NYC Buildings Department
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BUILDINGS BULLETIN 2013-008
OTCR

Supersedes: Buildings Bulletin 2012-010 dated August 21, 2012

Issuer: Alan Price, P.E.
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Issuance Date: June 13, 2013

Purpose: This document establishes acceptance criteria for flexible fuel-oil piping systems as alternative materials to the 2008 NYC Construction Code.

Related Code/Zoning Section(s):	AC	28-113.2.1	MC	1301
	AC	28-113.2.2	MC	1302.3
			MC	1305.9

Subject(s): Fuel oil, fuel oil piping; Fuel oil, fuel oil piping, flexible ; Fuel oil piping, flexible , continuous leak detection

Background: Table MC 1302.3 of the 2008 NYC Mechanical Code lists code-prescribed materials and applicable standards for fuel-oil pipes. This bulletin establishes the acceptance criteria for flexible fuel-oil piping systems with continuous leak detection as an alternative to the code.

Description: This bulletin covers flexible fuel-oil piping systems consisting of a metallic primary carrier and secondary containment. This may include a single or double metallic piping system encased with outer polymer jacket.

Evaluation Scope: 2008 NYC Construction Codes

Evaluation Criteria: Pursuant to section AC 28-113, the Office of Technical Certification and Research (OTCR) recognizes flexible fuel-oil piping system tested, and evaluated in accordance with ULC-S667-11 "*Metallic Underground Piping for Flammable and Combustible Liquids*."[1] Acceptable flexible fuel-oil piping 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.

Uses: Flexible fuel-oil piping systems may be used for transferring fuel oil below ground pursuant to MC Chapter 13 of the 2008 NYC Mechanical Code. Above ground use in accordance with section (A) (2) or (A) (3) of this bulletin shall be permitted.

Conditions of Acceptance: Flexible fuel-oil piping systems shall comply with the 2008 NYC Construction Codes and the following applicable provisions:

A. Design

1. Flexible fuel-oil piping systems shall be designed in accordance with the 2008 NYC Construction Codes, manufacturer's recommendation, and the conditions of the required listing.
2. Where installed above ground, flexible fuel-oil piping systems shall be enclosed in two hour fire-resistance-rated construction in accordance with section MC 1305.9 and installed in accordance with applicable sections of the 2008 NYC Construction Codes and the NYC Fire Code.
   2.1 Horizontal offsets shall comply with section MC 1305.9.3.
   Exception: Double metallic flexible fuel-oil piping systems installed as a horizontal offset are not be required to be enclosed in a metallic sleeve.
3. Flexible fuel-oil piping systems may be used above ground for conveying fuel oil at the roof level, and at marina or aviation installations, if such systems are double metallic piping with polymer protective cover for protection from exterior exposure to the elements. A fire-resistance-rated enclosure shall not be required for such applications.
4. Flexible fuel-oil piping systems shall be installed with continuous leak detection.

B. Installation Requirements

Installation requirements shall be in accordance with the manufacturer's instructions, the applicable listing, and the conditions of this bulletin.

C. Inspections

Pursuant to sections BC 1704.16 and BC 1704.13, the installation of flexible fuel-oil piping systems shall be subject to special inspection requirements of BC Chapter 17 and Department Rules covering special inspection. Special Inspectors of flexible fuel-oil piping systems shall:

1. Maintain the same qualification requirements for the "Fuel-oil storage and Fuel-oil piping system" category as defined in 1 RCNY section 101-06, Appendix A.

2. Have duties and responsibilities in accordance with, but not limited to 1 RCNY section 101-06 and section BC 1704.16.

3. Complete the statement of special inspection by referencing this bulletin under the Special Inspection Item for "Alternative Materials" in section 3.0 of the TR1 form.

☐	Wood - Installation of Metal-Plate-Connected Trusses		BC 1704.6.3
☐	Wood - Installation of Prefabricated I-Joists		BC 1704.6.4
☐	Soils - Site Preparation		BC 1704.7.1
☐	Soils - Fill placement & In-Place Density		BC 1704 .7.2, BC 1704.7.3
☐	Soils - Investigations (Borings/Test Pits)	TR4	BC 1704.7.4
☐	Pile Foundations & Drilled Pier Installation	TR5	BC 1704.8
☐	Pier Foundations		BC 1704.9
☐	Underpinning		BC 1704.9.1
☐	Wall Panels, Curtain Walls, and Veneers		BC 1704.10
☐	Sprayed Fire-Resistant Materials		BC 1704.11
☐	Exterior Insulation Finish Systems (EIFS)		BC 1704.12
☐	Alternative Materials - OTCR Buildings Bulletin # 2013-008		BC 1704.13
☐	Smoke Control Systems		BC 1704.14
☐	Mechanical Systems		BC 1704.15
☐	Fuel-Oil Storage and Fuel-Oil Piping Systems		BC 1704.16
☐	High-Pressure Steam Piping (Welding)		BC 1704.17
☐	Fuel-Gas Piping (Welding)		BC 1704.18

D. Labeling

Flexible fuel-oil piping systems with continuous leak detection system shall be labeled as per section AC 28-113.4. All shipments and deliveries of materials shall be accompanied by a certificate or label certifying that the materials shipped or delivered are equivalent to those tested and approved.

Referenced Standards:

1. ULC-S667-11 *"Metallic Underground Piping for Flammable and Combustible Liquids"*