

BLACK THEATER BOARD & PANEL ACÚSTICO

Thermal and acoustic insulation with low light reflectivity, it comprises a body of bio soluble fiberglass bonded with heat-resistant resin, it has a color between black and gray. One surface of the Black Theater Board is coated with a matte black reinforced fiberglass. Panel Acústico is presented without finish. It is light and smooth textured, is presented in panels.

Applications and Solutions:

- Low ceilings
- Dividing walls
- Auditoriums
- Cinemas
- Recording studios
- technical rooms
- Boilers





END USE CHARACTERISTICS AND LIMITATIONS

The product is designed as acoustic insulation, not to be directly exposed at environmental conditions. The product has excellent acoustical performance for multiplex cinemas, theaters, sound studios, auditoriums, theaters, home theaters and spaces generally requiring sound control in their designs.

The product has been designed to provide ease of installation and retention of its performance properties. The insulation can be placed over drywall, concrete block or precast concrete by mechanical or suspending systems including appropriate adhesives. The fiberglass insulation products themselves do not promote fire or ignite. Surface burning characteristics have been tested accordingly with UL723 test method as FS/SD=25/50, File R18971.

Black theater and Panel Acústico Negro have excellent resiliency properties and work as sound absorber and vibration neutralizer or as sound transmission barrier depending on the selected thickness and the complementary systems.

The faced product, BTB should support air operating with speeds up to 30.5 m/s (6000 fpm) and static Pressure up to 498 Pa (2 in

WG), without evidence of erosion of fiberglass, deformation or separation of the finish.

This product should be protected so that it remains dry during transport, storage and installation. This product is not recommended, and its properties are not warrantable if it is used in any of the following areas:

- Bath, shower or pool covers areas adjacent or near steam pipes or chimneys, kitchens.
- Laundry areas that require to be washed with disinfectant substances, hydrocarbons or water vapor.
- Areas where the material may be subject to physical abuse, sport areas or other areas where it may be beaten with an object.
- Areas where the material will be exposed to chemical vapor such as laboratories, industrial production, etc.

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

PRODUCT SPECIFICATION

Product	Length mm	Wide mm	Thickness (2) mm	Weight +/-10% kg/m ² (3)
BLACK THEATER BOARD 6# (1) 96" x 48" x 1"	2438 + 6mm	1219 ± 3mm	152 ± 3mm	2.46
BLACK THEATER BOARD 6# (1) 96" x 48" x 2"	2438 + 6mm	1219 ± 3mm	152 ± 2mm	4.92
BLACK THEATER BOARD (1) 96" x 48" x 1"	2438 + 6mm	1219 ± 3mm	203 ± 4mm	1.23
BLACK THEATER BOARD (1) 96" x 48" x 2"	2438 + 6mm	1219 ± 3mm	203 ± 2mm	2.46
BLACK THEATER BOARD (1) 48" x 24" x 1"	1219 + 6mm	610 ± 3mm	254 ± 5mm	1.23
BLACK THEATER BOARD (1) 48" x 24" x 2"	1219 + 6mm	610 ± 3mm	254 ± 3mm	2.46
BLACK THEATER BOARD (1) 47.3/4" x 23.3/4" x 1"	1213 + 6mm	603 ± 3mm	254 ± 5mm	1.23
BLACK THEATER BOARD (1) 47.3/4" x 23.3/4" x 2"	1213 + 6mm	603 ± 3mm	254 ± 5mm	2.46
PANEL ACÚSTICO NEGRO 117" x 48" x 1"	2971 + 6mm	1219 ± 3mm	203 ± 4mm	1.23

Squareness: Arists at 90° Max. 3 mm deviation

(1) Products coated with fiber glass ("Flame attenuated glass-fiber mat")

(2) Individual board thickness calculated from the stack height measurement.

(3) Products with more than 48 in width are specified with weight variation +/-20 % on the edge.

