

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.



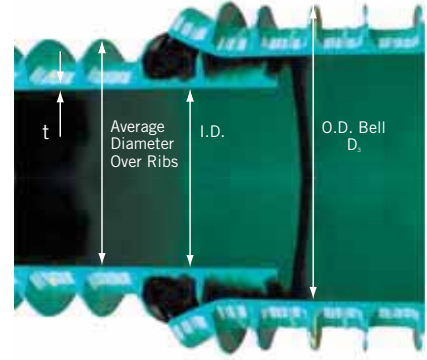
DID YOU KNOW?

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

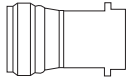
Pipe shall be colour-coded green.



PRODUCTION SELECTION CHART

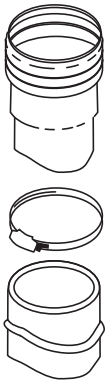
| Dimension | | Product Code |
|-----------|----|--------------|
| inches | mm | |

Wing Adapter (Adapts Ultra-Rib to AC, VCT or concrete Mains)



| | | |
|----|-----|--------|
| 8 | 200 | 087625 |
| 10 | 250 | 087626 |
| 12 | 300 | 087627 |
| 15 | 375 | 087628 |
| 18 | 450 | 087629 |
| 21 | 525 | 087630 |
| 24 | 600 | 087631 |

Inserta-Tees



| | | |
|---------|-----------|----------------------|
| 8 x 4 | 200 x 100 | 087650 |
| 10 x 4 | 250 x 100 | 087651 |
| 10 x 6 | 250 x 150 | 087652 |
| 10 x 8 | 250 x 200 | 087649 |
| 12 x 4 | 300 x 100 | 087653 |
| 12 x 6 | 300 x 150 | 087654 |
| 12 x 8 | 300 x 200 | 087655 |
| 12 x 10 | 300 x 250 | ** |
| 15 x 4 | 375 x 100 | 087656 |
| 15 x 6 | 375 x 150 | 087657 |
| 15 x 8 | 375 x 200 | 087658 |
| 15 x 12 | 375 x 300 | 087648 |
| 18 x 4 | 450 x 100 | 087660 |
| 18 x 6 | 450 x 150 | 087661 |
| 18 x 8 | 450 x 200 | 087662 |
| 18 x 10 | 450 x 250 | 087663 |
| 18 x 12 | 450 x 300 | 087664 |
| 18 x 15 | 450 x 375 | Available on Request |
| 21 x 4 | 525 x 100 | 087665 |
| 21 x 6 | 525 x 150 | 087666 |
| 21 x 8 | 525 x 200 | 087667 |
| 21 x 10 | 525 x 250 | 087668 |
| 21 x 12 | 525 x 300 | 087674 |
| 21 x 15 | 525 x 375 | Available on Request |
| 24 x 4 | 600 x 100 | 087669 |
| 24 x 6 | 600 x 150 | 087670 |
| 24 x 8 | 600 x 200 | 087671 |
| 24 x 10 | 600 x 250 | 087672 |
| 24 x 12 | 600 x 300 | 087685 |