

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







# Polyanss Polywool Duct Wrap

# For Comfort and Energy Saving

Polywool Insulation for Air Handling

### Description

Polywool Duct Wrap for thermal and acoustical insulation is made from highly resilient, inorganic glass fibre bonded with a thermosetting resin. It is available unfaced or with a Multi-purpose Foil-Skrim-Kraft (FSK) facing, or with BGT facing. Factory lamination of facing during the manufacturing process assures uniform quality.

# Benefits and Features

**ENERGY CONSERVATION.** Polywool Duct Wrap offers excellent thermal performance. 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.

**DURABLE**. Polywool Duct Wrap is non-combustible. Being non-cellular and non-hygroscopic, it does not promote capillary action. In addition, it is highly resistant to the effect of humidity, aging, corrosion, and rust. The resilient glass fibres also resist sagging from vibration.

LOW INSTALLATION COSTS. Polywool Duct Wrap is flexible and easily conforms to flat or irregular surfaces. The lightweight rolls enable faster installation and lower labour costs on the field.

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

**CONDENSATION CONTROL**. Polywool Duct Wrap, with one surface of FSK facing, properly installed and with sealed joints helps prevent condensation. This prevents the prospect of water damages and potential growth of fungus or bacteria.

THERMAL PERFORMANCE. Polywool Duct Wrap provides for excellent thermal insulation to reduce heat gain or loss for warm air ducts and air-conditioned ducts.





#### **Applications**

Polywool Duct Wrap is 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.

#### Fire Properties

Polywool Duct Wrap is non-combustible and is 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

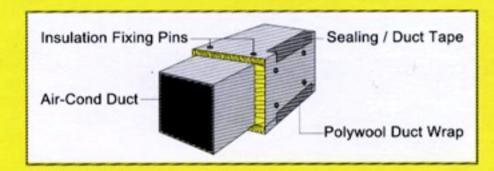
Polywool Duct Wrap does not ignite, evolve heat, spread flame or develop smoke when tested in accordance with Australia Standard 1530: Part 3-1982.

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

#### Surface Burning Characteristics

Polywool Duct Wrap meets the surface Burning Index requirements of NFPA 90A and 90B standards FHA when tested in accordance with ASTM E84.

Fire Hazard classification 25/50.

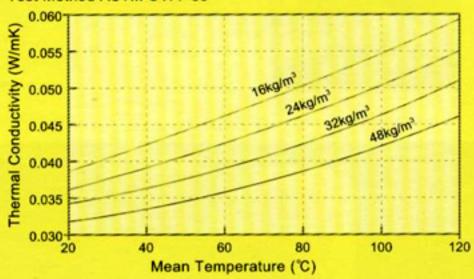


#### General Properties

350°C (662°F) 121°C (250°F)
Less than 5% by weight (ASTM C665)
PH9, slightly alkaline
Does not accelerate
None
Negligible
None
Does not promote

#### 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)	
16	0.0404	0.28	
24	0.0375	0.26	
32	0.0346	0.24	
48	0.0332	0.23	

#### **Acoustical Performance**

Tested Method ASTM C423. Type 'A' mounting

Density	Centre Frequency (Hz)							
Density Thickness (mm)	125	250	500	1000	2000	4000	NRC	
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

# Range of Products Available (PIAIN / UNFACED)

Density kg/m³	Thickness (mm)	Width (m)	Length (m)
16	25	1.2	20 / 30
16	50	1.2	15
24	25	1.2	24
24	50	1.2	12
32	25	1.2	20
32	50	1.2	10
48	25	1.2	15
48	50	1.2	7.5

Available unfaced or with a Multi-purpose FSK.

## Compressive Strength

Polywool Duct Wrap has excellent resilience. It will recover to its nominal thickness after prolonged compression.

#### Manufactured in Malaysia by:



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No. 2449, Lorong Perusahaan Sepuluh,
Kawasan Perusahaan Perai,
13600 Perai, Penang, Malaysia.
Tel: (604) 390 8460 (Hunting) Fax: (604) 399 6197
E-mail: poly@tm.net.my / polymktg@tm.net.my
Website: www.polyglass.com.my

Sales & Marketing:

PGF MARKETING (M) SDN. BHD. (200549-A)
No. 1, (2nd floor) Lengkuk Keluli 2,
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41050 Klang, Selangor, Malaysia.

Tel: (603) 3344 3113 Fax: (603) 3343 0935 E-mail: pgf@pd.jaring.my Other Factory Locations:

PT POLYGLASS INDUSTRIES Lot No. E1/C964;

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