

CENTRAL IOWA CODE CONSORTIUM
 PLUMBING, MECHANICAL & FUEL GAS COMMITTEE
 Armory-St. Etienne, 602 Robert D. Ray Dr., Des Moines, IA 50309
 October 10th, 2018 @ 2:00PM – 4:00PM
MINUTES

1. CALL TO ORDER:

- 2:00p.m. By Chair Brian Hamner

2. ROLL CALL

MEMBER	Present	Absent	
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk	X		
Jim Sanders		X	

3. AGENDA APPROVAL

- Motion to approve by: Gassman
- 2nd by: Patrick
- ROLL CALL

MEMBER	Present	Absent	
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk	X		
Jim Sanders		X	

4. PUBLIC COMMENT

- No Public Comment

5. APPROVE MINUTES FROM THE PREVIOUS MEETING

- 9/12/18 meeting cancelled
- 8/14/18 Minutes
 - Motion to approve by: Gassman
 - 2nd by: Rogers
- ROLL CALL

MEMBER	Present	Absent	
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk	X		
Jim Sanders		X	

6. AGENDA

1. UPC 402.5 Setting - Insert at the end of the Exception.

402.5 Setting. Fixtures shall be set level and in proper alignment with reference to adjacent walls. No water closet or bidet shall be set closer than 15 inches (381 mm) from its center to a side wall or obstruction or closer than 30 inches (762 mm) center to center to a similar fixture. The clear space in front of a water closet, lavatory, or bidet shall be not less than 24 inches (610 mm). No urinal shall be set closer than 12 inches (305 mm) from its center to a side wall or partition or closer than 24 inches (610 mm) center to center.

Exception: The installation of paper dispensers or accessibility grab bars shall not be considered obstructions; sanitary napkin receptor shall not be within the clear space of the water closet or bidet.

Amended

sanitary napkin receptor shall not be within the clear space of the water closet or bidet unless installed on the back wall.

Discussion: Some jurisdictions allow the receptor to be placed on the back wall. Although technically this is still considered part of the clear space, the committee felt it necessary to allow the dispenser to be installed in an area where it will not conflict with required clearances.

Clarification that sanitary napkin receptors are not a dispenser and my not be within the clear space of the water closet.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman Motion	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick 2nd	X		
Jason Merk	X		
Jim Sanders			

2. UPC 407.3 Limitation of Hot Water Temperature for Public Lavatories - **Modify the section.**

407.3 Limitation of Hot Water Temperature for Public Lavatories. Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F (49°C) by a device that complies with ASSE 1070/ASME A112.1070/CSA B125.70. The water heater thermostat shall not be considered a control for meeting this provision. These devices shall be installed at or as close as possible to the point of use.

Amended

Tempering devices shall be installed at or as close as possible to the point of use.

Discussion: Replacing these with Tempering is more prescriptive.

Clarification to where tempering devices are to be located. And a line with the State.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick Motion	X		
Jason Merk 2nd	X		
Jim Sanders			

3. UPC 408.4 Waste Outlet - Modify the section for showers.

408.4 Waste Outlet. Showers shall have a waste outlet and fixture tailpiece not less than 2 inches (50 mm) in diameter. Fixture tailpieces shall be constructed from the materials specified in Section 701.2 for drainage piping. Strainers serving shower drains shall have a waterway at least equivalent to the area of the tailpiece.

Exception: In a residential dwelling unit where a 2-inch waste pipe is not readily and approval for the Authority Having Jurisdiction has been granted, the waste outlet, fixture tailpiece, trap and trap arm may be 1 ½ inch when an existing tub is being replaced by a shower sized per Section 408.6(2). This exception only applies where one shower head rated at 2.5 gpm is installed.

Amended

Exception: In a residential dwelling unit where a 2-inch waste pipe is not accessible, and approval from the Authority Having Jurisdiction has been granted, the waste outlet, fixture tailpiece, trap and trap arm may be 1 ½ inch when an existing tub is being replaced by a shower sized per Section 408.6(2). This exception only applies where one shower head rated at 2.5 gpm is installed.

Discussion: Using accessible as defined in Chapter 2 clarifies the parameters of usage.

This Exception allows the use of a 1 1/2" existing drain in a retro fit tub to a shower installation in only private residences with the approval of the AHJ when extensive modification would be required to connect to a 2" drain. Typically, this would be for a location as to a 2nd floor or a finished basement where it would be difficult of connect to a 2" drain. And a line with the State.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman Motion	X		
Brian Rogers 2nd	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk	X		
Jim Sanders			

4. UPC 409.4 Limitation of Hot Water in Bathtubs and Whirlpool Bathtubs - Modify the section

409.4 Limitation of Hot Water in Bathtubs and Whirlpool Bathtubs. The maximum hot water temperature discharging from the bathtub and whirlpool bathtub filler shall be limited to 120°F (49°C) by a device that complies with ASSE 1070/ASME A112.1070/CSA B125.70. The water heater thermostat shall not be considered a control for meeting this provision. These devices shall be installed at or as close as possible to the point of use.

