

Ecowool Classic POLYTONE®

Built on Ecowool technology, Ecowool Classic POLYTONE® glass mineral wool ceiling panel is manufactured using up to 80% of recycled glass cullet. It is an aesthetical and decorative suspended ceiling system, specially designed for selective and distinctive applications, where acoustical (sound) control is crucial and paramount.

APPLICATION

As decorative, acoustically effective suspended ceilings for indoor use and in covered outside areas that are not exposed to weather such as rain or environmental pollution. Ecowool Classic POLYTONE® is installed on an exposed or concealed suspended grid system, creating a ceiling with a smooth appearance. Each acoustic panel is easily demountable.

FEATURES AND BENEFITS

Sustainable product. Ecowool Classic POLYTONE® is free from CFCs, HCFCs and any material with ozone depletion potential (ODP) in their manufacture/composition content, which are harmless to the environment. Ecowool Classic POLYTONE® is compliant with most green rating tools including ODP emission credit requirements. Air quality is unaffected with total volatile organic compound (VOC) emissions below quantifiable levels.

Mould-free. Does not encourage growth of mould, fungus or bacteria. Tested in accordance with ASTM C1338-08.

Non-corrosive. Chemically inert. Will not cause or accelerate corrosion of steel, stainless steel, copper or aluminum due to its specifically inorganic and mineral composition. Tested in accordance with ASTM C665-12.

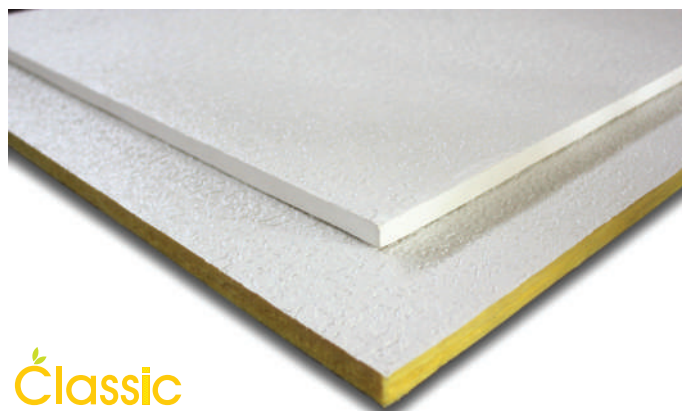
Optimal fibre diameter. Optimal fibre diameter ranging from 4-5 micron produces more air chamber which enables the insulation to provide a better and enhanced performance.

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

Alkalinity. pH 9.

Low water vapour absorption. Absorbs <0.02% by volume. Tested in accordance with ASTM C1104.

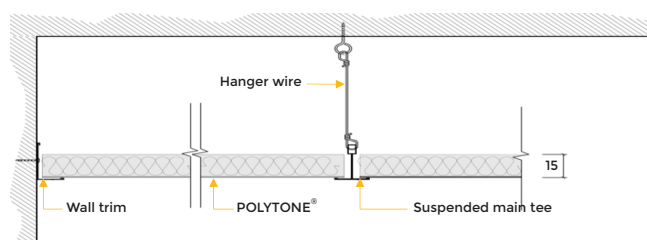
Zero odour emission. Does not emit any unpleasant odour. Tested in accordance with ASTM C1304.



Classic

PERFORMANCE

Sag Resistance. Moist indoor air can cause other panels to visibly sag. Ecowool Classic POLYTONE® acoustic ceiling panel offers very high resistance to moisture absorption which protects them against warping, bulging and sagging. The panels can withstand a permanent ambient relative humidity (RH) up to 90% at 30°C without sagging.



Hygienic properties. Made of Ecowool glass mineral wool, Ecowool Classic POLYTONE® has no nutritional value and therefore it provides no sustenance to harmful micro-organisms.

Surface finish. Matte black glass tissue.

Fire safety properties. 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)

Thermal conductivity. Tested in accordance with ASTM C518 at 20°C mean temperature. K-Value : 0.0309 W/mK.

Acoustical performance. Ecowool Classic POLYTONE® acoustic ceiling panel is amongst the most effective acoustic insulation solutions when noise treatment is required. Tested in accordance with ASTM C423-09a and E795-05.