DESEMPEÑO ACÚSTICO

PRODUCT TYPE AND THICKNESS (A mounting)	DENSITY		OCTAVE BAND CENTER FREQUENCIES, Hz							TERMAL RESISTANCE R - VALUE (1) (hr.ft ² .°F/BTU) (R100 m ² .°C/W)
	pcf	kh/m ³	125	250	500	1000	2000	4000	NRC	
1"	3.0	48	0.06	0.25	0.62	0.91	0.99	0.98	0.70	4.30 (77.59)
2"	3.0	48	0.18	0.71	1.12	1.12	1.03	1.00	1.00	8.60 (155.19)
1"	6.0	96	0.30	0.34	0.68	0.87	0.97	1-06	0.70	4.30 (77.59)
2"	6.0	96	0.39	0.63	0.06	1.13	1.09	1.10	1.00	8.60 (155.19)
4"	2.0	32	0.61	1.27	1.18	1.06	1.03	1.02	1.15	17.4 (306.3)

NRC (Noise reduction coefficient): Expected values based on similar designed products and limited number of samples, 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. The NRC values should be used as a quick screening tool to compare different construction assemblies. (1) Thermal transmittance $U=1/R$ (BTU/hr.ft².°F - W/m².°C)

Properties	Standard	Descripti
Operating Limits	ASTM C411/ASTM C447	Máx. 121°C (250°F)
Thermal performance (Thermal Conductivity)	ASTM C518	0.034 W/m.°C a 24°C Mean temperature typical Value (0.23 BTU.in/hr.ft².°F a 75°F Mean temp.)
Acoustic Performance (Noise Reduction Coefficient)	ASTM 423 Montaje A	NRC: 0.7 (1 in) a mounting NRC: 1.00 (2 in) a mounting
Water vapor Sorption	ASTM C1104/ C1104M	<3% weight - 120°F (49°C), 95% R.H. (*)
Compressive Resistance	ASTM C165	(3lb./ft³) 25 lbf/ft² min (10% deformation) (1197.01pa) y 90 lbf/ft² min (25% deformation) (4309.22pa)
Surface Burning Characteristics	ASTM E84/ UL723	Flame Spread Index <25 Smoke Developed Index <50
Corrosiveness	ASTM C665/ ASTM C795	Meets requirements
Rigidity	C1101/ C1101 M	Classified as rigid
Linear Shrinkage	ASTM C356	<2 % a 121°C (250°F)
Fungi Resistance	ASTM C1338	Meets requirements
Odor Emission	ASTM C1304	Meets requirements
DBE content	Oregon State	FREE, meets requirements

VISUAL STANDARD

Characteristic

Acceptance Guide BTB

Color	<p>The product is black, variations from dark gray to black are accepted, and these slight variations do not affect the performance of the insulation. The product can change on tonality in the same batch and between batches.</p> <p>If the customer decides to install this product vg, as ceiling tile, the color standard variation as well as the presence of random dark areas or spots could appear over the surface. The perception of mat and color are affected by the way the light reflects on the surface and direction facing impregnation.</p>
Surface and facing Appearance	<p>The finish must be free of holes, must not appear airbags or unbonded areas on the surface of the insulation. Blown wool or pieces of glass are not acceptable.</p> <p>The alignment of finishing should be +0, -1/4" (6 mm) for the wide of board. Boards which finishing is tearing or moving up to 3 mm are not acceptable. Surface must be uniform, free of dry or wet binder patches, unbonded areas or Bakelite patches.</p> <p>Surface must not have irregularities which affect the final appearance of the facing. There shall be no white layers with an extension up to 1.5 cm (1/16 in) deep and 5cm (2 in) of diameter in the coating surface. For example, minor cracks or shingling do not affect the final appearance of the insulation with the facing.</p> <p>Surfaces should not have flight marks exceeding 3 mm (1/8 ") high and 25mm (1in) wide. Wrinkles randomly located no deeper than 1.5 mm (1/16in), of width no greater than 3.0 mm (1/8 inch) and length up to 30.48 cm (12 inches), are considered as characteristic of the product and do not affect its performance.</p>

NOTES:

- 1). Reference 6# is particularly sensitive to variations in the appearance of the finished surface and these variations are part of the standard product.
- 2). The Panel Acústico Negro is not designed to be installed in sight; it has not special requirements of surface.

