

Application - Air - Conditioning

Poly Glasswool Blankets are used as external insulation on commercial or residential heating or air conditioning ducts. The product is also suitable for application to the interior of rectangular or round sheet metal ducts in areas where temperature, noise/vibration and condensation must be controlled. For warm air duct, it reduces heat loss, increases system efficiency and reduces fuel costs. For air-conditioning systems, it allows better temperature control of air conditioned air during distribution, conserves power and helps prevent condensation.

Thermal Conductivity at 24°C (75°F) mean temperature

Density kg/m ³	K-Value	
	W/m°C	BTU-in/(hrft ² °F)
16	0.0404	0.28
24	0.0375	0.26
32	0.0346	0.24
48	0.0332	0.23

Acoustical Performance

Test Method ASTM C423. Type 'A' mounting.

Density kg/m ³	Thickness (mm)	Centre Frequency (Hz)							NRC
		125	250	500	1000	2000	4000		
16	25	0.23	0.31	0.58	0.80	0.87	0.95	0.65	
24	25	0.24	0.36	0.67	0.87	0.88	0.92	0.70	
32	25	0.19	0.35	0.71	0.86	0.94	0.97	0.70	
48	25	0.22	0.38	0.80	0.91	0.96	0.99	0.75	
16	50	0.39	0.68	1.06	1.03	0.91	0.98	0.91	
24	50	0.36	0.64	1.04	1.06	1.05	1.10	0.95	
32	50	0.38	0.72	1.11	1.07	1.04	1.07	1.00	

Thermal Performance

R - Value (m ² K/W)	Width (m)	Length (m)
0.62	1.2	20 / 30
1.24	1.2	15
0.67	1.2	24
1.33	1.2	12
0.72	1.2	20
1.45	1.2	10
0.75	1.2	15
1.50	1.2	7.5

Application - Roofing

Poly Glasswool Blankets are widely used for underside of metal deck roofing to reduce the heat gain and loss. For sound absorption, it reduces noise from rain or hail drumming. This creates a more pleasant, quiet and comfortable building interior.

In the insulation of residential roofs, it can either be installed between the roof trusses or on top of ceiling. Due to its tensile strength and structural integrity, it will not tear or shrink and is easily installed on all kinds of roof structures. Poly Glasswool Blankets come in the form of unfaced or with a Multi-purpose Foil-Scrim-Kraft (FSK) facing. The glasswool blankets with aluminium foil facing helps to prevent water contamination to the glasswool insulation where it acts as a vapour barrier.

Thermal Conductivity at 24°C (75°F) Mean Temperature

Density kg/m ³	K-Value	
	W/m°C	BTU-in/(hrft ² °F)
10	0.0476	0.33
16	0.0404	0.28
24	0.0375	0.26
32	0.0346	0.24
48	0.0332	0.23

Acoustical Performance

Test Method ASTM C423. Type 'A' mounting.

Density kg/m ³	Thickness (mm)	Centre Frequency (Hz)						
		125	250	500	1000	2000	4000	NRC
10	50	0.46	0.62	0.88	0.87	0.86	0.97	0.80
16	50	0.39	0.68	1.06	1.03	0.91	0.98	0.91
24	50	0.36	0.64	1.04	1.06	1.05	1.10	0.95
32	50	0.38	0.72	1.11	1.07	1.04	1.07	1.00

Thermal Performance

R-Value (m ² K/W)	Width (m)	Length (m)
1.05	1.2	20 / 30
1.24	1.2	15.0
1.33	1.2	12.0
1.45	1.2	10.0
1.57	1.2	12.0
1.86	1.2	10.0
2.00	1.2	7.5
2.10	1.2	12.0
2.48	1.2	7.5

Description

Poly Glasswool Blankets are manufactured by the unique rotary flame attenuation process incorporating highly resilient, inorganic glass fibre, bonded with a thermosetting resin to form a lightweight, flexible and resilient insulation material. It provides excellent thermal insulation qualities and is also an effective acoustical, sound absorption material. It is available unfaced or with a Multi-purpose Foil-Scrim-Kraft (FSK) facing, or with BGT facing. Factory lamination of facing during the manufacturing process assures uniform quality.

Benefits and Features

DURABLE. Poly Glasswool Blankets are non-combustible. Being non-cellular and non-hygroscopic, they do not promote capillary action. In addition, they are highly resistant to the effect of humidity, aging, corrosion and rust. The resilient glass fibres also resist sagging from vibration.

THERMAL PERFORMANCE. Poly Glasswool Blankets provide for excellent thermal insulation to reduce heat gain or loss through the roofs.

NOISE REDUCTION. Excellent acoustical properties effectively reduce the level of unwanted noise and thus enhance the comfort level of building occupants.

EASY INSTALLATION. Poly Glasswool Blankets are lightweight, easy to handle and enable faster installation and lower labour costs on the field.

ENERGY CONSERVATION. Both thermal and acoustic insulation are essential to the preservation of the environment. Thermal insulation conserves energy by reducing operating costs on mechanical and electrical equipments.

Fire Properties

Poly Glasswool Blankets are non-combustible and are tested in accordance with:

B. S. 476 : Part 6 Fire propagation

B. S. 476 : Part 7 Surface spread of flame

Comply with BOMBA Class "O" Certification and other Building Regulations.

Early Fire Hazards

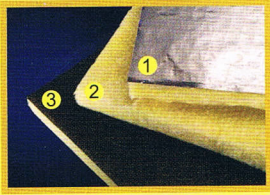
Poly Glasswool Blankets do not ignite, evolve heat, spread flame or develop smoke when tested in accordance with Australia Standard 1530 : Part 3-1982.

	Unfaced	Faced
Ignitability Index	0	0
Heat Evolved Index	0	0
Spread of Flame Index	0	0
Smoke Developed Index	0~1	0~1

R - Value

R-Value refers to the thermal resistance of any insulation material. It is the overall ability of an insulation material to resist (retard) heat flow, taking into account both the thermal conductivity (K-Value) and the thickness of the insulation material. It is used in calculating overall heat transmission coefficients and is expressed as m² °K/M (metre square Kelvin per Watt).

$$R\text{-Value} = \frac{\text{Insulation Material Thickness (metre)}}{\text{Insulation Material K-Value (W/m}^2\text{K)}}$$



- 1 | FSK / Single-sided Aluminium Foil Faced
- 2 | Plain / Unfaced
- 3 | BGT Faced



Blankets



POLY GLASS FIBRE
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POLYGLASS Glasswool Blanket

*For Comfort and
 Energy Saving*

Superior Thermal and Acoustic Insulation

**GlassWool
 Insulation**
Bio-Soluble

Applications:

- Roofing
- Air - Conditioning
- Various Thermal and Acoustic Insulation

