an approved private sewage disposal system that is in accordance with the International Private Sewage Disposal Code.~~

**Exception:** Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Sections P2911 or P2910.

**Reason:** Some jurisdictions do not have state and local laws for private sewage disposal systems. Therefore in those cases, the IPSDC provides regulations for waste disposal. The section language (existing or revised) presents a roadblock for utilizing gray water systems. The exception was added to allow for gray water to be diverted from the sewer or private sewage disposal system so that it can be processed by systems in accordance with Chapters P2910 or P2911.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 199.

#### Cost Impact:

Will not increase the cost of construction.

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, where private sewage disposal is not regulated by state and local laws, builders could do anything with sewage. They might not provide a large enough private sewage disposal system or one made of materials having long life. In those situations, there will be the extra cost for properly sized systems and better materials. Possibly there would be some additional labor for a larger installation.

[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P166-15 Part II**

**AS**

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[←BACK](#)

## Code Change No: **P170-15 Part II**

### Original Proposal

#### Section: Table P3002.1

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

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

#### Revise as follows:

**TABLE P3002.1  
UNDERGROUND BUILDING DRAINAGE AND VENT PIPE**

| PIPE            | STANDARD                                   |
|-----------------|--|
| Polyolefin pipe | ASTM F 1412; <u>ASTM F714</u> ; CSA B181.3 |

*(Portions of table not shown remain unchanged)*

**Reason:** ASTM F714 polyethylene pipe is sometimes used to rehabilitate piping sewers under buildings. Currently the code does not list the product for that use, and we were asked to submit a change to allow the use of the product.

HDPE sewer pipe made to ASTM F714, "Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter", is currently listed under TABLE P3002.1, Building Sewer Pipe, allowing its installation and use outside of buildings. PPFA has had calls regarding the codes not permitting the products under buildings when repair is needed.

ASTM F714, "Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter" is already in the code.

#### **Cost Impact:**

Will increase the cost of construction..

This proposal allows for an optional pipe material to be used under buildings. The option is not requiring that this method be chosen. Thus the code with this proposal added will not cause the cost of construction to increase, and the material may even cost less than other options.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P170-15 Part II**

**AS**

[←BACK](#)

## Code Change No: **P197-15 Part II**

### Original Proposal

#### Section: P3007.6

**Proponent:** Robert Adkins, Prince William County, representing Virginia Plumbing and Mechanical Inspectors Association (radkins@pwcgov.org)

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

#### Revise as follows:

**P3007.6 Capacity.** Sewage pumps and sewage ejectors shall have the capacity and head for the application requirements. Pumps and ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including ~~4 inch (25.4 mm)~~  $\frac{1}{2}$  inch (13 mm). The minimum capacity of a pump or ejector based on the diameter of the discharge pipe shall be in accordance with Table 3007.6.

#### Exceptions:

1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a discharge opening of not less than  $1\frac{1}{4}$  inches (32 mm).
2. Macerating toilet assemblies that serve single water closets shall have a discharge opening of not less than  $\frac{3}{4}$  inch (19 mm).

**Reason:** Many pumps do not comply with the 1 inch minimum requirement, especially smaller pump systems used for individual fixtures such as pantry sinks, etc. Numerous pumps for these purposes are available with this size discharge.

#### Cost Impact:

Will not increase the cost of construction.  
Allowing a slightly smaller pump will not increase the cost of construction.

### Report of Committee Action Hearings

#### Committee Action:

**Approved as Submitted**

**Committee Reason:** The committee agreed with the proponent's published reason statement. Smaller pumps are needed for limited applications.

#### Assembly Action:

**None**

### Final Action Results

**P197-15 Part II**

**AS**

## Code Change No: P174-15 Part II

### Original Proposal

#### Section: Table P3002.3

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

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

#### Revise as follows:

**TABLE P3002.3  
PIPE FITTINGS**

| PIPE MATERIAL | FITTING STANDARD |
|---------------|------------------|
| Polyethylene  | ASTM D2683       |

*(Portions of table not shown remain unchanged)*

**Reason:** Polyethylene pipe is already in IRC table for Building Sewer Pipe. However, a corresponding entry for pipe fittings of this material was not installed in the fittings table. This created a problem where fittings were needed for this pipe. Fittings could be required for branch piping, lateral connections and cleanouts. Section P3010 for Pipe Bursting for sewer replacement was added to the code in the last cycle. That section included the fitting standard ASTM D2683. This standard just needs to be put in Table P3002.3 so that fittings for polyethylene pipe included for sewer applications other than pipe bursting sewer applications.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 35.

#### **Cost Impact:**

Will not increase the cost of construction..

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P174-15 Part II**

**AS**

## Code Change No: P178-15 Part II

### Original Proposal

#### Section: P3005.1.6

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

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

#### Revise as follows:

**P3005.1.6 Change No reduction in size in the direction of flow.** The size of the drainage piping shall not be reduced in ~~size in the direction of the flow.~~ The following shall not be considered as a reduction in size in the direction of flow:

1. A 4-inch by 3-inch (102 mm by 76 mm) water closet ~~connection shall flange.~~
2. A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided that the 4 inch leg of the fitting is upright and below, but not be considered as a reduction in size, necessarily directly connected to, the water closet flange.
3. An approved offset closet flange.

**Reason:** This section begs for clarification especially since 4 x 3 closet bends (elbows) and offset closet flanges are frequently being used in current day construction. Item 1 is not any change to what was stated before.

Item 2- Four x 3 closet bends were commonly used many decades ago when these bends were made of lead. The item is carefully worded to make the intent clear that the bend is to be installed in the upright orientation (and not horizontally). Also, the wording indicates that the bend is not required to be directly connected to closet flange – there can be a vertical section of pipe between the upright bend and the closet flange.

