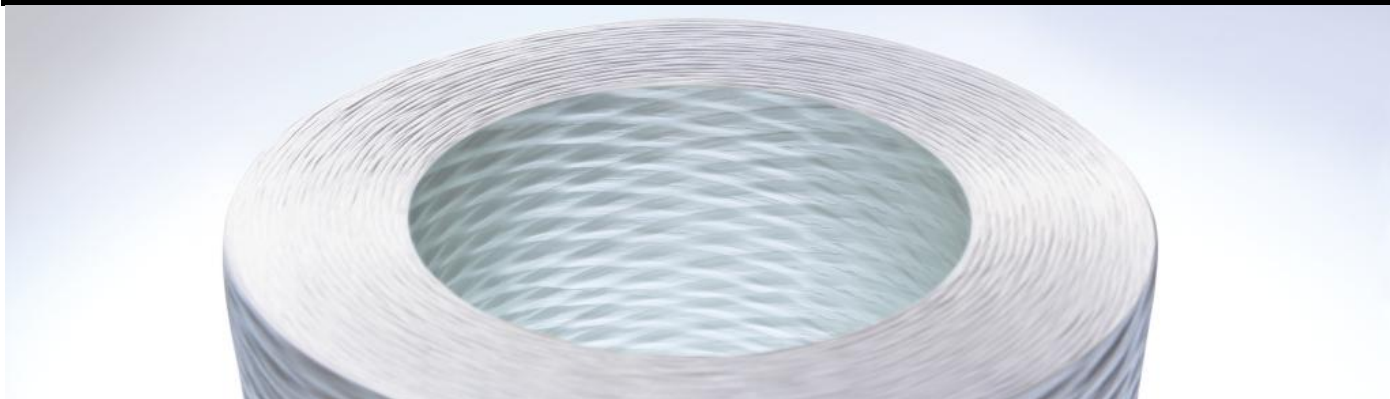


# PULSTRAND™ 4100 SINGLE-END ROVING

FOR PULTRUSION PROCESSES



## DESCRIPTION

- **Pulstrand™ 4100 Type 30®** is a single end roving designed specifically for pultrusion, offering fast wetting, excellent processing and excellent laminate performance in major resin systems.
- Pulstrand™ 4100 product sizing is specifically designed for fast wet-out, good processing, and excellent laminate properties, to maximize customers' processing and minimize their processing costs.
- Pulstrand™ 4100 roving is produced with Owens Corning's patented Advantex® corrosion resistant E-CR glass.

## BENEFITS

- **Excellent processing:** Pulstrand™ 4100 product provides smooth run-out, has low fuzz properties, resulting in smoother parts and less downtime for clean up, thus helping to drive higher efficiencies and lower manufacturing costs.
- **Multi-resin compatible:** Pulstrand™ 4100 product is designed for 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.
- **Excellent strand wet-out:** Pulstrand™ 4100 product has fast, uniform strand wet-out in all major resin systems. Fast wet-out allows for optimized part production speed and increased productivity, reducing manufacturing costs.
- **Outstanding shear and flexural properties in major resin systems,** providing maximum part strength and long part service life.
- **Excellent corrosion resistance with Advantex® Glass compared to standard E-glass:** Advantex® Glass means longer part life and great service life strength in applications facing corrosion. For additional information on Advantex® Glass: <http://composites.owenscorning.com/aboutAdvantex.aspx>



## APPLICATIONS

Pultrusion applications in polyester, vinyl ester, polyurethane, and epoxy resin systems, using conventional dip bath or resin injection technology

Manufacture of pultruded structural shapes, ladder rails, and grating systems



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**AVAILABILITY** – Not all Tex available in all regions.

Yield	Tex
825 – 250 – 207 – 113 – 103 – 56 – 52	600 – 2000 – 2400 – 4400 – 4800 – 8800 – 9600

## 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).

Mechanical properties	Flexural Strength ASTM D790		Interlaminar Shear Strength ASTM D 2344		Fiber Weight fraction (%)
	Flexural strength (ksi)	Flexural strength (MPa)	Short beam strength (ksi)	Short beam strength (MPa)	
Polyester Resin	180	1241	6.9	48	81.5
Vinyl ester Resin	204	1407	9.7	67	82
Polyurethane Resin	214	1476	13.3	92	80.5
Epoxy Resin	206	1421	11	76	78

## PACKAGING

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 packages are wrapped with Tack-Pak® packaging to aid package run-out and transfer. More information is available in the Customer Acceptance Standards.

## 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.

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