Center Frequency (Hz)						
125	250	500	1000	2000	4000	NRC
0.52	0.41	0.40	0.77	0.74	0.65	0.62

AVAILABLE FORM

Variations

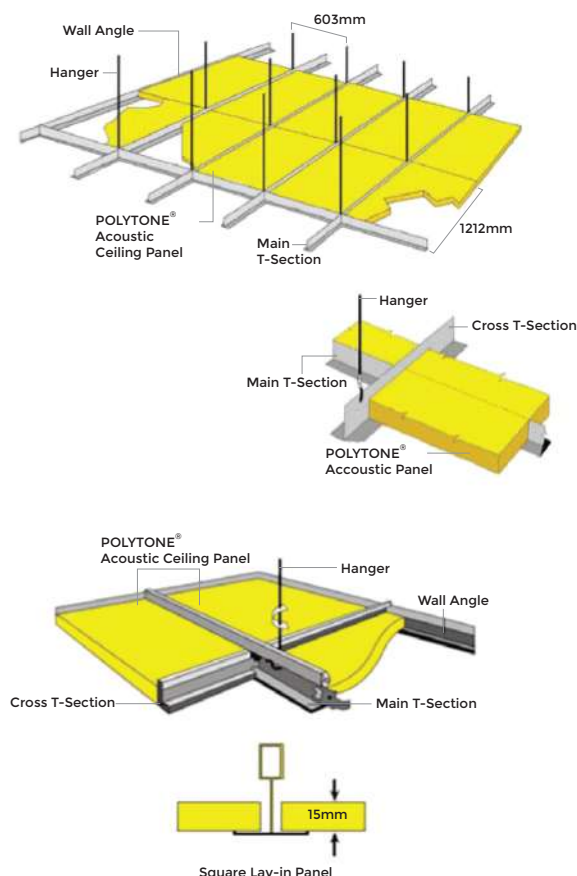
- Square lay in panels are available bare edges faced with printed glass tissue on the front.
- Square lay in panels are available concealed with printed glass tissue on the front, harden and painted edges and white glass tissue facing at the back.

Dimension	Density (kg/m ³)	K-Value (W/m K)	Thickness (mm)
603mm x 1212mm	65.8	0.0309	15mm (straight edge)
595mm x 1195mm			

INSTALLATION

The installation of Ecowool Classic POLYTONE® acoustic panels is part of interior decorating and may only be carried out under controlled humidity and temperature conditions. Installation shall not commence until the building is water tight and dry. Light fittings shall be independently supported, use hold down clips in areas of wind uplift. It is recommended that air grilles be installed in the ceiling to balance air pressure differentials. Please refer to the Acoustic Ceiling Panel Warranty, Installation and Maintenance Information.

Square Lay In / Drop In Panel



SHORT FORM SPECIFICATION

To supply and install Ecowool Classic POLYTONE® acoustic ceiling panel with NRC 0.90 manufactured by PGF Insulation c/w exposed grid system with approved 3mm hanger rod, adjustable butterfly clip, main tees, cross tees and necessary fitting and accessories fixing to steel framing or concrete soffit, including forming opening for grilles, light fittings as according to manufacturer's specification.

WARRANTY

This product is covered by a 10 years product warranty.

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

* Terms & conditions apply.



COLOUR / IMAGE DISCLAIMER

Despite every effort to provide accurate images of each ceiling panel's finishing colour, actual colours and design may vary slightly, due to the different device screen settings, the lighting in the installation location, minor differences in product finishes over time and other factors. PGF Insulation will not accept responsibility for any colour or design differences that are not factory faults. In purchasing from PGF Insulation, you agree to accept the small risk that there may be a subtle variation between the actual colour of the product against what is represented on our sales and marketing collateral due to the factors mentioned above.

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.



ECOWOOL CLASSIC POLYTONE

Application: Ceiling Panel

Brand: Ecowool

Series: Classic

Specification Statement:

Ecowool Classic Glasswool Insulation, certified by EUCB. This product is covered by a 10-year warranty.

A photograph of modern skyscrapers with glass facades, set against a clear blue sky. The buildings are partially obscured by a dark blue semi-transparent rectangle that serves as a background for the title.

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Certification



Certificate of WARRANTY

éc@wool

PGF INSULATION

We, PGF Insulation grant

LOREM IPSUM

on Lorem Ipsum

Lorem Ipsum

A 70-year Limited Warranty, which is valid with this certificate and the purchase documents.
Please refer to the enclosed Warranty Statement for details.

Valid Through

The xx of xx, 20xx

For PGF Insulation Sdn. Bhd.