Item 3-Offset closet flanges have been used for decades. Some jurisdictions are reluctant to allow any offset closet flanges because the code doesn't outright discuss the use offset flanges (nor does it prohibit them). Because some offset closet flanges are especially "restrictive looking", code officials didn't want to start allowing some types and not other types. This section is often cited as the basis for disapproving the use of all offset flanges. However, that doesn't seem completely appropriate as some offset closet flanges comply with the standards indicated for pipe fittings in Table 702.4. For example, the standard ASTM D2665 (for PVC fittings) references the standard ASTM D3311 for the patterns and dimensions of DWV fittings. Table 44 in ASTM D3311 shows two types of offset closet flanges. Thus, a code official denying the use of that particular offset closet flange might not be supported by what the code is allowing by Table P3002.3. Therefore, Item 3 is being added to open the door for fittings that are already approved by inclusion in a referenced standard and any other offset closet flange that the code official thinks is acceptable.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 201.

#### Cost Impact:

Will not increase the cost of construction

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



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| <b>Report of Committee Action<br/>Hearings</b> |
|--|

**Committee Action:****Disapproved**

**Committee Reason:** Item 3 requires offset closet flanges to be approved by the code official but there is not any criteria for the code official to use for making that approval. There are many different types of offset closet flanges that would not be appropriate.

**Assembly Action:****None**

|                        |
|------------------------|
| <b>Public Comments</b> |
|------------------------|

*Public Comment 1:*

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

**Modify as follows:**

**P3005.1.6 No reduction in size in the direction of flow.** The size of the drainage piping shall not be reduced in the direction of the flow. The following shall not be considered as a reduction in size in the direction of flow:

1. A 4-inch by 3-inch (102 mm by 76 mm) water closet flange.
2. A water closet bend fitting having a 4-inch (102 mm) inlet and a 3-inch (76 mm) outlet provided that the 4 inch leg of the fitting is upright and below, but not necessarily directly connected to, the water closet flange.
3. An ~~approved~~ offset closet flange.

**Commenter's Reason:** The Committee's point about offset closet flange is well-taken. The PMGCAC is removing "approved". This does not necessarily mean that *any* design of offset closet flange is acceptable. Closet flanges are pipe fittings and should comply with the standards indicated for pipe fittings in Table 702.4.

For example, PVC pipe standards ASTM D2665 and F1866 include a reference to ASTM D3311 which covers the patterns and dimensions for drainage fittings. ASTM D3311 includes the pattern and dimensions for an offset closet flange. Therefore, where the offset closet flange is marked with the standard for the pipe, that fitting is acceptable. Any pipe fitting, such as a closet flange, that is not marked with the pipe or fitting standard that includes a reference to fitting patterns for offset closet flanges, would need to be approved under Section 105.2 Alternative design, materials and methods.

|                             |
|-----------------------------|
| <b>Final Action Results</b> |
|-----------------------------|

**P178-15 Part II****AMPC1**

[←BACK](#)

## Code Change No: **P181-15 Part II**

### Original Proposal

**Section: P3003.13.1, P3003.13.2, P3003.13.3**

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

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

**Revise as follows:**

**P3003.13.1 Copper ~~pipe or copper-alloy~~ tubing to cast-iron hub pipe.** Joints between copper ~~pipe or copper-alloy~~ tubing and cast-iron hub pipe shall be made with a copper-alloy ferrule or compression joint. The copper ~~pipe or copper-alloy~~ tubing shall be soldered to the ferrule in an *approved* manner, and the ferrule shall be joined to the cast-iron hub by a caulked joint or a mechanical compression joint.

**P3003.13.2 Copper ~~pipe or copper-alloy~~ tubing to galvanized steel pipe.** Joints between copper ~~pipe or copper-alloy~~ tubing and galvanized steel pipe shall be made with a copper-alloy ~~ferrule~~ or dielectric fitting. The copper tubing shall be soldered to the fitting in an *approved* manner, and the fitting shall be screwed to the threaded pipe.

**P3003.13.3 Cast-iron pipe to galvanized steel or ~~brass-copper-alloy~~ pipe.** *No change to text.*

**Cost Impact:**

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P181-15 Part II**

**AS**

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## Code Change No: **P184-15 Part II**

### Original Proposal

#### Section: P3003.2, P3003.13.4, Chapter 44

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

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

#### Revise as follows:

**P3003.2 Prohibited joints.** Running threads and bands shall not be used in the drainage system. Drainage and vent piping shall not be drilled, tapped, burned or welded.

The following types of joints and connections shall be prohibited:

1. Cement or concrete.
2. Mastic or hot-pour bituminous joints.
3. Joints made with fittings not *approved* for the specific installation.
4. Joints between different diameter pipes made with elastomeric rolling O-rings.
5. Solvent-cement joints between different types of plastic pipe except where provided for in Section P3003.13.4.
6. Saddle-type fittings.

**P3003.13.4 Plastic pipe or tubing to other piping material.** Joints between different types of plastic pipe shall be made with approved adapter fitting or by a solvent cement joint only where a single joint is made between ABS and PVC pipes at the end of a building drainage pipe and the beginning of a building sewer pipe using a solvent cement complying with ASTM D3138. Joints between plastic pipe and other piping material shall be made with an *approved* adapter fitting. Joints between plastic pipe and cast-iron hub pipe shall be made by a caulked joint or a mechanical compression joint.

#### Reference standards type:

#### Add new standard(s) as follows:

ASTM D3138-04(2011) Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Components

**Reason:** The use of a special transition cement for this single application is widely accepted, both by local authorities having jurisdiction and other national codes when the building sewer and building drainage change from ABS to PVC. This will create a consistent practice in the industry.

#### Cost Impact:

Will not increase the cost of construction.

