

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







POLYGLASS Poly Building Insulation

For Comfort and Energy Saving

Poly Building Insulation Blankets for Roofing

Description

Poly Building Insulation 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.

Application

Poly Building Insulation 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 be either installed between the roof trusses roof trusses or on top of ceiling. The aluminium foil is a vapour barrier which prevents water contamination to the glasswool insulation.

Benefits and Features

EASY INSTALLATION. Poly Building Insulation Blankets are lightweight, easy to handle and install. Due to its' tensile strength and structural integrity, it will not tear or shrink and is easily installed on all kinds of roof structures.

DURABLE. Poly Building Insulation 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 Building Insulation 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.







Fire Properties

Poly Building Insulation 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 Building Insulation Blankets do not ignite, evolve heat, spread flame or develop smoke when tested in a 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	

Surface Burning Characteristics

Poly Building Insulation Blankets meet the Surface Burning Index requirements of NFPA 90A and 90B standards FHA when tested in accordance with ASTM E84.

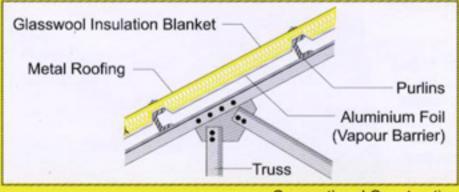
Fire Hazard Classification 25/50.

Compressive Strenght

Poly Building Insulation Blankets have excellent resilience. It will recover to its nominal thickness after prolonged compression.

General Properties

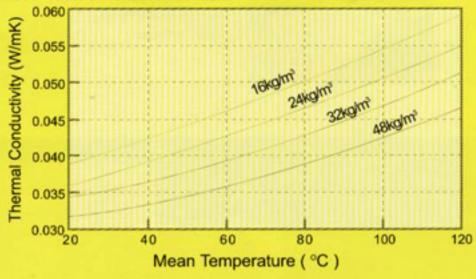
Maximum Service Temperature	
* Unfaced	350°C (662°C)
* Faced	121°C (250°C)
Moisture absorption	Less than 5% by weigh (ASTM C665)
Alkalinity	PH9, slightly alkaline
Corrosiveness (with steel, copper or aluminium)	Does not accelerate
Odour	None
Capillarity (after 24 hours)	Negligible
Shrinkage	None
Resistance to	Does not promote
fungus and bacteria	



Conventional Construction

Thermal Conductivity

Test Method ASTM C177-85



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

Density kg/m³	K Value			
	W/m°C	BTU-in/(hrft²°F)		
10	0.0476	0.33		
16	0.0404	0.28		
24	0.0375	0.26		
32	0.0346	0.24		

Acoustical Performance

Test Method ASTM C423. Type 'A' mounting.

Density	Thickness	Centre Frequency (Hz)						
kg/m³ (mi	(mm)	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

Density kg/m³	Thickness (mm)	Width (m)	Length (m)	R-Value (m2K/W)
10	50	1.2	20 / 30	1.05
16	50	1.2	15.0	1.24
24	50	1.2	12.0	1.33
32	50	1.2	10.0	1.45
10	75	1.2	12.0	1.57
16	75	1.2	10.0	1.86
24	75	1.2	7.5	2.00
10	100	1.2	12.0	2.10
16	100	1.2	7.5	2.48

Available plain and faced with Single or Double-sided Aluminium Foil for vapour barrier application.

Manufactured in Malaysia by:



POLY GLASS FIBRE (M) BHD. (42138-X)

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