

# 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](http://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 O.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

