



BUILDINGS BULLETIN 2014-010
OTCR

Supersedes: Buildings Bulletin 2012-010 dated August 21, 2012, Buildings Bulletin 2013-008 dated June 13, 2013

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

Related Code/Zoning Section(s):	AC 28-113.2.1	MC 1301	BC 707 (708)*
	AC 28-113.2.2	MC 1302.3	BC 1704.13 (1704.14)*
	1 RCNY 101-06	MC 1305.9	BC 1704.16 (1704.17)*

*parenthesis denotes corresponding section of 2014 NYC Construction Codes

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 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: 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 as follows:

- Below ground pursuant to MC Chapter 13 of the NYC Mechanical Code.
- Above ground use in accordance with section (A) (2) or (A) (3) of this bulletin.

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

A. Design

1. Flexible fuel-oil piping systems shall be designed in accordance with the NYC Construction

Codes, manufacturer's recommendation, and the conditions of the required listing in accordance with the Evaluation Criteria section of this Bulletin.

- Where installed above ground, flexible fuel-oil piping systems shall be installed in a shaft constructed of 4-inch concrete or masonry in accordance with section MC 1305.9 and installed in accordance with applicable sections of the NYC Construction Codes and the NYC Fire Code.

Exception for double metallic wall piping: Double metallic flexible fuel-oil piping systems may be installed in a 2-hour fire-resistance rated shaft enclosure complying with sections BC 703.2 and BC 707 (BC 708).

2.1 Horizontal offsets shall comply with section MC 1305.9.3.

Exception for double metallic wall piping: If a double metallic flexible fuel-oil piping system is installed as a horizontal offset, such piping system need not also be enclosed in the minimum No. 10 standard Gage steel sleeve referenced in this section.

- 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.
- 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. Special Inspections

The installation of flexible fuel-oil piping systems shall be subject to special inspection requirements pursuant to sections BC 1704.16 (BC 1704.17), BC 1704.13 (BC 1704.14), and 1 RCNY 101-06. Special Inspectors of flexible fuel-oil piping systems shall:

- 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.
- Have duties and responsibilities in accordance with, but not limited to 1 RCNY 101-06 and section BC 1704.16 (BC 1704.17).
- Complete a statement of special inspection within which this bulletin shall be referenced under the Special Inspection Item for "Alternative Materials" in section 3.0 of the TR1 form.

<input type="checkbox"/>	Structural Steel	BC 1704.10		
<input type="checkbox"/>	Wall Panels, Curtain Walls, and Veneers	BC 1704.10		
<input type="checkbox"/>	Sprayed Fire-Resistant Materials	BC 1704.11		
<input type="checkbox"/>	Exterior Insulation Finish Systems (EIFS)	BC 1704.12		
<input type="checkbox"/>	Alternative Materials - OTCR Buildings Bulletin # 2014-010	BC 1704.13		
<input type="checkbox"/>	Smoke Control Systems	BC 1704.14		
<input type="checkbox"/>	Mechanical Systems	BC 1704.15		
<input type="checkbox"/>	Fuel-Oil Storage and Fuel-Oil Piping Systems	BC 1704.16		

D. Labeling

Flexible fuel-oil piping systems with continuous leak detection system shall be labeled as per section AC 28-113.4.

Referenced Standards: 1. ULC-S667-11 "Metallic Underground Piping for Flammable and Combustible Liquids"