

ECOWOOL Classic DuctGuard

Ecowool Classic DuctGuard, manufactured by PGF Insulation, provides sheet metal ducts with improved cooling efficiency, condensation control and fire safety. It is designed to suit the hot and humid weather like Malaysia, Singapore and Indonesia. It is also certified to MS1020:2010 and meets fire safety standards of Singapore.

Ecowool Classic DuctGuard is prelaminated with a vapour barrier facing material.

APPLICATION

Recommended as a thermal insulation for the exterior of HVAC systems or other spaces or surfaces where temperature control is required. ECOWOOL Classic DuctGuard meets typical industry standards for core and tensile strength, which makes the product more resistant to damage during installation. The flexible and light weight features allow the insulation to conform easily around corners and curved surfaces and is readily cut in die presses or with a knife.

ECOWOOL Classic DuctGuard reduces heat loss or gain through duct walls, conserving energy and controlling moisture condensation.

PERFORMANCE

Fire Hazard Properties

Inherently non-combustible and doesn't fuel fire or propagate flames therefore, the ECOWOOL Classic DuctGuard 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

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.

Fast Installation

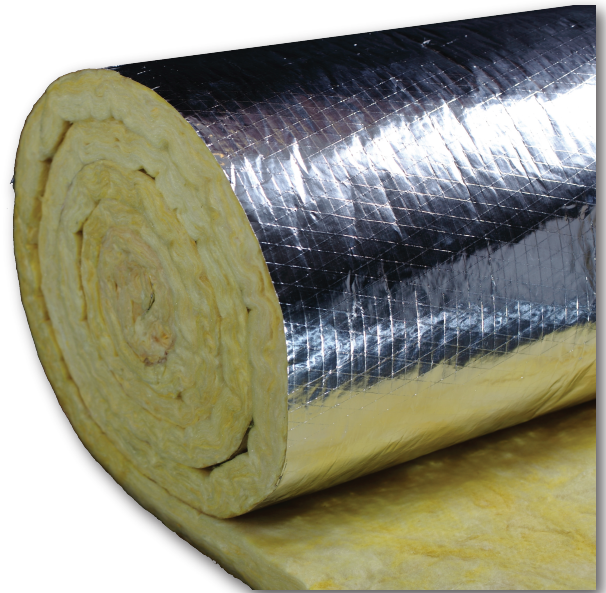
ECOWOOL Classic Ductguard saves installation time by up to 50% compared to conventional method of installation glass mineral wool insulation on ductings.

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 through the ducts into the rooms while its thermal performance helps maintain a consistent air temperature throughout the long network of ducts.

Condensation Control

When installed thickness recommendations are followed, ECOWOOL Classic DuctGuard installed over sealed sheet metal ducts reduces the likelihood of condensation occurring on the vapor retarder facing, and of moisture damage to ceilings and other interior finishes.



Durable

As glass mineral wool is made of inorganic mineral bonded with high temperature binder, it does not degrade or deform over time. When properly installed, Ecowool Classic DuctGuard can perform at its specified level for a long period of time. PGF recommends DuctGuard to be installed in accordance to ASHRAE or National Commercial and Industrial Insulation Standards, Midwest Insulation Contractors Association (MICA). Ecowool Classic DuctGuard is covered by a 10 years product warranty.

ACCREDITATION

MS1020:2010 Certified

ECOWOOL Classic DuctGuard is MS1020:2010 certified. The certification is accredited by SIRIM QAS.

CIDB Act Compliant

ECOWOOL Classic DuctGuard is certified by CIDB according to Section VIIA CIDB Act (2011 Amendment). Please contact PGF Insulation representative for further information.

SUSTAINABILITY

PGF Insulation is committed to providing environmentally sustainable products. ECOWOOL Classic DuctGuard 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.



PRODUCT AVAILABILITY

ECOWOOL Classic DuctGuard are supplied in two conventional thickness for standard sheet metal ducts to reduce the likelihood of condensation occurring. The following range of ECOWOOL Classic DuctGuard is available.

Type	Density (kg/m ³)	K- Value (W/m K)	R- Value (m ² K/W)	Thickness (mm)	Width (m)	Length (m)
EWBL 0.75	32	0.0327	0.75	25	1.2	15
EWBL 1.50	32	0.0327	1.50	50	1.2	7.5

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.

Exceptional vapour retarder. Faced with factory laminated facing material offers low permeance properties which allows excellent long-term vapour sealing. A properly installed glass mineral wool insulation with vapour barrier facing will help to minimize concerns with concealed condensation.

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

Less dusty and less itchy. 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.

Sustainable product. PGF Insulation uses no ozone depleting products (ODP) in manufacture.

Exceptional Sound-Absorbing Properties. ECOWOOL Classic DuctGuard reduces the transmission of HVAC noises such as air turbulence, popping and cracking.

Maximum service temperature. Maximum service temperature of 450 °C. Tested in accordance with ASTM C411-11 & ASTM C447-10.

Water Vapor Absorption. Absorbs less than 5% by weight. Tested in accordance with ASTM C 1104/C 1104M-13a.

Odor Emission. Does not emit any unpleasant odor. Tested in accordance with ASTM C 1304.

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

FACING MATERIAL SPECIFICATION

Physical Properties	Test Method	Value (English)	Value (Metric)
Water Vapour Permeance	ASTM E96, Procedure A	0.02 perm	1.15 ng/N.s
Tensile Strength - MD	ASTM D828	45 lbs/in	8 kN/m
Tensile Strength - XD	ASTM D828	25 lbs/in	4.4 kN/m
Burst Strength	ASTM D774	75.4 psi	52 N/cm2

SPECIFICATION STATEMENT

All ducts are to be insulated on the external GI surface with ECOWOOL Classic DuctGuard, glass mineral wool factory laminated with a vapour barrier facing. All glass wool insulation shown on drawings or specified herein shall be ECOWOOL Classic DuctGuard EWBL* with thickness of *mm. Thermal conductivity K-Value of the insulation shall be K 0.0327 W/mK. It shall be MS1020:2010 certified and CIDB Act compliant according to Section VIIA CIDB Act (2011 Amendment). It will be manufactured by PGF Insulation and shall be installed in accordance with the instructions issued by manufacturer.

*consultant to insert details of products used.

WARRANTY

This product is covered by a 10 years product warranty. For full details, please go to www.ecowool.com.my.

*Terms & Conditions apply



Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of the glass mineral wool insulation listed herein represent typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. The suitability of the product is not binding for special individual cases. Warranty and liability upon delivery shall be in accordance with our General Terms and Conditions. No responsibility is assumed for the correctness of this information. Version of January 2020.



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