

# TECHNICAL DATA SHEET

Permal  
Gloucester

04/04/01 Issue 06

## PERMAGLASS CARGO LINING WFT/24

### BENEFITS

- ♦ Low smoke and toxic fume emissions
- ♦ Low heat release rate
- ♦ High strength to weight ratio

This product is a woven glass/phenolic aircraft laminate material exhibiting high strength to weight ratio, high durability and exceptionally good fire, smoke and toxicity properties. A low heat release rating permits the use of this material in passenger cabins.

### Typical Properties:

#### Thickness and Weight:

Type 40	1mm	(0.040")	1900 gsm	(0.39 lbf/sq ft)
Type 30	0.8mm	(0.031")	1570 gsm	(0.32 lbf/sq ft)

Thickness of Type 20 (0.5mm) through to Type 70 (1.8mm) can also be manufactured.

#### Mechanical Properties:

Flexural Strength	550 MPa	Warp	ALL TESTED TO
	490 MPa		
Flexural Modulus	24 GPa	Warp	FOKKER STANDARD
	23 GPa		
Tensile Strength	570 MPa	Warp	TH33 0121
	550 MPa		
Tensile Modulus	21 GPa	Warp	
	20 GPa		

**Durability:**

WFT/24 has shown itself to have excellent all round durability and water resistance.

**Flammability:**

Meets FAR 25 853a and 855a-1 and all known aircraft cargo lining flammability specifications including FAR Part 25.855 Amendment 25-60 (burn-through test) and CAA Notice No. 80.

**Smoke Density:**

In NBS chamber to technical note 708 in flaming mode.

<u>Time</u>	<u>Smoke Density</u>	
1.5 minutes	Average 18	all types
4.0 minutes	Average 26	all types

**Toxicity:**

After 4 minutes in NBS chamber Draeger Tube Analysis.

Toxicant	CO	HCN	HF	HCL	SO <sub>2</sub>	NO <sub>2</sub>
Concentration	190	4	20	0	0	12

**Heat Release:**

Passes the 65/65 requirements of FAR/JAR 25.853 (a-1)/(c) App F Part iv (g).

Actual results for type 30:- Peak Heat Release 27.35 KW/sqm

Total Heat Release 14.83 KW.min/sqm

**Finish:**

Standard finish includes a white Tedlar film on one face only, but material can be supplied without Tedlar (WF/24) or with Tedlar on both faces (WFTT/24) if desired.

**Standard Sheet Sizes:**

96" x 48" (2440 x 1220 mm)

144" x 48" (3658 x 1220 mm)

124" x 65" (3150 x 1651 mm)

Other sizes may be available on request.