EPOXY COATED STRAND

Dimensions and Mechanical Characteristics of Flo-Gard and Flo-Bond

<table>
<thead>
<tr>
<th>Strand Nominal Diameter</th>
<th>EPOXY COATED STRAND</th>
<th>STEEL STRAND (A 416/A 416M)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Nominal Diameter</td>
<td>Coating Thickness</td>
</tr>
<tr>
<td>in. [mm]</td>
<td>in. [mm]</td>
<td>mil [mm]</td>
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</tbody>
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Coating Performance of Flo-Gard and Flo-Bond

BENDING CHARACTERISTICS OF COATING:
The coating develops no abnormalities even under severe conditions; SUCH AS, WHEN WOUND AROUND A CYLINDER MANDREL WITH A DIAMETER 32 times that of the strand diameter.

ADHESION AND CONTINUITY OF COATING UNDER TENSIONING:
The coating follows the steel wire and maintains continuity up until the wire breaks. Even after wire breakage, the coating demonstrates uniform behavior with the steel wire.

OTHER CHARACTERISTICS:

<table>
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<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Water Resistance:</td>
<td>With ASTM G-20-77 No blistering, softening, loss of bond or holidays in coating after immersion for 45 days in 20± 1°C distilled water.</td>
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<tr>
<td>Chemical Resistance:</td>
<td>With ASTM G-20-77 No blistering, softening, loss of bond or holidays in coating after immersion for 45 days in various 20± 1°C solutions.</td>
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<td>Impact Test:</td>
<td>With ASTM G-14-72 No shattering or bond loss in coating.</td>
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<tr>
<td>Salt Spray Test:</td>
<td>With ASTM B117-73 No visible signs or corrosion in coating after 3000 hours under tension 70% of maximum load.</td>
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</table>

COMPARISON WITH CONVENTIONAL STRANDS IN ACCELERATED TEST:
Epoxy-coated strand has superior corrosion resistance compared with bare strand and galvanized strand (after 1000 hours in salt spray test).
Anchorage Characteristics of Flo-Gard and Flo-Bond

Epoxy strand can be anchored from directly above the coating with a special anchoring tool to provide an anchoring efficiency equal to that of a bare strand.

Fatigue Resistance of Flo-Gard and Flo-Bond

The epoxy resin filling prevents fretting between the strands as well as between the wedge and steel, providing superior fatigue resistance.

Maximum Load = 261 x 0.45
= 117kN
= (12,000kgf)

Bond Characteristics with Concrete of Flo-Bond

Special surface treatment makes Flo-Bond adhere to concrete as well as or better than bare strand.