# FRESCASA ECO

Thermal and Acoustic insulation, uniform texture, presented in sheets or rolls. The material consists of bio soluble glass fibers bonded in a thermosetting resin to be used in constructions, especially to be installed in drywalls in residential, commercial and industrial areas.



#### **END USE CHARACTERISTICS AND LIMITATIONS**

The product is designed as a thermal and acoustic insulation, to be installed in rooms with calefaction, enclosures with air conditioning and other industrial applications in wall-wall assemblies, assemblies under floor and as a complement for ceiling facilities.

The vapor barrier helps to control the amount of moisture passing through the insulation and into the inner face of outer walls, ceilings and floors, this vapor barrier is usually installed in/or near the surface exposed to the higher steam pressure. (ASTM C665 Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing Type 1 unfaced. Type II - Class C, kraft-faced. Type III-Class B, Foil faced)

Generally, products (faced and unfaced) should not be exposed to environments with abnormal conditions of humidity and temperature.

Product certificated by LAPEM (Testing Laboratory Equipment and Materials), Mexico.

PRESENTATION TYPE	DESCRIPTION
FRESCASA ECO *	Flexible rolls and sheets, made in Green Wool, unfaced.
FRESCASA ECO KRAFT	Flexible rolls and sheets made in Green Wool with a facing in Kraft paper bonded to one side of the insulation.
FRESCASA ECO FOIL	Green rolls with a facing in aluminum foil FRK Type (foil-kraft-reinforcement), excellent vapor barrier, bonded to one side of the insulation.
FRESCASA ECO MBI	Green rolls with a White finishing in a film PRK type (Polypropylene Reinforced Kraft), excellent vapor barrier, bonded to one side of the insulation and excellent light reflectivity (85%).

\*FRESCASA ECO is available on request with longitudinal cuts to 24" and 16", and transversal cuts to 96" (FRESCASA ECO SAB).

FRESCASA ECO KRAFT	FRESCASA ECO MBI	FRESCASA ECO FOIL	FRESCASA ECO

#### **PRODUCT SPECIFICATION**

PRODUCT	LENGTH m	WIDE mm	THICKNESS (1) mm	NRC (2) A/E-405 Mounting	THERMAL RESISTANCE (3) Hr.ft <sup>2</sup> .F/BTU (R100 m <sup>2</sup> .°C/W)
FRESCASA ECO 600" x 48" x 2.5"	15.24 ± 150mm	1219 + 13mm	63.5 ± 3mm	0.85/0.9	8.5 (149.6)
FRESCASA ECO 600" x 48" x 3.5"	15.24 ± 150mm	1219 + 13mm	89 ± 3mm	1.05/1.0	11 (193.7)
FRESCASA ECO 450" x 48" x 6.25"	11.43 ± 150mm	1219 + 13mm	127 ± 3mm		21.5 (379.52)

- Available with coating of Paper, aluminum FRK and white polypropylene PSK.



PRODUCT	LENGTH m	WIDE mm	THICKNESS (1) mm	NRC (2) A/E-405 Mounting	THERMAL RESISTANCE (3) Hr.ff².F/BTU (R100 m².°C/W)
FRESCASA ECO 12.5 m x 1.2 m x 2"	12.5 ± 150mm	1200 + 13mm	50 ± 3mm		7 (123.3)
FRESCASA ECO** 7.5 m x 1.20 m x 2.5"	7.5 ± 150mm	1200 + 13mm	63.5 ± 3mm	0.85/0.9	8.5 (149.6)
FRESCASA ECO 7.5 m x 1.20 m x 3.5"	7.5 ± 150mm	1200 + 13mm	89 ± 3mm	1.05/1.0	11 (193.7)
FRESCASA ECO 12.5 m x 1.2 m x 4"	12.5 ± 150mm	1200 + 13mm	102 ± 3mm		14.28 (251.57)

Disponible con recubrimientos de papel y aluminio FRK.

