HI-Q® PIPE (PER ASTM F2648)
HIGH-CAPACITY PERFORMANCE

THE PERFORMANCE YOU EXPECT. THE INNOVATIONS YOU NEED.

With over 110 years experience, Hancor has provided expert knowledge and innovative product solutions proven in a wide range of field drainage applications. Today’s Hi-Q pipe (per ASTM F2648) is engineered with a compound of virgin and recycled high density polyethylene resins to provide impressive material properties. The performance you’ve come to expect from Hi-Q, with the added benefit of helping to promote responsible use of resources. Our HDPE pipe delivers superior value while providing physical strength and structural design that just cannot be matched by metal or concrete.

HI-Q PIPE (PER ASTM F2648) IS PERFECT FOR THE FOLLOWING APPLICATIONS:

• Culverts
• Cross, Slope or Edge Drains
• Pond Overflows
• Parking Lot Drainage
• Storm Drains
• Retention/Detention Systems
• Sports Playing Fields

FEATURES & BENEFITS

• Meets soil-tight joint performance requirements. Coupling bands are available.
• Available in nominal 20’ (6.1 m) lengths, resulting in fewer joints – pipe can easily be cut to the desired lengths in the field.
• Easy-to-handle, safe, lightweight pipe requires less labor and equipment for faster installation and reduced costs.
• HS-25 (Highway traffic loads) rated with a minimum of 1’ (0.3 m) of cover for 4” - 48” (100 - 1200 mm) and 2’ (0.6 m) for 60” diameters.
• Provides superior resistance to chemicals, road salts, motor oil and gasoline – will not rust, deteriorate or crumble.
• Withstands repeated freeze/thaw cycles and continuous subzero temperatures.
• Superior hydraulics-smooth interior will ensure no debris or sediment build-up.

Bell/Bell Coupler
Split Coupler

Hancor Service: Hancor representatives and engineers are committed to providing you with the answers to all your questions, including specifications, installation, backfill recommendations and more.
HI-Q PIPE (PER ASTM F2648) SPECIFICATIONS

SCOPE
This specification describes 4- through 60-inch (100 to 1500 mm) Hancor Hi-Q pipe (per ASTM F2648) for use in gravity-flow land drainage applications.

PIPE REQUIREMENTS
Hi-Q pipe (per ASTM F2648) plain end pipe shall have a smooth interior and annular exterior corrugations.

• 4- through 60-inch (100 to 1500 mm) shall meet ASTM F2648.
• Manning's "n" value for use in design shall be 0.012.

JOINT PERFORMANCE
Pipe shall be joined with coupling bands covering at least two full corrugations on each end of the pipe. Standard connections shall meet or exceed the soil-tight requirements of ASTM F2648.

Gasketed connections shall incorporate a closed-cell synthetic expanded rubber gasket meeting the requirements of ASTM D1056 Grade 2A2. Gaskets, when applicable, shall be installed by the pipe manufacturer.

FITTINGS
Fittings shall conform to ASTM F2306.

MATERIAL PROPERTIES
Material for pipe production shall be an engineered compound of virgin and recycled high density polyethylene conforming with the minimum requirements of cell classification 424420C (ESCR Test Condition B) for 4- through 10-inch (100 to 250 mm) diameters, and 435420C (ESCR Test Condition B) 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 design engineer shall verify compatibility with overall system including structural, hydraulic, material and installation requirements for a given application.

INSTALLATION
Installation shall be in accordance with ASTM D2321 and Hancor’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 60-inch (1500 mm) diameters, the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), or Class 2 (minimum 90% SPD) material. Maximum fill height depend on embedment material and compaction level; please refer to Technical Note 2.02. Contact your local Hancor representative or visit our website at www.hancor.com for a copy of the latest installation guidelines.

PIPE DIMENSIONS

<table>
<thead>
<tr>
<th>Pipe I.D., in. (mm)</th>
<th>4 (100)</th>
<th>6 (150)</th>
<th>8 (200)</th>
<th>10 (250)</th>
<th>12 (300)</th>
<th>15 (375)</th>
<th>18 (450)</th>
<th>24 (600)</th>
<th>30 (750)</th>
<th>36 (900)</th>
<th>42 (1050)</th>
<th>48 (1200)</th>
<th>60 (1500)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe O.D.,* in. (mm)</td>
<td>4.8 (122)</td>
<td>6.9 (175)</td>
<td>9.1 (231)</td>
<td>11.4 (290)</td>
<td>14.5 (368)</td>
<td>18 (457)</td>
<td>22 (559)</td>
<td>28 (711)</td>
<td>36 (914)</td>
<td>42 (1067)</td>
<td>48 (1219)</td>
<td>54 (1372)</td>
<td>67 (1702)</td>
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<tr>
<td>Perforations</td>
<td>All diameters available with or without perforations.</td>
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*Pipe O.D. values are provided for reference purposes only, values stated for 12- through 30-inch are ± 1 inch. Contact a sales representative for exact values.