

ULTRA-RIB PIPING SYSTEMS

8" - 24" (200mm - 600mm)

Ultra-Rib®

IPEX Ultra-Rib® is a gravity flow PVC sewer pipe with concentric reinforcing ribs that encircle the pipe to provide superior ring stiffness and performance. It is an extruded, seamless pipe made from high grade PVC compound.

Ultra-Rib is available in standard sewer sizes from 200mm to 600mm (8" - 24"). Its optimized profile design offers strength and reliability, as well as economy and superior flow rates.

APPLICATIONS

- Sanitary and Storm Sewers
- Industrial Lines
- Highway & Culvert

STANDARDS



D1784
F477



3624-135



B182.4

ADVANTAGES

- 1 Tight Joints and Lower Treatment Costs**
Eliminate infiltration and exfiltration. Ultra-Rib's 50 psi capable joints easily outperform concrete and corrugated PE joints.
- 2 Superior Flow Characteristics**
Because of the smooth inside wall of Ultra-Rib, a Manning's number of 0.009 can be used when designing systems using Ultra-Rib pipe. This compares with Manning's numbers of up to 0.023 for other materials like clay or concrete.
- 3 Abrasion Resistance**
Ultra-Rib has been proven to be more abrasion-resistant than other profile pipes, and has out-performed concrete pipe in testing at California State University.
- 4 Chemical Resistance**
PVC is virtually immune to chemical attack from any type of sewage. Hydrogen sulphide attack, which causes millions of dollars of damage to concrete and metal infrastructure, will not affect Ultra-Rib.
- 5 Stress Crack Resistance**
While some HDPE pipes have been found to crack prematurely under load, Ultra-Rib's tough PVC construction and superior formulation has been proven to be immune to these problems.



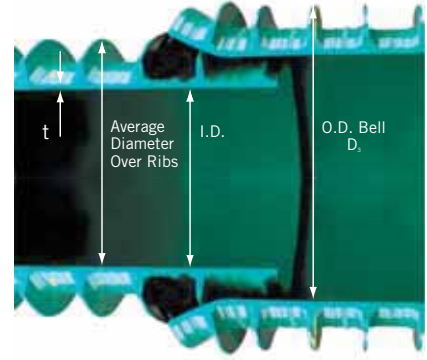
DID YOU KNOW?

Ultra-Rib's seamless 'Open Profile' wall has the same stiffness as DR35, but with a more efficient use of structural material.



DIMENSIONS

Pipe Size		Average I.D. d		Average Diameter Over Ribs D		O.D. at Bell D ₃		Waterway Wall t	
in	mm	in	mm	in	mm	in	mm	in	mm
8	200	7.89	200	8.80	224	9.78	248	0.087	2.20
10	250	9.86	251	11.00	280	12.22	311	0.091	2.30
12	300	11.74	298	13.10	333	14.59	371	0.102	2.60
15	375	14.37	365	16.04	408	17.82	453	0.110	2.80
18	450	17.65	448	19.57	497	21.77	553	0.130	3.30
21	525	20.75	527	22.80	579	25.14	638	0.160	4.06
24	600	23.50	597	25.61	650	28.24	717	0.180	4.58



SHORT FORM SPECIFICATIONS

GENERAL

IPEX Ultra-Rib PVC Pipe is available in sizes 200mm, 250mm, 300mm, 375mm, 450mm, 525mm and 600mm (8" - 24").

MATERIAL

Ultra-Rib PVC Pipe shall be made of PVC compound having a cell classification of 12454B as defined in ASTM D1784B.

PRODUCT

The pipe shall be extruded with a smooth interior and with solid reinforcing ribs on the exterior at right angles to the pipe. The space between any two ribs serves as a gasket race.

Ultra-Rib PVC pipe and fittings shall be certified to CSA B182.4 "Profile (Ribbed) PVC Sewer Pipe and Fittings", and shall meet the requirements of ASTM F794 "Standard Specification for Poly (Vinyl Chloride) (PVC) Ribbed Gravity Sanitary Pipe and Fittings Based on Controlled Inside Diameter".

PIPE STIFFNESS

Pipe stiffness must be 320 kPa (46 lbs/in of sample length per inch of deflection) at 5% vertical deflection when tested according to ASTM D2412.

JOINTS

Gaskets for use with Ultra-Rib pipe are manufactured from EPDM and are designed specifically for use with Ultra-Rib pipe. This unique design is also available in Nitrile.

