

October 21, 2008

Ms. Gabriella Davis
Sr. Director of Worldwide Operations
5001 East Philadelphia Street
Ontario, CA 91761



**RE: FCIA Appeal to Standards Council and request for Hearing
Item #187, requirement for ASME A112.20.2 ANSI Qualification for Installers of
Firestop Systems and Devices for Piping Systems**

Dear Ms. Davis,

The Firestop Contractors International Association attended recent IAPMO Hearings where the 2009 Plumbing Code was voted on by the membership in attendance. The purpose of this letter is to submit a written Appeal to the IAPMO Standards Council to overturn the assembly action that overturned the committee and approved Item #187, as submitted. FCIA petitions the council to have the Item Approved as Modified by Public Comment #2 or #3.

FCIA testified against and notes that the substantive issue in the floor motion to add a reference to the "ASME A112.20.2 Qualification of Installers of Firestop Systems and Devices for Piping Systems" in Chapter 14, linking it to Chapter 1503.1 is that the change now mandates that a 4 year experienced plumber shall be the only qualified individuals to install firestopping around piping system in buildings under the IAPMO Plumbing Code.

FCIA respects the plumbers' role in protecting the health of the nation in plumbing science. However, we believe that firestopping is fire science, not plumbing science, and that the plumber with education in the ASME A112.20.2 is not capable of recognizing the correct and incorrect installation of firestopping systems. FCIA also believes the standard is flawed, as it extends the plumber into treating pipes that are not plumbing pipes as well, and does not belong in the Uniform Plumbing Code.

Below is our argument setting for the grounds for the appeal in attachment A. More attachments. FCIA requests the committee action for 'As Modified', in Denver, May 2008 be upheld, and the assembly action in October for 'As Submitted', denied.

Please let us know as soon as possible the time of the hearing so we may attend.

Yours very truly,

Bill McHugh
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Attachment A– Argument setting forth grounds for Appeal to ITEM #187 Approval

1. Item #187 Mandates using a Plumber for Firestopping - Item 187 requires the use of Standard, ASME A112.20.2-2004, Qualification of Installers of Firestop Systems and Devices for Piping Systems”, which limits who can install firestopping around piping. Firestopping installation is limited in 8.2 to a worker who "shall have a minimum four years of documented practical experience, recognized by the ISO/IEC 17024 ANSI-accredited third party certifier, in the installation of piping systems".

The now approved Item #187, requires ASME A 112.20.2 for all firestopping referenced in Chapter 15 of the Uniform Plumbing Code. ASME A 112.20.2 requires that a journeyman plumber be the only person who can install firestopping around piping of all types. In our opinion, this means the plumbing trade used the UPC Plumbing Code to eliminate ALL other already experienced and effective installers of firestop systems, replacing them with journeymen plumbers who may not have the education nor experience necessary to provide fire and life safety in buildings. There is no technical justification to mandate a plumbing workforce be the only installers for firestopping around piping penetrations, no statistics that prove them better qualified than a specialty firestop contractor employee from another trade. This code change result will be that the plumbing unions will require that plumbing contractors install firestopping, a liability that many do now want. Most important, see below for statistical performance of those who install firestopping as a second trade vs. those who do not, and resulting statistics.

2. Item #187 extends plumbers jurisdiction into electrical systems.

The definition of ‘piping’ from the Free Dictionary, shows that this also extends the plumbing worker into electrical and other piping work, since piping is not limited to plumbing. Definition - pip·ing $\text{ˈ}(\text{p}^{\text{ɪ}}\text{ˈ} \text{p}^{\text{ɪ}}\text{ŋ})$. 1. A system of pipes, such as those used in plumbing. <http://www.thefreedictionary.com/piping> .

3. Item #187 Restricts Free Market Competition

This new reference to ASME A 112.20.2 in the IAPMO 2009 Plumbing Code creates a fire and life safety risk to building occupants because it uses the code to mandate one trade installing a product over another. The result is that it limits the firestop systems purchaser, building owner & manager, general contractor, the freedom to choose who performs firestopping installation services. This restriction is due to the referenced to ASME A 112.20.2 standard, which requires a journeyman plumber be the only person that can apply firestopping inside the space between the wall and the penetrating item. Clearly, this is restraint of trade. See below for information about the State of Washington’s Firestop / Containment Worker Apprenticeship Program, where there's a choice allowed of journeyman and apprentices to maximize use of a qualified workforce while developing new people in the industry.

4. Item #187 Mandates higher installed costs

This requirement will be used by union officials to mandate a journeyman plumber, at increased cost over the insulators, caulkers, firestop / containment workers, and others who install firestopping around piping.

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5. ASME A112.20.2 is an inadequate standard. – This standard is flawed in several ways. We were involved in the development, disagreed with several items, participated in the public comment process to correct the standard.

Even with including several of our comments, the standard is still not appropriate for mandatory use by the plumbing code as our major objections were voted down by those wishing to mandate the plumber by a standard, then insert it into the plumbing code.