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

**Analysis:** A review of the standard proposed for inclusion in the code, ASTM D3138, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P184-15 Part II**

**AS**

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## Code Change No: **P191-15 Part II**

### Original Proposal

**Section: P3005.2.6**

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

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

**Revise as follows:**

**P3005.2.6 Cleanout plugs.** Cleanout plugs shall be copper alloy, plastic or other *approved* materials. Cleanout plugs for borosilicate glass piping systems shall be of borosilicate glass. ~~Brass-Copper-alloy~~ cleanout plugs shall conform to ASTM A74 and shall be limited for use only on metallic piping systems. Plastic cleanout plugs shall conform to the referenced standards for plastic pipe fittings as indicated in Table P3002.3. Cleanout plugs shall have a raised square head, a countersunk square head or a countersunk slot head. Where a cleanout plug will have a trim cover screw installed into the plug, the plug shall be manufactured with a blind end threaded hole for such purpose.

**Reason:** This proposal cleans up the section and does not change the intent. There are many different copper and copper-alloy compositions. Copper alloy is the term used to identify materials manufactured where copper is the base metal and it includes brass and bronze.

**Cost Impact:**

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P191-15 Part II**

**AS**

[←BACK](#)

## Code Change No: **P226-15 Part I**

### Original Proposal

#### Section: 918.8

**Proponent:** Guy McMann, representing Colorado Association of Plumbing and Mechanical Officials (CAPMO) (gcmann@jeffco.us)

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

#### Revise as follows:

**918.8 Prohibited installations.** Air admittance valves shall not be installed in nonneutralized special waste systems as described in Chapter 8 except where such valves are in compliance with ASSE 1049, are constructed of materials *approved* in accordance with Section 702.5 and are tested for chemical resistance in accordance with ASTM F 1412. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves without an engineered design shall not be utilized to vent sumps or tanks of any type. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes or mechanical air intakes.

**Reason:** This type of installation is not consistent with the intent of use of AAVs. These are still mechanical devices with a shelf life and are subject to failure even if the correct AAV for outdoor use is installed. Failures will result in sewer gas making its way into building openings. The correct remedy is to move or raise the vent.

#### Cost Impact:

Will not increase the cost of construction

There is no additional cost that would normally occur to correct a non-code compliant installation. This proposal attempts to circumvent the installation of a product against its' intended use as air admittance valves are a mechanical devices that will eventually fail.

### Report of Committee Action Hearings

#### Committee Action:

**Approved as Submitted**

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

#### Assembly Action:

**None**

### Final Action Results

**P226-15 Part I**

**AS**

[←BACK](#)

## Code Change No: **P194-15 Part II**

### Original Proposal

#### Section: P3007.3.2

**Proponent:** Donald Surrena, National Association of Home Builders, representing National Association of Home Builders (dsurrena@nahb.org)

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

#### Revise as follows:

**P3007.3.2 Sump pit.** The sump pit shall be not less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep, unless otherwise *approved*. The pit shall be accessible and located so that drainage flows into the pit by gravity. The sump pit shall be constructed of tile, concrete, steel, plastic or other *approved* materials. The pit bottom shall be solid and provide permanent support for the pump. The sump pit shall be fitted with a gas-tight removable cover that is installed ~~above grade level or floor level,~~ or not more than 2 inches (51 mm) below grade or floor level. The cover shall be adequate to support anticipated loads in the area of use. The sump pit shall be vented in accordance with Chapter 31.

**Reason:** The purpose of this code change is to make the IPC consistent with the IRC where the sump cover is installed not more than 2 inches below grade. Currently the cover for sump pits needs to be located at grade or higher leaving little to no flexibility for the design of the finished floor, however by allowing the cover to be not more than 2 inches below grade (as in the IRC) or higher eliminates this problem.

#### Cost Impact:

Will not increase the cost of construction.

There is no change to the requirements of this section. This proposal is for correlation purposes only.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P194-15 Part II**

**AS**



[←BACK](#)

## Code Change No: **P195-15 Part II**

### Original Proposal

#### Section: P3007.3.3

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

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

#### Revise as follows:

**P3007.3.3 Discharge pipe and fittings.** Discharge pipe and fittings serving sump pumps and ejectors shall be constructed of materials in accordance with Sections P3007.3.3.1 and P3007.3.3.2 ~~and shall be approved.~~

**Reason:** Subsections 712.3.3.1 and 712.3.3.1 provide enough guidance to the designer and installer for proper selection of discharge piping components such that there is not a need for the code official to further approve the selections. Besides, what other criteria would a code official use to grant approval?

**712.3.3.1 Materials.** Pipe and fitting materials shall be constructed of brass, copper, CPVC, ductile iron, PE, or PVC.

**712.3.3.2 Ratings.** Pipe and fittings shall be rated for the maximum system operating pressure and temperature. Pipe fitting materials shall be compatible with the pipe material. Where pipe and fittings are buried in the earth, they shall be suitable for burial.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 50.

#### Cost Impact:

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P195-15 Part II**

**AS**

## Code Change No: **P198-15 Part II**

### Original Proposal

#### Section: P3007.6

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

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

#### Revise as follows:

**P3007.6 Capacity.** Sewage pumps and sewage ejectors shall have the capacity and head for the application requirements. Pumps and ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including 1/2 inch (25.413 mm). The minimum capacity of a pump or ejector based on the diameter of the discharge pipe shall be in accordance with Table 3007.6.

#### Exceptions:

1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a discharge opening of not less than 1 <sup>1</sup>/<sub>4</sub> inches (32 mm).
2. Macerating toilet assemblies that serve single water closets shall have a discharge opening of not less than <sup>3</sup>/<sub>4</sub> inch (19 mm).

**Reason:** There are smaller pump systems used for individual fixtures such as pantry sinks and bar sinks that are only capable of passing 1/2 inch solids. These pumps have been successfully used in jurisdictions where these pumps were approved as an alternative method.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 113.

#### Cost Impact:

Will not increase the cost of construction.

