

Plumbing Board
Product and Code Review Committee – Meeting Minutes
June 15, 2010 – 9:30 a.m.
Department of Labor and Industry
443 Lafayette Road No., Saint Paul, MN 55155-4344
DLI.CCLDBOARDS@State.MN.US

Committee Members Present:

John A. Parizek
Lawrence Justin
Jim Lungstrom
Allen Lamm
Karl Abrahamson

Board Members Present:

Ron Thompson

Visitors via Teleconference:

Jeremy Brown; NSF International
Michelle Park; EasyFlex
Tack Chong; Easy Flex
David Weisz, P.E. UV-System Inc.
Kelly Boaz, Benchmark
David Kimball, Benchmark
Jeff Thomas, Go Aerosol Spray Weld
Alan Shulman, Next Level

Committee Members Absent:

None

Staff Present:

Cathy Tran
Sandy Arndt (first ½ hour)

Visitors:

Chuck Higgins
Jay Stenklyft
Joe Ross
Bob Nicol
Brian Soderholm
Stuart Bennerotte
Alvin Kreutz
Rena Torborg
Craig Johnson
Jennifer Rademacher
PHCC Representative

I. Call To Order

The meeting was called to order by Chair Justin at 9:30 a.m. Announcements were made and introductions were done.

II. Approval of Meeting Agenda

Abrahamson made a motion, seconded by Lamm, to accept the Agenda. The vote was unanimous and the motion passed.

III. Regular Business

A. Mr. Jeremy Brown, NSF International, had some concerns on the 3/23/10 PCRC Meeting Minutes concerning the discussion on PB0042. Mr. Brown's specific concerns

were regarding the statement about NSF-14 being superseded by NSF-61. The PB0042 noted that clarification of this statement would be made during their presentation. The following statement was added to three locations in the minutes - Paragraph starting with "Presenter then proceeded into their presentation" – Item E and paragraph starting with "DLI Comments" – Item D at two locations:

Clarification of this statement was done at the 6/15/10 meeting; refer to 6/15/10 PCRC meeting minutes.

The above language was acceptable to Mr. Brown.

Mr. Brown also requested a copy of the information the PB0042 Presenters provided be sent to him. Copy was sent to Mr. Brown via email on 6/17/10.

Parizek moved to accept with revisions; Lamm 2nd; Karl & Jim abstain; passed 3-0.

- B. Prior to Mr. Brown departing, Ron Thompson had some questions concerning NSF 61 and 14.
1. Question: Briefly explain the difference between Standards 14 and 61:
Mr. Brown indicated that Standard 14 applies to plastic piping systems and Standard 61 applies to drinking water system health effects.
 2. Question: Would Standard 14 apply to plastic or other non-metallic components, such as o-rings in fittings of metal piping systems such as stainless steel pipe?
Mr. Brown indicated that it would not apply.
- C. Expense Reports – Parizek stated he has approved the expense reports and Per Diems that he has received.

IV. Special Business

A) RFA's

1. **4715.0420 Stainless Steel Pipe meeting ASTM A240 by Easyflex (Tele-Conference) (File PB0041 submitted 5/26/09; reviewed at 9/22/09 and 3/23/10 PCRC meeting).**

Michelle Park and Tack Chong (EasyFlex) participated via teleconference (714-258-2600 x104 - Presenters). There was no local representation present.

Chair requested Committee to review the 3/23/10 meeting minutes concerning this item.

Chair covered the 5/5/10 Letter with Response in revised RFA.

Presenters covered their 5/27/10 email response to Ms. Tran's questions:

1. All of the Easy Flex fittings meet IGC 233-2009 standards and have been indicated in their RFA.
2. Can an installer buy EASYFLEX pipe and use other manufacturer's fittings to install?
Answer: Easy Flex requires installers to use their fittings with their pipes.
3. How does the installer assure compliance with IAPMO IGC 233?
Answer: Easy Flex provides installation guides based on IAPMO standards.
4. Does the installer have to be factory trained or trained by the manufacturer to install this piping and fitting system?
Answer: Easy Flex does not require factory or manufacturer training to install their piping and fitting system. If a plumber can install copper pipes, Easy Flex system is easier than copper to install.

Extensive discussion occurred with some Committee and Staff Questions below:

What is the coating for?

Answer: Coating is for identification, blue for cold and red for hot.

Is product intended to be used for inside the building or can it be used for service piping?

Answer: Intent is for inside of building, not service line.

Where is the product manufactured?

Answer: South Korean Manufacturer.

Can the corrugation cause turbulence and thus erosion?

Answer: Has been studied extensively with no noticeable effect. Supporting documentation can be supplied; Committee requested documentation be provided.

Does Easy Flex require their pipe and fitting be used only on their piping?

Answer: Yes and is intended to be used as a system.

Are there other manufacturers who make this product?

Answer: Easy Flex is the only one presently in the U.S. but there are others in Asia. More competition will occur in time.

Can pipe and joint be concealed and imbedded in concrete?