Name : Tan Ming Chong
Designation : Chief Operating Officer



Product & Project Specific Commercial Warranty

GLASS MINERAL WOOL INSULATION

Sponsor :
Project :

Address :

Application :
Product :

BQ Quantity :
Actual Quantity :
Commencement Date :
Completion Date :
Architect :
Contractor :

PGF Insulation, subject to the conditions and limitations set forth below, warrants its resin bonded glass mineral wool insulations are manufactured in accordance with MS 1020:2022 and are fit for the purpose of insulating roofs, walls, sectional pipes and ceiling, if tested in accordance with the methodology referred to in MS 1020:2022, if properly installed in accordance with the installation instructions, and if maintained according to relevant Standards including MS 1020:2022 .

PGF INSULATION DISCLAIMS ALL OTHER REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, IN FACT OR IN LAW, INCLUDING, WITHOUT LIMITATION, THE IMPLIED LIMITED WARRANTY OF MERCHANTABILITY AND THE IMPLIED LIMITED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

CLAUSE 1 - COVERAGE

- 1) PGF Insulation warrants to the organization purchasing the glass mineral wool insulation, hereinafter referred to as the "Covered Company" that:
 - a) The glass mineral wool insulation is free from manufacturing defects for a period of 10 years for faced product and 70 years for unfaced products from the date of purchase.
 - b) When used for its intended purpose, properly installed in accordance with PGF Insulation installation instructions and maintained in dry conditions, the glass mineral wool insulation can be expected to maintain its thermal insulation properties for the warranted period from the date of purchase (glass mineral wool insulation product performance).
 - c) Should any manufacturing defect e.g. bulging, warping, buckling or sagging occur during said warranted period, PGF Insulation will provide replacement of glass mineral wool insulation material to the original purchaser of the material or a subsequent owner of the building if the portion of the glass mineral wool insulation is determined to be defective; but not including labour costs and tear-out costs incurred in removal of defective material or installing the replacement material.
 - d) In lieu of providing replacement material reserves the right to, at its sole discretion, refund that amount paid for the defective material (excluding costs to install).

CLAUSE 2 - TERMS AND CONDITIONS

- 1) PGF Insulation's liability to the Covered Company under this Limited Warranty shall be subject to the following terms and conditions:
 - a) The claimant must provide the following documents:
 - i. Original Certificate of Warranty
 - ii. Proof of Purchase showing details of the seller and the installer.
 - b) The glass mineral wool insulation must be transported and stored in dry conditions at all times between purchase and installation and without bearing the weight of other materials. PGF Insulation will have no liability under this Limited Warranty in respect of wet or water damaged glass mineral wool insulation.
 - c) The glass mineral wool insulation must be installed in accordance with PGF Insulation installation instructions and maintained according to all other applicable building codes adopted by federal, state, or local government or government agencies and applicable to the installation or maintenance. Failure to properly install or maintain the glass mineral wool insulation in accordance with this clause will void this Limited Warranty.



This certificate has been

Awarded to

PGF INSULATION SDN BHD

Which is located at

**2449, LORONG PERUSAHAAN 10, KAWASAN PERUSAHAAN PERAI, 13600 PERAI,
PENANG, MALAYSIA.**

On Standard

ISO 9001 : 2015

Which the organization stated above had been assessed and found to be in accordance with the requirements of international Quality Management System.

PGF INSULATION SDN BHD
Under the Scope of

**PRODUCTION OF GLASSWOOL AND RELATED PRODUCTS FOR THERMAL AND
ACOUSTIC INSULATION.**

Original Issued Date : **27th September 2006**

Effective Date : **7th May 2024**

Expiration Date : **8th May 2027**

*Note: The **sticker** on the right top corner indicates the validity of the certificate. The expiration date of the certificate will be superseded once the sticker is not made present in the particular year as stated above.*

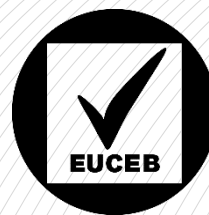
This certificate will be null and void if at any circumstances the compliance towards the standards stated above is not fulfilled. The compliance of the standards stated above will be indicated by the labelling on the right corner indicating the year of assessment. The validity of the certificate can also be traced to the audit report generated for each every assessment or through our website www.carecert.net



ACB 015

Fleming Teo
Managing Director

CARE Certification International (M) Sdn. Bhd.



