ROOF

TECHNICAL DATA SHEET

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 sound-absorbing 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.

R-Value = Thickness / K-Value

ROOF

TECHNICAL DATA SHEET

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.

Type	Density (kg/m^3)	K-Value (W/mK)	R-Value (m^2K/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.

Type	Center Frequency (Hz)						
	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

Type	Density (kg/m^3)	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/m^3) x _____ mm thick. Shall have Thermal Resistance of R___m^2k/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.