Answer: Can be concealed and imbedded in concrete. In Korea it is used for radiant floor piping imbedded in concrete.

What is the lead content of the brass?

Answer: Complies with California and Vermont lead free requirements.

In review of IAPMO IGC-233, it calls that the product shall be installed as a system but section 4.4 allow push-on fittings (Minnesota only allows for copper - 4715.0805). Does Easy Flex have a push-on fitting to their pipe?

Answer: Presenter noted that their connection to the Easy Flex pipe is not push-on. Push-on is for copper connection.

Is this a patented system?

Answer: Yes.

DLI and Committee Comments:

DLI has concerns on how to enforce that the correct joint is used on the correct pipe.

RFA does not indicate product is a system. If a system, then rule would need to specify the details of the system.

Only Standard referenced is A312/312M (Stainless Steel Pipe), does not reference NSF-61. Language of IAPMO IGC-233 is for joint, not piping. Recommend adding NSF-61 to 4715.0420 2C(c) to the RFA.

Still a large number of concerns on the product that needs to be further reviewed.

Motion on the RFA was requested and none were made.

Chairman noted that if Presenter wants to come back to the Committee, they can with clarification of the items discussed in the meeting. Chairman also noted that Presenter can proceed to the Plumbing Board, if they request.

After further discussion, the Presenter noted that they would like to come back to the Committee on September 21, 2010.

Committee Chair will author a letter with the following recommendations:

1. Add NSF-61 to 4715.0420
2. Provide a sample of the Easy Flex push-on fitting for copper. Need language to address push-on fittings concerning the Minnesota Plumbing Code restriction on copper only (4715.0805).
3. Provide supporting documentation of erosion/velocity testing.
4. Easy Flex to submit for Committee review a sizing chart for their product. Since the nominal size and flow characteristics of the pipe are not the same as the other materials in the Minnesota Plumbing Code, the Committee will compare it to the Minnesota charts to see if the Easy Flex pipe system size

requirements match up with the Minnesota code or if revised sizing charts are required.

5. Fittings and pipe need to be clearly marked on which standards they meet for ease of inspections.
6. Committee and Staff prefer to have the RFA written such that the material needs to be a "system". Presenter to review the Language in Minnesota Plumbing Code 4715.0520L as an example of language concerning PEX piping "system". Presenter to provide initial language to Ms. Tran for coordination.

Due to some of the presenters needing to depart, PB0044 was requested to be moved up to item IVA2 in lieu of IVA3. Motion made by Justin, seconded by Parizek; unanimous voice vote.

2. 4715.2790 (New section) Siphonic Roof Drains (File PB0044, submitted 8-23-09.)

Presented by Jay Stenklyft of Tyler Pipe/Wade Drain. Craig Johnson (Mechanical Engineer), Jennifer Rademacher PE (Target Structural Engineer) and Renae Torborg PE (Target Mechanical Engineer) were present to assist in the presentation. Kelly Boaz and David Kimball of Benchmark (479-636-5004) and Jim David Weisz, P.E. UV-System Inc. (510-333-1990) participated by Teleconference.

The Presenter provided a flash drive with supporting documentation.

Committee Chair reviewed the letter sent dated May 11, 2010 to the presenter.

Committee Chair reviewed the letter sent dated May 31, 2010 from the Presenter to DLI.

Discussed Subp. 2D, specifically concerning "controlled flow", ponding of water and the structural concerns with this.

Jennifer Rademacher reviewed a description of structural design in Minnesota. There was discussion concerning the amount of water collecting on the roof for a Siphonic system and subsequent structural.

Motion: Justin moved, Seconded by Lamm, to delete the strikethrough language and accept the underline language below:

- D. ~~The roof when designed for water accumulation for controlled flow, the roof must be for the maximum possible water accumulation in accordance with the Minnesota Building Code, Chapter 1305 and 4715.2780, subpart 1 C.~~ Confirm with the structural engineer the roof loading is capable of supporting a siphonic roof drainage system.

Vote: Aye: Justin, Lamm

Nea: Parizek, Lungstrom
Abstain: Abrahamson
Motion Failed due to not receiving a majority.

Motion: Justin moved, Seconded by Lamm, to revise 2D as noted below:

- D. ~~The roof w~~When designed for water accumulation ~~for controlled flow~~, the roof must be designed for the maximum possible water accumulation in accordance with the Minnesota Building Code, Chapter 1305 and 4715.2780, subpart 1 C.

Vote: Aye: Unanimous
Nea: none
Abstain: none
Motion Passed.

Discussed Subp. 2E. The Standard allows 1 1/2" minimum pipe size. A video was provided showing water flow with pine needles to simulate a roof with limited maintenance. No clogging was shown. A second video was shown indicating flow of a Siphonic system. After further review, DLI did not have issues with the language.

Motion: Parizek moved, Seconded by Justin, to accept language as noted below:

- E. Minimum ~~roof drain and~~ pipe size must be 1 1/2 2-inches. All other pipe size and cleanouts in the drainage system must be designed and installed in accordance with ASPE 45.