Amended

Tempering devices shall be installed at or as close as possible to the point of use.

Discussion: Replacing these with Tempering is more prescriptive.

Clarification to where tempering devices are to be located. And a line with the State.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers Motion	X		
Justin Jordan	X		
Dennis Patrick 2nd	X		
Jason Merk	x		
Jim Sanders			

5. UPC 410.3 Limitation of Water Temperature in Bidets - Modify the section

410.3 Limitation of Water Temperature in Bidets. The maximum hot water temperature discharging from a bidet shall be limited to 110°F (43°C) by a device that complies with ASSE 1070/ASME A112.1070/CSA B125.70. The water heater thermostat shall not be considered a control for meeting this provision. These devices shall be installed at or as close as possible to the point of use.

Amended

Tempering devices shall be installed at or as close as possible to the point of use.

Discussion: Replacing these with Tempering is more prescriptive.

Clarification to where tempering devices are to be located. And a line with the State.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers 2nd	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk Motion	X		
Jim Sanders			

6. UPC 418.3 Location of Floor Drains – Insert new language.

418.3 Location of Floor Drains. Floor drains shall be installed in the following areas:

- (1) Toilet rooms containing two or more water closets or a combination of one water closet and one urinal, except in a dwelling unit.
- (2) Commercial kitchens and in accordance with Section 704.3.
- (3) Laundry rooms in commercial buildings and common laundry facilities in multi-family dwelling buildings.
- (4) Boiler rooms.
- (5) Unless otherwise approved by the plumbing inspector, at least one floor drain or approved receptor shall be provided in each room where an automatic water heater is or will be installed and in each mechanical room. When installed in a basement floor, such floor drain shall be at least three inches in diameter. Floor drains in other locations may be no less than two inches in diameter. Every water heater shall be located in close proximity to a floor drain.

Amended

(5) At least one floor drain or receptor approved by the AHJ shall be provided in each room where an automatic water heater is or will be installed and in each mechanical room. When installed in a basement floor, such floor drain shall be at least three inches in diameter. Floor drains in other locations may be no less than two inches in diameter.

Discussion: A receptor approved by the AHJ would allow for other means of disposal from mechanical room equipment located above the basement floor level.

Provides requirements for a drain in a room equipped with a AWH for the drains associated with a AWH. An approved receptor could be a Floor Sink or an Hub style drain. A Hub drain has been very helpful in areas that require a T-rating as a replacement of a floor drain or floor sink, and a line with the state code for a floor drain in a room with a AWH.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman Motion	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk 2nd	X		
Jim Sanders			

7. UPC 604.0 Materials- Modification for Fire rated services. (Withdraw or Modify)

In areas served by Des Moines Water Works, water service materials shall comply with Des Moines Water Works regulations. PVC piping of four inches or larger may be used for service lines provided that it conforms to AWWA standard C 900 DR 14 and the following:

- (1) Tracer wire shall be installed with all water service lines except when the water service line is type K copper or red brass. The tracer wire shall be installed according to Des Moines Water Works' specifications
- (2) PVC shall not be used within five feet of a building

This give direction for contractors to follow DMWW rules and regulations for the installations of water services that are installing in areas serviced by DMWW. Areas that are not serviced by DMWW may have different rules and regulations.

This is no longer needed since there is now DR18 pipe that meets the 200# test rating.

Motion to withdraw.

Discussion: The committee determined the proposed language was covered in the code

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman Motion	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick 2nd	X		
Jason Merk	X		
Jim Sanders			

8. UPC 605.1.3.3 Push Fit Fittings – Modify

605.1.3.3 Push Fit Fittings. Removable and nonremovable push fit fittings for copper or copper alloy tubing or pipe that employ quick assembly push fit connectors shall comply with ASSE 1061. Push fit fittings for copper or copper alloy pipe or tubing shall have an approved elastomeric o-ring that forms the joint. Pipe or tubing shall be cut square, chamfered, and reamed to full inside diameter. The tubing shall be fully inserted into the fitting, and the tubing marked at the shoulder of the fitting. The fitting alignment shall be checked against the mark on the tubing to ensure the tubing is inserted into the fitting and gripping mechanism has engaged on the pipe. **Push fit shall not be permitted to be installed underground, in concealed space or within 18” of a water heater.**

We have had issues with these types of fittings being installed in these locations that have resulted in damage and added cost to the consumer.