PRODUCT	LENGTH m	WIDE mm	THICKNESS (1) mm	NRC (2) A/E-405 Mounting	THERMAL RESISTANCE (3) Hr.ff <sup>2</sup> .F/BTU (R100 m <sup>2</sup> .°C/W)
FRESCASA ECO SAB 24" x 96" x 50 mm	2.438 ± 300mm	610 + 13mm	50 ± 3mm		7 (128.4)
FRESCASA ECO SAB 24" x 96" x 63.5 mm	2.438 ± 300mm	610 + 13mm	63.5 ± 3mm	0.85/0.9	8.5 (162.9)
FRESCASA ECO SAB 24" x 96" x 89 mm	2.438 ± 300mm	610 + 13mm	89 ± 3mm	1.05/1.0	11 (193.7)
FRESCASA ECO SAB 24" x 96" x 2.5"	2.438 ± 300mm	610 + 13mm	63.5 ± 3mm	0.85/0.9	8.5 (162.9)
FRESCASA ECO SAB 16" x 96" x 2.5"	2.438 ± 300mm	406 + 13mm	63.5 ± 3mm	0.85/0.9	8.5 (162.9)
FRESCASA ECO SAB 16" x 96" x 3.5"	2.438 ± 300mm	406 + 13mm	89 ± 3mm	1.05/1.0	11 (193.7)
FRESCASA ECO SAB KRAFT 24" x 96" x 2.5"	2.438 ± 300mm	610 + 13mm	63.5 ± 3mm	0.85/0.9	8.5 (162.9)
FRESCASA ECO SAB KRAFT 24" x 96" x 3.5"	2.438 ± 300mm	610 + 13mm	89 ± 3mm	1.05/1.0	11 (193.7)

(1) Minimum thickness 95% six weeks after being produced.

(2) NRC: Noise reduction coefficient. ASTM C423 Standard Test Method for Sound Absorption Coefficients by the Reverberation Room Method. Insulation exposed to sound. The NRC values should be used as a quick screening tool to compare different construction assemblies. (A Mounting: Material placed against a solid backing such as a block wall). (E-405 Mounting: Material placed over a 16 inches air space) (3) Value to nominal thickness. Thermal transmittance U=1/R (BTU/ft².hr. °F - W/m².°C)

PROPERTIES	STANDARD	DESCRIPTION
Thermal performance (Thermal conductivity)	ASTM C411	0.040 – 0.044 W/m.°C at 24°C Mean Temp. Typical value (0.28 – 0.308 BTU.in/hr.ft².°F at 75°F Mean Temp.)
Thermal performance (Thermal resistance)	ASTM C518	Meets requirements
Acoustic Performance	ASTM C423	Meets requirements
Water Vapor Sorption	ASTM C1104/C 1104M	<3% weight-120°F (49°C), 95% R.H
Surface Burning Characteristics	ASTM E84 / UL723 (*)(**)	Flame Spread Index <25 Smoke Developed Index <50
Vapor Barriers Characteristics (FRK/PRK)	ASTM C1136	Meets requirements
Water Vapor Transmission	ASTM E96/E96M Método A	FRK: 0.02 Perms max. (1.15 ng/Ns) PRK: 0.02 Perms Max. (1.15 ng/Ns)
Odor Emission	ASTM C1304	Meets requirements
Corrosiveness	ASTM C665 / ASTM C795	Meets requirements
Fungi Resistance	ASTM C1338	Meets requirements
DBE Content	Oregon State	FREE, Meets requirements

(\*) UL labeled on request MTO (Products with facing)

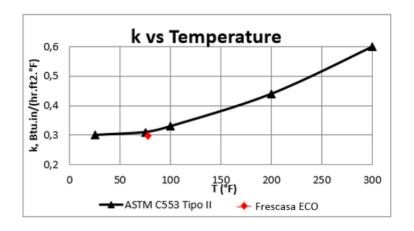
(\*\*) UL File R25157



Data presented below are a guide for thermal performance based on qualification requirements on ASTM C553 Type II compared to the minimum point of the thermal performance (0.276 -. 0.308 BTU.in / hr.ft <sup>2</sup> ° F to 75 ° F Average Temp.) of product in reference (FRESCASA):

	ASTM C553 Type II				
TEMPE	RATURE	THERMA CONDUCT			
°F	°C	BTU.in/hr.ft².F	W/m.°C		
25	-3,89	0,3	0,043		
75	23,89	0,31	0,042		
100	37,78	0,33	0,048		
200	93,33	0,44	0,063		
300	148,89	0,6	0,087		

	FRESCASA ECO FGC				
TEMPERATURE THERMAL CONDUCTIVITY			DUCTIVITY		
°F	°C	BTU.in/hr.ft <sup>2</sup> .F	W/m.°C		
75	23,89	0,294	0,042		



