

### PRODUCT INFORMATION BULLETIN

## IPEX PVC Profile Pipe – Ultra-Rib®

PVC Gravity Flow Systems manufactured to  
CSA and ASTM standards

IPEX Ultra-Rib® Pipe and Fittings  
(200 mm – 600 mm) (8" – 24" )  
CSA B182.4 and ASTM F794

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 600 mm (8" – 24"). Its optimized profile design offers strength and reliability, as well as economy and superior flow rates.



### Features and Benefits

Ultra-Rib offers many advantages over traditional materials, as well as other plastic sewer pipes. Some of these advantages include:

**Tight Joints & Lower Treatment Costs:** Eliminate infiltration and exfiltration. Ultra-Rib's 50 psi capable joints easily outperform concrete and corrugated PE joints.

**Superior Flow Characteristics:** Because of the smooth inside wall of Ultra-Rib, a Manning's coefficient of 0.009 can be used when designing systems using Ultra-Rib pipe. This compares with Manning's coefficients of up to 0.023 for other materials like clay or concrete.

**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.

**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.

**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.



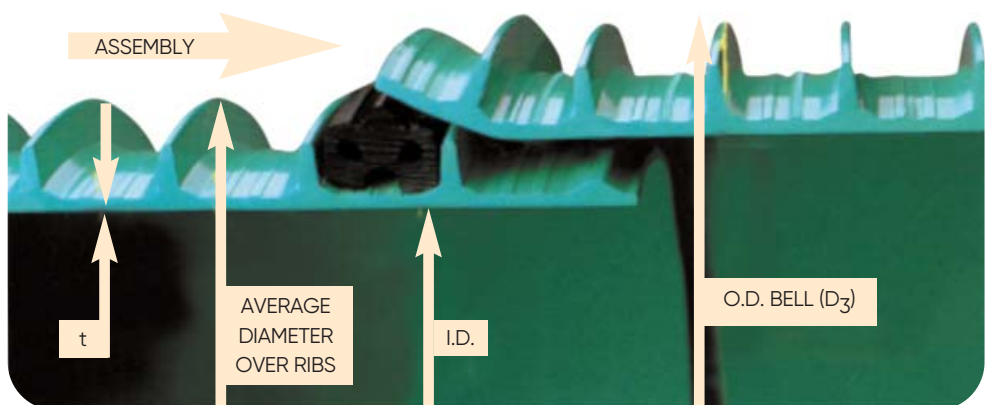
## Percent (%) Deflection of ULTRA-RIB pipe

ASTM Embedment Material Classification	Manufactured Granular Angular CLASS I		Clean Sand & Gravel CLASS II		Sand & Gravel with Fines CLASS III		Silt & Clay CLASS IV
	DENSITY (PROCTOR) AASHTO T-99		DENSITY (PROCTOR) AASHTO T-99		DENSITY (PROCTOR) AASHTO T-99		DENSITY (PROCTOR) AASHTO T-99
	90%	90%	80%	90%	85%	85%	
E' kPa (psi)	20 700 (3,000)	13 800 (2,000)	7 000 (1,000)	7 000 (1,000)	3 500 (500)	2 760 (400)	
Height of Cover							
m	ft						
1	3.3	0.3	0.5	1.0	1.0	1.7	2.1
2	6.6	0.4	0.5	1.0	1.0	1.8	2.2
3	9.8	0.4	0.6	1.2	1.2	2.2	2.6
4	13.1	0.6	0.8	1.6	1.6	2.9	3.5
5	16.4	0.7	1.1	2.0	2.0	3.7	4.4
6	19.7	0.9	1.3	2.4	2.4	4.4	5.3
7	23.0	1.0	1.5	2.8	2.8	5.1	6.1
8	26.3	1.2	1.7	3.2	3.2	5.9	7.0
9	29.5	1.3	1.9	3.6	3.6	6.6	7.9
10	32.8	1.4	2.1	4.0	4.0	7.3	8.8
15	49.2	2.2	3.2	6.0	6.0	11.0	13.1

○ Not recommended

## Dimensions

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



IPEX Inc.

Toll Free: (866) 473-9462  
ipexna.com