Motion to deny

Discussion: Referring to manufacturer’s installation instruction, will allow installation in these locations.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan Motion	X		
Dennis Patrick 2nd	X		
Jason Merk	X		
Jim Sanders			

9. UPC 608.5 Discharge Piping- Modify the section

608.5 Discharge Piping. The discharge piping serving a temperature relief valve, pressure relief valve, or combination of both shall have no valves, obstructions, or means of isolation and be provided with the following:

- (1) Equal to the size of the valve outlet and shall discharge full size to the flood level of the area receiving the discharge and pointing down.
- (2) Materials shall be rated at not less than the operating temperature of the system and approved for such use or shall comply with ASME A112.4.1, **relief valve drains located inside a building shall not be of CPVC or PB.**
- (3) Discharge pipe shall discharge independently by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) and not less than 6 inches (152 mm) above the ground and pointing downwards.
- (4) Discharge in such a manner that does not cause personal injury or structural damage.
- (5) No part of such discharge pipe shall be trapped or subject to freezing.
- (6) The terminal end of the pipe shall not be threaded.
- (7) Discharge from a relief valve into a water heater pan shall be prohibited.

Amended

relief valve drain material and installation shall meet the manufactures approved temperature and pressure rating of the relief valve.

Discussion: The committee felt it necessary to provide prescriptive language that the relief valve material must meet the rating of the temperature and pressure of the relief valve

This is a clarification of the material allow for relief valve drains particularly on Water heaters.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman Motion	X		
Brian Rogers 2nd	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk	X		
Jim Sanders			

10.UPC 609.1 Installation - Modify the section

609.1 Installation. Water piping shall be adequately supported in accordance with Table 313.3. Burred ends shall be reamed to the full bore of the pipe or tube. Changes in direction shall be made by the appropriate use of fittings, except that changes in direction in copper or copper alloy tubing shall be permitted to be made with bends, provided that such bends are made with bending equipment that does not deform or create a loss in the cross-sectional area of the tubing. Changes in direction are allowed with flexible pipe and tubing without fittings in accordance with the manufacturer's instructions. Provisions shall be made for expansion in hot-water piping. Piping, equipment, appurtenances, and devices shall be installed in a workmanlike manner in accordance with the provisions and intent of the code. **Building supply yard piping wherever feasible shall be not less than 60 inches below earth cover. The cover shall be not less than 12 inches (305 mm) below finish grade.**

Amended

Building supply yard piping wherever feasible shall be not less than 60 inches below earth cover.

Discussion: 60" below earth cover is the recommended depth for our region. 12 inches below finish grade is already stated in the code

Clarification to water works rule and regs, and proposed State language.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan 2nd	X		
Dennis Patrick Motion	X		
Jason Merk	X		
Jim Sanders			

11.UPC 701.2 Drainage Piping – Exception (2) Insert language

701.2 Drainage Piping. Materials for drainage piping shall be in accordance with one of the referenced standards in Table 701.2 except that:

(2) ABS and PVC DWV piping installations shall be installed in accordance with applicable standards referenced in Table 701.2 and Chapter 14 “Firestop Protection.” Except for individual single-family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke-developed index of not more than 50, where tested in accordance with ASTM E84 or UL 723. **No ABS and PVC DWV piping shall be installed in the vertical position between Cast Iron piping.** These tests shall comply with all requirements of the standards to include the sample size, both for width and length. Plastic pipe shall not be tested filled with water.

Amended

ABS and PVC DWV piping may be installed in the vertical position between Cast Iron piping if supported properly and the cast iron does not impose a load on the vertical ABS or PVC piping.

Discussion: ABS and PVC are not designed to carry the load from vertical Cast iron pipe. However, if the cast iron is properly supported to not bear any load on the ABS or PVC. This provision would assist in repair and remodel applications.

ABS and PVC piping is not designed to bare the weight of cast iron piping. This addition clarifies that in the vertical position it would not be allowed, it may be allowed in the horizontal position because there is no cast iron weight baring on the ABS or PVC.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman Motion	X		
Brian Rogers	X		
Justin Jordan	X		
Dennis Patrick	X		
Jason Merk 2nd	X		
Jim Sanders			

12.UPC 701.2 Drainage Piping – Add exception (7) (Withdraw)

701.2 Drainage Piping. Materials for drainage piping shall be in accordance with one of the referenced standards in Table 701.2 except that:

(7) The use of SDR 23.5 is an acceptable material for [exterior] building sewers.

