

Electrical Insulating Structural Shapes

GLASROD Solid Rod and Bar

GLASROD® solid rod and bar products are fiberglass-reinforced thermoset polyester shapes which exhibit properties desirable for a wide range of structural and electrical applications.

GLASROD Grade MTS

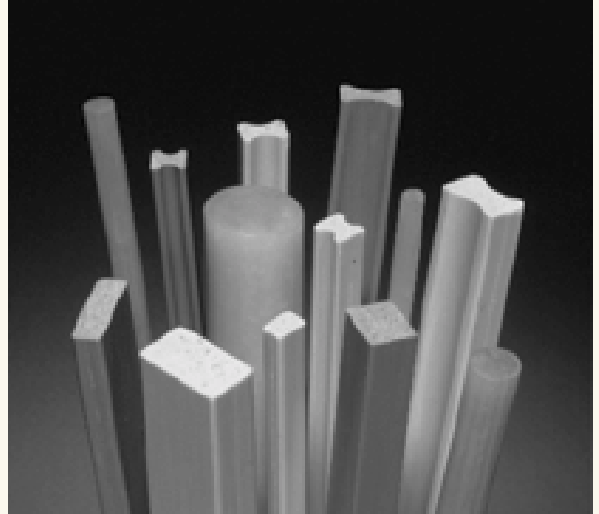
Most economical system for electrical use; designed for 155°C service. 50,000 psi tensile and 80,000 psi flexural strength. Available in Rectangular, Square, "A" and Dogbone shapes.

GLASROD Grade SG-200

Highest temperature – rated for 210°C/210°C service. Excellent thermal endurance. Ideal replacement for silicone rod. Available in Rectangular, Square, "A" and Dogbone shapes.

GLASROD Grade HIR

Highest physical properties. Electrical properties and high temperature capabilities – Class H (200°C). Dimensional stability and 100,000 psi flexural strength. Resistant to fluids commonly used around electrical equipment. Greater cost efficiency than epoxy, phenolic, nylon or brass rod. Available in Round Rod.



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GLASROD Features

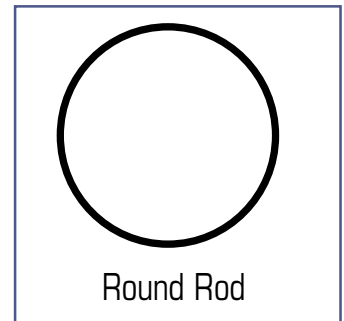
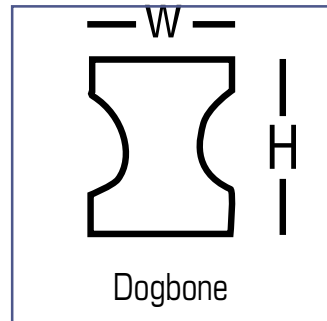
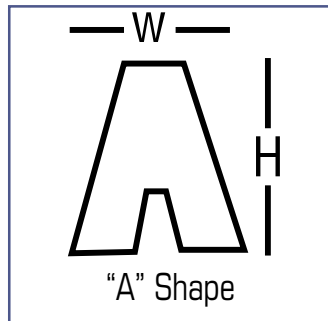
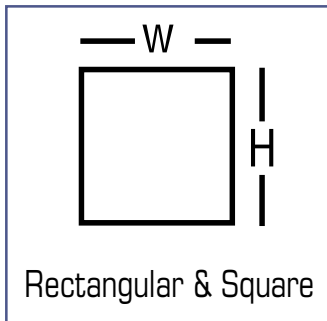
GLASROD SOLID ROD AND BAR PRODUCTS PROPERTY TABLE – TYPICAL AVERAGE VALUES					
GENERAL INFORMATION	UNIT	ASTM/UL TEST NUMBER	GRADE MTS	GRADE SG-200	GRADE HIR
Standard Color	—	—	Red	Tan	Light Green
MECHANICAL PROPERTIES					
Tensile Strength	Psi	D638	50,000	70,000	90,000
Tensile Modulus	Psi x 10 ⁶	D638	2.0	2.0	3.0
Flexural Strength	Psi	D790	80,000	80,000	100,000
Flexural Modulus	Psi x 10 ⁶	D790	3.0	3.0	4.0
Compressive Strength – axial	Psi	D695	40,000	50,000	60,000
Compressive Strength – transverse	Psi	D695	14,000	14,000	16,000
IZOD Impact Strength	Ft. lb./in.	D256	40	40	60
Shear Strength – in plane	Psi	D3914	2,000	3,000	3,500
Water Absorption	% by wt.	D570	0.25	0.15	0.10
Specific Gravity	—	D792	2.0	1.85	1.9
ELECTRICAL PROPERTIES					
Arc Resistance	Sec.	D495	130	150	150
Electric Strength – 1" axial in oil	kV/in.	D149	70	70	80
Permittivity, 60 Hz	—	D150	5.0	5.0	5.0
Insulation Resistance	Ohm x 10 ¹²	D257	83	64	100
THERMAL PROPERTIES					
Thermal Conductivity	BTU x in/h x ft ² x °F	C177	2.0	2.0	2.0
Coefficient of Thermal Expansion	in/in/°C •10 ⁻⁵	D696	0.9	0.7	0.6

