



EM-C Microwave Transparent Laminate

PTFE LAMINATE ENGINEERED FOR RADOMES

EM-C Description:

EM-C is a family of high strength pure PTFE laminates designed to protect high performance antennas in the most challenging environments. A unique multidirectional lamination process creates structural composites free of reinforcements with exceptionally low dielectric constants and loss tangents. EM-C products are available in both planar and three dimensional designs.

- **Low transmission loss over a multitude of frequencies**
- **Maintenance free permanent hydrophobic surface**
- **Environmentally stable from -30°F – 140°F (-34°C – 96°C)**
- **Monolithic construction (no reinforcement)**
- **Moldable - Ideal for shipboard applications**
- **Standard and custom colors - logos available**



EM-C PHYSICAL PROPERTIES:

2109

2112

2115

2120

	2109	2112	2115	2120
Weight: oz/yd ² (g/m ²)	13.5 (457.8)	18.0 (610.0)	22.0 (746)	29.0 (984.0)
Thickness: mils (mm)	0.009 (0.23)	0.012 (0.30)	0.015 (0.38)	0.020 (0.51)
Tensile Strength: lbs/in (N/50mm)	25 (223.4)	40 (357.5)	57 (499.0)	74 (648.0)
Tear Strength: N	22 (99.8)	35 (158.8)	47 (209.0)	59 (262)
Seal/Splice Strength:	≤ 98% of Composite Material			
Dielectric Constant:	1.8 Nominal			
Loss Tangent:	0.00052 Nominal			
Water Absorption:	≥ 0.3%			
Incombustability:	0 Seconds to Flameout			
Hydrophobic Contact Angle:	≤ 95 Degrees, Nominal			
Width: in (mm)	Up to 60" (1524 mm)			

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200 Bouchard Street, Manchester, NH 03103 USA PHONE: (603) 296-2221 FAX: (603) 296-2248 www.textilecoated.com