



EM-Trans 1400 Microwave Transparent Composites

PTFE COATED FIBERGLASS COMPOSITE ENGINEERED FOR PLANAR RADOMES

EM-Trans 1400 Description:

EM-Trans 1400 is a high strength PTFE/fiberglass composite designed to protect high performance antennas in the most challenging environments. Superior mechanical properties and a low dielectric constant provide excellent RF performance with a design life in excess of twenty years.

- **Low transmission loss across a multitude of frequencies**
- **Maintenance free permanent hydrophobic surface**
- **Environmentally stable from -30°F-140°F (-34°C - 96°C)**
- **Available with PTFE coating on one or both sides**
- **Wind loads up to 140 MPH**
- **Custom logos and colors available**



EM-TRANS 1400 PHYSICAL PROPERTIES:

Weight:	22.7 oz/yd ² (769.7 g/m ²)
Thickness:	15.8 mils (0.40 mm)
Strip Tensile Strength (Warp):	467 lbs/inch (4089 N/50 mm)
Strip Tensile Strength (Fill):	471 lbs/inch (4124 N/50 mm)
Trapezoidal Tear (Warp):	34.4 lbs (153 N)
Trapezoidal Tear (Fill):	37.0 lbs (165 N)
Coating Adhesion:	8.0 lbs
Seam/Splice Strength:	98 % / composite
Dielectric Constant:	2.8 Ka band
Loss Tangent:	0.005 Ka band
Water Absorption:	Less than 0.3%
Incombustability:	0 seconds to flameout
Hydrophobic Contact Angle:	≤ 95 degrees, nominal

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