

N-12[®] ST IB PIPE (PER ASTM F2648)

N-12 corrugated dual-wall pipe was introduced in 1987. Today's N-12 ST IB pipe (per ASTM F2648) is an engineered compound of virgin and recycled high density polyethylene resins to provide impressive material properties. The performance you've come to expect from N-12, with the added benefit of helping to promote responsible use of resources. Available in diameters from 4" to 60" (100 to 1500 mm), N-12 pipe is replacing reinforced concrete pipe as a preferred product for storm water applications.

ADS N-12 ST IB pipe (per ASTM F2648) contains a superior built-in bell-and-spigot joint. The joints are sealed by high-quality, factory-installed rubber gaskets that meet all the requirements of ASTM F477. A polyethylene bell minimizes joint distortion. The chipping and cracking that is common to concrete bells, is eliminated.

APPLICATIONS:

Storm Drains	Slope/Edge Drains
Retention/Detention	Mining/Forestry/Industrial
Golf, Turf & Recreation	Foundation Drains
Culverts/Cross Drains	Downspouts/Roof Drainage
Grain Aeration	Land Reclamation
Waterways	Terracing
Ditch Enclosures	

FEATURES:

- 4" - 60" (100 to 1500 mm) diameters available
- Nominal 20 ft (6m) and 13 ft (4m) lengths available
- Bell and spigot joint design
- In-line bell design
- Exceptional joint strength
- Excellent abrasion and corrosion resistance
- Light weight
- Fast installation times
- Structural strength will support H-25 live loads with 12" (300mm) minimum cover; 60" (1500mm) pipe requires 2' (0.6m) cover for H-25 loads

ADS Service: ADS representatives are committed to providing you with the answers to all your questions, including specifications, and installation and more.



BENEFITS:

- Variety of diameters and lengths that will fit in any project
- Joint only requires lube for fitting – ends are pushed together for easy field installation
- Unlike pipe from other manufacturers, there are no additional gasket materials, grout or sealing bands to transport and apply
- Installation cost savings from lower shipping costs, fewer people, and less heavy equipment required
- Hydraulic efficiency from smooth interior
- Long-term durability of HDPE



ADS N-12® ST IB PIPE (PER ASTM F2648) SPECIFICATION

SCOPE

This specification describes 4- through 60-inch (100 to 1500 mm) ADS N-12 ST IB pipe (per ASTM F2648) for use in gravity-flow land drainage applications.

PIPE REQUIREMENTS

ADS N-12 ST IB pipe (per ASTM F2648) shall have a smooth interior and annular exterior corrugations.

- 4- through 60-inch (100 to 1500 mm) shall meet ASTM F2648.
- Manning's "n" value for use in design shall be 0.012.

JOINT PERFORMANCE

Pipe shall be joined using a bell & spigot joint meeting ASTM F2648. The joint shall be soil-tight and gaskets, when applicable, shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on the gasket and bell during assembly.

FITTINGS

Fittings shall conform to ASTM F2306. Bell and spigot connections shall utilize a spun-on or welded bell and valley or saddle gasket meeting the soil-tight joint performance requirements of ASTM F2306.

MATERIAL PROPERTIES

Material for pipe production shall be an engineered compound of virgin and recycled high density polyethylene conforming with the minimum requirements of cell classification 424420C, (ESCR Test Condition B) for 4- through 10-inch (100 to 250 mm) diameters, and 435420C, (ESCR Test Condition B) for 12- through 60-inch (300 to 1500 mm) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The design engineer shall verify compatibility with overall system including structural, hydraulic, material and installation requirements for a given application.

INSTALLATION

Installation shall be in accordance with ASTM D2321 and ADS's published installation guidelines, with the exception that minimum cover in trafficked areas for 4- through 48-inch (100 to 1200 mm) diameters shall be one foot (0.3 m), and for 60-inch (1500 mm) diameters, the minimum cover shall be 2 ft (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), or Class 2 (minimum 90% SPD) material. Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.02. Contact your local ADS representative or visit our website at www.ads-pipe.com for a copy of the latest installation guidelines.

PIPE DIMENSIONS

Pipe I.D., in. (mm)	Nominal Diameter, in (mm)												
	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)	42 (1050)	48 (1200)	60 (1500)
Pipe O.D.** in. (mm)	4.8 (122)	6.9 (175)	9.1 (231)	11.4 (290)	14.5 (368)	18 (457)	22 (559)	28 (711)	36 (914)	42 (1067)	48 (1219)	54 (1372)	67 (1702)
Perforations	All diameters available with or without perforations.												

* Check with sales representative for availability by region.

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

For more information on ADS N-12 ST IB pipe (per ASTM F2648) and other ADS products, please contact our Customer Service Representatives at 1-800-821-6710.

ADS "Terms and Conditions of Sale" are available on the ADS website, www.ads-pipe.com.
The ADS logo, the Green Stripe, and N-12® are registered trademarks of Advanced Drainage Systems, Inc. © 2010 Advanced Drainage Systems, Inc.
BRO 10628 01/10 (08334)