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

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P198-15 Part II**

**AS**

## Code Change No: P202-15 Part II

### Original Proposal

#### Section: P3008.1, P3008.2 (New)

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

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

#### Revise as follows:

**P3008.1 Sewage backflow Where required.** ~~Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, the fixtures shall be protected by a backwater valve installed in the *building drain*, branch of the *building drain* or horizontal branch serving such fixtures. Plumbing fixtures having flood level rims above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not discharge through a backwater valve.~~

~~**Exception:** In existing buildings, fixtures above the elevation of the manhole cover of the next upstream manhole in the *public sewer* shall not be prohibited from discharging through a backwater valve.~~

#### Add new text as follows:

**P3008.2 Allowable installation.** Where plumbing fixtures are installed on a floor with a finished floor elevation above the elevation of the manhole cover of the next upstream manhole in the public sewer, and a backwater valve is installed in the building drain or horizontal branch serving such fixtures, the backwater valve shall be of the normally-open type.

**Exception:** Normally-closed backwater valve installations for existing buildings shall not be prohibited.

**Reason:** This section was originally developed based on the use of what is now classified as "normally closed backwater valve." ASME A112.14.1 has two categories of backwater valves, normally closed backwater valves and normally open backwater valves. A normally open backwater valve allows the free movement of air throughout the drainage system. The connection to the public sewer is based on having a free movement of air from the public sewer through the vent terminal on the roof.

When a normally closed backwater valve is installed for the entire plumbing system, this is not accomplished. However, with a normally open backwater valve, the free movement of air occurs in the sanitary drainage and vent system.

This change merely adds a distinction between the use of a normally closed backwater valve and a normally open backwater valve. The requirements for normally closed backwater valve remain the same. The only change is to revise the title of the section to read, "Where required." Since this is the section that requires backwater valves to be installed, it is most appropriate to entitle the section, "Where required."

The second half of the original section has been split into a new section entitled, "Allowable installation." This is the part of the original code section that placed limitations on using backwater valves for fixtures that are located above the elevation of the manhole cover. The change is to allow the discharge of fixtures located above the elevation of the manhole cover provided that a normally open backwater valve is installed. This is consistent with the intended use of each style of backwater valve. The wording of the exception was changed to reflect the revised wording to Section 915.2. However, the requirements of the exception do not change. It still will allow a normally closed backwater valve for an existing building.

#### Cost Impact:

Will not increase the cost of construction.

This change provides options for the code user. There is no additional language mandating the use of backwater valves.

[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P202-15 Part II**

**AS**

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[←BACK](#)

## Code Change No: **P204-15 Part II**

### Original Proposal

**Section: P3010.4, P3010.5**

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

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

**Revise as follows:**

**P3010.4 Pipe.** The replacement pipe shall be made of a high-density polyethylene (HDPE) ~~that conforms to cell classification number PE3608, PE4608 or PE4710 as indicated in ASTM F 714. The pipe fittings and shall be manufactured with an SDR of 17 and in compliance with ASTM F 714.~~

**P3010.5 Pipe fittings.** Pipe fittings to be connected to the replacement ~~pipe~~ pipng pipe shall be made of high-density polyethylene (HDPE) ~~that conforms to cell classification number PE3608, PE4608 or PE4710 as indicated in ASTM F 714. The pipe fittings and shall be manufactured with an SDR of 17 and in compliance with ASTM D 2683.~~

**Reason:** ASTM F714, Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter, only refers to pipe, not fittings. Fittings are not made in SDR's. And calling out resin designation codes is not necessary. This change has a companion change in the IRC to get the requirements to match this language.

**Cost Impact:**

Will not increase the cost of construction

This proposal is modifying language to coordinate with each other in multiple code sections and does not impact costs. Thus the code with this proposal added will not cause the cost of construction to increase.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

### Final Action Results

**P204-15 Part II**

**AS**

[←BACK](#)

## Code Change No: **P203-15 Part II**

### Original Proposal

**Section: P3008.2, P3008.3, P3008.4, P3008.5**

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

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

**Revise as follows:**

**P3008.2 Material.** ~~Bearing parts of backwater valves shall be of corrosion-resistant material.~~  
Backwater valves shall comply with ASME A112.14.1, CSA B181.1 or CSA B181.2.

**P3008.5-P3008.3 Location.** Backwater valves shall be installed so that ~~the working parts are accessible for service and repair.~~ access is provided to the working parts.

**Delete without substitution:**

**P3008.3 Seal.** ~~Backwater valves shall be constructed to provide a mechanical seal against backflow.~~

**P3008.4 Diameter.** ~~Backwater valves, when fully opened, shall have a capacity not less than that of the pipes in which they are installed.~~

**Reason:** This change cleans up the language in the section. Backwater valves, like all plumbing products, are required to be third party listed. The listing is to the referenced standard. The reference standard has the requirements that are proposed to be stricken in the section. Furthermore, plumbing inspectors are not checking on the dimensions or working parts of a listed backwater valve.

Paragraph 2.1.1 of ASME A112.14.1 requires the backwater valve to comply with the opening dimensions of Table 1. The opening dimensions equal the pipe dimensions. Hence, Section P3008.4 is unnecessary.

Paragraph 2.4 of the ASME standard goes into great detail regarding the material requirements for the backwater valve. Not only are the bearing parts corrosion resistant, the quality of the corrosion resistance is listed. Hence the first sentence in Section P3008.2 is unnecessary.

Paragraph 3.2 of the ASME standard specifies water tightness requirements for the backwater valve. Hence, Section P3008.3 is unnecessary.

The last section has been cleaned up to identify that the internal moving components are what must be accessible. The movement in the code has been to use the term, "provide access" or "access is provided," as opposed to accessible. The term "accessible" is more associated with requirements for the physically challenged. The sentence would become identical to the wording in the IPC.

**Cost Impact:**

Will not increase the cost of construction.

There is no change in the requirements. The proposal cleans up the language with reliance on the standard and the listing.