Superior strength provided by the continuous filament fiberglass roving is complemented by the physical and electrical characteristics contributed by the thermoset polyester resins. Together they provide the right combination of properties to offer significant price/performance advantages over alternative materials.

All GLASROD solid rod and bar products feature:

- High physical strength
- Excellent dielectric properties
- Dimensional stability
- Resistance to common solvents
- Heat resistance
- High strength-to-weight ratio
- Low water absorption

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GLASROD GRADE MTS OR SG-200 RECTANGULAR AND SQUARE			
PART NUMBER	SIZE (WIDTH & HEIGHT)	FEET PER PACKAGE	MOLDED TOLERANCE
0404	1/4 x 1/4	1620	±0.010"
0406	1/4 x 3/8	1080	±0.010"
0408	1/4 x 1/2	864	±0.010"
0410	1/4 x 5/8	648	±0.010"
0412	1/4 x 3/4	540	±0.010"
1904	1/4 x 1-3/16	324	±0.010"
0505	5/16 x 5/16	972	±0.010"
0508	5/16 x 1/2	648	±0.010"
0516	5/16 x 1	324	±0.010"
0606	3/8 x 3/8	720	±0.010"
0608	3/8 x 1/2	576	±0.010"
0610	3/8 x 5/8	432	±0.010"
0612	3/8 x 3/4	360	±0.010"
0708	7/16 x 1/2	504	±0.010"
0808	1/2 x 1/2	432	±0.010"
0810	1/2 x 5/8	324	±0.010"
0812	1/2 x 3/4	270	±0.015"
0822	1/2 x 1-3/8	162	±0.015"
0909	9/16 x 9/16	315	±0.015"
0916	9/16 x 1	180	±0.015"
0918	9/16 x 1-1/8	135	±0.015"
1012	5/8 x 3/4	225	±0.015"
1216	3/4 x 1	144	±0.015"
2020*	1-1/4 x 1-1/4	54	±0.015"

Standard Length is 9 Feet

GLASROD GRADE SG-200 "A" SHAPE			
PART NUMBER	SIZE (WIDTH & HEIGHT)	FEET PER PACKAGE	MOLDED TOLERANCE
6277110	3/8 x 1/2	648	±0.010"
6277120	1/2 x 5/8	450	±0.010"
6277130	11/16 x 3/4	288	±0.015"

GLASROD GRADE MTS OR SG-200 DOGBONE			
PART NUMBER	SIZE (WIDTH & HEIGHT)	FEET PER PACKAGE	MOLDED TOLERANCE
0406	1/4 x 3/8	1080	±0.010"
0606	3/8 x 3/8	810	±0.010"
0608	3/8 x 1/2	576	±0.010"
0610	3/8 x 5/8	432	±0.010"
0612	3/8 x 3/4	360	±0.010"
0616	3/8 x 1	288	±0.010"
0808	1/2 x 1/2	432	±0.010"
0810	1/2 x 5/8	324	±0.010"
0812	1/2 x 3/4	270	±0.015"
0816	1/2 x 1	216	±0.015"
1012	5/8 x 3/4	225	±0.015"
1216	3/4 x 1	144	±0.015"

Standard Length is 9 Feet

GLASROD GRADE HIR ROUND ROD				
PART NUMBER	SIZE (WIDTH & HEIGHT)	MOLDED TOLERANCE	LENGTH PER ROD (FT)	FEET PER STANDARD BUNDLE
6030125	.125	±0.003"	3	180
6050003	.187	±0.002"	3	150
6050004	.250	±0.005"	9	1620
6050005	.313	±0.005"	9	810
6050006	.375	±0.005"	9	720
6050008	.500	±0.010"	9	432
6050010	.625	±0.010"	9	270
6050012	.750	±0.015"	9	180
6050014	.875	±0.015"	9	135
6050016	1.000	±0.020"	9	108

Standard Length is 9 Feet



GLASTIC CORPORATION

4321 Glenridge Road | Cleveland, OH 44121-2891 | phone 216-486-0100 | toll free 800-360-1319 | fax 216-486-1091 | www.glastic.com

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