

Scope

This specification designates the requirements for 3- through 15-inch (75 to 375mm) Prinsco GOLDLINE® single wall pipe for use in gravity-flow land drainage applications.

Pipe Requirements

Prinsco GOLDLINE single wall pipe shall have annular interior and exterior corrugations and shall meet the following standards:

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

Materials

GOLDLINE pipe shall be manufactured using High Density Polyethylene (HDPE) meeting the minimum requirements of cell classification of 424420C for 3- through 10-inch (75 to 250mm) diameters and 435400C for 12- through 15-inch (300 to 375mm) diameters as defined and described in ASTM D3350, except that carbon black content shall not be greater than 4%.

The HDPE pipe material for 12- through 15-inch (300 to 375mm) diameters shall be tested for slow crack growth resistance using the notched constant ligament-stress (NCLS) test as specified in section 9.4 of AASHTO M294.

Joint Performance

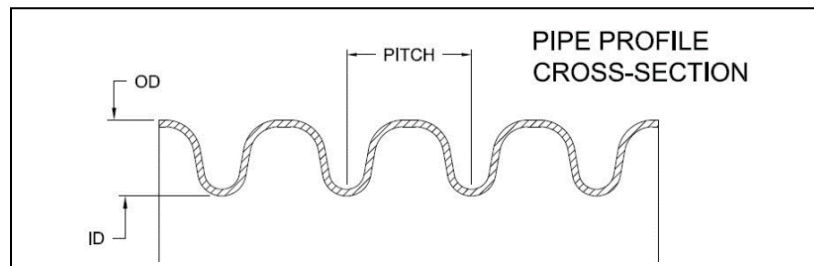
GOLDLINE pipe joints shall meet the requirements of AASHTO M252 or M294.

- Soil Tight Connection – GOLDLINE is available in plain end configuration and shall be joined with soil tight couplers. Coupling methods shall be designed to positively engage with the corrugations, shall be assembled per manufacturer's recommendations, and shall meet the soil tightness requirements of paragraph 26.4.2.4 in Section 26 of the *AASHTO LRFD Bridge Construction Specifications*.

Fittings

Fittings shall meet the requirements of AASHTO M252 or M294.

Physical Pipe Dimensions





Nominal ID in (mm)	Approximate OD in (mm)	Corrugation Pitch in (mm)	Min. Pipe Stiffness @ 5% Deflection psi (kpa)
3 (75)	3.6 (91)	0.67 (17)	35 (240)
4 (100)	4.7 (119)	0.67 (17)	35 (240)
5 (125)	5.7 (145)	0.67 (17)	35 (240)
6 (150)	7.0 (178)	0.8 (20)	35 (240)
8 (200)	9.3 (236)	1.0 (25)	35 (240)
10 (250)	11.9 (302)	1.3 (33)	35 (240)
12 (300)	14.6 (371)	2.0 (51)	35 (240)
15 (375)	17.8 (452)	2.6 (66)	35 (240)

Installation

Pipe and fittings shall be installed in accordance with ASTM D2321 or ASTM F449 and Prinsco's published installation guidelines. Minimum cover for AASHTO H-25 loads shall be 12" (300mm) and shall be measured from the top of the pipe to the bottom of flexible pavement or to the top of rigid pavement. Contact your local Prinsco representative or visit www.prinsco.com for the latest installation guidelines.

Reference Specifications

This specification references the latest edition and revisions of the following standard specifications:

- AASHTO M252 – *Standard Specification for Corrugated Polyethylene Drainage Pipe*
- AASHTO M294 – *Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter*
- ASTM D3350 – *Standard Specification for Polyethylene Plastics Pipe and Fittings Materials*
- ASTM D2321 – *Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications*
- ASTM F449 – *Standard Practice for Subsurface Installation of Corrugated Polyethylene Pipe for Agricultural Drainage or Water Table Control*