### Report of Committee Action Hearings

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P203-15 Part II**

**AS**

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## Code Change No: **P205-15 Part II**

### Original Proposal

#### Section: 3011 (New), Chapter 44

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

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

**Add new text as follows:**

### SECTION 3011 REPLACEMENT OF UNDERGROUND SEWERS BY PVC FOLD AND FORM METHODS

**3011.1 General** This section shall govern the replacement of existing building sewer piping by PVC Fold and Form methods.

**3011.2 Applicability** The replacement of building sewer piping by PVC Fold and Form methods shall be limited to gravity drainage piping 4 inches (152MM) to 18 inches (457mm). The replacement piping shall be of the same nominal size as the existing piping.

**3011.3 Pre-installation inspection** The existing piping sections to be replaced shall be inspected internally by a recorded video camera survey. The survey shall include notations of the position of cleanouts and the depth of connections to the existing piping.

**3011.4 Pipe** The replacement piping shall be manufactured in compliance with ASTM F1871 or ASTM F1504.

**3011.5 Installation** The piping sections to be replaced shall be cleaned and flushed. Remediation shall be performed where there is groundwater infiltration, roots, collapsed pipe, dropped joints, offsets more than 12% of the inside pipe diameter or other obstructions.

**3011.6 Cleanouts** Where the existing building sewer did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

**3011.7 Post-installation inspection** The completed replacement piping shall be inspected internally by a recorded video camera survey. The video survey shall be reviewed and approved by the code official prior to pressure testing of the replacement piping system.

**3011.8 Pressure testing** The replacement piping system as well as the connections to the replacement piping shall be tested in accordance with Section P2503.4.

**Reference standards type:**

**Add new standard(s) as follows:**

ASTM F1871 - 2011 Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation

ASTM F1504 - 2014 Standard Specification for Folded Poly(Vinyl Chloride) (PVC) Pipe for Existing Sewer and Conduit Rehabilitation



[←BACK](#)ASTM F1947 - 2010 Standard Practice for Installation of Folded Poly (Vinyl Chloride) (PVC) Pipe into Existing Sewers and ConduitsASTM F1867 - 2012 Standard Practice for Installation of Folded/Formed Poly (Vinyl Chloride) (PVC) Pipe Type A for Existing Sewer and Conduit Rehabilitation

**Reason:** The current IPC includes provisions for replacement of underground sewers by pipe bursting or the installation of new pipe in an open cut trench. This proposal introduces a different method for sewer rehabilitation which is similar to pipe bursting. Fold and form is a method where a PVC pipe is manufactured in a plant to either ASTM F1504 or ASTM F1871. The pipe is heated and collapsed to form a roll for transport to the worksite. Once on site the pipe is heated and pulled into an existing sewer pipe which is in need of rehabilitation. The new pipe is then expanded and installed per ASTM F1947 or ASTM F1867. This proposal also includes sections similar to Section 717 to put the sewer line back in service. This proposal will provide for an alternative to open cut and pipe bursting methods and give owners and municipalities additional means to repair a deteriorating system.

**Cost Impact:**

Will not increase the cost of construction

No cost impact. It is estimated that pipe bursting and fold and form methods are approximately 60% of the cost of open cut installations. These methods offer significant savings as well as less impact on the surrounding area.

**Analysis:** A review of the standard proposed for inclusion in the code, ASTM F1871-2011, ASTM F1504-2014, ASTM F1947-2010 and ASTM F1867-2012, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

**Report of Committee Action  
Hearings**
**Committee Action:****Approved as Modified****Modify proposal as follows:**

**P3011.2 Applicability.** The replacement of building sewer piping by PVC Fold and Form methods shall be limited to gravity drainage piping in sizes ~~64~~ inches ( ~~152~~102 mm ) and ~~smaller to~~ 18 inches (457 mm). The replacement piping shall be of the same nominal size as the existing piping.

**P3011.5 Installation.** ~~Piping complying with ASTM F1504~~The piping sections to be replaced shall be installed in accordance with ASTM F1947 ~~cleaned and flushed.~~ Piping complying with ASTM ~~ASTM F1871~~ Remediation shall be installed in accordance with ASTM F1867 ~~performed where there is groundwater infiltration, roots, collapsed pipe, dropped joints, offsets more than 12 percent of the inside pipe diameter or other obstructions.~~

**Reference Standards:**

ASTM F1871 - 2011 Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation

ASTM F1504 - 2014 Standard Specification for Folded Poly(Vinyl Chloride) (PVC) Pipe for Existing Sewer and Conduit Rehabilitation

~~ASTM F1947 - 2010 Standard Practice for Installation of Folded Poly (Vinyl Chloride) (PVC) Pipe into Existing Sewers and Conduits~~

~~ASTM F1867 - 2012 Standard Practice for Installation of Folded/Formed Poly (Vinyl Chloride) (PVC) Pipe Type A for Existing Sewer and Conduit Rehabilitation~~

**Committee Reason:**

For the Modification only:

The size of piping that this process can be used on was corrected to allow its use for larger piping systems that could exist for IRC buildings.

For the proposal As Modified:

The committee agreed with the proponent's reason statement.

**Assembly Action:****None**

**Analysis.** For staff analysis of the content of ASTM F1871-2011, ASTM F1504-2014, ASTM F1947-2010 and ASTM F1867-2012 with regard to the ICC criteria for referenced standards (Section 3.6 of CP #28), please visit: <http://www.iccsafe.org/wp-content/uploads/2015-Proposed-Standards-Group-AFinal.Pdf>

**Final Action Results**
**P205-15 Part II****AM**

## Code Change No: **P215-15 Part II**

### Original Proposal

**Section: P3101.1.2 (New), P3103.1, P3103.1.1 (New), P3103.1.3 (New), P3103.1.4 (New), P3103.6**

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

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

**Revise as follows:**

**P3103.1 Roof extension-Vent pipes terminating outdoors.** ~~Open vent-Vent pipes that extend through a roof-terminating outdoors shall be terminated not less than 6 inches (152 mm) above-extended to the outdoors through the roof or 6 inches (152 mm) above-a side wall of the anticipated snow accumulation, whichever is greater. Where a roof is to be used for assembly, as a promenade, observation deck or sunbathing deck or for similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above building in accordance with one of the roof-methods identified in Sections P3103.1.1 through P3103.1.4.~~

**Add new text as follows:**

**P3103.1.1 Roof extension.** Open vent pipes that extend through a roof and that do not meet the conditions of Section P3101.1.2 or Section P3101.1.3 shall terminate not less than 6 inches (150 mm) above the roof or 6 inches (150 mm) above the anticipated snow accumulation, which ever is greater.

