

## General Purpose Insulation blanket for mechanical services

### Description

General Purpose is manufactured from 80% recycled glass forming a lightweight, flexible blanket. It is available in various densities of 18kg, 22kg and 24kg. Sisalation® Facing Foil is applied to one side for condensation management.

### Applications

General Purpose is a flexible insulation blanket designed for the external lagging of sheetmetal ductwork as well as low to medium temperature industrial equipment and appliances. It can also be used as a general insulating roofing blanket for commercial building where desired. General Purpose insulation is typically suited for use in applications such as air-conditioning ductwork, hot water tanks, and as an effective energy saving material on process vessels operating up to 300°C. The glasswool blanket is sufficiently flexible to wrap around sharp angles and small radii with sufficient compressive strength to maintain its thickness.

### Product limitations of use

- Not to be used/exposed to weather in any condition including prior, during and after installation. Product must be kept dry at all times.
- Not suitable for applications where high humidity is present within building (wet climates for a long period).
- This product can not be classified to AS 1530.1 as an assembly, and is not suitable where non-combustible material is required.
- This product does not have a group number in accordance with AS 5637.1 and is not suitable for exposed applications where a group number is required.
- Product needs to be allowed to fully recover before installation.
- The facing is a vapour barrier, not to be used where vapour permeable product is required.
- Unfaced glasswool is not a water or vapour barrier, as such is not suitable for water or vapour control.
- Modifications not permissible, as suitability &/or compliance may be compromised.

### Features and benefits

Available in a range of thicknesses	→	Effectively meeting the NCC 2022 energy efficiency provision.
Codemark certified to AS 4859.1 for thermal performance	→	Assurance that the product meets the requirements of National Construction Code (NCC).
Environmentally positive made from up to 80% recycled material	→	Minimal impact on the environment.
FBS-1 Bio-Soluble product	→	Safe and comfortable to handle.

### Product data

Density kg/m <sup>3</sup>	Facing	Material R-value m <sup>2</sup> K/W	Thickness mm	Width mm	Length m	Old product code	New product code
18	Sisalation® Medium Duty (MD) 430 Facing Foil 150mm lap	R1.5	50	1380	10	935477	4005655
		R2.0	75	1380	8	935476	4005654
22	Unfaced	R1.2	41	1200	18	935433	4003806
		R1.5	50	1200	15	435415	4003803
		R2.0	75	1200	7.5	940186	4005585
	Sisalation® Heavy Duty (HD) 450 Facing Foil 150mm lap	R0.7	25	1200	15	935321	4005642
		R1.5	50	1200	15	935322	4005272
		R1.5	50	1380	15	935318	4005641
		R2.0	75	1200	7.5	935327	4005643
R2.0	75	1425	9	935332	4005644		
24	Unfaced	R0.7	25	1500	20	936135	4005657
		R1.5	20	1500	12	936140	4005658

### Physical properties

Property	Test method/standard	Result	Unit
Nominal density		18, 22 or 24	kg/m <sup>3</sup>
Thermal resistance @ 23°C	AS/NZS 4859.1	Complies	m <sup>2</sup> K/W
Maximum service temperature	ASTM C411/C447	Glasswool: 300 Reflective Foil Facing: 70	°C
Fungi Resistance of Insulation Materials	ASTM C1338-14	Pass (No growth)	-

### Fire hazard properties

General Purpose exhibits the following characteristics when tested in accordance with the following standards:

Property	Test method/standard	Test results	
		Unfaced	Sisalation® HD Facing Foil
Combustibility (unfaced glasswool component only)	AS/NZS 1530.1	Non-combustible	N/A
Early Fire Hazard Indices	AS/NZS 1530.3		
Ignitability Index		0	0
Spread of Flame Index		0	0
Heat Evolved Index		0	0
Smoke Developed Index		1	2
Burn Test (excluding 24kg/m <sup>3</sup> )	UL1811 (Compliance to AS 4254.2)	-	Complies*

\*Result is for 18kg and 22kg density only.

### Compliance

#### NCC2019

- Complies with AS/NZS 4859.1 as referenced in NCC 2019, Volume 1 Clause J1.2(a) and NCC 2019, Volume 2 Clause 3.12.1.1.
- When tested to AS/NZS 1530.3 this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices as required by NCC 2019 Volume 1, Specification C1.10 Clause 5 for Air Handling Ductwork & Clause 7 for insulation materials.

#### NCC2022

- Complies with AS/NZS 4859.1 as referenced in NCC 2019, Volume 1 Clause J1.2(a) and NCC 2019, Volume 2 Clause 3.12.1.1.
- When tested to AS/NZS 1530.3 this product does not exceed the 'Spread of Flame' or 'Smoke Developed' indices as required by NCC 2019 Volume 1, Specification C1.10 Clause 5 for Air Handling Ductwork & Clause 7 for insulation materials.

### Environmental properties

The Glasswool component of General Purpose Insulation is manufactured from up to 80% recycled glass which would otherwise go into landfill and be unsuitable for alternative manufacturing processes.

Fletcher Insulation avoids the use of Ozone Depleting Potential (ODP) substances in the manufacture or composition of its FBS-1 Glasswool Bio-Soluble Insulation® and Sisalation® reflective foil products.

The use of General Purpose 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

General Purpose is manufactured from FBS-1 Glasswool Bio-Soluble Insulation. Refer to Fletcher Insulation Glasswool SUIIS for more information.

### Maintenance and conditions of use

- For installation please refer to AS4254.2 for installation requirement for air handling ductwork.
- Product must be kept dry at all times, not to be exposed to weather in any condition including prior, during and after installation.
- Foil facing should not be in contact with any water or alkaline materials such as wet concrete etc.
- Use of pressure cleaners or mineral based cleaners must not be used on the facing product.
- If product is compressed it will reduce the thermal performance of the product, ensure product recovers to nominal thickness where allowable to claim declared material R-value.
- Where insulation can be inspected, ensure any tears in the facing are repaired with appropriate tape as highlighted in the AS4254.2 for installation requirement for air handling ductwork.

### Technical specification

**When specifying, please state the following:**

The insulation material must be Fletcher Insulation® FI \_\_\_\_\_ (specify density 18, 22, 24) General Purpose with a Material R-value of R \_\_\_\_\_ m<sup>2</sup>K/W (specify Material R-value) at a nominal thickness of \_\_\_\_\_ mm (specify nominal thickness). Compliant with the thermal testing requirements of AS/NZS 4859.1.

Where a vapour barrier laminate is to be adhered to the blanket, the specification must state 'incorporating a Sisalation® MD or HD Facing Foil \_\_\_\_\_ mm wide' (specify 1200, 1380, 1425 or 1500mm width).

**The following performance attributes must be specified:**

- Product must be FBS-1 Biosoluble.
- Product must recover to the requirements of AS/NZS 4859.1.

© Fletcher Insulation Pty Limited 2024. Fletcher Insulation 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. The colour PINK, Pink® and Pink® Batts are registered trademarks of Owens Corning used under licence by Fletcher Insulation. FBS-1 Glasswool Bio-Soluble Insulation® is a registered trademark of ICANZ. Unless otherwise stated all ™ and ® are trademarks and registered trademarks of Fletcher Insulation Pty Limited ABN 72 001 175 355. HITDS6\_Revision\_4\_Issue date 14062024.