# **TECHNICAL DATA SHEET**

# **BLANKET | HVAC**

## **ECOWOOL Classic**

**ECOWOOL** Classic External Duct wrap, the new generation glass mineral wool insulation manufactured by PGF Insulation provides traditional sheet metal ducts with improved thermal insulation. The external glass mineral wool duct wrap has been engineered to provide the highest level of insulation performance for building occupants to achieve the optimum level of indoor comfort deserved.

# APPLICATION

Recommended as a thermal insulation for the exterior of HVAC systems or other spaces or surfaces where temperature control is required. ECOWOOL Classic 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 Duct wrap 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 BROWNIE external duct Wrap won't burn if exposed to fire. Tested in accordance with:

- B.S. 476: Part 4
- B.S. 476: Part 6 Fire propagation
- B.S. 476: Part 7 Surface spread of flame
- ASTM E84-15b Test for Surface Burning Characteristics

### 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 in accordance 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 it's thermal performance helps maintain a consistent air temperature throughout the long network of ducts.





## Enhanced Comfort Control

By reducing heat loss or gain through duct walls, conditioned air reaches occupied spaces at temperatures close to design conditions. Central air equipment may therefore be operated at reduced levels, saving energy.

### Condensation Control

When installed thickness recommendations are followed, ECOWOOL Classic 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.

## CERTIFICATIONS

#### MS1020:2010 Certified

 $\mathsf{ECOWOOL}\ \mathsf{CLASSIC}\ \mathsf{is}\ \mathsf{MS1020:2010}\ \mathsf{certified}.$  The certification is accredited by  $\mathsf{SIRIM}\ \mathsf{QAS}.$ 

#### **CIDB COA Compliant**

is CIDB COA complaint according to Section VIIA CIDB Act (2011 Amendment). Please contact PGF Insulation representative for further information.

### Sustainable Product

PGF Insulation is committed to providing environmentally sustainable products. ECOWOOL Classic external duct wrap 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 wall batts is perfectly in tune with sustainability and environmental concerns.

## 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

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

**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.

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

**Better fibre network.** Fine, longer and evenly distributed fibre network helps in creating better tensile strength allowing the insulation to demonstrate superior durability, flexibility and feeling much softer.

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

**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.

**Corrosiveness.** Chemically inert and will not cause or accelerate corrosion of steel, stainless 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.

**Exceptional sound-absorbing properties.** ECOWOOL Classic External Duct wrap reduces the transmission of HVAC noises such as air turbulence, popping and cracking.

# PRODUCT AVAILBILITY

Туре	Density (kg/m <sup>3</sup> )	K- Value (W/m K)	R- Value (m <sup>2</sup> K/W)	Thickness (mm)	Width (m)	Length (m)
EBWL 0.75	32	0.0327	0.75	50	1.2	15
EBWL 1.50	32	0.0327	1.50	50	1.2	7.5

# SPECIFICATION STATEMENT

All ducts are to be insulated on the external GI surface with ECOWOOL Classic, glass mineral wool. All glass wool insulation shown on drawings or specified herein shall be ECOWOOL Classic 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 COA complaint 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 70 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 August 2019.



## PGF Insulation Sdn. Bhd.

Headquarters (HQ): 2449, Lorong Perusahaan Sepuluh, Kawasan Perusahaan Perai, 13600 Perai, Penang, Malaysia Tel: +604 390 8460 Fax: +604 399 6197 E-mail: sales@ecowool.com.my

#### Sales Office:

46-2, Block D, Zenith Corporate Park, Jln SS7/26, 47301 Petaling Jaya, Selangor D.E., Malaysia Tel: +603 7886 0074 Fax : +603 7886 0077 E-mail: sales@ecowool.com.my