**P3101.1.2 Roof used for recreational purposes.** Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

**P3103.1.3 Roof extension covered.** Where an open vent pipe terminates above a sloped roof and is covered by either a roof-mounted panel such as a solar collector or photovoltaic panel mounted over the vent opening, or by a roof element such as an architectural feature or a decorative shroud, the vent pipe shall terminate not less than 2 inches (51 mm) above the roof surface. Such roof elements shall be designed to prevent the adverse effects of snow accumulation and wind on the function of the vent. The placement of a panel over a vent pipe and the design of a roof element covering the vent pipe shall provide for an open area for the vent pipe to the outdoors that is not less than the area of the pipe, as calculated from the inside diameter of the pipe. Such vent terminals shall be protected by a method that prevents birds and rodents from entering or blocking the vent pipe opening.

**P3103.1.4 Side wall vent terminal.** Vent terminals extending through the wall shall terminate not closer than 10 feet (3048 mm) from a lot line and not less than 10 feet (3048 mm) above the highest grade elevation within 10 feet (3048 mm) in any direction horizontally of the vent terminal. Vent pipes shall not terminate under the overhang of a structure where the overhang includes soffit vents. Such vent terminals shall be protected by a method that prevents birds and rodents from entering or blocking the vent pipe opening and that does not reduce the open area of the vent pipe.

**Delete without substitution:**

**~~P3103.6 Extension through the wall.~~** ~~Vent terminals extending through the wall shall terminate not less than 10 feet (3048 mm) from the lot line and 10 feet (3048 mm) above the highest adjacent grade within 10 feet (3048 mm) horizontally of the vent terminal. Vent terminals shall not terminate under the overhang of a structure with soffit vents. Side wall vent terminals shall be protected to prevent birds or rodents from entering or blocking the vent opening.~~

**Reason:** This proposed change reorganizes the section regarding the vent terminal. There are currently three options for a vent terminal, extending the vent (number) inches or more above the roof, extending the vent more than 7 feet above the roof when the roof is used for entertainment, or extending the vent through the side wall. However, the three requirements are separated between multiple sections. This makes the requirement readily identifiable in a section that presents all the options in one main section. A fourth option for terminating the vent has been included. The fourth option would allow the vent to terminate 2 inches above a sloped roof when protected by a covering. This would allow photovoltaic solar collectors to be installed over vent terminals. It would also allow other protected vent terminals, such as architectural features that hide the vent for aesthetic purposes. The size, length, and location of vent terminals has been a subject matter that has been greatly discussed over the last century. There are many myths, innuendoes, theories, and hypothesis regarding vent terminals. One of the most complete papers on vent terminals was published by the National Bureau of Standards (NBS) in 1954, entitled, "Frost Closure of Roof Vents in Plumbing Systems," authored by Nerbert Eaton and Robert Wylie. Most of the current code requirements originate from the recommendations of this paper.

The NBS paper investigated plumbing roof vents and their termination throughout North America. Identified as a major concern is the frost closure of the vent terminal. Other concerns included snow blockage, shearing off of the vent terminal, and rainwater entrance.

Prior to this paper, it was largely alluded that the reason for a minimum size of 1-1/4 inch and a termination above the roof surface was to prevent a bird from building a nest and laying an egg to block off the vent. To this day, birds building nests in vents is a concern. However, that concern is more related to side wall venting that provides an easy opening for a bird to build a nest. When a vent terminates lower to the roof, measures must be taken to prevent a bird from building a nest around the vent pipe and blocking it off. Increasing the size of the vent is one means used to avoid a bird's nest. Screening and vent covers also are used to prevent birds from building a nest.

The more pressing issue is how far above the roof a vent should terminate. Two issues of importance are water tightness of the flashing and preventing rainwater entrance into the plumbing vent. Modern day flashings can make the roof penetration water tight at much lower heights, including a termination 2 inches above the roof.

The NBS report suggested a minimum of 2 inch penetration above the roof to prevent rainwater from entering the plumbing vent. It is recognized that a flat roof can have a greater accumulation of water hence the need for the vent to be at a higher elevation. Typically secondary roof drains are located between 2 and 4 inches above the roof. Thus, the vent terminal would have to be located at a higher height which is the reason for maintaining a minimum of inserting the appropriate number of inches above the roof for a flat roof.

The NBS report identified a vent terminal used in Saskatoon, Canada that terminates at the sloped roof. There was no extension above the roof. This was found to be extremely effective in preventing frost closure. As the NBS report states, the closer the vent terminates to the roof, the lower the possibility of frost closure. The report also found that by making the vent a minimum of 3 inch in diameter, frost closure that impacts the performance of the venting system was avoided.

Snow accumulation has been a subject of more recent discussions regarding vent terminals. However, snow accumulation was addressed in the NBS report. The NBS report found that while snow may completely cover the vent terminal, the snow eventually melts from the heated vapors emanating out of the vent. Prior to the snow melting, the NBS report found that the snow cover did not impact the performance of the vent. This makes sense since the purpose of the vent is to balance the pressure in the drainage system with atmospheric pressure. The snow cover is not dense enough to prevent the balancing of pressure in the piping system.

The current code requires the vent to terminate at a height specified by the jurisdiction. The Residential Code requires the termination to be 6 inches above the anticipated snow cover. The requirement add the local value remains intact. However, when the vent is covered, such as by a solar panel or architectural feature, it cannot be covered by snow such that the vent doesn't perform properly. Thus, the vent could terminate at a 2 inch height above a sloped roof.