Sealing gaskets shall meet the requirements of CSA B182.4 and ASTM F477, with the additional requirement that joints shall be

able to withstand 345 kPa (50 psi) hydrostatic pressure.

The joint will not leak at 10.8 psi or 25' (74 kPa) or 7.5m) of head with -74 kPa (22") Hg vacuum with spigot under 5% ring deflection and joint at full axial deflection.

MOULDED FITTINGS

Injection-moulded gasketed PVC fittings of ribbed construction shall be certified to CSA B182.1 or CSA B182.2 and used for direct connection to Ultra-Rib pipes in available sizes.

FABRICATED FITTINGS

Fittings fabricated for use with Ultra-Rib pipe shall be certified to CSA B182.4 or ASTM F794 and may include legs of PVC pipe meeting CSA B182.1, B182.2 or ASTM D3034 or F679.

LUBRICANT

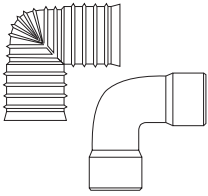
Assembly of Ultra-Rib pipe and fittings shall be done in accordance with the manufacturer's directions using only IPEX PVC pipe lubricant. Substitute lubricants shall not be used. IPEX lubricant shall be applied to the inside of the bell to be joined, to a uniform thickness for a distance inside the bell equivalent to three ribs from outside edge.

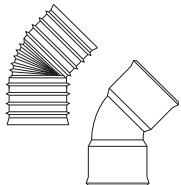
COLOUR CODING

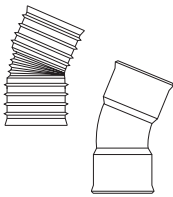
Pipe shall be colour-coded green.

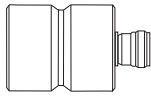


PRODUCTION SELECTION CHART

	Dimension		Product Code
	inches	mm	
90° Elbow B x B (Ultra-Rib x Ultra-Rib)			
	8	200	087300
	10	250	087301
	12	300	087302
	15	375	087303
	18	450	087304
	21	525	087305
	24	600	087306

	Dimension		Product Code
	inches	mm	
45° Elbow B x B (Ultra-Rib x Ultra-Rib)			
	8	200	087325
	10	250	087326
	12	300	187327
	15	375	087328
	18	450	087329
	21	525	087330
	24	600	087331

	Dimension		Product Code
	inches	mm	
22-1/2° Elbow B x B (Ultra-Rib x Ultra-Rib)			
	8	200	087375
	10	250	087376
	12	300	087377
	15	375	087378
	18	450	087379
	21	525	087380
	24	600	087381

	Dimension		Product Code
	inches	mm	
Increaser B x G (Ultra-Rib x DR35 or 28)			
	8 x 4	200 x 100	087400
	8 x 5	200 x 135	087401
	8 x 6	200 x 150	087402
	10 x 4	250 x 100	087403
	10 x 5	250 x 135	087404
	10 x 6	250 x 150	087405
	10 x 8	250 x 200	087406
	12 x 4	300 x 100	087407
	12 x 5	300 x 135	087408
	12 x 6	300 x 150	087409
	12 x 8	300 x 200	087410
	12 x 10	300 x 250	087411
	15 x 4	375 x 100	087412
	15 x 5	375 x 135	087413
	15 x 6	375 x 150	087414
	15 x 8	375 x 200	087415
	15 x 10	375 x 250	087416
	15 x 12	375 x 300	087417
	18 x 4	450 x 100	087418
	18 x 5	450 x 135	087419
	18 x 6	450 x 150	087420
	18 x 8	450 x 200	087421
	18 x 10	450 x 250	087422
	18 x 12	450 x 300	087423
	18 x 15	450 x 375	087424
	21 x 4	525 x 100	087482
	21 x 6	525 x 150	087483
	21 x 8	525 x 200	087484
	21 x 10	525 x 250	087485
	21 x 12	525 x 300	087486
	21 x 18	525 x 450	087488
	24 x 4	600 x 100	087489
	24 x 6	600 x 150	087490
	24 x 8	600 x 200	087491
	24 x 10	600 x 250	087492
	24 x 12	600 x 300	087493
	24 x 15	600 x 375	087494
	24 x 18	600 x 450	087495
	24 x 21	600 x 525	087496