

# **PRO100 PIPE**

POLYPROPYLENE, LONG SERVICE LIFE, DUAL WALL CONSTRUCTION

AND A SMOOTH INTERIOR



# About **LANE**

As a full-line manufacturer of corrugated metal and plastic drainage products, Lane Enterprises, Inc. operates plants throughout the Northeastern, Mid-Atlantic, and South-Central states producing various types of buried structures for the construction industry.

For nearly 90 years, Lane has partnered with contractors, engineers and municipalities to supply reliable products that provide the highest levels of service life, strength, versatility and economy. Our focus on quality products, responsive customer service and technical expertise has established a long, proven history of successful partnerships within the industries we serve.

## LANE'S PIPE PRODUCT LINE

Lane provides the complete product line to meet all your drainage needs. With the addition of PRO100 Lane has the most comprehensive flexible pipe offering available today. PRO100 provides additional solutions for the more demanding environments with the added strength and service life for even the most demanding applications.

LANE'S PRO100 // is today's top corrugated polypropylene pipe featuring a dual wall, smooth interior and the long service life that the industry demands.

## **PRO100 PERFORMANCE**

#### LONG SERVICE LIFE

When properly installed, PRO100 will meet minimum 100-yr service life requirements.

#### LABORATORY RATED JOINTS

PRO100 bell-and-spigot joints with manufacturer installed gaskets are certified to the requirements of ASTM D3212, a laboratory test in which joint samples for each diameter must sustain, under varying conditions, 10.8 psi for 10 minutes.

#### HYDRAULICALLY EFFICIENT FLOW

With a Manning's coefficient of 0.012 the PRO100 smooth interior provides the most efficient flow recognized in the storm drainage industry today.



**THE PRODUCT** // PR0100 pipe provides superior in-service joint performance for sensitive applications.

## SPECIFY LANE PRO100 PIPE

PRO100 meets today's leading polypropylene pipe specifications, featuring a dual wall construction with a smooth interior for exceptional service life and efficient flow. Available in six-inch increment diameters ranging from 12 to 60 inches, the added stiffness of PRO100 also provides for enhanced handling performance and beam strength for tough jobsite conditions.

## SPECIFY LANE PRO100 TO MEET ASTM F2881

PRO100 exceeds the requirements of ASTM F2881, today's leading corrugated polypropylene pipe specification, by using a resin compound with better long-term properties. The superior compounds provide excellent pipe stiffness and increased handling characteristics.

### SPECIFY LANE PRO100 TO MEET AASHTO M330

PRO100 exceeds even the more demanding standards of AASHTO M330. With the use of a 100% virgin impact modified co-polymer polypropylene resin, PRO100 provides the added durability and strength needed for the most challenging job site conditions in all phases of construction and weather.



## FITTINGS AND FABRICATION

Lane's fitting fabrication shop is capable of producing a full assortment of fittings and custom fabrications for all pipe diameters. Fittings for water storage, storm water conveyance, and other applications are available. Fitting drawings are available from your Lane representative to aid the designer in the use of corrugated polypropylene pipe for varied applications.

## SPECIFY INSTALLATION IN ACCORDANCE WITH ASTM D2321

PRO100 interacts with appropriate backfill and proper installation to form a composite structural system. Good installation practices ensure reliable long-term performance.

### MINIMUM COVER HEIGHTS

Minimum cover heights are established with industry accepted guidelines. Smaller cover heights than those listed may be possible. Contact your Lane representative should your project require minimums that are less than those listed here.

Truck Loadings (H20, H25 or HL93) <sup>1</sup> , 12" thru 48" dia	12"
Truck Loadings (H20, H25 or HL93) <sup>1</sup> , 60" dia	24"
Minimum Cover for E-80 (Rail Road) Loads	24"
Temporary Cover for Construction Loads <sup>2</sup>	2' to 4'

<sup>1</sup> May be subject to local or state agency minimum cover requirements.

<sup>2</sup> Cover for construction loads depends on pipe diameter and construction equipment (see table below).

MINIMUM COVER FOR CONSTRUCTION LOADS (in)				
Nominal Pipe Diameter (ft)	Axle Loads (kips)			
	18-50	50-75	75-100	110-150
2.0 - 3.0	24.0	30.0	36.0	36.0
3.5 - 5.0	36.0	36.0	42.0	48.0



## MAXIMUM COVER HEIGHTS

Maximum burial depths correspond to the soil classification system of ASTM D2321 and are shown in the table below, with the best results obtained using manufactured or processed aggregates. (i.e. crushed stone.)

LANE PRO100 (PP) PIPE - ALLOWABLE BURIAL DEPTHS (FT)						
Dia.	Cla	ss I	Class II		Class III	
(in.)	Comp.	Dumped	95%	90%	95%	90%
12	39	30	31	23	23	12
15	30	28	23	17	18	11
18	30	23	23	16	17	11
24	30	23	23	16	16	11
30	27	20	20	14	14	10
36	29	22	21	15	16	10
48	25	19	18	12	13	9
60	25	19	18	12	13	8

1. Installation in accordance with ASTM D2321.

2. Class I indicates a soil that generally provides the highest soil stiffness at any given percent compaction and provides a given soil stiffness with the least compactive effort. Each higher number soil class provides successively less stiffness at a given compaction and requires greater compactive effort to provide a given level of soil stiffness.

3. All acceptable backfill materials are not presented here. See ASTM D 2321 for a complete listing of classifications.

4. Results are based on the ASHTO LRFD design method using zero hydrostatic pressure and a soil density of 120 pcf. Greater cover heights are attainable with appropriate modifications to the design method. Contact Lane for further assistance.

5. Dumped Class I material is estimated at 90% maximum standard Proctor density.



#### LANE Enterprises, Inc.

3905 Hartzdale Drive, Suite 514 Camp Hill, PA 17011 P: 717.761.8175 • F: 717.761.5055 Iane-enterprises.com

# **LANE Facilities**

#### PENNSYLVANIA

Bedford	814.623.1191
Carlisle	717.249.8342
King of Prussia	610.272.4531
Pulaski	724.652.7747
Shippensburg	717.532.5959

#### VIRGINIA

Bealeton	540.439.3201
Dublin	540.674.4645
Wytheville	276.223.1051

#### **NEW YORK**

Ballston Spa	518.885.4385
Bath	607.776.3366

#### **NORTH CAROLINA**

Statesville 704.872.2471

#### TEXAS Temple

254.727.3346

#### **CORPORATE HEADQUARTERS**

Camp Hill 717.761.8175

# **LANE Products**

**Corrugated Metal Pipe Spiral Rib Pipe Corrugated HDPE Pipe Corrugated Polypropylene Pipe Structural Plate Pipe and Arches** Structural Plate Box Culverts Storm Water Collection Chambers Storm Water Management Systems **Storm Water Filters** CFT (HDPE) Water Quality Unit **CMP Sandfilter Open Top Slotted Drain** Welded Wire Mesh Gabions Structural Plate Headwall-Culvert Systems Custom Fabrications (Pond Kits, Trash Racks, etc.) Long Span Bridge & Culvert Services **Rebar and Custom Powder Coatings** 



ncspa.org

PLASTICS PIPE INSTITUTE<sup>®</sup> plasticpipe.org