In the mountain west, shearing of the roof vent is a problem when the snow and ice melt and slide off of sloped roofs. By extending the vent higher through the roof, there is a greater force applied on the vent that can result in the pipe being sheared off. If the vent is lowered, the force on the vent during snow and ice slides is also lowered. This may reduce the shearing incidents of vent pipes. However, that is not part of the reason for lowering the vent terminal height. The vent would be protected if installed at a lower height. Hence, the snow and ice slides would have little to no impact on the vent since it is covered.

Plumbing contractors in the mountain west with heavy snow and ice accumulations have found that the more practical solution is to extend the vent through the roof closer to the peak of the roof. Thus, the force from sliding snow and ice is lowered. This has not been addressed in this code change and is more of a regional issue addressed by knowledgeable local contractors.

The remaining issue that is not often addressed for vent terminals is the impact of wind. During windy conditions, the vent terminal can create a reduced pressure zone that siphons the trap seal. This is often called a Venturi effect. The other concern is downdrafts that can increase the pressure in the drainage system. However, downdrafts have not had a major impact on the drainage system based on the termination height above the roof. While the possibility exists that a lower vent termination height could result in higher wind downdrafts, this has not proven to be the case. However, the code requirement addresses downdrafts by requiring the covering to prevent any adverse impact from wind.

What the plumbing profession must acknowledge is that solar is a viable source of energy for a building. As such, accommodations must be made to allow for the maximum area of roof coverage with solar panels. This may require the adjustment in the height of the vent terminal.

[←BACK](#)

While accommodations must be made, there cannot be a sacrifice of public health. The lowering of the vent terminal to 2 inches on a sloped roof will not impact public health. This was proven by the NBS study published in 1954. Furthermore, modern building practices will result in a water tight vent terminal that will perform as intended.

**Bibliography:**

"*Frost Closure of roof Vents in Plumbing Systems*," Herbert N. Eaton and Robert S. Wyly, BMS Report 142, published 1954, United States Department of Commerce, National Bureau of Standards.

National Plumbing Code Handbook, Standards and Design Information, Vincent T. Manas, P.E., copyright 1957, McGraw-Hill Book Company

**Cost Impact:**

Will not increase the cost of construction.

This change provides options. As such, there is no cost implication.

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| <b>Report of Committee Action<br/>Hearings</b> |
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**Committee Action:****Approved as Submitted**

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

**Assembly Action:****None**

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| <b>Final Action Results</b> |
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**P215-15 Part II****AS**

[←BACK](#)

## Code Change No: **P220-15 Part II**

### Original Proposal

#### Section: P3111.1

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

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

#### Revise as follows:

**P3111.1 Type of fixtures.** A combination waste and vent system shall not serve fixtures other than floor drains, sinks and lavatories. ~~A combination waste and vent system shall not receive the discharge of a food waste disposer.~~

#### Cost Impact:

**Part II:** Will not increase the cost of construction.

It's going to allow an installation that previously wasn't permitted thus lowering the cost of production.

### Report of Committee Action Hearings

#### Committee Action:

**Approved as Submitted**

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

#### Assembly Action:

**None**

### Final Action Results

**P220-15 Part II**

**AS**

## Code Change No: P221-15 Part II

### Original Proposal

**Section:** P3111.1, P3111.1.1 (New), P3111.2, P3111.2.1, P3111.2.2, P3111.2.3, P3111.2.4, P3111.3

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

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

**Revise as follows:**

**P3111.1 Type of fixtures.** A combination waste and vent system shall ~~not only serve fixtures other than~~ floor drains, sinks, lavatories and lavatories drinking fountains. A combination waste and vent system shall be considered to be the vent for those fixtures. The developed length of a fixture drain to the combination waste and vent system piping shall not exceed the limitations of Table P3105.1. Combination waste and vent systems shall not receive the discharge of from a food waste disposer.

**Add new text as follows:**

**P3111.1.1 Single fixture systems.** A horizontal fixture drain shall be considered to be a combination waste and vent system provided that the fixture drain size complies with P3105.1.

**Revise as follows:**

**P3111.2 Installation.** The only vertical pipe of a combination waste and vent system shall be the connection between ~~the a~~ fixture drain and ~~the a~~ horizontal combination waste and vent pipe. The length of the vertical distance pipe shall be not greater than 8 feet (2438 mm).

**P3111.2.1 Slope.** The slope of a horizontal combination waste and vent pipe piping shall have a slope of not greater than ½ unit vertical in 12 units horizontal (4-percent slope). The minimum slope and shall not be less than that indicated in accordance with Section P3005.3 P3005.2.

**P3111.2.2 Connection-Vent connection.** ~~The A~~ combination waste and vent system shall be provided with a dry vent connected at any point within the system or the system shall connect to a horizontal drain or building drain, that serves vented fixtures located on the same floor. Combination waste and vent systems connecting to ~~building drains~~ receiving only the discharge from one or more stacks shall be provided with a dry vent. The dry vent connection connected to the combination waste and vent pipe shall extend vertically to a point not less than 6 inches (152 mm) above the flood level rim of the highest fixture being vented by the combination waste and vent system before offsetting horizontally horizontal offsets in the dry vent piping are allowed.

**P3111.2.3 Vent size.** The dry vent connected to the combination waste and vent system shall be sized for the total drainage fixture unit load in accordance with Section ~~P3143.4~~ P3111.1.

**Delete without substitution:**

**P3111.2.4 Fixture branch or drain.** ~~The fixture branch or fixture drain shall connect to the combination waste and vent within a distance specified in Table P3105.1. The combination waste and vent pipe shall be considered the vent for the fixture.~~

**Revise as follows:**

**P3111.3 Size and length.** The size of a combination drain and vent ~~pipe~~ piping shall be not less than that specified in Table 3111.3. The horizontal length of a combination drain and vent system shall be unlimited.

