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KUBRICKY CONSTRUCTION CORP.
A PROUD MEMBER OF THE D.A. COLLINS™ COMPANIES

Rutland City BRF 3000 (2014036)
SUBMITTAL 49

Issued 04/10/15
Respond by 04/17/15

To

Timothy Pockette, PE

Topic	601.0915 18" CPEP
Status	For Approval
Spec section	601.0915
Responsibility	(16) River Street
Sent to approver	4/10/15
Required from approver	4/17/15

From

Volker H.D. Burkowski

Signed by _____ Date 4/10/15

Proceed as Indicated _____ Date _____
Owner Authorized Representative

N-12® ST IB PIPE (PER AASHTO)

N-12 corrugated dual-wall pipe was introduced in 1987. Today's N-12 pipe offers significant performance advantages, plus the best soil-tight joint in the industry. 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 pipe 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 Sewers
Retention/Detention
Golf, Turf & Recreation
Culverts/Cross Drains
Grain Aeration
Waterways
Ditch Enclosures
Slope/Edge Drains
Mining/Forestry/Industrial
Foundation Drains
Downspouts/Roof Drainage
Land Reclamation
Terracing

FEATURES:

- 4"– 60" (100 to 1500 mm) diameters available
- 6 m (19 ft, 8 in) or 4 m (13 ft) 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 that will support H-25 live loads with 1' (0.3 m) minimum cover 54" and 60" (1350 and 1500 mm) pipe requires 2' (0.6 m) cover for H-25 loads

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
- Hydraulic efficiency from smooth interior
- Long-term durability of HDPE

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

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

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

SCOPE

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

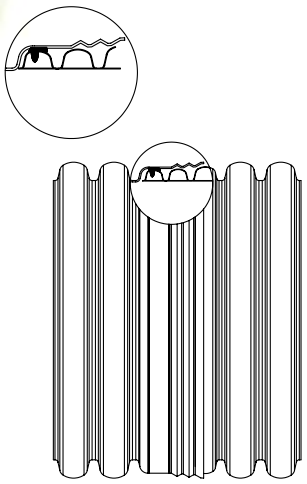
PIPE REQUIREMENTS

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

- 4- through 10-inch (100 to 250 mm) 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 using a bell & spigot joint meeting AASHTO M252, AASHTO M294, or ASTM F2306. 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 AASHTO M252, AASHTO M294 or 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 AASHTO M252, AASHTO M294 or ASTM F2306.

MATERIAL PROPERTIES

Virgin material for pipe and fitting production shall be high density polyethylene conforming with the minimum requirements of cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, or 435400C 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 12- through 60-inch (300 to 1500 mm) virgin pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Section 9.5 and 5.1 of AASHTO M294 and ASTM F2306 respectfully.

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 54- and 60-inch (1350 and 1500 mm) diameters, shall be 2 ft (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1, Class 2 (minimum 90% SPD) or Class 3 (minimum 90% SPD) material. Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.01. 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 Diameter, in (mm)													
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)
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)	61 (1549)	57 (1702)
Perforations	All diameters available with or without perforations.													

* Check with sales representative for availabiltity 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 AASHTO) 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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