BCCA

EUCEB CERTIFICATE

BCCA, independent Certification Body designated by the scheme owner EUCEB,
declares that all requirements have been met to attest that the products
to which the right to use the EUCEB Trademark is granted and that are manufactured by

PGF Insulation SDN BHD - Malaysia

**LORONG PERUSAHAAN SEPULUH 2449, Kawasan Perusahaan Perai
MY - 13600 Perai, Penang**

in the plant situated at

Perai, Penang

are made of fibres with a chemical composition that lies within the chemical range of the reference fibre

Mineral Wool PGF801X

that has successfully been tested

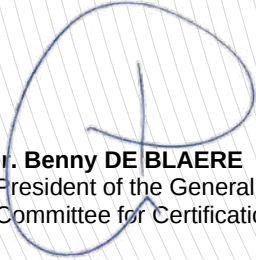
**in accordance with Note Q of the Regulation (EC) No 1272/2008
of the European Parliament and of the Council as currently in force**

as given in report No 02G22006 of 18 October 2022.

This certificate is granted on the basis of the Implementation Rules TRA-BEUC-511
for EUCEB Certification of mineral wool products.

**N° certificate BEUC-511-25893-475-25893 | Valid from 2023-01-17 until 2026-03-31
Furnace: PG 1**

Issued in Brussels, on 17 January 2023.


ir. Benny DE BLAERE
President of the General management
Committee for Certification & Approval

The validity of this certificate can be checked on the website www.bcca.be.
Further clarification regarding the scope of this certificate and the applicability
of the requirements of the standard may be obtained from the certified organisation.

BELGIAN CONSTRUCTION CERTIFICATION ASSOCIATION NPO
HEADQUARTERS: CANTERSTEEN, 47 BE-1000 BRUSSELS
OPERATIONAL HEADQUARTERS: HERMESLAAN, 9 BE-1831 DIEGEM
TEL. + 32 2 238 24 11
MAIL@BCCA.BE | WWW.BCCA.BE



PERAKUAN PEMATUHAN STANDARD (BAHAN BINAAN)

Adalah dengan ini Pengilang/Pengeluar yang dinyatakan di bawah ini telah mengeluarkan bahan binaan yang diperakui oleh Lembaga mengikut Bahagian VIIA Akta Lembaga Pembangunan Industri Pembinaan Malaysia (Pindaan 2011). Perakuan ini adalah tertakluk kepada syarat-syarat yang telah ditetapkan. Perakuan ini mengesahkan bahawa bahan atau produk binaan yang dinyatakan di bawah telah diperakukan

No. Pendaftaran : 1141209PP0017
Nama Pengilang / Pengeluar : PGF INSULATION SDN BHD
Alamat Kilang Berdaftar : 2449, LORONG PERUSAHAAN 10, KAWASAN PERUSAHAAN
PERAI, PERAI,
13600
SEBERANG PERAI TENGAH
PULAU PINANG

Kategori Bahan Binaan :

INSULATION MATERIALS

(Rujuk LAMPIRAN A untuk butiran terperinci bahan atau produk binaan yang diperakukan)

Tarikh Mula Berkuatkuasa : 26-01-2025
Tarikh Tamat Tempoh Perakuan : 25-01-2026

Perakuan ini boleh diperbaharui bermula 60 hari sebelum tarikh tamat tempoh perakuan.

Nota: Perakuan dikeluarkan setelah Lembaga menjalankan pemeriksaan dan pengesahan ke atas kilang dan produk-produk yang terkandung di dalam Pensijilan Produk (Product Certification) yang dikeluarkan oleh Badan Pensijilan yang diiktiraf. Pihak pengeluar/pengilang adalah bertanggungjawab untuk memastikan Pensijilan Produk (Product Certification) sentiasa dalam tempoh sahlaku.

MOHAMAD NORSANI KATAP
PENGARAH
CIDB NEGERI PULAU PINANG
b.p Ketua Eksekutif



SIJIL INI ADALAH CETAKAN KOMPUTER DAN TIDAK MEMERLUKAN TANDATANGAN

SYARAT - SYARAT PERAKUAN PEMATUHAN STANDARD (PPS)

1. Syarat-syarat

- Perakuan ini tidak boleh dipindah milik.
- Lembaga berhak mengenakan apa-apa arahan berkenaan bahan binaan dan standard yang didaftarkan dalam PPS ini dari semasa ke semasa.
- Lembaga berhak pada bila-bila masa menjalankan pemeriksaan terhadap mana-mana pihak yang berurusan dengan mana-mana bahan binaan yang terkandung dalam Jadual Keempat.

