



N-12[®] ST (SOILTIGHT) IB PIPE

N-12 corrugated dual-wall pipe was introduced in 1987. Today's N-12 ST IB pipe offers significant performance advantages, plus the best soil-tight joint in the industry. Available in diameters from 4" to 60" (100 to 1500mm), N-12 pipe is replacing reinforced concrete pipe as a preferred product for storm water applications.

ADS N-12 ST IB pipe contains a superior built-in bell joint. The bell spans three corrugations, which exceeds the AASHTO M294 recommendations. The joints are sealed by high-quality, factory-installed rubber gaskets that meet all the requirements of ASTM F477. A reinforced polyethylene bell minimizes joint distortion. The chipping and cracking that is common to concrete bells, is eliminated.

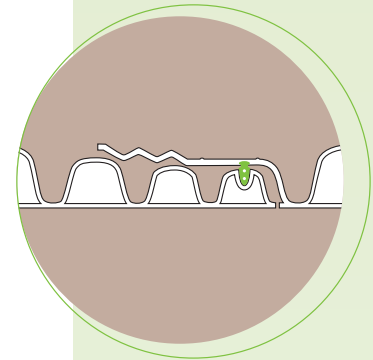
APPLICATIONS:

Storm Sewers	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
- 6m (19 ft, 8 in) or 13 ft lengths available
- Bell and spigot joint design
- In-line bell design
- Joint meets or exceeds ASTM D3212 lab test 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 live loads with 12" (300mm) minimum cover and E-80 loads under 24" (600 mm) cover (60" pipe requires 2' cover for H-25 loads)

ADS Service: ADS representatives and engineers are committed to providing you with the answers to all your questions, including specifications, installation, backfill recommendations 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 pipes 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
- The reinforced polyethylene bell minimizes distortion. Chipping and cracking common to concrete pipe bells, is eliminated
- Hydraulic efficiency from smooth interior
- Long-term durability of HDPE



The Most **Advanced** Name in Drainage Systems[®]

ADS N-12® ST IB PIPE SPECIFICATION

SCOPE

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

PIPE REQUIREMENTS

ADS N-12 ST IB pipe shall have a smooth interior and annular exterior corrugations.

- 4- through 10-inch (100 to 250mm) shall meet AASHTO M252, Type S.
- 12- through 60-inch (300 to 1500 mm) shall meet AASHTO M294, Type S or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

JOINT PERFORMANCE

Pipe shall be joined with the ADS N-12 ST IB (bell-and-spigot) joint meeting AASHTO M252, AASHTO M294, or ASTM F2306. The joint shall be soil-tight and gaskets 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 available from the manufacturer shall be used on the gasket and bell during assembly.

FITTINGS

Fittings shall conform to AASHTO M294 or ASTM F2306. Fabricated fittings shall be welded at all accessible interior and exterior junctions.

MATERIAL PROPERTIES

Pipe and fittings shall be made of virgin polyethylene compounds that comply with the cell classification 424420C for 4- through 10-inch (100 to 250mm) diameters, or 435400C for 12- through 60-inch (300 to 1500mm) diameters, as defined and described in ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 60-inch (300 to 1500mm) virgin pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Section 6.1.1 and 5.1 of AASHTO M294 and ASTM F2306 respectively.

INSTALLATION

Installation shall be in accordance with ASTM D2321 and ADS installation guidelines, with the exception that minimum cover in trafficked areas for 12- through 48-inch (300 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). Contact your local ADS representative or visit our website at www.ads-pipe.com for a copy of the 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)	21 (559)	28 (711)	36 (914)	42 (1067)	48 (1219)	54 (1372)	57 (1702)
Perforations	All diameters available with or without perforations.												

*Pipe O.D. values are provided for reference purposes only. values stated for 12- through 60-inch are ± 1 inch. Contact Applications Engineering for exact values.

For more information on ADS N-12 WT IB pipe 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
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