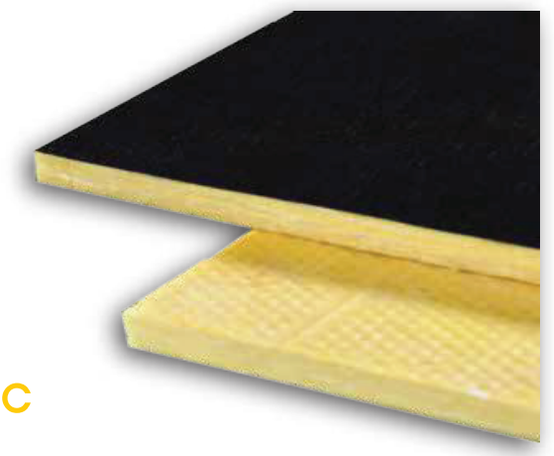
ECOWOOL® Classic Ventliner

ECOWOOL® Classic Ventliner board is a highly resilient board version of glass mineral wool made from up to 80% of recycled glass. It is designed to meet specific requirement in the HVAC equipment industry especially for the internal duct lining and other OEM applications. The glass mineral wool provides excellent thermal and acoustical insulating properties due to its sound absorbent material that absorbs noise within sheet metal ducts, besides providing thermal comfort by reducing heat loss or gain through duct walls.



APPLICATION

- Reduced fibre migration compared to perforated foil.
- Specifically designed for use as an extended performance lining insulation for HVAC plenum and air distribution ductwork. It offers exceptional durability and superior acoustical and thermal performance offers minimal fibre migration.

FEATURES AND BENEFITS

Better fibre network. Fine, longer and evenly distributed fibre network helps in creating better tensile strength allowing the insulation to demonstrate superior durability. Due to unique fiber structure in can be easily bend over different shapes and parts of HVAC systems.

Damage resistance. The specially factory laminated surface enhances the ability of the insulation to resist damage from typical in-shop handling, fabrication, and jobsite shipment. If necessary, the surface may be cleaned using standard industry-recognised dry methods.

Optimal fibre diameter. Optimal fibre diameter produces more air chamber which enables the insulation to provide a better and enhanced performance.

Less dust less itch. Specifically engineered to produce a comfortable and less dusty insulation compared to conventional glass wool. The insulation creates a pleasant work experience by reducing the tingling feeling during installation.

Exceptional sound-absorbing properties. ECOWOOL® Ventliner board reduces the transmission of HVAC noises such as air turbulence, popping and cracking.

Factory laminated facing. Laminated with a high end durable woven glass fabric. The woven glass fabric is an inorganic woven glass membranes which will not rot, is lightweight and will conform to irregular surfaces. The tensile strength of glass fabrics is greater than cotton fabric or jute.

Insulation Properties:

- Excellent thermal efficiency
- Excellent acoustical performance
- Easy to fabricate
- Easy to handle and install

Sustainability. PGF Insulation is committed to providing environmentally sustainable products. ECOWOOL® Ventliner board is free from CFCs, HCFCs and any other material, with ozone depletion potential in their manufacture or content. Made from nearly 80% recycled glass and locally sourced raw materials, the product is perfectly in tune with sustainability and environmental concerns.

Working temperature limitations. Operating temperature up to 121°C for the woven glass fabric faced product. At excessive temperatures, limited migration of binder may occur in the insulation in contact with the surface. This in no way impairs the performance of the insulation.

Water vapor absorption. Absorbs <0.02% by volume. Tested in accordance with ASTM C 1104/C 1104M-13a.

Zero odour emission. Does not emit any unpleasant odour. Tested in accordance with ASTM C 1304.

Non-corrosive. Chemically inert and will not cause or accelerate corrosion of steel, copper or aluminum. Hydrogen ion concentration at pH 9. Tested in accordance with ASTM C 665-12.

Mould-free. Does not encourage growth of mould, fungus or bacteria. Tested in accordance with ASTM C 1338-14.

Alkalinity. pH 9.

CERTIFICATIONS

MS 1020:2010 certified. ECOWOOL® Ventliner board is MS1020:2010 certified. The certification is accredited by SIRIM QAS.