First, it mandates one trade over another, requiring a 4 year journeyman plumber to install all firestopping around piping. Secondly, the 32 hour education requirement is not appropriate for training firestop workers.

FCIA believes, and the State of Washington agrees, that the Firestopping Trade is apprenticeable and recognized by 4 year apprenticeship towards becoming a firestop / containment worker to assure fire and life safety in buildings. This Washington Adaption, including a rigorous exam for journeyman status, shows that a short 32 hour class on firestopping is inadequate for the firestopping industry.

Third, the specific language in ASME A112.20.2, 8.1, states that "Certification shall include successful completion of a minimum 32 hr. training course ... that includes a written and practical examination covering all facets of this standard".

This '32 hour training course' education is for plumbing only, and not nearly enough to hold a worker accountable for a fire safe installation. Also, Firestopping around 'piping' will be misunderstood in the marketplace, as many purchasers will understand the piping to include electrical and communications, and other piping clearly outside the education and training of the journeyman plumber. Finally, what test is given, written by whom?

7. Statistics and Research Show Trades not qualified to install firestopping.

A recent study has shown how often 'trades', including plumbers, install firestopping correctly, vs. specialty firestop contractors employing their own workers, union or non-union, as they choose:

- FM Approved Specialty Firestop Contractors & Specialty Firestop Contractors –
Installations are 90% Correct
- Trade Contractors – Installations are 32% correct

Not only does this IAPMO Code Requirement for ASME A112.20.2 mandate use of the worker who installs a firestop system wrong 68% of the time, it eliminates those workers who install firestopping right 90% of the time, just because they do not have 4 years experience in plumbing piping. This is a large risk to fire and life safety in buildings.

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8. ASTM Inspection of Firestop Systems required of Jurisdiction – The ASTM E 2174 Inspection Standards This Inspection is a major cost burden for any municipality, large or small. In ASME A112.20.2, 1.3, this standard mandates inspection per ASTM E2174. While a great standard, it would require the plumbing official to either witness 10% of all firestopping types, no less than one of each type, or destructively examine 2% of each type of firestop, no less than one of each type. This requirement will cause extra cost to the municipality, and ultimately the building owner. It also includes ALL PIPING. Piping is electrical, mechanical, and plumbing piping, well beyond the scope of the ASME A 112.20.2 document.

9. Washington State 4 Year Firestop Apprenticeship Program - Firestopping is a very technical trade, requiring firestop systems knowledge from the Underwriters Laboratories, Factory Mutual, Omega Point Laboratories and other directories. This systems knowledge is a complete understanding of the **fire science** of the wall, floor assembly, the penetrating items, and the space around the penetrating item. Additionally, knowledge of fire and smoke resistance ratings, and field application knowledge to install properly are integrated into a ‘zero tolerance, zero variance’ culture of worker, unlike most trades where ‘construction tolerances’ are acceptable. The Firestop / Containment Worker Apprenticeship Program in Washington requires 8000 hours of on the job training and **144 hours of classroom training per year** to qualify. The ASME A 112.20.2 Standard only requires a 32 hour education program with no on the job training as a requirement. Most union organizations provide a seminar given by manufacturers for a short 8 hours to apprentices on firestopping currently.

10. FCIA Participation in ASME A112.20.2 Standard Development - FCIA Participated in the development of the ASME A112.20.2. And, we made many suggestions attempting to bring credibility to the standard. However, our biggest objection, the requirement for a journeyman plumber to install firestopping, was overruled by an ASME committee dominated by the plumbers and plumbing manufacturers.

Although FCIA participated in the Standards Development Process, we formally objected to it's development in the first place through a presentation at an ASME Committee Meeting in Orlando, FL. We recognized that the United Associations' (Plumbers Union) Sid Cavanaugh, chair of ASME A112.20.2 objective was to have the document mandate Plumbing union personnel for firestopping. When the key vote came to remove the mandate for a plumber, FCIA and the Firestopping industry were overruled by the overwhelming abundance of plumbers union and manufacturers that supply piping to them mandating themselves work.

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FCIA objected to the final version of the standard, and wrote the Project Team and ASME Staff about the standard faults. ASME A112.20.2 is written specifically for one plumbing trade to install firestopping around piping penetrations. Piping penetrations include electrical, communications, mechanical and plumbing penetrations, extending reach of this standard far beyond the scope stated in responses to our negatives. (See letter written April 24, 2003, sec. 1A, 2, and negatives) Secondly, firestopping is fire science, not piping science. And, trades other than firestop / containment workers have a dismal quality record in firestopping, getting it right only 32% of the time...

10. Conflict with the Building Code & Specifications – FCIA sees that this new requirement will be in conflict with the building codes throughout the world. Firestopping is referenced in a separate section of each building code. Final Jurisdiction sits with the building official as this is a fire and life safety item related to general construction and not plumbing. Specifications for firestopping are in 07-84-00, Firestopping, in MasterFormat. Since specifications state requirements in one section, the plumber will not have the specifications for firestopping, with all the detailed requirements completely missing from the plumbers bid package.

Appeal to Standards Council - Respectfully submitted,

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