

Glass Fiber Reinforced Polymer (GFRP) rebars

Detailed properties: SFT-Bar ® G50 Grade II

| Size Imperial [Metric] | Nominal Cross sectional Area mm²[in.²] | Tensile Load kN [lbf] | Guaranteed Tensile Strength MPa [Ksi] | Young's Modulus, E MPa [Ksi] | Transverse Shear Strength MPa [Ksi] | Ultimate Strain μfε(%) | Bond Strength MPa | Transition Temperature, ℃ |
|------------------------------|--|--------------------------|---|---------------------------------|---|---------------------------|-------------------------|------------------------------|
| #2 [6mm] | 32 [0.049] | 32 [7193] | 1000 [145] | 60000 [8702] | | 1.50 | | |
| #3 [10mm] | 71 [0.11] | 71 [15961] | 1000 [145] | 60000 [8702] | | 1.55 | | |
| #4 [13mm] | 129 [0.20] | 129 [29000] | 1000 [145] | 60000 [8702] | | 1.62 | | |
| #5 [16mm] | 199 [0.31] | 195 [43838] | 980 [142] | 60000 [8702] | 200 [29] | 1.54 | 20 | 120 |
| #6 [20mm] | 284 [0.44] | 270 [60698] | 950 [138] | 55000 [7977] | | 1.50 | | |
| #7 [22mm] | 387 [0.60] | 348 [78233] | 900 [130] | 55000 [7977] | | 1.65 | | |
| #8 [25mm] | 510 [0.79] | 433 [97342] | 850 [123] | 55000 [7977] | | 1.61 | | |

- Nominal cross-sectional area is not based on designated diameter.
- Tensile properties is calculated using nominal cross-sectional areas.
- Guaranteed value: Average value 3 × standard deviation (ACI 440 2015) –
- The designers should contact the bar manufacturer for the latest updates of this technical data sheet

vs Black steel (low Quality)

Disclaimer:

G50 SFT-Bar are Concrete Reinforcing Bars that can be used in some Concrete applications (such reinforcing bars can be considered for some primary or secondary structural applications) as defined by the CSA S807 & ASTM D7957 standards. SFTec Inc. or its affiliates, distributors, partners, sister companies, subsidiaries, suppliers, or any other such entity licensed by SFTec Inc. will not be held liable for any misuse of its bars and materials. Any consequence of such misuse that results from non-respect of applicable standards, codes or known processes and rules will not be attributable to SFTec Inc. and no claim for responsibility or damages of any sort will be pursued against SFTec Inc. or its affiliates, distributors, partners, sister companies, subpliers, or any other such entity licensed by SFTec Inc.