

Mateenbar™ 60

Mateenbar 60 (CSA Grade III)

| | Units | #2 (6mm) | #3 (10mm) | #4 (13mm) | #5 (15/16mm) | #6 (19/20mm) | #7 (22mm) | #8 (25mm) | #9 (30mm) | #10 (32mm) |
|--------------------------------------|-----------------|---|-----------|-----------|--------------|--------------|-----------|-----------|-----------|------------|
| Guaranteed tensile force | kN | 27 | 71 | 129 | 199 | 284 | 387 | 510 | 600 | 735 |
| | kip | 7.2 | 16.0 | 29.0 | 44.0 | 64.0 | 87.0 | 115.0 | 134.9 | 165.2 |
| Tensile modulus | GPa | 60 | | | | | | | | |
| | ksi | 8700 | | | | | | | | |
| Guaranteed transverse shear capacity | MPa | 180 | | | | | | | | |
| | ksi | 26.1 | | | | | | | | |
| Primary Materials | | Epoxy Backboned Vinylester and Corrosion Resistant E-CR Glass | | | | | | | | |
| Weight | g/m | 97 | 185 | 315 | 476 | 702 | 960 | 1252 | 1575 | 2050 |
| | lb/ft | 0.07 | 0.12 | 0.21 | 0.32 | 0.47 | 0.64 | 0.84 | 1.06 | 1.37 |
| Nominal cross-sectional area | mm ² | 32 | 71 | 129 | 199 | 284 | 387 | 510 | 645 | 819 |
| | in ² | 0.049 | 0.110 | 0.200 | 0.310 | 0.440 | 0.600 | 0.790 | 1.000 | 1.270 |
| Outer diameter (including ribs) | mm | 8.2 | 10.8 | 14.0 | 17.2 | 20.6 | 24.1 | 22.4 | 30.8 | 35.0 |
| | in | 0.315 | 0.425 | 0.551 | 0.677 | 0.807 | 0.949 | 1.087 | 1.213 | 1.378 |

Please contact our team for information on the material properties, shape availability and dimensional limitations of bent bars.

Direct comparisons: Steel and mateenbar

| Material Properties | Units | Mateenbar™ | Stainless Steel (ASTM A955) | Steel (ASTM A615) |
|------------------------|--------------------|--------------------------|-----------------------------|-------------------|
| Tensile strength | MPa | 800 - 1100 | 420 | 420 |
| | ksi | 116 - 159 | 60 | 60 |
| Tensile modulus | GPa | 46 - 60 | 200 | 200 |
| | KSI | 6675 - 8700 | 29000 | 29000 |
| Bond strength | MPa | 10 | 10 | 10 |
| | PSI | 1450 | 145 | 1450 |
| Thermal conductivity | W/ (m·°C) | < 1 ⁽¹⁾ | 16 | 54 |
| | BTU/(hr.ft.°F) | < 0.6 ⁽¹⁾ | 10 | 32 |
| Electrical resistivity | Ω·m | > 200 x 10 ¹⁰ | 1 x 10 ⁻⁴ | 1.5 x 10 |
| | Ω·in | > 8 x 10 ¹³ | 4 x 10 ⁻⁵ | 6 x 10 |
| Unit weight | kg/m ³ | 2100 | 7800 - 8000 | 7850 |
| | lb/ft ³ | 130 | 485 - 500 | 490 |

(1) Approximate value