TECHNICAL DATA SHEET

POLY GLASS FIBRE

BROWNIE® BLANKET



DESCRIPTION

BROWNIE", the formaldehyde free range of ECOWOOL glass mineral wool insulation manufactured by PGF Insulation employs formaldehyde free binder that is free of formaldehyde, phenol or any other artificial chemicals.

Once installed, the high performance insulation blanket will not off-gas formaldehyde in the indoor environment and acts as a highly effective barrier to heat flow, keeping your building cool during hot weather and conserving the cool air indoors. No formaldehyde means fewer things to worry about. The formaldehyde free insulation product was tested in Air Quality Services and the product emission for formaldehyde and VOCs passed the GREENGUARD Children and Schools Criteria.

FORMALDEHYDE FREE

Formaldehyde has traditionally been used as part of the binder in glass mineral wool insulation. Although there is no health risk with the traditional product, formaldehyde at higher level may cause irritation and sensitivity. PGF Insulation formaldehyde free insulation utilises an innovative new binder that eliminates binder-related formaldehyde emissions during manufacturing and once installed, will not off-gas formaldehyde in the indoor environment.

APPLICATIONS

Application focused, it combines cost efficiency with the highest standard of insulation performance when installed under metal deck roofs or clay tiles roofs.

ADVANTAGES

Improves indoor air quality. Formaldehyde free binder reduces the overall formaldehyde exposure. Formaldehyde free insulation means a better smelling indoor environment and less formaldehyde in the air.

Sustainable product. Satisfying the growing indoor air quality (IAQ) needs, PGF Insulation uses no ozone depleting products (ODP) in manufacture and has low volatile organic compounds (VOCs) content.

Optimal fibre diameter. Optimal fibre diameter ranging from 4-5 microns produces more air pockets 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 and feeling much softer.

Less dusty and less itchy. Specifically engineered to produce a comfortable and less dusty insulation. The insulation creates a pleasant work experience by reducing the tingling feeling during installation.

Mould growth. Does not encourage growth of mould, fungus, bacteria or rodents.

Absorbs disturbing sound. Exceptional soundabsorbing properties. Specially designed to reduce rain noise through roofs in industrial, residential and commercial buildings. The acoustic performance of the insulation material can reduce substantial amount of rain noise compared to a metal roof with no insulation. It will also stop noise from the rapid expansion of metal deck roofs under the sun.

Corrosiveness. Chemically inert. Will not cause or accelerate corrosion of steel, stainless steel, copper or aluminum due to its specifically inorganic and mineral composition.

Alkalinity, pH 6-7.

Read This Before You Buy

Insulation's effectiveness is measured in R-Value. R stands for the insulation's resistance to heat flow; heat escapes from your building and heated air enters your building. The higher the R-Value, the greater the resistance to heat flow and the greater your potential for saving energy, natural resources and money. Compare insulation R-Values before you buy.



BROWNIE® BLANKET

FIRE PROPERTIES

Tested in accordance with (plain/unfaced):

- · B.S. 476: Part 4 Non-combustibility
- · B.S. 476: Part 6 Fire propagation
- · B.S. 476: Part 7 Surface spread of flame
- · BOMBA Class 'O'
- ASTM E84

VOLATILE ORGANIC COMPOUNDS (VOCS) EMISSION

Tested in accordance with ASTM D5116.

Analyte	168 HR Predicted Concentration			
	GREENGUARD	CHILDREN & SCHOOLS		
TVOC	0.001mg/m ³	0.001mg/m ³		
Formaldehyde	< 0.001ppm	0.001ppm		
Total Aldehydes	< 0.001ppm	0.001ppm		

THERMAL PERFORMANCE

Tested in accordance with ASTM C518 at 20°C mean temperature.

Туре	Density (kg/m³)	K-Value (W/mK)	R-Value (m ² K/W)
EWBL 1.35	16	0.0366	1.35
EWBL 1.45	24	0.0344	1.45
EWBL 1.50	32	0.0321	1.50
EWBL 1.60	48	0.0309	1.60

ACOUSTICAL PERFORMANCE

Not only an effective thermal insulation, BROWNIE® BLANKET acts as a baffle to reduce sound transmission from outside sources. It is tested and complies with ASTM C423. Type 'A' mounting.

Trong	Center Frequency (Hz)						
Туре	125	250	500	1000	2000	4000	NRC
EWBL 1.35	0.39	0.68	1.06	1.03	0.91	0.98	0.91
EWBL 1.45	0.36	0.64	1.04	1.06	1.05	1.10	0.95
EWBL 1.50	0.38	0.72	1.11	1.07	1.04	1.07	1.00

PRODUCTS AVAILABLE

Туре	Density (kg/m³)	Thickness (mm)	Width (m)	Length (m)
EWBL 1.35	16	50	1.2	15
EWBL 1.45	24	50	1.2	12
EWBL 1.50	32	50	1.2	10
EWBL 1.60	48	50	1.2	7.5

AVAILABLE FORM

Unfaced or Plain – designed for predictable thermal insulation performance with the added benefit of being an effective sound absorption material.