2. Tanggungjawab Pemilik Sijil PPS

- Memahami dan mematuhi peruntukan-peruntukan Akta Lembaga Pembangunan Industri Pembinaan Malaysia 1994 Akta 520 (Pindaan 2011), peraturan-peraturan yang dibuat di bawahnya dan apa-apa terma, syarat-syarat atau sekatan yang dikenakan oleh Lembaga dari semasa ke semasa.
- Tidak boleh berurusan atau mengaku janji untuk berurusan, sama ada secara langsung atau tidak langsung, dengan bahan binaan yang dinyatakan dalam Jadual Keempat, melainkan jika bahan binaan itu telah diperakukan dan memperolehi PPS yang masih sah (belum tamat tempoh).
- Memastikan Sijil Produk/ Keputusan Pengujian Penuh yang dikeluarkan oleh Badan Pensijilan yang diiktiraf bagi bahan binaan yang diperakukan dalam perakuan ini sentiasa dalam tempoh sah laku.
- Mengemukakan Salinan sijil PPS ini kepada pembeli semasa urusan pembekalan, pemasaran, pemindahan dan penjualan sebagai bukti bahan binaan ini telah diperakui oleh Lembaga.
- Sentiasa memberi kerjasama dalam mengemukakan apa-apa maklumat yang dikehendaki oleh Lembaga dari semasa ke semasa.
- Memaklumkan kepada Lembaga jika ingin menamatkan, memindahkan atau apa-apa perubahan berkaitan operasi dan lokasi.
- Memahami dan bertanggungjawab terhadap produk-produk yang memerlukan pematuhan standard yang berterusan (pembaharuan) terutama yang melibatkan kualiti dan keselamatan kerja-kerja pembinaan, pekerja dan orang awam (Contoh; perancah, konkrit siap bancuh atau lain-lain yang berkaitan)

3. Tindakan Atas Perlanggaran Akta 520 CIDB

- Lembaga boleh mengambil tindakan pendakwaan mahkamah kepada mana-mana orang yang melanggar mana-mana peruntukan dalam Akta 520 dan apabila disabitkan, didenda tidak kurang daripada sepuluh ribu ringgit (RM10,000) tetapi tidak melebihi lima ratus ribu ringgit (RM500,000).
- Lembaga juga boleh mengenakan tindakan tatatertib terhadap mana-mana ketidakpatuhan yang dilakukan seperti berikut:-

Bil	Kesalahan	Hukuman
1	Berurusan dengan PPS yang tamat tempoh	Gantung, Batal PPS atau dikenakan penalti denda tidak lebih RM10,000 atau mana-mana tindakan gantung atau batal dan juga dikenakan penalti denda tidak lebih RM10,000
2	Memalsu atau mengubahsuai sijil PPS, Pensijilan Produk (PC), Keputusan Pengujian Penuh (FTTR) atau apa-apa dokumen berkaitan bagi maksud memperakui bahan binaan tersebut	
3	Melakukan apa-apa ketidakpatuhan terhadap bahan binaan yang diperiksa atau berdasarkan keputusan ujian atau kedua-duanya	
4	Melanggar mana-mana arahan Lembaga, akujanji atau akuan tanggungjawab yang dikeluarkan	
5	Berurusan dengan mana-mana bahan binaan yang tiada di dalam senarai sijil PPS	
6	Walau bagaimanapun bagi PC yang telah digantung, dibatal atau lain-lain tindakan oleh Badan Persijilan (CB)	PPS tersebut akan digantung atau dibatalkan
7	Pemohon membatalkan atau menggantung PPS secara sukarela	

- Lembaga tidak akan bertanggungjawab terhadap apa-apa kerugian atau kos-kos yang terlibat hasil dari tindakan ketidakpatuhan yang dilakukan dan ianya merupakan tanggungjawab pengeluar, pengilang atau mana-mana orang yang berurusan sepenuhnya.

Catatan : PPS yang telah diputuskan dan dibatalkan oleh Jawatankuasa tatatertib tidak boleh diperbaharui sehingga tempoh maksima 2 tahun. Perlanggaran arahan tersebut dan masih berurusan dengan bahan yang tidak diperakukan akan mengakibatkan pemohon disenarai hitam dari memohon PPS selamanya dan tindakan pendakwaan mahkamah dengan denda maksima RM500,000.

