

**Intended use**

Galen Basalt Fiber Rebar is designed for reinforcement of prestressed and non-prestressed construction structures and components (foundations of buildings and structures, reinforcement of concrete floors, reinforcement of roads, etc.)



**Design**

Galen Basalt Fiber Rebars are GFRP bars of a round section, cut to length, sand coated or plain.

**Technical characteristics**

Property	Certified Results Basalt FRP Rebar					
	US	#2/M6	#3/M10	#4/M13	#5M16	#6/M19
Bar Designation No.	US	#2/M6	#3/M10	#4/M13	#5M16	#6/M19
Resin Type	Epoxy					
Fiber Type	Basalt					
Weight	lb/ft	0,047	0,121	0,198	0,309	0,429
Mean Glass Transition Temperature	°F	216	223	219	221	220
Mean Degree of Cure	%	>97	>98	>97	>97	>97
Guaranteed Ultimate Tensile Force	kip	9,5	16,8	28,4	46,7	52,2
Nominal Ultimate Tensile Strength	ksi	170	165	160	155	150
Nominal Mean Tensile Modulus of Elasticity	Msi	7,3	7,3	7,3	7,3	7,3
Nominal Mean Ultimate Tensile Strain	%	2,3	2,2	2,2	2,1	2,0
Mean Measured Cross-Sectional Area	inch <sup>2</sup>	0,049	0,11	0,20	0,31	0,44
Guaranteed Bond Strength	ksi	2,5	1,4	2	1,4	1,1
Guaranteed Transverse Shear Strength	ksi	22,4	29,3	27,3	25,8	23,9
Fiber Mass Content	%	83	85	85	86	85
Mean Moisture Absorption to Saturation at 50°C	%	0,63	0,54	0,56	0,73	0,72
Moisture Absorption in 24 hrs. at 50°C	%	0,16	0,09	0,1	0,14	0,11

**Advantages**

- ABSOLUTE CORROSION RESISTANCE, ALKALI RESISTANCE
- HIGH STRENGTH
- LOW WEIGHT
- ABSOLUTE ECO-FRIENDLINESS AND FIRE SAFETY
- DURABILITY
- DIELECTRIC
- NON-MAGNETIC
- LOW THERMAL CONDUCTIVITY