Tropic Construction Solutions ****

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**TECHNICAL SHEET FOR TECWEB® TW303 CELL**

TECWEB® TW303 is a three-dimensional confinement structure composed of honeycomb-shaped cells with perforated walls and indented rhomboidal corrugation made from high-density polyethylene (HDPE). Its function is to retain materials such as soil, concrete, gravel, soil-cement, and local materials with high shear resistance.

**Applications**

* Channels
* Shoreline Defenses
* Slope Erosion Control
* Retaining Walls
* Pavements

|  |  |  |  |
| --- | --- | --- | --- |
| Property | Standard | Unit | Value |
| Cell Height | Measured | mm | 75 mm (+/- 2%) |
| Nominal Cell Opening (Width x Length) | Measured | mm | 320 x 287 (+/- 10%) |
| Unit Dimensions (Width x Length) | Measured | m | 4.16m x 9.76m (+/- 10%) |
| Nominal Wall Thickness without Texture -10% | GRI-GS14 | mm | 1.25 (-10%) |
| Thickness Including Texturing | ASTM D5199 | mm | 1.50 (-5%+10%) |
| Environmental Stress Crack Resistance (ESCR) in Resin | ASTM D1693 | Hours | 5000 |
| Density | ASTM D792 | g/cm³ | 0.935 – 0.955 |
| Welding Efficiency | GRI-GS13 | % | 100 |
| Peel Bond Strength | USCOE GL86-19 Appendix A / ISO 13426-1 Method B | N | 1060 |
| Number of Rhomboidal Indentations | Measured | Indentations per cm² | 22-31 |
| Perforation Diameter | Measured | mm | 10 (±10%) |
| Creep Resistance | ASTM D6693 | kN/m | 18 |
| Creep Elongation | ASTM D6693 | % | 12 |
| Tensile Strength | ASTM D6693 | kN/m | 13 |
| Tensile Elongation | ASTM D6693 | % | 100 |
| Tear Resistance | ASTM D1004 | N | 155 |
| Puncture Resistance | ASTM D4833 | N | 330 |
| Direct Shear Friction Angle | ASTM D5321 | ° | 30° |
| Carbon Black Content | ASTM D4218 | % | 2%-3% |
| Carbon Black Dispersion | ASTM D5596 | Category | (1) |
| Standard Oxidation Induction Time – Standard OIT | ASTM D3895 | min | 100 |
| UV Resistance OIT – HP @ 1920 hours | ASTM D7238 ASTM D5885 | % | 50 |

1. For 10 different views (only spherical agglomerations): nine in category 1 or 2 and one in category 3.

**Distributors of Geotextile Fabrics, Geotextile Tubes, Gabion Mattress &amp; PPE.**