

SUPERSTRONG COATED FRP

TECHNICAL DATA SHEET

| S. No. | PARAMFTERS | UNITS | SPECIFICATIONS | TEST MERHOD |
|--------|--|--------------------|---|------------------------------|
| 1 | Surface | - | Smooth, Free from cracks | Visual |
| 2 | Diameter (Uncoated Rod) | mm | $d \pm 0.05$ | Micrometer |
| 3 | Diameter (Coated Rod) | mm | $D +0.10 / -0.05$ | Micrometer |
| 4 | EAA Coating thickness (As per Customer Requirement) | Microns | 40 ± 20 | Micrometer |
| 5 | Ovality | mm | 0.05 | Micrometer |
| 6 | Glass Content | % | 82 ± 3 | By Weight |
| 7 | Outgassing | % | < 1 | By Weight |
| 8 | Density | gm/cm ³ | 1.7 to 2.1 | ASTM D792 |
| 9 | Min. Bending Diameter at 25°C | mm | i) 25D for 3.5mm FRP rod ii) 30D for > 3.5mm FRP rod | TEC 89010:2021 Section-II |
| 10 | Tensile Strength | Kg/mm ² | 140 | ASTMD 3916 |
| 11 | Tensile Modulus | Kg/mm ² | 5000 | ASTMD 3916 |
| 12 | Elongation at break | % | 2.5 - 4.0 | ASTMD 3916 |
| 13 | Flexural Strength | Kg/mm ² | 70 | ASTM D 790 |
| 14 | Flexural Modulus | Kg/mm ² | 5000 | ASTM D 3916 |
| 15 | Thermal Resistance | mm | No decomposition or delamination | @100°C for 5 Days, 100xD |
| 16 | Water Resistance | mm | No decomposition or delamination | @80°C for 5 Days, 80xD |
| 17 | Humidity Resistance | mm | No decomposition or delamination | @85°C/85RH for 14 Days |
| 18 | Water Absorption | % | 0.1 | ASTM D 570 |
| 19 | Heat Stress @ 80°C For 24 hours, 50xD | mm | No decomposition or delamination | TEC 89010:2021 Section-II |