

N-12® WT IB PIPE (PER ASTM F2648)

Our N-12 WT IB (per ASTM F2648) pipe offers significant performance advantages over reinforced concrete and corrugated metal pipe. Plus, it has the best watertight joint in the industry. Better yet, it's green. N-12 WT IB (per ASTM F2648) pipe is manufactured in diameters 4"-60" (100-1500 mm).

Today's N-12 WT IB pipe (per ASTM F2648) has a minimum recycled content of 40% using an engineered blend 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 promote responsible use of resources.

ADS N-12 WT IB (per ASTM F2648) pipe contains a superior built-in bell-and-spigot joint. An exterior bell wrap provides a quick visual indicator to customers and inspectors that a watertight product is being used. A patented gasket, that meets all requirements of ASTM F477, increases its sealing forces as temporary internal or external hydrostatic pressure increases. The flared bell and spigot significantly improve ease of installation. N-12 WT IB (per ASTM F2648) pipe is so advanced in its design that it is easy to put your confidence in for long-term reliability.

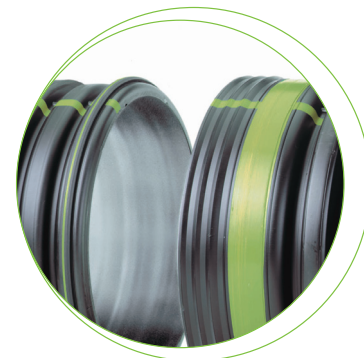
APPLICATIONS:

Storm Sewers	Culverts & Cross Drains
Retention/Detention	Slope/Edge Drains
Ditch Enclosures	Mining/Forestry/Industrial
Roof Drainage	

FEATURES:

- 4"-60" (100 - 1500 mm) diameters available
- Nominal 20 ft. (6m) and 13 ft. (4m) lengths available
- Integral bell and factory-installed gasket
- Joint meets or exceeds ASTM D3212 lab test as well as ASTM F2487 and ASTM F1417 watertight field test
- Exceptional joint strength
- Excellent abrasion and corrosion resistance
- Light weight
- Fast installation times
- Structural strength that will support H-25 or HL-93 live loads with 1' (0.3 m) minimum cover; 60" (1500 mm) pipe requires 2' (0.6 m) cover for H-25 or HL-93 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 fit any project
- Pipe requires no extra couplers, grout or other sealants for installation due to built-in bell and factory-installed gasket. This means fewer components to risk performance
- 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® WT IB PIPE (PER ASTM F2648) SPECIFICATION

SCOPE

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

PIPE REQUIREMENTS

ADS N-12 WT 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

4- through 60-inch (100 to 1500 mm) pipe shall be watertight according to the requirements of ASTM D3212. Gaskets shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly.

12- through 60-inch (300 to 1500 mm) diameters shall have an exterior bell wrap installed by the manufacturer.

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 watertight joint performance requirements of ASTM F2306.

FIELD PIPE AND JOINT PERFORMANCE

To assure watertightness, field performance verification may be accomplished by testing in accordance with ASTM F2487. Appropriate safety precautions must be used when field testing any pipe material. Contact the manufacturer for recommended leakage rates.

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 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 foot (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted) or Class 2 (minimum 90% SPD). 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

Nominal Pipe I.D.* 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)	54* (1350)	60 (1500)
Nominal 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)	61 (1549)	67 (1702)

*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.

