



GOLDPRO STORM™ DUAL-WALL HP SPECIFICATION

Scope

This specification designates the requirements for 12- through 60- inch I.D. Prinsco GOLDPRO Storm High Performance (HP) polypropylene pipe for use in gravity-flow drainage applications.

Pipe Requirements

Prinsco GOLDPRO Storm pipe shall have annular exterior corrugations with a smooth interior allowing for a Manning's "n" design value of 0.012 and shall meet the following standards:

- 12- through 30- inch shall meet ASTM F2736*, Type S (Withdrawn)
- 12- through 60- inch shall meet ASTM F2881 and AASHTO M330, Type S

Materials

GOLDPRO Storm pipe and fabricated fittings shall be manufactured using virgin Polypropylene (PP) compounds meeting the requirements of ASTM F2881 and AASHTO M330. Polypropylene compounds shall be comprised of the base unfilled copolymer polypropylene virgin resin and all additives, colorants, UV inhibitors and stabilizers. Conditioning, sampling, preparation and testing of molded specimens shall be in accordance with the requirements in Specification D4101.

Joint Performance

GOLDPRO Storm pipe shall be joined using watertight bell and spigot type joints meeting ASTM F2881. The integral joints shall be watertight according to ASTM D3212. Gaskets shall be made of polyisoprene meeting the requirements of ASTM F477, shall be installed by the manufacturer, and shall be covered with a protective wrap. An approved joint lubricant, available from the manufacturer, shall be applied to the bell and gasket during installation. GOLDPRO Storm joints shall be assembled in accordance with the manufacturer's requirements to ensure installed watertight performance.

Field performance verification of installed pipe may be accomplished by testing in accordance with ASTM F2487.

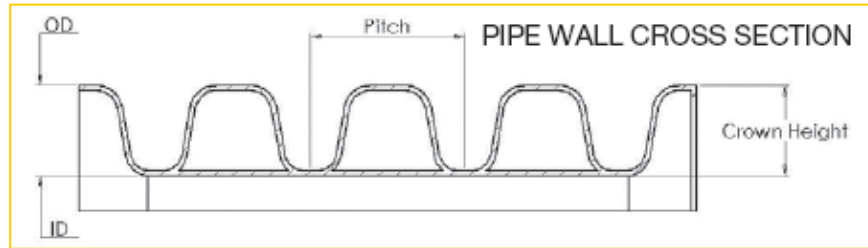
Fittings

Fittings fabricated from pipe manufactured to this specification shall meet the requirements of ASTM F2881 and AASHTO M330. Connections between fittings and pipe shall be watertight and shall meet the performance requirements of ASTM D3212.

Physical Pipe Dimensions

Nominal ID (in)	Approximate OD (in)	Length (ft)	Corrugation Pitch (in)	Approximate Weight/foot (lb)	Min. Pipe Stiffness @ 5% Deflection (psi)
12"	14.6	20	2.00	3.7	70
15"	17.8	20	2.67	5.1	60
18"	21.5	20	3.00	7.3	56
24"	28.2	20	4.00	11.7	50
30"	34.7	20	4.00	17.4	46
36"	40.9	20	4.00	22.9	40
42"	47.9	20	6.00	23.3	35
48"	54.6	20	6.00	32.0	30
60"	67.0	20	5.90	46.3	25

*ASTM F2736 has been withdrawn as an ASTM specification and is incorporated into the latest version of ASTM F2881.



Installation

Pipe and fittings shall be installed in accordance with ASTM D2321 and Prinsco's published installation guidelines. Minimum cover for AASHTO H-25 loads shall be 12" for 4- through 48-inch diameter pipe (18" for 60-inch pipe) to sub-grade in trafficked areas where flexible pavement is installed and shall be 12" for 4- through 48-inch diameter pipe (18" for 60-inch pipe) to the surface 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 M330 – *Standard Specification for Polypropylene Pipe, 300- to 1500-mm (12- to 60-in) Diameter*
- ASTM F2881 – *Standard Specification for 12 to 60 in. (300 to 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications*
- ASTM F2736 – *Standard Specification for 6 to 30 in. (150 to 750 mm) Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe*
- ASTM D4101– *Standard Specification for Polypropylene Injection and Extrusion Materials*
- ASTM F477 – *Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe*
- ASTM D3212 – *Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals*
- ASTM D2321 – *Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications*
- ASTM F2487 – *Standard Practice for Underground Infiltration and Exfiltration Acceptance Testing of Installed Corrugated High-Density Polyethylene and Polypropylene Pipelines*