



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 and concrete 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 are available by special order up to 20 ft.

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

Diameter			Area		Guaranteed Tensile Strength		Ultimate Tensile Load		Tensile Modulus of Elasticity	
Size	(mm)	(in)	(mm ²)	(in ²)	(MPa)	(ksi)	kN	Kips	(GPa)	(psi 10 ⁶)
2	6	1/4	31.67	0.049	825	120	26.2	5.89	40.8	5.92
3	10	3/8	71.26	0.110	760	110	54.0	12.10	40.8	5.92
4	13	1/2	126.70	0.196	690	100	87.3	19.60	40.8	5.92
5	16	5/8	197.90	0.307	655	95	130.0	29.10	40.8	5.92
6	19	3/4	285.00	0.442	620	90	177.0	39.80	40.8	5.92
7	22	7/8	387.90	0.601	586	85	227.0	51.10	40.8	5.92
8	25	1	506.70	0.785	550	80	279.0	62.80	40.8	5.92
9	29	1 1/8	641.30	0.994	517	75	332.0	74.60	40.8	5.92
10	32	1 1/4	791.70	1.227	480	70	382.0	85.90	40.8	5.92