

S3.03 Single Wall Highway Pipe Specification

Scope

This specification describes 3- through 15-inch (75 to 375 mm) single wall high-density corrugated polyethylene highway pipe for use in gravity-flow land drainage applications.

Pipe Requirements

Single wall high-density corrugated polyethylene highway pipe shall have annular interior and exterior corrugations.

- 3- through 10-inch (75 to 250 mm) pipe shall meet AASHTO M252, Type C or CP.
- 12- through 15-inch (300 to 375 mm) pipe shall meet AASHTO M294, Type C or CP.

Joint Performance

Joints for 3- to 15- inch (75 – 375 mm) shall be made with split or snap couplings. Standard connections shall meet the soil-tight requirements of the AASHTO M252 or M294. Gasketed connections shall incorporate a closed-cell synthetic expanded rubber gasket meeting the requirements of ASTM D1056 Grade 2A2. Gaskets, when applicable, shall be installed by the pipe manufacturer.

Fittings

Fittings shall conform to AASHTO M252 or AASHTO M294.

Material Properties

Pipe and fittings shall be made of polyethylene compounds that comply with the cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, or 435400C for 12- through 15-inch (300 to 375 mm) diameters, as defined and described in ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 15-inch (300 to 375 mm) pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Sections 9.5 of AASHTO M294.

Installation

Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines with the exception that minimum cover in trafficked areas for 3- through 15-inch (75 to 375 mm) diameters shall be one foot (0.3 m). Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.03. Contact your local ADS representative or visit our website at www.adspipe.com for a copy of the latest installation guidelines.

Build America, Buy America (BABA)

Single wall highway pipe, manufactured in accordance with AASHTO M252 or AASHTO M294, complies with the requirements in the Build America, Buy America (BABA) Act.

Pipe Dimensions

Nominal Pipe I.D. in (mm)	3 (75)	4 (100)	5 (125)	6 (150)	8 (200)	10 (250)	12 (300)	15 (375)
Average Pipe I.D. in (mm)	3.6 (91)	4.6 (117)	5.8 (147)	7.0 (178)	9.5 (241)	12.0 (305)	14.5 (368)	18.0 (457)

* Pipe O.D. values are provided for reference purposes only, values stated for 12 through 60-inch are ±1 inch.

** All diameters available with or without perforations.

Contact a sales representative for exact values