### **VISUAL STANDARD**

CHARACTERISTIC	ACCEPTANCE GUIDE
Color	The product is green. Slight variations in tonality are accepted. These variations do not affect the acoustic and thermal performance of the material.
	The surface exposed to air, occasionally may present white patches; no more than 3 in a unit, which could not exceed an area of $0.04~\rm m^2$ (20 cm diameter) and no more than one wet patch which exceed the same area.
Surface and Facing	The foil must be completely dry and without holes, however in case of detect holes, the foil must be repaired with a tape FRK Type (or PRK as appropriate) to ensure the vapor barrier. Any evidence of detachment is not acceptable.
Appearance	The foil surface can present discoloration; oxidation dyeing or abrasion during transport, but this condition does not affect the product.  The PRK surface should not be submitted to direct heating at temperatures higher than 50°C because the facing could shrink.  The presence of holes, damages, etc., in the vapor barrier may reduce highly its efficiency, for this reason, any anomaly must be corrected promptly.
Packaging	The package covers the surface of the roll and the edges but leaving the extremes open in order to allow proper aeration of the product, due to this, adequate handling and storage must be provided.

## RECYCLED CONTENT

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

PRODUCT	TOTAL RECYCLED CONTENT	POST INDUSTRIAL RECYCLED CONTENT (1)	POST CONSUMER RECYCLED CONTENT (2)
Unfaced	74,9 %	74,9 %	0 %
Faced	min 60%	min 60%	0 %



#### **PACKAGING**

PRODUCT	UNITS / PACKAGE	AREA/PACKAGE (m²)	NET WEIGHT +/-10% kg/Package
FRESCASA ECO 600" x 48" x 2.5"	1	18.58	11
FRESCASA ECO 600" x 48" x 3.5"	1	18.58	15
FRESCASA ECO 450" x 48" x 6.25"	1	14.86	23
FRESCASA ECO 12.5 m x 1.2 m x 2"	1	15.0	8
FRESCASA ECO 12.5 m x 1.2 m x 4"	1	15.0	15
FRESCASA ECO 7.5 m x 1.20 m x 2.5"	1	9.0	5
FRESCASA ECO 7.5 m x 1.20 m x 3.5"	1	9.0	6
FRESCASA ECO SAB 24" x 96" x 50 mm	12	17.76	9
FRESCASA ECO SAB 24" x 96" x 63.5 mm	12	17.76	10
FRESCASA ECO SAB 24" x 96" x 89 mm	12	17.76	14
FRESCASA ECO SAB 24" x 96" x 2.5" R-6.35	12	17.76	10
FRESCASA ECO SAB 16" x 96" x 2.5"	18	17.64	10
FRESCASA ECO SAB 16" x 96" x 3.5"	18	17.64	14
FRESCASA ECO SAB KRAFT 24" x 96" x 2.5"	12	17.76	12
FRESCASA ECO SAB KRAFT 24" x 96" x 3.5"	12	17.76	15

#### INSTALLATION RECOMMENDATIONS

FRESCASA insulations are pre-cut panels of insulation and are made to fit within most regular wall framing. It is available with and without facing which acts as vapor retarder. Faced batts are used in exterior wall as well in attics, ceilings, floors, knee walls and cathedral ceilings.

#### **Installation Tips**

- Faced batts are attached to framing members by stapling trough the flanges. Unfaced batts are installed between framing members but not attached, allowing friction to hold them in place.
- Choose the insulation with the R-value appropriate for the application.
- Open the packages by cutting lengthwise trough the side panel. Be careful to avoid cutting the product or facing. Insulation is compression packaged. Handling or fluffing the product during installation helps the product to recover full thickness and deliver the highest R-Value.
- Gently push insulation into the cavity so that it sits all the way in, especially at the corner and edges. Then, fluff it to its full expansion by pulling it forward to fill the depth of the cavity.

- Make sure the vapor retarder is facing to the conditioned interior space.
- Allow friction to hold the material in place. Or is recommended to staple the flanges of faced batts to the inside or face the joists.
- Secure floor insulation with mechanical fasteners.
   Press the fasteners so they bow up gently against the subflooring without compressing it. Space the fasteners at least six inches from each end of the batt and 12"-24" apart.
- Cut insulation about an inch wider than the space using a sharp utility knife against a smooth, flat surface. Always cut on the unfaced side of the product.
- For shorted spaces, cut the insulation to fit properly. If more than one batt is needed to fill the height of a wall cavity, ensure that two pieces are butted snugly together





#### 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



LABORATORIO DE PRUEBAS DE EQUIPOS Y MATERIALES

FIBERGLASS COLOMBIA S.A PROVEEDOR AUTORIZADO

#### 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.

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