BQ DESCRIPTION

Insulation meterial shall be BROWNIE® formaldehyde free glass mineral wool insulation EWBL _____ (___kg/m³) x _____ mm thick. Shall have Thermal Resistance of R___m²k/W at 20°C. BROWNIE® Formaldehyde Free glass mineral wool insulation shall be certified to MS1020:2010 and free from formaldehyde. BROWNIE® Formaldehyde free glass mineral wool shall be non-combustible tested and comply with BS476:Part 4.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of the fire safety, thermal and acoustic properties of 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. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

BROWNIE® RigiSlab





BROWNIE RigiSlab, the formaldehyde free range of glass ECOWOOL mineral wool insulation manufactured PGF Insulation employs formaldehyde free binder that is free of formaldehyde, phenol or any other artificial chemicals.

Once installed, the insulation slab acts as a highly effective barrier to heat flow, keeping your building cool during hot weather. It combines cost efficiency with the highest standard of insulation performance when installed in either wood, cement board or plasterboard dry wall system.

FORMALDEHYDE FREE

Formaldehyde has traditionally been used as part of the binder in glass mineral wool insulation. Although there is no health risk with the traditional product, formaldehyde at higher level may cause irritation and sensitivity. PGF Insulation formaldehyde insulation utilises an innovative new binder that eliminates binder-related formaldehyde emissions during manufacturing and once installed, will not offgas formaldehyde in the indoor environment.

APPLICATIONS

Application focused, BROWNIE® RigiSlab is designed specifically for press-fit installation without the need for stapling or fastening. It can be fitted between timber or steel studs in a wall cavity and ceiling system applications. They resist vibration or shakedown and fit readily around uneven surfaces.

ADVANTAGES

Rigidity. Fine, longer and evenly distributed fibre network helps in creating better tensile strength allowing the insulation to demonstrate superior rigidity. It is rigid enough to stand on its own when leaned against wall, eliminating the need to use pin to secure against wall or board.



Compressed Packaging. The high ratio 'compression packaging' reduces transport and handling costs for distributors and installers. RigiSlab is packed in a compressed form with 60 pieces packed in a woven bag.

Resiliency. Highly resilient insulation recovers quickly to its original thickness when unpack.

Improves Indoor Air Quality. Formaldehyde free binder reduces the overall formaldehyde exposure. Formaldehyde free insulation means a better smelling indoor environment and less formaldehyde in the air.

Sustainable Product. Satisfying the growing indoor air quality (IAQ) needs, PGF Insulation uses no ozone depleting products (ODP) in manufacture and has low volatile organic compounds (VOCs) content.

Less dusty and less itchy. Specifically engineered to produce a comfortable and less dusty insulation. The insulation creates a pleasant work experience by reducing the tingling feeling during installation.

Mould Growth. Does not encourage growth of mould, fungus, bacteria or rodents.

Reduce Sound Transmission. Designed exceptional sound-absorbing performance to reduce transmission of unwanted noise. This is ideal for drywall partition systems for rooms and offices in residential, commercial and industrial buildings.

Corrosiveness. Chemically inert. Will not cause or accelerate corrosion of steel, stainless steel, copper or aluminum due to its specifically inorganic and mineral composition.

Read This Before You Buy

Insulation's effectiveness is measured in R-Value. R stands for the insulation's resistance to heat flow; heat escapes from your building and heated air enters your building. The higher the R-Value, the greater the resistance to heat flow and the greater your potential for saving energy, natural resources and money. Compare insulation R-Values before you buy.

TECHNICAL DATA SHEET



BROWNIE® RigiSlab

FIRE PROPERTIES

Tested in accordance with:

- B.S. 476: Part 4 Non-combustibility
- B.S. 476: Part 6 Fire propagation
- B.S. 476: Part 7 Surface spread of flame
- ASTM E84
- BOMBA Class "O"

INDIVIDUAL VOLATILE ORGANIC COMPOUNDS (VOCS) EMISSION

BROWNIE® RigiSlab is safe to use due to the low VOC content. Tested in accordance with ASTM D 5116.

Analyte	24 HR Emmission Factor	Certificati	on Criteria	168 HR Predicted concentration		
	24 HK Emmission Factor (μg/m²-hr)	GREENGUARD	CHILDREN & SCHOOLS	GREENGUARD	CHILDREN 8 SCHOOLS	
TVOC	4.8	≤ 0.5mg/m³	≤ 0.22mg/m³	0.001mg/m ³	0.001mg/m ³	
Formaldehyde	2	≤ 0.05mg/m³	≤ 0.0135mg/m³	< 0.001ppm	0.001ppm	
Total Aldehydes	2	≤ 0.1ppm	≤ 0.043ppm	< 0.001ppm	0.001ppm	

ACOUSTICAL PERFORMANCE

BROWNIE RigiSlab acts as a baffle to reduce sound transmission both from outside and inside sources.

Plasterboard Thickness (mm)	Number of Layers	Stud Size (mm)	Overall System Width (mm)	Acoustic Performance (STC)
12.5	1	50	75	41
15	1	50	80	45
12.5	2	50	100	53
15	2	50	110	54

PRODUCT AVAILABLE

Туре	Density	K-Value	R-Value	Thickness (mm)	Width (m)	Length (m)
BROWNIE* RigiSlab	20kgm³	0.0348	1.44	50	0.6	1.2

Note:

Thermal performance complies with ASTM C518 at 20C mean temperature Please contact PGF insulation sales representative for indicative of the products above.

Available Form

Unfaced or Plain - designed for predictable thermal insulation performance with the added benefit of being an effective sound absorption material.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of fire safety, thermal and acoustic 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. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.