

TECHNICAL DATA SHEET

FI48 RIGID GLASSWOOL SHEETS AND ACOUSTIC BLANKET MEDIUM WEIGHT EQUIPMENT INSULATION

Product description and typical applications

FI48 Rigid Glasswool Sheets and Acoustic Blanket provide an excellent balance of both thermal and acoustic insulation properties, which render them suitable for a broad range of industrial applications. They are particularly suited to the mechanical services industry where design requirements dictate optimum performance from internally lined air conditioning ducts, plant room and equipment casings. In such applications FI48 Rigid Glasswool Sheets and Acoustic Blanket offer the additional benefits of high compressive strength and clean, accurate fabrication.

Physical characteristics

Material R-value m ² K/W	Nominal thickness mm	Sheet dimensions mm x mm	Roll dimensions mm x m	Density kg/m ³	Mass/unit area kg/m ²
R0.8	25	2400 x 1200	1200 x 15	48	1.2
R1.2	38	2400 x 1200	-	48	1.8
R1.5	50	2400 x 1200	1200 x 7.5	48	2.4
R2.3	75	2400 x 1200	-	48	3.6

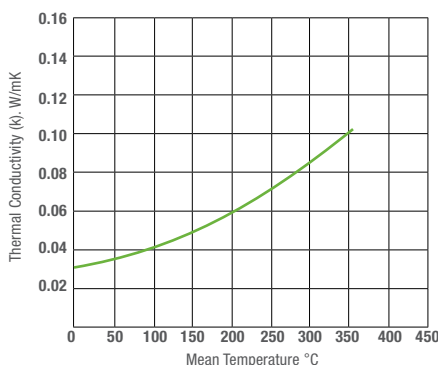
Thermal performance

The R-value of FI48 Rigid Glasswool Sheets and Acoustic Blanket is determined in accordance with AS/NZS 4859.1. The thermal conductivity of FI 48 Rigid Glasswool Sheets and Acoustic Blanket at a mean temperature* 23°C is 0.032 (at 20°C it is 0.031 W/mK) when tested in accordance with ASTM C177. Values of thermal conductivity may be obtained from the adjacent graph.

$$* \text{Mean Temperature} = \frac{T_1 + T_2}{2}$$

Where T1 = temperature of hot side of insulation (°C)

Where T2 = temperature of cool side of insulation (°C)



Maximum service temperature

The maximum service temperature for FI 48 Rigid Glasswool Sheets and Acoustic Blanket is 340°C. Where facings are applied, the temperature tolerance of the facing adhesive limits the surface temperature to 70°C.

Green Star compliant

Fletcher Insulation is committed to providing environmentally sustainable products. Fletcher Insulation products have Zero Ozone Depleting Potential in both manufacture and composition, complying with the GreenStar Insulant ODP Emissions credit requirement. Air quality is maintained with total Volatile Organic Compound (VOC) emissions below quantifiable levels.



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Early fire hazard properties

FI48 Rigid Glasswool Sheets and Acoustic Blanket exhibits the following characteristics when tested in accordance with AS1530.3.

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Developed Index	3

Moisture absorption

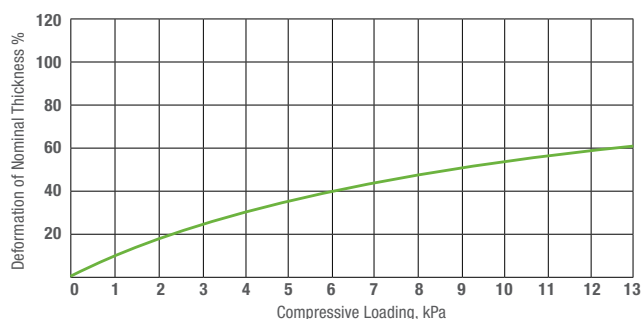
Tested in an atmosphere of 65% relative humidity at 20°C in accordance with British Standard 2972. The moisture content of FI 48 Rigid Glasswool is less than 0.1% by volume.

Alkalinity

FI48 Rigid Glasswool Sheets and Acoustic Blanket will not support the corrosion of steel. When test in accordance with British Standard 3958 FI48 Rigid Glasswool Sheet Sheets and Acoustic Blanket products are slightly alkaline, pH9 (neutral is pH7).

Compressive strength

FI48 Rigid Glasswool Sheets and Acoustic Blanket provides excellent compressive strength and resilience and recover to its nominal thickness after compression. Deformation under compression loading is demonstrated in the adjacent graph.



Acoustic performance

FI48 Rigid Glasswool Sheets and Acoustic Blanket has the following sound absorption coefficients when tested in accordance with AS1045 by the Reverberation Room Method (Mounting N4-laid flat on floor):

Thickness (mm)	Sound absorption coefficients (reverberation) at frequencies (Hz) of:					
	125	250	500	1000	2000	NRC
Rigid Glasswool - Plain						
25	0.07	0.26	0.67	0.95	1.02	0.7
50	0.33	0.74	1.18	1.11	1.12	1.05
Rigid Glasswool - Black Tissue Faced						
25	0.08	0.33	0.73	0.94	1.04	0.75
50	0.26	0.79	1.16	1.09	1.08	1.05
Rigid Glasswool - Perf. Foil Faced (e.g. Sisalation® 450)						
25	0.11	0.29	0.77	1.04	1.03	0.8
50	0.25	0.89	1.15	1.12	1.09	1.05

Specification notes

The insulation material shall be Fletcher Insulation FI48 Rigid Glasswool _____. Specify 'Sheets' or 'Acoustic Blanket'.

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