



BUILDINGS BULLETIN 2011-002
OTCR

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Purpose: This document establishes acceptance criteria for the use of mechanical press joint fittings and piping in automatic sprinkler systems in accordance with the 2008 NYC Construction Codes.

Related Code Section(s):

AC 28-113.2.3	BC Q102
BC 903.3.1	BC Q103
BC 903.3.2	BC Q104

Subject(s): Automatic sprinkler system, mechanical joint, press joint; Automatic sprinkler system, fittings and piping, mechanical press joint

Background: NFPA 13 (Section 6.4.3), 13D (Section 5.2.91.), and 13R (Section 5.2.10.1), as modified by Appendix Q permit the use of other types of fittings and piping investigated for suitability in automatic sprinkler systems when installed in accordance with their listing and manufacturer's installation instructions.

Description: A mechanical press joint fitting and piping is a permanent connection used in automatic sprinkler systems. The press joint has an elastomeric seal, with or without a corrosion resistant grip ring. The joint is constructed by inserting the pipe into the fitting and pressing with an approved pressing tool. This bulletin specifically addresses copper, carbon steel and stainless steel mechanical press joint fittings and piping used in automatic sprinkler systems.

Uses: Mechanical press joint fittings and piping may be used for above ground automatic sprinkler systems' piping manufactured from copper, carbon and stainless steel.

Evaluation Scope: 2008 NYC Construction Codes

Evaluation Criteria: Pursuant to section AC 28-113, the Office of Technical Certification and Research recognizes mechanical press joint fittings and piping for automatic sprinkler systems tested, and evaluated in accordance with FM Approval, class number 1920, "Approval Standard for Pipe Coupling and Fitting for Aboveground Fire Protection Systems." ¹ All press style pipe used in connection with such mechanical press joint fittings shall be manufactured in accordance with table 1.2.9 of FM 1920. Acceptable mechanical press joint fittings and piping for automatic sprinkler systems shall be listed and labeled by an approved agency in accordance with section AC 28-113.2.3 and shall comply with the conditions of this bulletin.

Conditions of Acceptance: Mechanical press joint fittings and piping for automatic sprinkler systems shall be designed and installed in accordance with the 2008 NYC Construction Codes and other applicable provisions including but not limited to the following:

A. Design

1. Mechanical press joint fittings and piping for automatic sprinkler systems shall be specified in accordance with the manufacturer's recommendation and the conditions of the listing.

B. Installation Requirements

1. Installation requirements shall be in accordance with the manufacturer's instructions, the applicable listing, and the conditions of this bulletin.
2. Installation shall be performed by a licensed master plumber or fire suppression contractor.
3. Pipe and fittings shall be of the same material.
4. Galvanized carbon steel (C-Steel) pipe and fittings are approved for use in wet automatic sprinkler system installation only. Copper and stainless steel (S-Steel) pipe and fittings are approved for use in wet and dry automatic sprinkler system installation.
5. Mechanical press joint fittings must be installed using tools approved by the listing agency and the manufacturer. Tools must be sized correctly for piping installation.
6. Mechanical press joint fittings and piping for automatic sprinkler systems shall be labeled as per section AC 28-113.4. All shipment and deliveries of materials shall be accompanied by a label certifying the material shipped or delivered are equivalent to those tested and approved.

C. Maintenance

1. Maintenance shall comply with all applicable requirements of New York City Fire Code, New York City Construction Codes, the Rules of the City of New York, and NFPA 13, 13D, and 13R as modified by Appendix Q.
2. Maintenance shall comply with the manufacturer's instruction and the applicable listing.

Referenced Standards: 1. FM Approval, Class number 1920, November 2007 – *“Approval Standard for Pipe Couplings and Fittings for Above ground Fire Protection Systems.”*