## **TECHNICAL DATA SHEET**

# **ROOF INSULATION HD**

Acoustic and thermal insulation made of bio soluble glass fibers, bonded with a thermosetting resin, of uniform texture and thickness, ending in one of its faces with kraft paper which is bonded with asphalt, so that the longitudinal edges are covered up to achieve and overlap of 1" on the opposite side.



## **END USE CHARACTERISTICS AND LIMITATIONS**

This product is designed to be used as thermal and acoustic insulation, installed in such form that the face covered with kraft, faces upward.

For acoustic applications, the product is Installed between plates, or on decks or terraces, properly protected from moisture to receive hard finishing.

For thermal use, the product is installed in the outside of the deck. Ensure a slope minimum of 1.5%, preferably 3%; in case of steep slopes, provide mechanical anchors.

Generally, the product must be protected from water and excessive moisture, by covering with asphaltic blankets the decks exposed to environment. The product will lose its performance thermal and acoustic at contact with water.

In general terms, the surface of the product is flat; however, if the product is exposed to environmental conditions, it may twist.

In order to minimize this situation, after manufacturing and release, is recommended:

- Keep the insulation dry before and after installing.
- Keep the insulation on pallets and protected from environment previously to installation.
- Isolate the protector system of the ceiling system as soon as possible.

#### **PRODUCT SPECIFICATION**

PRODUCT	LENGTH (mm/inch)	WIDE (mm/inch)	THICKNESS (1) (mm)	WEIGHT (kg/m2)
ROOF INSULATION HD 1.20 m X 0.60 m X 3/4"	1200 (47.24) +5 mm	600 (23.62) + 3mm	304 ± 3 mm	1.74 ± 10%

Squareness: Angles to 90°, maximum 3 mm deviation.

(1) Measurement method, stack height: Average of 4 measurements taken on the centers from the stack.

OCTAVE BAND CENTER FREQUENCIES, Hz.						
125	250	500	1000	2000	4000	NRC (*)
0.08	0.37	0.84	0.99	1.01	1.02	0.75

(\*) Noise reduction coefficient (NRC). ASTM C423 Standard Test Method for Sound Absorption Coefficients by the Reverberation Room Method (A Mounting: Material placed against a solid backing such as a block wall).

PROPERTIES	STANDARDS	DESCRIPTION	
Operating Limits	ASTM C411	Temperatures up to 250°F (121°C)	
Thermal performance (Thermal Conductivity)	ASTM C177	0.039 W/m.°C (24°C Mean Temp) Typical Value (0.27 BTU.in/hr.ft².°F at 75 °F Mean Temp.)	
Thermal resistance	ASTM C177	R-2.8 (hr.ft².°F /BTU) 0.43 (m².°C /W)	
Acoustic performance (NRC)	ASTM C423 A Mounting	NRC: 0.75	
Water vapor Sorption	ASTM C1104/ C1104M-00	<5% weight-120°F (49°C), 95% R.H.	
Vapor Barrier (Kraft Paper)	ASTM C1136	Meets requirements	
Surface Burning Characteristics	E84 / UL723	Flame Spread Index <25 Smoke Developed Index <50	
Corrosiveness	ASTM C665 / ASTM 795	Meets requirements	
Compressive resistance	ASTM C165	432 lbf/ft² (at 25% deformation)	
Rigidity	C1101/C1101M	Classified as Rigid	
Linear Shrinkage	ASTM C356	<2% Change in LENGTH	
Fungi Resistance	ASTM C1338	Meets requirements	
Odor Emission	ASTM 1304		
DBE Content	Oregon State	FREE, Meets requirements	



#### **VISUAL STANDARD**

CHARACTERISTIC	VISUAL STANDARD
Color	The product is yellow, however slight variations are accepted and do not affect the thermal performance of the product.
Surface Appearance	The overall surface should be uniform without any king of patches, but white patches or occasional patches of Bakelite are allowed.  Avoid punches that could damage the appearance and strength of the product. The asphalt is uniformly distributed, but some wrinkles may occur on the surface (1/16").  The kraft paper must be well bonded to the board without air bags or delamination.  Generally, the sheet surface is flat, but may present differences in the range of 1/8" or marks generated during the manufacturing process that do not exceed 1/8".

#### **PACKAGING**

UNITS/ PACKAGE	AREA/ PACKAGE (m²)	NET WEIGHT +/-10% kg/Package	
16	11.52	20.04	

## INSTALLATION RECOMMENDATIONS

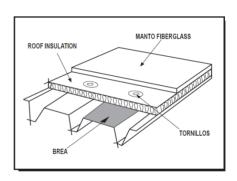
- Surface in sheets.
- As subjection system of this Roof Insulation HD is possible to use mechanical fasteners, adhesives or a combination of both. In any case, provide at least one mechanical fixing by sheet. Usually as adhesive, hot asphalt is employed.
- Seal the joints or paints between sheets of Roof insulation HD.
- Details waterproofing
- Application of Primer with Asphalt Emulsion (Emulsión Asfáltica PX900 de FGC.)
- Dry the primer over the insulation: 3-6 hours.
- Installation of Fiber Glass Waterproofing mantle

#### **RECYCLED CONTENT**

- (1) PI Post Industrial Recycled Content: Collected from Manufacturers or industry.
- (2) PC Recycled Content Post-Consumer: Collected from end uses.

TOTAL RECYCLED CONTENT	POST-INDUSTRIAL RECYCLED CONTENT PI (1)	POST-CONSUMER RECYCLED CONTENT PC (2)
65.8%	65.8%	0%

- Application of bituminous reflective painting for protection of mantle.
- Maintenance of painting every 18 months.





#### Fiberglass Colombia S.A - Colombia Planta Mosquera Mineral Glass Wool AA1

Certificate No.385 Bio soluble Mineral glass wool FGC. Note Q of the Regulation EC 1272/2008 of the European Parliament and of the Council as Currently in force.

European Certification Board for Mineral Wool Products

## N° CO11/4442

Sistema de Gestión de la Calidad para la producción y venta de membranas impermeabilizantes modificadas (mantos, con o sin recubrimiento autoprotector) y emulsiones asfalticas, Cielo rasos en fibra de vidrio con acabado decorativo. Láminas y rollos flexibles en fibra de vidrio para la fabricación y recubrimiento interno y externo de conductos para transporte de aire acondicionado. Aislamientos térmicos y acústicos rígidos, flexibles y preformados.



## Norma - ISO 9001:2015

Producto fabricado bajo un sistema de administración de calidad certificado de conformidad con ISO 9001. Reported values are typical of tests carried out on samples taken from standard production and may be update without notice.

The user is responsible for determining if the product is recommended for a particular surface and if it satisfies the application requirements. The user must make application testing and product testing required for that purpose.

Not controlled copy. Information on this document may be updated without notice.

Last Update: August 28th / 2018

