

# **Technical Data Sheet**

# GLASSWOOL 48kg RIGID SHEETS AND ACOUSTIC BLANKET MEDIUM WEIGHT EQUIPMENT INSULATION

# **Description**

Glasswool 48kg Rigid Sheets and Acoustic Blanket is manufactured from up to 80% recycled glass using a thermoset resin, producing fine non-combustible fibres which form a high density insulation board or blanket. A foil or fabric facing material can be applied to one side in applications where increased acoustic performance or when indoor air quality hygiene and/or mechanical cleaning capabilities are required.

# **Applications**

Glasswool 48kg rigid 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 for higher thermal performance than standard lower density insulation products can provide. These applications include internally lined air conditioning ducts, risers, silencers, plant room and equipment casings. 48kg Rigid Glasswool is also suitable in acoustic panel applications. In such applications, 48kg Rigid Glasswool sheets and acoustic blanket offer the additional benefits of high compressive strength and clean, accurate fabrication.

# **Product limitations of use**

- Modifications not permissible, as suitability and/or compliance may be compromised.
- This product is not designed for use as a wall wrap or roof sarking.
- Unfaced Glasswool is not a water or vapour barrier, cannot be used where a water or vapour control is required.
- This product cannot be used in exposed/lining applications where a group number is required in accordance with AS 5637.1 (NCC V1 Amdt 1 C1.10(4) NCC 2022 V1 S7C4).
- When faced, this product does not meet AS1530.1 and is not suitable where non-combustible material is required.
- The foil facing product should not come into contact with wet concrete, or alkaline materials.

### **Features and Benefits**

High density performance	Delivers superior sound absorption and attenuation.
Environmentally positive, made from up to 80% recycled material	Minimal impact on the environment. FBS-1
FBS-1 Biosoluble material	Safe and comfortable to handle.



# **Product Data**

Material R-value m² K/W	Thickness mm	Sheet width mm	Sheet length mm	Roll width mm	Roll length m	Density kg/m³	Density kg/m³	Mass/uit area kg/m³
R0.8	25	1200	2400	1200	15	48	48	1.2
R1.2	38	1200	2400	-	-	48	48	1.8
R1.5	50	1200	2400	1200	7.5	48	48	2.4
R2.3	75	1200	2400	-	-	48	48	3.6
R3.0	100	1200	2400	-	-	48	48	4.8
R3.0	100	1500	2400	-	-	48	48	4.8

# **Physical Properties**

Property	Test Method/Standard	Result	Unit
Nominal density	ASTM C167	48	kg/m³
Thermal conductivity @23°C	AS/NZS 4859.1	Complies	W/Mk

# **Fire Hazard Properties**

Glasswool 48kg Rigid Sheets and Acoustic Blanket material exhibits the following characteristics when tested in accordance with the following standards:

Property	Test Metho	d/Standard	Test Results			
		Unfaced	Sisalation® HDP Facing Foil	Black Matt Facing (BMF) Glass Tissue		
Combustability	AS 1530.1	Non combustible	N/a	N/a		
Early Fire Hazard Indices						
Ignitability Index		0	0	0		
Spread of Flame Index	AS/NZS 1530.3	0	0	0		
Heat Evolved Index		0	0	0		
Smoke Developed Index		1	3	2		

# **Acoustic Performance**

Glasswool 48kg Rigid Sheets and Acoustic Blanket has achieves the following sound absorption coefficients when tested in accordance with AS ISO 354:

	Nominal thickness	Sound absorption coefficients at frequencies (Hz) of:										
Property	mm	100	125	250	500	1000	2000	3150	4000	5000	NRC	αw
Unfaced/Plain	50	0.14	0.16	0.91	1.07	1.08	1.03	1.03	1.09	1.05	1.00	1.00
HDP	50	0.11	0.19	0.83	1.08	1.10	1.06	1.03	0.99	1.00	1.00	1.00
BMF	50	0.10	0.16	0.73	1.07	1.10	1.04	1.03	1.02	1.05	1.00	1.00
Unfaced/Plain	100	0.40	0.68	1.14	1.05	1.05	1.07	1.06	1.09	1.06	1.10	1.00



# **Environmental Properties**

The Glasswool component of 48kg Rigid Insulation is manufactured from up to 80% recycled glass which would otherwise go into landfill and be unsuitable for alternative manufacturing processes. Baron Insulation avoids the use of Ozone Depleting Potential (ODP) substances in the manufacture or composition of its FBS-1 Glasswool Bio-Soluble Insulation® and reflective foil products. The use of 48kg Rigid Insulation provides the use of Zero ODP insulation while also ensuring that no harmful levels of Volatile Organic Compounds (VOCs) are released. This allows the incorporation of environmentally preferable insulation whilst also maintaining indoor air quality.

# **Health and Safety**

Glasswool 48kg Rigid Sheets is manufactured from FBS-1 Glasswool Bio-Soluble Insulation<sup>®</sup>. Refer to the Baron SUIS for more information.

### Maintenance and conditions of use

- Product should be kept dry, not to be exposed to weather in any condition including prior, during and after installation.
- Use of pressure cleaners or mineral based cleaners must not be used on the facing product.
- For installation please refer to AS 4254.2 for installation requirements for air handling ductwork.
- Where insulation can be inspected, where appropriate ensure any tears in the facing are repaired with appropriate tape as highlighted in the AS4254.2 for installation requirement for air handling ductwork.
- Foil facing should not be in contact with any corrosive environments, water or alkaline materials such as wet concrete etc.

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Tec	hnical	Specifi	ication

When specifying, state the following:	
The insulation material shall be Glasswool 48kg	(specify 'Sheets' or 'Acoustic Blanket').

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