PULSTRAND® 4100 SINGLE END ROVING
MAXIMIZE PERFORMANCE, MINIMIZE COST

PulStrand® 4100 is specifically designed for fast wet-out, good processing, high glass loading and excellent laminate properties, to maximize customers’ processing and minimize their processing costs in pultrusion applications.

• PulStrand® 4100 Type 30® is a single-end roving designed for pultrusion, offering excellent processing and laminate performance with multi-resin compatibility.
• Produced with patented Advantex® corrosion resistant E-CR glass by Owens Corning.

### Product Benefits

#### Outstanding Mechanical Properties
- Excellent shear and flexural properties in major resin systems, provide maximum part strength and long part service life.

#### Reduced Cost
- Fast, uniform strand wet-out leads to higher glass loading, reducing resin demand; fast wet-out also increases production speed and productivity resulting in reduced manufacturing cost.

#### Multi-resin Compatibility
- Excellent glass/resin bonding in polyester, vinyl ester, polyurethane, acrylic, and epoxy resins, providing the processor maximum flexibility with one input glass. This reduces cost with less inventory to carry and eliminates the need for costly downtime and labor to change input glass during job changes.
- Suitable for LFTP PA compounding applications

#### Excellent Processing
- Smooth run-out combined with low fuzz properties, result in smoother parts and less downtime for clean-up, enabling higher efficiencies and lower manufacturing costs.

#### Corrosion Resistant
- Excellent corrosion resistance with Advantex® Glass compared to standard E-glass: providing longer service life in applications facing corrosion.

### Application
- Pultrusion applications in polyester, vinyl ester, polyurethane, and epoxy resin systems, using conventional dip bath or resin injection technology.
- Pultruded structural applications: ladder rails, grating systems, rebar and poles, etc.
Technical Characteristics Single-End Roving

The following data was generated using PulStrand® 4100 – 113 Yield (4400 Tex) on pultruded part cross-section of samples: 1 inch by 0.125 inch (25.4 mm by 3.175 mm).

### Packaging (Standard Reference)

Rovings are available in a single-end internal-pull package. Each pallet weighs about 1 ton and can be packaged in bulk or Creel-Pak™ packaging format. Pallets are stretch-wrapped for load stability and for protection during transport. All individual packages are wrapped with Tack-Pak™ packaging to aid package run-out and transfer. More information is available in the Customer Acceptance Standards.

### Labeling

Each individual package is labeled with information including: product name, tex/yield, producing plant, and production date.

### Storage

Glass fiber products should be stored in a cool, dry area. The glass fiber products must remain in their original packaging material until use; the product should be stored in the workshop, within its original packaging, 48 hours prior to its utilization, to allow it to reach the workshop temperature condition and prevent condensation, especially during cold weather. The packaging is not waterproof. Be sure to protect the product from the weather and other sources of water. When stored properly, the product has no known shelf-life issues, but retesting is advised after three years from the initial production date to insure optimum performance.

<table>
<thead>
<tr>
<th>TEX</th>
<th>YIELD</th>
<th>REGION AVAILABLE</th>
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<tbody>
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### Availability

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<th>MECHANICAL PROPERTIES</th>
<th>FLEXURAL STRENGTH ASTM D790</th>
<th>INTER-LAMINAR SHEAR STRENGTH ASTM D 2344</th>
<th>FIBER WEIGHT FRACTION (%)</th>
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<tbody>
<tr>
<td></td>
<td>Flexural Strength (ksi)</td>
<td>Flexural Strength (MPa)</td>
<td>Short Beam Strength (ksi)</td>
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<td>Epoxy Resin</td>
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### MECHANICAL PROPERTIES

- **FLEXURAL STRENGTH ASTM D790**:
  - Flexural Strength (ksi)
  - Flexural Strength (MPa)
- **INTER-LAMINAR SHEAR STRENGTH ASTM D 2344**:
  - Short Beam Strength (ksi)
  - Short Beam Strength (MPa)
- **FIBER WEIGHT FRACTION (%)**:

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