No. Pendaftaran : 1141209PP0017
Nama Pengilang / Pengeluar : PGF INSULATION SDN BHD

Kategori	Jenis / Saiz	Jenama	Standard
INSULATION MATERIALS	Mineral Wool - Glass Model : Board; ECOWOOL CLASSIC Rating : Density range: (24 - 96) kg/m ³ Fire Propagation Index: 3.9, 6.8, 6.8, 7.1 Surface Spread of Flame: Class 1 Fire Classification: CLASS 0 Type : Glasswool Size :Width range: (0.595 - 1.2) m Length range: (0.595 - 2.3) m Thickness range: (13 - 50) mm	ECOWOOL	MS 1020:2022
	Mineral Wool - Glass Model : Roll; ECOWOOL CLASSIC Rating : Density range: (10 - 48) kg/m ³ Fire Propagation Index: 1.5, 2.7, 4.3, 3.4, 3.8, 7.3 Surface Spread of Flame: Class 1 Fire Classification: CLASS 0 Type : Glasswool Size :Width: 1.2 m Length range: (7.5 - 30) m Thickness range: 1. (10 - 14) kg/m ³ : 50 mm 2. (14 - 48) kg/m ³ : (25 - 50) mm	ECOWOOL	MS 1020:2022
	Mineral Wool - Glass Model : Roll; DuctGuard Rating : Density: 32 kg/m ³ Fire Propagation Index: 5.0, 7.2 Surface Spread of Flame: Class 1 Fire Classification: CLASS 0 Type : Glasswool with Facing Material Size : 50mm(t) x 1.2m(w) x 7.5m(l), 25m(t) x 1.2m(w) x 15m(l)	ECOWOOL	MS 1020:2022

Mineral Wool - Glass Model : Board; CLASSIC VENTLINER Rating : Density: 32 kg/m ³ Fire Propagation Index: 9.2, 9.7 Surface Spread of Flame: Class 1 Fire Classification: Class 0 Type : Glasswool with Facing Material Size : Thickness : (25 - 50) mm Width : 1.2m Length : (1.20 - 2.44) m	ECOWOOL	MS 1020:2022
Mineral Wool - Glass Model : Board; BROWNIE V2 Rating : Density range: (24 - 96) kg/m ³ Fire Propagation Index: 3.9, 6.8, 6.8, 7.1 Surface Spread of Flame: Class 1 Fire Classification: CLASS 0 Type : Glasswool Size :Width range: (0.595 - 1.2) m Length range: (0.595 - 2.3) m Thickness range: (13 - 50) mm	ECOWOOL	MS 1020:2022
Mineral Wool - Glass Model : Batts; BROWNIE V2 Rating : Density range: 20 kg/m ³ Fire Propagation Index: 4.2 Surface Spread of Flame: Class 1 Fire Classification: CLASS 0 Type : Glasswool Size :Width: 0.6 m Length: 1.2 m Thickness: 50 mm	ECOWOOL	MS 1020:2022
Mineral Wool - Glass Model: Roll; BROWNIE V2; Rating: Density range: (10 - 48) kg/m ³ , Fire Propagation Index: 1.5, 2.7, 4.3, 3.4, 3.8, 7.3, 1.3, 2.9, 2.2, 8.0, 7.8, Surface Spread of Flame: Class 1, Fire Classification: CLASS 0; Type: Glasswool; Size: Width: (1.2 - 1.5) m, Length range: (5 - 30) m, Thickness range: 1. (10 - 14) kg/m ³ : 50 mm, 2. (14 - 48) kg/m ³ : (25 - 50) mm, 3. (14 - 24) kg/m ³ : (75 - 120) mm	ECOWOOL	MS 1020:2022

Mineral Wool - Glass	ECOWOOL	MS 1020:2022
Model : Roll; BROWNIE V2		
VENTLINER Rating : Density: 32		
kg/m ³ Fire Propagation Index: 6.6,		
3.0 Surface Spread of Flame: Class		
1 Fire Classification: CLASS 0		
Type : Glasswool with Facing		
Material Size : 25mm(t) x 1.2m(w)		
x 15m(l) 50mm(t) x 1.2m(w) x		
7.5m(l)		

Mineral Wool - Glass	ECOWOOL	MS 1020:2022
Model : Roll; BROWNIE V2		
ROOFWHITE Rating : Density:		
(16, 24, 32 & 48) kg/m ³ Fire		
Propagation Index: 8.8, 9.1, 8.8,		
7.7 Surface Spread of Flame: Class		
1 Fire Classification: CLASS 0		
Type : Glasswool with Facing		
Material Size : Length: (5 – 15) m,		
Width: 1.2 m Thickness: 50 mm ;		
Density: (16, 24, 32 & 48) kg/m ³		
Thickness: (75 - 100) mm ;		
Density: (16 & 24) kg/m ³		
