



BUILDINGS BULLETIN 2014-002

OTCR

Supersedes: None

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Purpose: This document establishes acceptance criteria for corrugated polypropylene piping and fittings used for storm sewer pipe as an alternative to code prescribed polyethylene piping and fittings referenced in the 2008 NYC Construction Codes.

Related Code/Zoning Section(s): AC 28-113 PC 1101.10
Table PC 1102.4

Subject(s): Storm sewer, corrugated polypropylene piping and fitting; Storm sewer, corrugated polyethylene piping and fitting; Yard drainage, storm water piping

Background: Building Code section PC 1101.10, Exception 2 permits the use of polyethylene plastic pipe :

“Corrugated polyethylene piping and fittings, with a diameter of 12 inches (305 mm) or more may be used in connection with any type of building for underground yard drainage and storm water piping when used outside of the foundation wall of the building and not connecting to any piping system from the interior of the building.”

Table PC 1102.4 permits corrugated polyethylene piping for building storm sewer pipe. This bulletin establishes criteria for polypropylene piping as an alternative to polyethylene for similar applications.

Description: Polypropylene is a compound which is comprised of base polypropylene virgin material, all additive, colorants, UV inhibitors and stabilizers. It is used in the manufacture of corrugated single wall, double wall and triple wall polypropylene pipe and fitting which is suitable for underground use for non-pressure sanitary sewer systems.

Evaluation Scope: 2008 NYC Construction Codes

Evaluation Criteria: Pursuant to section AC 28-113, the Office of Technical Certification and Research (OTCR) recognizes corrugated polypropylene piping and fitting used as storm sewer piping as an alternative to code prescribed polyethylene piping. Polypropylene piping shall be designed and evaluated in accordance with:

- ASTM F 2736¹ – “Standard Specification for 6 to 30 in. [152 to 762 mm] Polypropylene

- (PP) Corrugated Single Wall Pipe and Double Wall Pipe” for pipe size 12-30 inch.
- ASTM F2764² – “Standard Specification for 30 to 60 in. [750 to 1500 mm] Polypropylene (PP) Triple Wall Pipe and Fittings for Non-pressure Sanitary Sewer Applications” for pipe size 30 to 60 inch.

Corrugated polypropylene piping and fittings shall be listed and labeled by an approved agency accordance with section AC 28-113.2.3 and comply with conditions of this bulletin.

Uses: Corrugated polypropylene piping and fittings may be used in connection with storm sewer piping when used outside of the foundation wall of the building and not connecting to any piping system from the interior of the buildings.

Conditions of Acceptance: Corrugated polypropylene piping and fittings shall be designed and installed in accordance with the 2008 NYC Construction Codes and other applicable provisions including but not limited the following:

A. Design

1. Corrugated polypropylene piping and fittings shall be specified in accordance with the manufacturer’s recommendation and the conditions of the listing.
2. Corrugated polypropylene piping and fittings shall be a minimum of 12 inches or larger.

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.
3. Pipe and fittings shall be of the same material.
4. Corrugated polypropylene piping and fittings shall be labeled as per section AC-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.
5. Pursuant to section BC 1704.20, the installation of corrugated polypropylene piping and fittings shall be subject to special inspection requirement of Chapter 17 of the Building Code and 1RCNY section 101-06.

C. Maintenance

1. Maintenance shall comply with all applicable requirements of 2008 NYC Construction Codes and the Rules of the City of New York.
2. Maintenance shall comply with the manufacturer’s instruction and the applicable listing.

- Referenced Standards:**
1. ASTM F 2736 -10¹ – “Standard Specification for 6 to 30 in. [152 to 762 mm] Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe” for pipe size 12-30 inch.
 2. ASTM F2764-10² - “Standard Specification for 30 to 60 in. [750 to 1500 mm] Polypropylene (PP) Triple Wall Pipe and Fittings for Non-pressure Sanitary Sewer Applications” for pipe size 30 to 60 inch.