BUILDINGS BULLETIN 2015-021

OTCR

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Purpose: This document establishes acceptance criteria for above-ground nonmetallic fuel-oil storage tanks as alternative equipment in the NYC Construction Codes.

Related Code Section(s): 
AC 28-113.2.2  
MC 1301

Related Buildings Bulletin(s):  
2011-026

Subject(s): Fuel oil, storage, above-ground; Fuel-oil, storage tank, nonmetallic; Fuel-oil storage tanks, testing

Background: The NYC Mechanical Code does not directly address the use of above-ground nonmetallic fuel-oil storage tanks. The Mechanical Code recognizes NFPA 31\(^1\) for testing of fuel-oil storage tanks. Since section 7.2.7.1 of NFPA 31-2011 recognizes nonmetallic fuel-oil storage tanks constructed in accordance with UL subject 2258\(^2\), this bulletin establishes the acceptance criteria for above-ground, nonmetallic fuel-oil storage tanks based on these references.

Description: Above ground nonmetallic fuel-oil storage tanks are constructed of a nonmetallic primary tank and metallic secondary

Uses: Above ground nonmetallic fuel-oil storage tanks are used to store and supply fuel oil for heating purposes.

Permissible applications: Above ground nonmetallic fuel-oil storage tanks shall only be used:

1. Above-ground for both indoor and outdoor.
2. In buildings used exclusively for one-family or two-family dwelling units; and
3. For fuel-oil heating including biodiesel blends for 100 percent (B100) and up to 20 percent (B20).

Restriction: Above ground nonmetallic fuel-oil storage tanks shall not be used for the storage of waste oils and flammable liquids.
Evaluation Scope: NYC Construction Codes

Evaluation Criteria: Pursuant to AC section 28-113, the Office of Technical Certification and Research (OTCR) recognizes above-ground nonmetallic fuel-oil storage tanks fabricated, tested, and evaluated in accordance with UL subject 2258 “Outline of Investigation for Nonmetallic Tanks for Oil-Burner Fuels and Other Combustible Liquids”. Acceptable above ground nonmetallic fuel-oil tanks shall be listed and labeled by an approved agency in accordance with AC section 28-113.2.3 and shall comply with the conditions of this bulletin.

Conditions of Acceptance: Above-ground, nonmetallic fuel-oil storage tanks shall be manufactured and installed in accordance with the NYC Construction Codes and other applicable provisions including but not limited to the following:

A. Manufacturing
   1. Above ground nonmetallic fuel-oil storage tanks shall be constructed as per sections 7, 8, 9, 10, 11, and 12 of UL subject 2258 and chapter 7 of NFPA 31.
   2. Above ground nonmetallic fuel-oil storage tanks shall be marked in accordance with sections 40, 41, and 42 of UL subject 2258. The label shall also include the biodiesel percentage as identified in the scope of UL subject 2258.
   3. Nonmetallic fuel-oil storage tanks shall only be supplied in sizes ranging from 60 gallons to 660 gallons.
   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.

B. Installation
   1. Installation requirements shall be in accordance with the manufacturer’s instructions, the NYC Mechanical Code, NFPA 31 and the conditions of this bulletin.
   2. Above-ground nonmetallic fuel-oil storage tanks installed indoor shall not be exposed to sunlight on any plastic parts.
   3. Above-ground nonmetallic fuel-oil storage tanks installed outdoor shall be assembled with required cover from the manufacturer.
   4. Installation of above ground nonmetallic fuel-oil storage tanks shall be performed by a NYC licensed oil-burning equipment installer who is certified by the manufacturer for training and experience.

Referenced Standards:
1. NFPA 31-2011 “Standard for the Installation of Oil-Burning Equipment” (www.nfpa.org)
2. UL subject 2258-2010 “Outline of Investigation for Nonmetallic Tanks for Oil-Burner Fuels and Other Combustible Liquids” (www.ul.org)