

## Ultra-Rib<sup>®</sup> Open Profile Sewer Pipe & Fittings

PVC Gravity Flow Systems manufactured to  
CSA and ASTM standards

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

IPEX Ultra-Rib<sup>®</sup> 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.

- **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 outperformed 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.

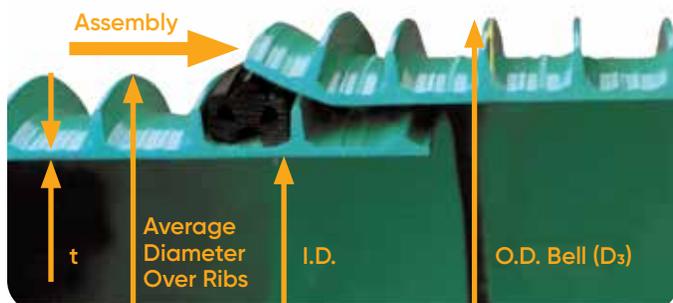
### Percent (%) Deflection of Ultra-Rib pipe

| ASTM Embedment Material Classification | Manufactured Granular Angular |    | Clean Sand & Gravel |               | Sand & Gravel with Fines |             | Silt & Clay |      |
|--|-------------------------------|----|---------------------|---------------|--------------------------|-------------|-------------|------|
|  | Class I                       |    | Class II            |               | Class III                |             | Class IV    |      |
| 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>s</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 |



### Contact us

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