

# TUFCOTE® Scrim-reinforced Decoupled Barrier Composites



Product Applications

*Compressor wraps*

*Equipment enclosures*

*Engine compartments*

*Firewall liners*

*Generators*

*Pumps*

Integral fiberglass mesh enhances durability

- High transmission loss performance
- Withstand harsh environments
- Both block and absorb airborne noise
- Flexible, easy to cut and install

TUFCOTE scrim-reinforced decoupled barrier composites integrate a strong fiberglass mesh into a flexible weighted vinyl barrier layered with a decoupler of polyester urethane acoustical foam. The resulting multi-layer, multi-function composites provide aggressive, durable noise control with the installation ease of a single product.

TUFCOTE E-0-10S-50 composite features a 1 lb./ft.<sup>2</sup> scrim-reinforced barrier, and E-0-20S-50 barrier features a 2 lb./ft.<sup>2</sup> barrier. Both composites utilize a .5-inch foam decoupler. The E-0-10S-50 material is available in 4.5-foot-by-60-foot rolls, and the E-0-20S-50 composite is sold in 4.5-foot-by-30-foot rolls. Both composites are available with or without pressure-sensitive adhesive backing.

## Typical Properties

<b>Property</b>	<b>E-0-10S-50</b>	<b>E-0-20S-50</b>
<b>Description</b> Decoupler	1.28 cm (0.50 in) Polyester Urethane Foam	1.28 cm (0.50 in) Polyester Urethane Foam
Barrier	5 kg/m <sup>2</sup> (1 lb/ft <sup>2</sup> ) Vinyl	10 kg/m <sup>2</sup> (2 lb/ft <sup>2</sup> ) Vinyl
Scrim	24 g/m <sup>2</sup> (.71 oz/yd <sup>2</sup> ) Fiberglass	24 g/m <sup>2</sup> (.71 oz/yd <sup>2</sup> ) Fiberglass
Thickness nominal cm (in)	1.45 cm (0.57 in)	1.63 cm (0.64 in)
<b>Density, Barrier kg/m<sup>2</sup> (lb/ft<sup>2</sup>)</b>	4.9 (1.0)	9.8 (2.0)
<b>Flammability</b> UL 94 FMVSS 302	Listed HB Meets	Listed HB Meets
<b>Tensile Strength kPa (psi)</b> Barrier, ASTM D638 Scrim	3592 (521) 32 x 32 lb/in (286 x 286 N/5cm)	3412 (495) 32 x 32 lb/in (286 x 286 N/5cm)
<b>Tear Strength kN/m (lbf/in)</b> Barrier with scrim, ASTM D1004	22 (126)	21 (120)
<b>Elongation %</b> Barrier with scrim, ASTM D638	106	95
<b>Sound Transmission Loss (dB)</b> ASTM E90-90 and ASTM E413-87	Composite	Composite
@ 250 Hz	15	21
@ 500 Hz	21	27
@ 1000 Hz	27	33
@ 2000 Hz	33	39
@ 4000 Hz	39	45
<b>Temperature Range C (F)</b> Peak performance	-18C to 82C (0F to 180F)	-18C to 82C (0F to 180F)

The data listed are typical or average values based on tests conducted by independent laboratories or by the manufacturer. They are indicative only of the results obtained in such tests and should not be considered as guaranteed maximums or minimums. Materials must be tested under actual service to determine their suitability for a particular purpose.