

SuperRod™ Composite Tie Rod Data Sheet

(Part Number SST007, SST008, SST009, SST010)

**Wale & Retaining Wall System
(US Patent #6,893,191 B2/May 17, 2005)*

SuperRod™ is manufactured using the pultrusion process and consists of E-glass reinforcements with a thermoset Vinyl Ester resin matrix.

Key Benefits:

- High Strength
- Corrosion Resistance
- High Flexibility
- Light Weight
- Easy to Cut
- For Use in Seawater



SuperRod™ products are high strength and lightweight. SuperRod™ solid rods have a threaded surface four feet on each end of the rod, which gives excellent mechanical bonding characteristics between the rod and interface.

Rod lengths are stocked up to 20ft. (6.1 m) 303 Stainless Steel couplers are available to make longer lengths.



303 Stainless Steel Coupler
Working Load: 20,000 lbs. (9,072 kg)

Properties

Material Specification		
Resin Type	Vinyl Ester	
Glass Type	E-Glass	
Glass Content (by weight)	82% nominal	
Mechanical Properties	Average Values Imperial	Average Values Metric
Tensile Modulus (ASTM D638)	6.0E6 psi	41400 MPa
Flexural Modulus (ASTM D790)	6.0E6 psi	41400 MPa
Tensile Strength (ASTM D638)	100,000 psi	689 MPa
Flexural Strength (ASTM D790)	100,000 psi	689 MPa
Elongation at Break	2.3%	2.3%
Bending Radius	8.2 ft.	2.5 m
Coefficient of Thermal Expansion (ASTM D696)	3.00 E 6 in/in/°F	5.40 E 6 mm/mm/°C



CREATIVE PULTRUSIONS, INC.

214 Industrial Lane ■ Alum Bank, PA 15521
Toll-Free: 888-CPI-PULL (274-7855) ■ 814-839-4186 ■ Fax: 814-839-4276
Web site: <http://www.creativepultrusions.com> ■ E-mail: crpul@pultrude.com

Working Loads

SuperRod™ has been subject to extensive mechanical testing. A Safety Factor of 1.60 has been applied to the Failure Load. Maximum recommended torque not to exceed 175 lbs-ft (260.43 kg/m).



Single Urethane Nut
Working Load: 8,000 lbs. (3,629 kg.)



Double Urethane Nuts
Working Load: 13,750 lbs. (6,237 kg.)



SuperRod™
with One Stainless Steel Nut
Working Load: 15,450 lbs. (7,008 kg.)



SuperRod™
with Two Stainless Steel Nuts
Working Load: 26,250 lbs. (11,907 kg.)



SuperRod™
Washers: 6" (152 mm)
Glass Filled Polymer Washer.

Flowgrip® and Pultex® are registered trademarks of Creative Pultrusions, Inc. Creative Pultrusions™, Shaping the Future™, Superstud™, Superstud™/Nuts, Superstik™, SUPURTUF™, Superplank™, Superdeck™, Supergrate™, Tuf-dek™, SuperLoc™, SuperWale™, SuperCap™, SuperRod™, Pultrusion Dynamics™, DYNAPUL™, Pulshaping™, TOPSCAN™ and TOPDIE™ are trademarks of Creative Pultrusions, Inc.