The design of site utilities by SUDAS allow for PVC pipe of Schedule SDR 23.5 as a sewer material.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner			
Chuck Gassman			
Brian Rogers			
Justin Jordan			
Dennis Patrick			
Jason Merk			
Jim Sanders			

13.UPC 715.1 Materials – Add language for Orangeburg piping. (Amended)

715.1 Materials. The building sewer, beginning 2 feet (610 mm) from a building or structure, shall be of such materials as prescribed in this code. **Compromised piping would consist of significant cracks, out of alignment piping, missing pieces from piping, and or fittings. If any portion of a bituminous fiber (“Orangeburg”) building sewer fails, the Orangeburg sewer shall be replaced in its entirety from the building to the public sanitary sewer with new sewer that fully complies with this Code.**

Amended

715.3 Existing Sewers. Replacement of existing building sewers and building storm sewers using trenchless methodology and materials shall be installed in accordance with ASTM F1216. Cast iron soil pipe and fittings shall not be repaired or replaced by using this method above ground or below ground. Replacement using cure-in-place pipe liners shall not be used on collapsed piping or when the existing piping is compromised.

Compromised piping is determined by the AHJ that would consist of significant cracks, out of alignment piping, missing pieces from piping, and or fittings. If any portion of a bituminous fiber (“Orangeburg”) building sewer fails, the Orangeburg sewer shall be replaced in its entirety from the building to the public sanitary sewer with new sewer that fully complies with this Code.

Discussion: By requiring the replacement of Orangeburg alleviates the problem of homeowners only replacing comprised sections of the building sewer prior to selling, leaving the new owners the bill to replace the remaining sewer when it fails. Additionally, there is no code approved transition coupling to Orangeburg piping.

Clarifies what compromised piping is and requires that Orangeburg sewers are replaced and not repaired. There are already jurisdictions in the area that require Orangeburg is replaced and not repaired.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers	X		
Justin Jordan 2nd	X		
Dennis Patrick	X		
Jason Merk Motion	X		
Jim Sanders			

14. UPC 717.1 General- Amend for sewer size.

717.1 General. The minimum size of a building sewer shall be determined on the basis of the total number of fixture units drained by such sewer, in accordance with Table 717.1. No building sewer shall be smaller than **4" in diameter and or** the building drain.

Houses being build most often are constructed with 3 finished bathroom groups. Some builders don't rough-in a future bathroom, and with those houses would only require a 3" building drain. If a home owner were to add a bathroom to the basement the 3" building drain would need to be increased. This adds a minimal cost to the construction.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner			
Chuck Gassman			
Brian Rogers			
Justin Jordan			
Dennis Patrick			
Jason Merk			
Jim Sanders			

15.UPC 718.3 Protection from Damage – Insert text for sewer protection.

718.3 Protection from Damage. No building sewer or other drainage piping or part thereof, which is constructed of materials other than those approved for use under or within a building, shall be installed under or within 2 feet (610 mm) of a building or structure, or part thereof, nor less than 1 foot (305 mm) below the surface of the ground. **Building sewers less than 42" below grade shall be cast iron pipe or be protected with an engineered system to prevent damage from freezing and frost heave.** The provisions of this subsection include structures such as porches and steps, whether covered or uncovered; breezeways; roofed porte cochere; roofed patios; carports; covered walks; covered driveways; and similar structures or appurtenances.

All PVC manufactures require their pipe to be installed below the frost line to some degree. This proposal gives the contractor or designer the ability have an engineered system to protect the PVC from the frost if they want to us PVC within the frost area instead of using Cast Iron. This proposal removes our liability and puts it on the Engineer.

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner			
Chuck Gassman			
Brian Rogers			
Justin Jordan			
Dennis Patrick			
Jason Merk			
Jim Sanders			

7. OTHER BUSINESS

- None

8. UPCOMING MEETINGS

- 11/14/2018, 1:00pm 1551 E. ML King Jr. Parkway, Mac Rae Room, Des Moines, Iowa 50309

9. ADJOURNMENT: 4:13PM

MEMBER	YEA	NAY	ABSTAIN
Brian Hamner	X		
Chuck Gassman	X		
Brian Rogers Motion	X		
Justin Jordan 2nd	X		
Dennis Patrick	X		
Jason Merk	X		
Jim Sanders			

Posted on 5/23/2018 at www.capitalcrossroadsvision.com/central-iowa-code-consortium and at the City of Des Moines Amory building 602 Robert D. Ray Dr., Des Moines, IA 50309

Form date - 7/25/15