

**POLYMER GRID BX3326
FOR SUPPORT OF UNDERGROUND MINE OPENINGS**

The grid shall be a regular structure formed by biaxially drawing a continuous sheet of select polypropylene material and shall have an open aperture geometry of uniformly spaced ribs having high rigidity, high tensile strength and modulus, and high junction strength and efficiency. The grid shall be resistant to ultraviolet degradation, to damage under normal installation procedures, and to all forms of biological or chemical degradation normally encountered in the environment in which it will be placed. In addition, the grid shall pass flammability tests as required by the Code of Federal Regulations: 30 C.F.R. Ch. 1, Part 7, Subpart B.

The grid shall also conform in all respects to the property requirements listed below.

| PROPERTY | TEST METHOD | UNITS | VALUE |
|------------------------------|--|---------------|--|
| Material | | | |
| · polypropylene | ASTM D 4101 | | Group 1/Class 1/Grade 2 |
| · flammability | 30 C.F.R., Ch.1, Part 7 Subpart B (Brattice Cloth) test method | | Per acceptable performance as described in test |
| · colorant and UV inhibitor | ASTM 4218 | % | 2.0 (nom) |
| Physical | | | |
| · aperture size ¹ | I.D. Calipered ² | | |
| - MD | | in | 1.8 (nom) |
| - TD | | in | 2.0 (nom) |
| · thickness | ASTM D 1777-64 | | |
| - ribs | | in | 0.04 (nom) |
| - junctions | | in | 0.19 (nom) |
| Mechanical | | | |
| · tensile strength | GRI GG1-87 | | |
| - MD | | lbs/ft | 1,500 (min) |
| - TD | | lbs/ft | 1,600 (min) |
| · flexural rigidity | ASTM D1388-64 ³ | | |
| - MD | | mg-cm | 600,000 (min) |
| - TD | | mg-cm | 800,000 (min) |
| · tensile modulus | | | |
| - MD | | lb/ft | 20,000 (min) |
| - TD | | lb/ft | 21,000 (min) |
| · junction strength | | | |
| - MD | | lb/ft | 1,350 (min) |
| - TD | | lb/ft | 1,440 (min) |
| · junction efficiency | | % | 90 (min) |
| · fatigue efficiency | | % | 95 (min) |
| Dimensions | | | |
| · unit weight | | lbs/ft-length | 1.0 |
| · roll length | | ft | 164 |
| · roll width | | ft | 4, 6.5, 8.75, 13.1 |
| · roll weight | | lb | 48, 78, 96, 157 |

Notes:

- MD (machine direction) is along roll length; TD (transverse direction) is across roll width.
- Inside dimension in each principal direction measured by calipers.
- ASTM D 1388-64 modified to account for wide specimen testing as described in Tensar Test Method TTM-5.0 "Stiffness of Geosynthetics".
- The percent strength retained following 1000 bends within the same rib(s).