



## Gilliner™ 1366/1366T Laminate

July 2003

### Description

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Gilliner 1366 is a high impact resistant, fiberglass cloth reinforced polyester laminate. 1366T is identical to 1366 but has 1 mil white Tedlar® overlay.

### Applications

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Aircraft cargo compartment liner.

### Features

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- Superior mechanical strength, puncture resistance and corrosion resistance.
- Service temperature range: -100°F to 180°F.

### Specifications

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- Boeing specification BMS 8-2 Cl 2 Gr A - 1366
- De Havilland DHMS P1.42 Cl B - 1366, 1366T
- Lockheed LAC-C-22-1249 Cl 3 - 1366
- Airbus 2550 M1M 0014 01 - 1366
- 1366T - Boeing specification BMS 8-2 Cl 2 Gr B - 1366T
- Airbus 2550M1M000703 - 1366T
  
- FAR Part 25, Appendix, F Parts I and III (burn through). - ALL

### Availability

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Thickness: .011", .020, .030", .045", .070. (Types 11, 20, 30, 45, 70, respectively)

Length: .011" to .050" thickness - up to 150' rolls; thicker - sheets up to 168" long.

Width: Up to 72" (60" max. in rolls).

### Construction

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Resin: Fire resistant polyester.  
Reinforcement: Woven fiberglass.  
Surface: Glossy, white.  
Color: Natural.



## Standard Tolerances

|            |              |
|------------|--------------|
| Thickness: | ± 10%        |
| Length:    | + 0.5", - 0" |
| Width:     | + 0.5", - 0" |

## Properties of Gillfab 1366/1366T

Typical Values Reported Only in Warp Direction Except as Noted

| Property                 | Test Method         | Unit               | Type 11      | Type 20      | Type 30      |
|--------------------------|---------------------|--------------------|--------------|--------------|--------------|
| Weight                   | M.C. Gill GTP 085   | lb/sq ft (kg/sq m) | 0.145 (0.7)  | 0.210 (1.0)  | 0.292 (1.3)  |
| Thickness                | ASTM D2103          | inch (mm)          | 0.012 (0.30) | 0.019 (0.48) | 0.033 (0.84) |
| Water Absorption         | ASTM D570           | %                  | 1.3          | 1.3          | 1.6          |
| Impact                   | AI M1M 2550 000 800 | ft-lb (N-m)        | 16 (22)      | 25 (34)      | 31 (42)      |
| Edge Bearing Strength    | ASTM D953           |                    |              |              |              |
| Warp                     |                     | ksi (MPa)          | 38.8 (267.6) | 40.7 (280.7) | 37.1 (255.9) |
| Fill                     |                     | ksi (MPa)          | 33.7 (232.4) | 40.5 (279.3) | 36.3 (250.4) |
| Tedlar Peel              | ASTM D1876          |                    |              |              |              |
| Warp                     |                     | in                 | 0            | 0            | 0            |
| Fill                     |                     | in                 | 0            | 0            | 0            |
| Flexural Note 1          | ASTM D790           |                    |              |              |              |
| Strength                 |                     | ksi (MPa)          | NR           | NR           | NR           |
| Modulus                  |                     | msi (GPa)          | NR           | NR           | NR           |
| Bond Strength            | ASTM D638           | lb (kg)            | 577 (262)    | 880 (400)    | 972 (441)    |
| Abrasion Resistance      | ASTM D1242          | gram               | 0.065        | 0.042        | 0.041        |
| Flammability - Vertical  | FAR 25.855          |                    |              |              |              |
| Extinguishing Time       |                     | second             | 0            | 0            | 0            |
| Burn Length              |                     | inch (mm)          | 2.5 (63.5)   | 1.6 (40.6)   | 1.6 (40.6)   |
| Dripping Flame Time      |                     | second             | 0            | 0            | 0            |
| Flammability - 45 Degree | FAR 25.855          |                    |              |              |              |
| Extinguishing Time       |                     | second             | 0            | 0            | 0            |
| Afterglow                |                     | second             | 0            | 0            | 0            |
| Penetration              |                     | ---                | None         | None         | None         |
| Oil Burner Note 2        | FAR 25.855          | ---                | Pass         | Pass         | Pass         |

Note 1 - Reported in warp direction.

Note 2 - Test performed by U. S. Testing in accordance to the procedure outlined in Appendix F, Part III of FAR 25.855, "Oil Burner - Burn through Resistance".

NR = No Requirement



**Properties of Gillfab 1366/1366T**  
Typical Values Reported Only in Warp Direction Except as Noted

| Property  | Test Method         | Unit               | Type 45       | Type 70       |
|---|---------------------|--------------------|---------------|---------------|
| Weight  | M.C. Gill GTP 085   | lb/sq ft (kg/sq m) | 0.438 (2.0)   | 0.658 (3.0)   |
| Thickness   | ASTM D2103          | inch (mm)          | 0.046 (1.17)  | 0.065 (1.65)  |
| Water Absorption  | ASTM D570           | %                  | 1.7           | 1.7           |
| Impact  | AI M1M 2550 000 800 | ft-lb (N-m)        | 41 (56)       | 47 (64)       |
| Edge Bearing Strength   | ASTM D953           |                    |               |               |
| Warp  |                     | ksi (MPa)          | 40.5 (279.3)  | 47.2 (325.5)  |
| Fill  |                     | ksi (MPa)          | 39.5 (272.4)  | 40.3 (277.9)  |
| Tedlar Peel   | ASTM D1876          |                    |               |               |
| Warp  |                     | in                 | 0             | 0             |
| Fill  |                     | in                 | 0             | 0             |
| Flexural Note 1   | ASTM D790           |                    |               |               |
| Strength  |                     | ksi (MPa)          | 28.31 (195.2) | 33.82 (233.2) |
| Modulus   |                     | msi (GPa)          | 3.27 (22.6)   | 2.80 (19.3)   |
| Bond Strength   | ASTM D638           | lb (kg)            | 1,015 (461)   | 1,307 (593)   |
| Abrasion Resistance   | ASTM D1242          | gram               | 0.100         | 0.049         |
| Flammability - Vertical   | FAR 25.855          |                    |               |               |
| Extinguishing Time  |                     | second             | 0             | 0             |
| Burn Length   |                     | inch (mm)          | 1.4 (35.6)    | 1.8 (45.7)    |
| Dripping Flame Time   |                     | second             | 0             | 0             |
| Flammability - 45 Degree  | FAR 25.855          |                    |               |               |
| Extinguishing Time  |                     | second             | 0             | 0             |
| Afterglow   |                     | second             | 0             | 0             |
| Penetration   |                     | ---                | None          | None          |
| Oil Burner Note 2   | FAR 25.855          | ---                | Pass          | Pass          |
| <p>Note 1 - Reported in warp direction.<br/> Note 2 - Test performed by U. S. Testing in accordance to the procedure outlined in Appendix F, Part III of FAR 25.855, "Oil Burner - Burn through Resistance".<br/> NR = No Requirement</p> |                     |                    |               |               |

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