



800 GLASS FIBER REINFORCED POLYMER

TECHNICAL DATA

DESCRIPTION: ConServ 800 FIBERGLASS REBAR is a structural spiral wrapped fiberglass reinforcing bar which is corrosion resistant, non-conductive and lightweight while it is one-fourth the weight of steel rebar. It more closely matches the characteristics of wood for modulus of elasticity, expansion and contraction, and condensation than does typical steel reinforcing bar.

USES: For making load bearing connections, pinning and reinforcing wood, concrete and stone elements. Typical applications include attachment and reinforcement of rafters, trusses, purlins, framing members, beams, sills, columns, logs, timbers, etc. It can be used for casting wood and concrete elements and to replace steel rebar in concrete slabs, forms and beams. Fiberglass rebar is most often used in conjunction with ConServ Epoxy Adhesives for attaching the rebar to the elements and the elements to one another.

PROPERTIES: Continuous drawn glass roving saturated with vinyl ester resin. A single strand, spiral wrapped around the exterior diameter to provide a spiral indentation in the bar providing maximum bonding and lock to epoxy, concrete or grout bedding.

Bond shear (between rebar and epoxy) 580 psi
 Bond shear (between rebar and concrete) 400 psi
 Modulus of elasticity 4x(106)

Single transverse shear 5,000 psi
 Tensile strength 80,000 psi
 Bonding stress 72,000 psi
 Thermal coefficient of expansion 5.5x(106) in/in/°F
 Recommended allowable working stress 20,000 psi

SHIPPING: All diameters are shipped in convenient 5 ft. lengths to facilitate UPS handling. Longer lengths up to 20' are available by special order.

ORDER NUMBERS:

Diameter	Order Item #
1/4 inch	800-2
3/8 inch	800-3
1/2 inch	800-4
5/8 inch	800-5
3/4 inch	800-6
7/8 inch	800-7
1 inch	800-8

SIZE AVAILABILITY

Size	Nominal Diameter		Nominal Area		Guaranteed Tensile Strength		Ultimate Tensile Load		Tensile Modulus of Elasticity	
	(mm)	(in)	(mm ²)	(in ²)	(MPa)	(ksi)	kN	Kips	(GPa)	(psi 10 ⁶)
2	6	1/4	31.67	0.049	896	130	28.34	6.37	46	6.7
3	10	3/8	71.26	0.110	827	120	58.72	13.20	46	6.7
4	13	1/2	126.70	0.196	758	110	95.90	21.56	46	6.7
5	16	5/8	197.90	0.307	724	105	143.41	32.24	46	6.7
6	19	3/4	285.00	0.442	690	100	196.60	44.20	46	6.7
7	22	7/8	387.90	0.601	655	95	254.00	57.10	46	6.7
8	25	1	506.70	0.785	620	90	314.27	70.65	46	56.7