



PRODUCT DATA SHEET

Gilliner® 1566/1566T

DESCRIPTION

Gilliner® 1566 and 1566T is a high impact resistant grade liner constructed of woven E- and S-glass cloth with a modified vinyl ester resin system to optimize strength, weight and cost. This product offers superior mechanical properties and higher strength-to-weight ratio compared to all E glass constructions. 1 mil. white polyvinyl fluoride film overlay on the face side is included for Gilliner® 1566T.

APPLICATIONS

Designed for aircraft cargo compartments where added impact and edge-bearing strength are needed to withstand in-service conditions. Also a material of choice in freighter conversion programs throughout the world due to high strength-to-weight ratio.

FEATURES

- High impact strength
- Abrasion resistant
- Corrosion resistant
- Fire resistant

AVAILABILITY

Thickness, inch (mm)	0.011 (0.28)
	0.020 (0.51)
	0.030 (0.76)
	0.045 (1.14)
	0.070 (1.78)
Length	Maximum 144 in (3,658 mm) in sheet form Maximum 150 feet (45,720 mm) in roll form
Width, inch (mm)	Typical 48 (1,219), Maximum 60 (1,524)
Color	Natural or White

CONSTRUCTION

- Resin:** Modified vinyl ester
- Reinforcement:** Woven E- and S-glass fiber cloth
- Surface:** 1 mil. white polyvinyl fluoride film overlay (for 1566T)

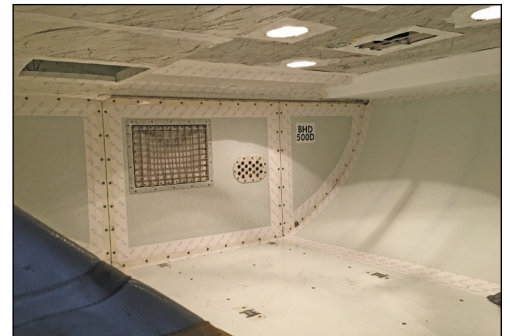
SPECIFICATIONS

- BMS 8-2, Class 2 Grade A and Grade B
- FAR Part 25 Appendix F Parts I and III (burn through)

HEALTH PRECAUTIONS

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. A SDS is available at <https://www.thegillcorp.com/msds.php>.

For industrial use only. Keep away from children. Additional information can be found at: www.thegillcorp.com. For sales and ordering information call 1-626-443-6094.





PERFORMANCE PROPERTIES, TYPICAL

TGC Part Number	1566-011	1566-020	1566-030	1566-045	1566-070
Thickness, in (mm)	0.011 (0.28)	0.020 (0.51)	0.030 (0.76)	0.045 (1.14)	0.070 (1.78)
Weight, psf (kg/m ²)	0.13 (0.63)	0.21 (1.03)	0.32 (1.56)	0.50 (2.44)	0.74 (3.61)
Tensile Strength ¹ , ksi (MPa)	Warp	> 50 (340)			
	Fill				
Flexural Strength ² , ksi (MPa)	Warp	N/A		≥ 30 (210)	
	Fill				
Flexural Tangent Modulus ² , Msi (GPa)	Warp	N/A		≥ 2.5 (17)	
	Fill				
Water Absorption ³ , % Increase	< 2.0				
Bond Strength ⁴ , lbf (N) Warp	≥ 500 (2200)				
Abrasion Resistance ⁵ , g/1000 cycles	< 0.17				
Impact Strength ⁶ , ft-lb (N-m)	14 (19)	16 (22)	22 (30)	32 (40)	44 (60)
Edge Bearing Strength ⁷ , ksi (MPa)	Warp	≥ 40 (270)			
	Fill				
Flammability	Meets requirements of FAR 25.853 & 855 Appendix F Part I & III				

Table shown reflects typical values and should not be used as design specifications.

¹ Tensile Strength was tested and calculated per ASTM D638.

² Flexural Strength and Modulus were tested and calculated per ASTM D790.

³ Water Absorption was tested and calculated per ASTM D570.

⁴ Bond Strength was tested and calculated per ASTM D5868 using modified specimen preparation and test speed.

⁵ Abrasion resistance was tested per ASTM D3389 with modified specimen conditioning and shape.

⁶ Impact Strength was tested calculated per ASTM D5420 using a modified dart and specimen test frame.

⁷ Edge Bearing Strength was calculated per ASTM D953 using a modified tension loading fixture.

All recommendations, statements, values and technical data herein are based on tests The Gill Corporation believes to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. Users shall rely on their own information and tests to determine suitability of the product for the intended use and assume all risks and liability resulting from their use of the product. The Gill Corporation's sole responsibility shall be to replace that portion of the product that proves to be defective. The Gill Corporation will not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements not contained in a written agreement signed by an officer of The Gill Corporation shall not be binding upon The Gill Corporation. Gilliner® is a registered trademark of The Gill Corporation.