

## FI 48 Rigid Glasswool™ Sheets and Acoustic Blanket

### Medium weight equipment insulation

#### Product description and typical applications

FI 48 Rigid Glasswool™ Sheets and Acoustic Blanket provides an excellent balance of both thermal and acoustic insulation properties, which render it suitable for a broad range of industrial applications. It is 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 FI 48 Rigid Glasswool offers the additional benefits of high compressive strength and clean, accurate fabrication.

#### Physical characteristics

Material R-value	0.8	1.2	1.5	2.3
Thickness (mm)	25	38	50	75
Sheet Dimensions (mm)*	2400 x 1200	2400 x 1200	2400 x 1200	2400 x 1200
Density (kg/m <sup>3</sup> )	48	48	48	48
Mass/Unit Area (kg/m <sup>2</sup> )	1.2	1.6	2.4	3.6
Roll Dimensions (mm)*	15m x 1200		7.5m x 1200	

\*Other sizes are available, subject to minimum order quantities

AS/NZS 4859.1:  
2002 - Including  
Amendment 1  
Materials for the  
Thermal Insulation of  
Buildings

FI 48 Rigid Glasswool Sheets and Acoustic Blanket rolls comply with the Energy Efficiency provisions of the BCA for all types of thermal insulation to be certified by a NATA accredited organisation.



Global-Mark.com.au®  
ID Number: 100577

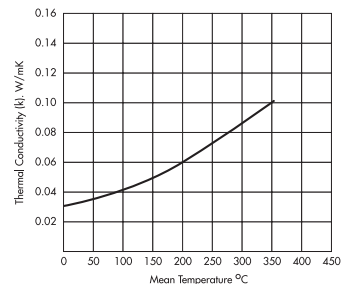


Global-Mark.com.au®



#### Thermal conductivity

The R-value of FI 48 Rigid Glasswool 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 following graph.



$$* \text{Mean Temperature} = \frac{T1 + T2}{2}$$

Where T1 = temperature of hot side of insulation (°C)  
Where T2 = temperature of cool side of insulation (°C)

#### Heat transfer calculation service

Given the actual service temperature and the required surface temperature, the appropriate insulation thickness can be calculated by staff at Fletcher Insulation. Fletcher Insulation can also assist to determine the optimum insulation thickness quickly and accurately, in an easy-to-read format.

#### 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. (The appropriate insulation thickness can be used to limit 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.

## AS1530.3 Early fire hazard properties of materials

FI 48 Rigid Glasswool Sheets and Acoustic Blanket exhibit the following characteristics when tested in accordance with AS1530 Part 3.

	Plain	Black Matt Tissue Faced	Sisalation® Heavy Duty Faced
Ignitability Index	0	0	0
Spread of Flame Index	0	0	0
Heat Evolved Index	0	0	0
Smoke Developed Index	0-1	2	3

## Moisture absorption

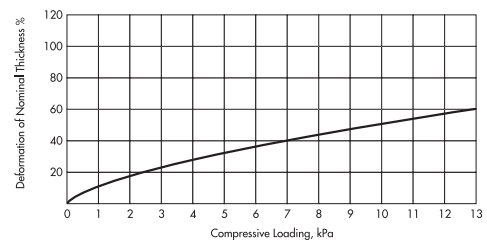
Tested in an atmosphere of 65% relative humidity at 20°C in accordance with British Standard 2972. The moisture content of FI 48 Rigid Glasswool is less than 0.1% by volume.

## Alkalinity

FI 48 Rigid Glasswool will not support the corrosion of steel. When test in accordance with British Standard 3958 FI 48 Rigid Glasswool Sheet products are slightly alkaline, pH9 (neutral is pH7).

## Compressive strength

FI 48 Rigid Glasswool Sheets have excellent compressive strength and resilience and recovers to its nominal thickness after compression. Deformation under compression loading is shown on the graph.



## Acoustic performance

FI 48 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
<b>Rigid Glasswool - Plain</b>						
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
<b>Rigid Glasswool - Black Tissue Faced</b>						
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
<b>Rigid Glasswool - Perf. Foil Faced (eg. Sisalation® 450)</b>						
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

State the following:

- Product name - Fletcher Insulation FI 48 Rigid Glasswool Sheets
- Thickness, Thermal and acoustic performance
- Fixing method preferred (eg. Fletcher Insulation Insul Clips)
- Type of facing if required (eg Fletcher Insulation Heavy Duty Sisalation®).

Freecall SALES **1300 65 44 44** Technical Services **1800 000 878**

Email [info@insulation.com.au](mailto:info@insulation.com.au) Web [www.insulation.com.au](http://www.insulation.com.au)

NOTE: Fletcher Insulation Pty. Limited. reserves the right to change product specifications without prior notification. Information in this Publication and otherwise supplied to users as to the subject product is based on our general experience and is given in good faith, but Because of the many particular factors which are outside our knowledge and control and affect the use of products, no warranty is given Or is to be implied with respect to either such information or the product itself, in particular the suitability of the product for any particular purpose. The purchaser should independently determine the suitability of the product for the intended application.

Fletcher Insulation Pty. Limited. ABN 72 001 175 355. <sup>TM</sup>Trademarks of Fletcher Insulation. <sup>TM</sup>FBS-1 Bio-Soluble Glass Wool is a trademark used under license by Fletcher Insulation. © Copyright 2010.

TDS17 / FI\_0022\_000610\_56



The production of environmentally sustainable FBS-1 Glasswool Bio-Soluble Insulation utilizes approximately 70% recycled waste glass.



Low Allergen content with the ability to moderate temperature changes.



Fletcher Insulation glasswool products are manufactured from FBS-1 Bio-Soluble Glass Wool™. FBS-1 Bio-Soluble Glass Wool™ is not classified as hazardous according to the criteria of the Australian Safety and Compensation Council (formerly NOHSC), Approved Criteria for Classifying Hazardous Substances (NOHSC: 1008) 3rd Edition. Fletcher Insulation glasswool is classified as safe to use, refer to our MSDS.



**Fletcher**  
Insulation