CIDB COA compliant. CIDB COA compliant according to CIDB Act 520

PERFORMANCE

Fire hazard properties. Inherently non-combustible and doesn't fuel fire or propagate flames therefore, the ECOWOOL® Ventliner board won't burn if exposed to fire. Tested in accordance with:

- **B.S. 476: Part 6 Fire propagation**
- **B.S. 476: Part 7 Surface spread of flame**
- **BOMBA Class "O" (glass mineral wool only)**

Surface burning characteristic. Meets the surface burning characteristic and limited combustibility of the following standards (plain/unfaced):

- ASTM E84
- NFPA 90A and NFPA 90B

TECHNICAL DATA SHEET
VENTLINER | HVAC

Fire safety properties. Does not ignite, evolve heat, spread flame or develop smoke when tested in accordance with Australia Standard 1530 : Part 3-1982 (plain/unfaced)

Withstands high velocity. Tested according to the Erosion Test Method in UL 181 at velocities as high as 15,000 fpm.

Assured thermal performance. Greatly reduces heat gains or losses through the duct walls so that energy costs are reduced and conditioned air reaches the outlet at the required temperature. Tested and complies with ASTM C518 at 20°C mean temperature.

Acoustical Performance. Commercial HVAC (Heating, Ventilation and Air Conditioning) systems are typically driven by large central motors that push conditioned air to each room of a building through a complex network of metal ducts. The insulation reduces noise from the HVAC motors travelling though the ducts into the rooms while its thermal performance helps maintain a consistent air temperature throughout the long network of ducts. Tested and complies with ASTM C423 - Type 'A' mounting.
Please refer to the table overleaf for more information on the acoustic performance.

Type	Thickness (mm)	Center Frequency (Hz)						
		125	250	500	1000	2000	4000	NRC
EWBL 0.75	25	0.19	0.35	0.71	0.86	0.94	0.97	0.90
EWBL 1.50	50	0.38	0.72	1.11	1.07	1.04	1.07	1.05

PRODUCT AVAILABLE

Type	Thickness (mm)	Width (m)	Length (m)	K-Value (W/m K)	R-Value (m²k/w)
EWBL 0.75	25	1.20	2.30	0.0327	0.75
EWBL 1.50	50	1.20	2.30	0.0327	1.50

ECOWOOL® Ventliner board available in faced with woven glass fabric.

** ECOWOOL® Ventliner is also available in blanket form. Please contact our sales representative for more information.

INSTALLATION

All material shall be installed in accordance with the NAIMA Fibrous Glass Duct Liner Installation Standard.

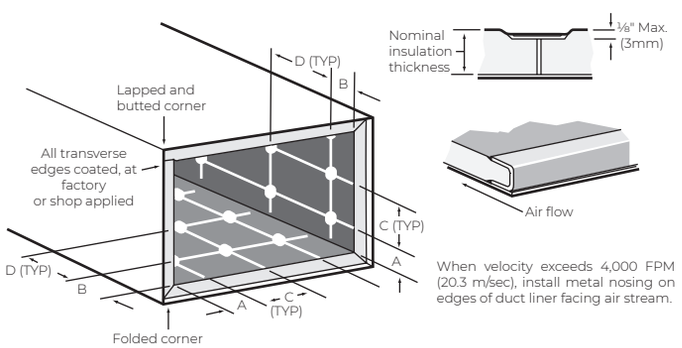


Figure 1: Mechanical fastener spacing

Dimension		Velocity, feet per minute (meters per second)	
		0-2,500 (0 - 12.7)	2,501-6000 (12.7 - 30.5)
A	From corners of duct	4" (100mm)	4" (100mm)
B	From transverse end of duct liner	3" (75mm)	3" (75mm)
C	Across width of duct, on centers (min. 1 per side)	12" (300mm)	6" (150mm)
D	Along length of duct, on centers (min. 1 per side)	18" (450mm)	16" (400mm)

SHORT FORM SPECIFICATION

All ducts are to be insulated on the internal GI surface with _____ mm (25mm, 50mm) thickness ECOWOOL® Ventliner board EWBL _____ (_____kg/m³) glass mineral wool insulation. Thermal conductivity 'K-Value' of the insulation shall be K _____. Thermal resistance "R-Value" of the insulation shall be R _____. The product shall be certified to MS1020 : 2010 and shall be non-combustible, tested and comply with BS 476 : Part 4 :1970. Noise Reduction Coefficient (NRC) of the insulation shall be _____.

WARRANTY

This product is covered by a 10 years product warranty.

For full details, please go to **www.ecowool.com.my**

* Terms & conditions apply.

POLY GLASS FIBRE™ Insulation

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BUATAN MALAYSIA
MADE IN MALAYSIA

We Are Environmental Friendly
Recycled symbol indicates that our glass wool is manufactured using up to 80% of recycled glass

Manufacturing Process Energised By Up To 573.65kWp Solar Power

2023 v1