Vote: Aye: Unanimous
Nea: none
Abstain: none

Motion Passed.

Discussed Subp. 2I specifically concerning the location of the transition from Siphonic to gravity and venting of the Siphonic to gravity transition point. After extensive discussion, there was no motion made. Committee direction was for presenter and Staff to review for word-smithing concerning interior transition and venting of this transition.

Discussed Subp. 2K concerning use of Siphonic system for the secondary (emergency) overflow drain.

Motion: Lamm moved, Seconded by Justin, to delete 2K in its entirety and as noted below:

~~K. Secondary roof drainage system must not be a siphonic roof drainage system.~~

Vote: Aye: Parizek, Justin, Lamm
Nea: Lungstrom
Abstain: Abrahamson

Motion Passed.

Based on the above, the Presenter noted that they would like to come back to the Committee on September 21, 2010.

Committee Chair will author a letter outlining what was discussed at meeting with direction.

Meeting was adjourned for lunch at 1:00 PM.

Meeting was called to order by Chair Justin at 1:45 P.M.

3. 4715.0810. Go Aerosol Spray Weld for PVC pipe. (File PB0042 submitted 6-22-09. reviewed at 12/1/09 PCRC meeting)

Jeff Thomas (Go Aerosol Spray Weld; 614-551-5974) and Mr. Jeremy Brown (NSF International) participated via teleconference. Mr. Bob Nicol was present locally.

Chair reviewed the 5/4/10 Letter with the Presenters response.

Discussed the statement made at the 3/23/10 PCRC meeting that NSF 14 is superseded by 61. Mr. Brown described the relationship between NSF-14 and 61 and noted that NSF does not recommend the reference of NSF-14/61 to be removed from the code.

Apparently there was confusion by the Presenter concerning NSF-61 and 14 and Mr. Thomas noted that they are not recommending removing any reference of NSF-61 or 14.

It was noted that at the 1/19/10 Plumbing Board Meeting, the Plumbing Board voted on that any submitted RFA's include the product standard that it meets and be listed as a mandatory standard in both the IPC and UPC before they will be considered by the Plumbing Board. The product is presently not Listed in the IPC or UPC. Plumbing Board is accepting products only that are listed in the national Codes.

The Presenter noted that their product has an IAPMO IGC classified listing for one-step process. The Presenter noted that they are in the process of writing a Standard and thus getting UPC/IPC approval.

Committee recommended that the Presenter come back to the Committee after they have a Standard written and listed in both IPC and UPC.

Committee Chair will author a letter outlining what was discussed at meeting with direction.

4. 4715 Standards for Plumbing Equipment Installation by Alvin Kreutz (File PB0046 submitted 10/28/09).

Presenter covered his RFA. Recommend for the State of Minnesota Plumbing Code to provide a one source document for installation and material standards.

Committee members agreed with the need. Committee recommended staff to look at 4715.2100 by listing standards for the backflow preventer and present to the Plumbing Board.

Motion: Parizek moved, Seconded by Abrahamson, to pass PB0046 onto Plumbing Board with recommendation from DLI as where process of addressing Standards in Code can begin.

Vote: Aye: Unanimous
Nea: none
Abstain: none

Motion Passed.

5. 4715.1900 Prohibition of water powered sump pumps by Alan Shulman (via teleconference – 847-415-6400 x 1-11#) and Joe Ross, Next Level (File PB0048 submitted 2/22/10).

Presenter provided a description of the water powered sump pumps and reviewed their submittal and why they thought these pumps should be prohibited.

Committee and Staff discussion covered:

1. This can be considered a water conservation issue and the Plumbing Code does not address this specific issue. This is more likely covered by some other state department like the DNR. It was noted that DNR would be the department but would only look at when 10,000 gallons per day or 1,000,000 gallons per year is used.

2. Misuse of use is addressed in the Plumbing Code and the requirement of an RPZ is also called for. An RPZ is required to be tested yearly and replaced/rebuilt every 5 years.
3. It was noted by the Presenter that National or State codes do not specifically prohibit the product; some cities prohibit the product.

Motion: Abrahamson moved, Seconded by Lamm, to pass PB0048 onto Plumbing Board General Counsel for review of the RFA and provide comment on if the Plumbing Board can prohibit water powered sump pump and report back at the next PCRC meeting (9/21/10).

Vote: Aye: Unanimous
Nea: none
Abstain: none

Motion Passed.

V. Open Forum

There were no requests for Open Forum.

VI. Discussion

There were no further discussions.

VII. Announcements

- A. Next Regularly Scheduled Meeting:
September 21, 2010, 9:30 AM – Minnesota Room, DLI

XI. Adjournment

A motion was made by Abrahamson, seconded by Lamm to adjourn the meeting. The vote was unanimous and the motion passed. The meeting adjourned at 3:30 p.m.

Respectfully Submitted,

Lawrence Justin

Lawrence Justin