RECYCLD CONTENT

- 1) PI Contenido Reciclado Post Industrial: Recogido de los fabricantes o la industria.
- (2) PC Contenido Reciclado Post-Consumidor: Recogido de usos finales.

Product	Total recycled contend	Post industrial recycled content (1)	Post consumer recycled content (2)
BLACK THEATER BOARD 6#, 2in	68.32%	68.32%	0%
BLACK THEATER BOARD 3#, 2in	67.27%	67.27%	0%
BLACK THEATER BOARD 3#, 1in	69.37%	69.37%	0%

PACKAGING

Product	Units / Package	Área / Package (m ²)	Net weight +/-10% kg / Package
BlackTheater Board 6# (1) 96" x 48" x 1"	6	17.8	43.78
BlackTheater Board 6# (1) 96" x 48" x 2"	3	8.9	43.78
BlackTheater Board (1) 96" x 48" x 1"	8	23.8	29.27
BlackTheater Board (1) 96" x 48" x 2"	4	11.9	29.27
BlackTheater Board (1) 48" x 24" x 1"	10	7.4	9.10
BlackTheater Board (1) 48" x 24" x 1"	5	3.7	9.10
BlackTheater Board (1) 4" x 2" x 1"	10	7.3	9.10
BlackTheater Board (1) 4" x 2" x 2"	5	3.7	9.10
Panel Acústico Negro 117" x 48" x 1"	8	28.97	35.31

Polyethylene shrink-package, extremes closed and autoadhesive label.

GROSS WEIGHT (kg/package) = NET WEIGHT (kg/package) + 0.6 kg aproxThe packaging system is not airtight and may contain some holes that do not affect the performance of the packaging.

Provide adequate storage and transport conditions.

INSTALLATION RECOMMENDATIONS

- 1). Set the panels in the room where they will be installed.
- 2). Prepare the wall for the panels. Check to see if there are any uneven areas on the wall. Level out uneven areas with a small amount of drywall mud and a trowel. Spread the mud over the wall until they are flat. Let the mud dry overnight.
- 3). Set the fiberglass paneling on the wall. Check the size of the paneling. Trim the paneling to size with a circular saw fitted with a carbide blade.
- 4). Apply paneling adhesive to the back of the cut panel with a notched trowel. Spread the adhesive over the entire surface of the back of the wall in a cross hatch pattern.
- 5). Set the fiberglass panel in place on the wall. Use a laminate roller to roll over the surface of the panels. The roller will ensure that the adhesive sticks to both the wall and the panel. Rolling over the paneling will also ensure that you eliminate any air bubbles from behind the panels.
- 6). Continue installing the panels. Leave approximately 1/8" space between each of the panels to allow for expansion and contraction.
- 7). Install divider and cap molding on the top edge of the panels. Cut the moldings to size on a miter saw and apply silicone caulk along the back of each molding before setting them in place at the top and sides of the panels.
- 8). The BTB is not designed to be installed as ceiling tile given the normal color variations and the presence of marks that are part of the surface standard. Users should run the appropriate trials in order to decide the convenience of this product for a particular application.

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LABORATORIO DE PRUEBAS DE EQUIPOS Y MATERIALES

FIBERGLASS COLOMBIA S.A PROVEEDOR AUTORIZADO

El Laboratorio de Pruebas Equipos y Materiales (LAPEM) es una organización de la Comisión Federal de Electricidad que tiene como objetivo atender las necesidades del sector eléctrico nacional e internacional, proporcionando estudios de ingeniería especializada, pruebas de laboratorio y campo a equipos y materiales.



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

Certificado No.385 Lana Mineral de vidrio biosoluble FGC.
Nota Q de la regulación EC 1272/2008 conforme al Parlamento y al Consejo Europeo.

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 asfálticas, 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.

Los valores reportados son típicos de pruebas llevadas a cabo en muestras tomadas de producción estándar y podrían ser actualizados sin previo aviso.

El usuario es responsable de determinar si el producto está recomendado para una superficie en particular y si se adapta a la aplicación requerida por este. El usuario debe hacer las pruebas y ensayos de aplicación del producto que requiera para tal efecto.

Copia no controlada. La información contenida en este documento puede ser actualizada sin previo aviso.