**Reason:** The primary reason for this proposal is to add new Section 915.1.1 to cover the very special situation of a single fixture combination waste and vent system.

Consider a 2 inch floor drain which by definition has a 2 inch trap. Where the floor drain is an emergency floor drain, Table P3004.1 indicates that the dfu value is zero. Where the floor drain is not emergency floor drain, note b indicates the dfu unit value is the summation of dfu discharging to the floor drain. For this example, consider that the floor drain is a 2 dfu value. Now review Table P3111.3 and determine that a 2 inch combination waste and vent pipe can accommodate up to 3 dfu. Therefore, the 2 inch pipe from the trap of the 2 inch floor drain can be its own combination waste and vent system.

However, this is not readily apparent from existing language especially when reading existing Section P3111.2.4. That section seems to indicate that the length of a fixture drain to its vent connection is always limited by the trap-to-vent distances in Table P3105.1. The piping from any fixture trap to the vent connection is limited in length so that the vent connection is not below the trap weir (see Section P3105.2). Table P3105.1 reflects the maximum length of the fixture drain at the indicated slopes so Section P3105.2 is not violated. But where the fixture drain is "oversized" according to the requirements for a combination waste and vent system, then the limit on fixture drain length for these single fixture applications is meaningless. The fixture trap cannot siphon because the pipe is oversized for the intended dfu going into the drain.

For a better flow of requirements, Section P3111.2.4 was merged into Section P3111.1. This was important in order to move the requirement for meeting Table P3105.1 before new Section P3111.1 to make that new section make sense.

Several minor changes were made to other sections including changing pipe to piping. Pipe implies a section of pipe without fittings. A combination waste and vent system can have horizontal bends. Some have misinterpreted that "pipe" meant that a CWV system only was allowed as a "straight run" system.

Another small but important change is in P3111.2. Here, pipe really does mean pipe as in a straight run of pipe in vertical direction. Adding words to the last sentence will hopefully reinforce that it is not just the distance of 8 feet but a vertical pipe not longer than 8 feet. Note the definition for VERTICAL PIPE in chapter 2. A vertical pipe could have vertical offsets and still be considered vertical.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 18.

**Cost Impact:**

Will not increase the cost of construction.

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

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| <b>Report of Committee Action<br/>Hearings</b> |
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**Committee Action:****Approved as Submitted****Committee Reason:** The committee agreed with the proponent's published reason statement.**Assembly Action:****None**

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| <b>Final Action Results</b> |
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**P221-15 Part II****AS**



## Code Change No: P279-15 Part II

### Original Proposal

#### Section: P3002.1, P3010, P3010.1, P3010.2, P3010.6

**Proponent:** Roger Harper (skip.harper@dhcd.virginia.gov); Shawn Strausbaugh, VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA), representing VA Department of Housing and Community Development, representing VA Plumbing and Mechanical Inspectors Association (VPMIA) and the VA Building Code Officials Association (VBCOA) (Skip.Harper@dhcd.virginia.gov)

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

#### Revise as follows:

**TABLE P3002.1  
UNDERGROUND BUILDING DRAINAGE AND VENT PIPE**

| PIPE                                    | STANDARD   |
|---|------------|
| Polyethylene (PE) plastic pipe (SDR-PR) | ASTM F 714 |

*(Portions of table not shown remain unchanged)*

For SI: 1 inch = 25.4 mm.

#### Revise as follows:

### SECTION P3010 REPLACEMENT OF UNDERGROUND BUILDING SEWERS AND BUILDING DRAINS BY PIPE BURSTING METHODS

**P3010.1 General.** This section shall govern the replacement of existing *building sewer and building drain* piping by pipe-bursting methods.

**P3010.2 Applicability.** The replacement of building sewer and building drain piping by pipe bursting methods shall be limited to gravity drainage piping of sizes 6 inches (150 mm) and smaller. The replacement piping shall be of the same nominal size as the existing piping.

**P3010.6 Cleanouts.** Where the existing *building sewer or building drain* did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

**Reason:** Pipe bursting is commonly used in both underground building sewers and building drains. The original proposal did not include the replacement of existing underground building drainage piping. The changes as seen above will allow pipe bursting of underground building drainage piping meeting all of the other necessary requirements under these sections. The addition of PE pipe to the underground building drain and vent piping table provides the suitable material for pipe bursting sections of underground building drains.

**Cost Impact:** Will not increase the cost of construction

The addition of pipe bursting of existing building drains will lead to repair/renovation cost that will most likely be less than by using conventional pipe replacement methodology.



[←BACK](#)

**Report of Committee Action  
Hearings**

**Committee Action:**

**Approved as Submitted**

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

**Assembly Action:**

**None**

**Final Action Results**

**P279-15 Part II**

**AS**

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[←BACK](#)

## Code Change No: **P226-15 Part II**

### Original Proposal

#### Section: P3114.8

**Proponent:** Guy McMann, representing Colorado Association of Plumbing and Mechanical Officials (CAPMO) (gcmann@jeffco.us)

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

#### Revise as follows:

**P3114.8 Prohibited installations.** *Air admittance valves* shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity or mechanical air intakes.

**Reason:** This type of installation is not consistent with the intended use of AAVs. These are still mechanical devices with a shelf life and are subject to failure even if the correct AAV for outdoor use is installed. Failures will result in sewer gas making its way into building openings. The correct remedy is to move or raise the vent.

#### Cost Impact:

Will not increase the cost of construction

There is no additional cost that would normally occur to correct a non-code compliant installation. This proposal attempts to circumvent the installation of a product against its' intended use as air admittance valves are a mechanical devices that will eventually fail.

### Report of Committee Action Hearings

#### Committee Action:

**Approved as Submitted**

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

#### Assembly Action:

**None**

### Final Action Results

**P226-15 Part II**

**AS**