

# ACOUSTICAL BOARD 6# MF

Thermal and acoustic insulation of bio soluble fiber glass wool bonded together using a thermosetting resin and formed into flat, rigid acoustical boards, one side mat faced with smooth surface.



## END USE CHARACTERISTICS AND LIMITATIONS

Acoustical Base Board 6#MF (Mat Faced) has been designed as thermal and acoustical insulation with high performance in applications where high acoustical efficiency is required, such as sound transmission barrier in office partitions, ceiling panels, walls, etc. It is intended for use in acoustical panels. Boards are sold in a plain, faced, uncoated condition: if customers choose to face or laminate, or coat in any manner, proper procedures should be developed to insure adequate adhesion characteristics of materials to insulation surface.

The insulation shall have a uniform pale to bright yellow color throughout.

This product has been designed for easy cutting, handling, manufacturing and installation, as well as to keep its properties after installation. It should not be

exposed to abnormal conditions of temperature and humidity. **ASTM C612** Standard Specification for Mineral Fiber Block and Board Thermal Insulation.

This product is not recommended and its properties are not warrantable if it is used in any of the following areas:

- Areas where the material needs to be washed or cleaned 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 may be exposed to chemical vapors such as laboratories, industrial production facilities, etc.

## PRODUCT REQUIREMENTS

PRODUCT	LENGTH (1) (mm)	WIDE (1) (mm)	THICKNESS (2) (mm)	NET WEIGHT (3) kg/m <sup>2</sup>
6# MFL 48" x 24" x 7/8"	1219 +5 mm	610 + 3mm	244 ± 2mm	2.02 ± 10%
6# MFL 48" x 24" x 15/16"	1219 + 5mm	610 + 3mm	240 ± 2mm	2.17 ± 10%
6# MFL 96" x 48" x 1"	2438 + 5mm	1219 + 3mm	152 ± 1.5mm	2.31 ± 10%
6# MFL 96" x 48" x 1.5"	2438 +5mm	1219 + 3mm	152 ± 1.5mm	3.47 ± 10%
6# MFL 96" x 48" x 1.7/8"	2438 +5mm	1219 + 3mm	144 ± 1.5mm	4.34 ± 10%
6# MFL 96" x 48" x 2"	2438 +5mm	1219 + 3mm	152 ± 1.5mm	4.63 ± 10%
6# MFH 48"x 24" x 7/8"	1219 +5mm	610 + 3mm	244 ± 2mm	2.02 ± 10%
6# MFH 96"x 48" x 1"	2438 +5mm	1219 + 3mm	152 ± 1.5mm	2.31 ± 10%
6# MFH 96" x 48" x 2"	2438 +5mm	1219 + 3mm	152 ± 1.5mm	4.63 ± 10%

- (1) Standard board 96"x48", available in different length and wide in the thickness indicated. Length: minimum 48", maximum 121", specified in 1" increments. Wide: minimum 46", maximum 49", specified in 1/4" increments.
- (2) Average of 4 measurements taken from the stack pile (packaging height) on the centers. Divide the average by the boards package count. You will be able, if it is necessary, the internal test method 4.10-IT-45 Minimum 7/8", maximum 2", specified in 1/8" or 1/4" increments.
- (3) Average of taking one package and weighing individual boards. For the edges take a 2" stripe by 39.37" length and weight pieces (including the facing). For width between 48" up to 49", ± 20% weight variation. Mimimum 3#, maximum 6#.
- (4) Squareness: máximo 3 mm. Take two boards, rotate one of it, measure deviation (slide gauge). Mat alignment MD maximum 5mm.

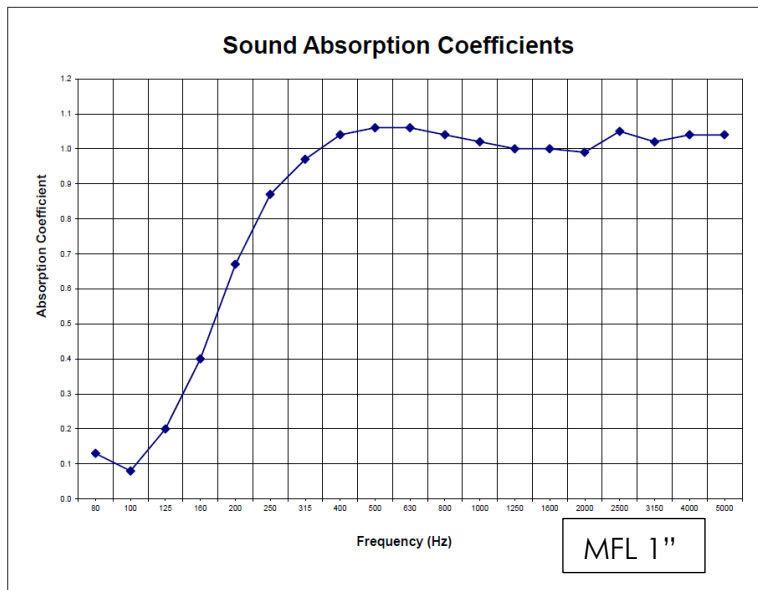
PROPERTIES	STANDARD	DESCRIPTION
Operating limits	ASTM C411	Maximum Temperature 450°F (232 °C)
Corrosiveness	ASTM C665/ASTM C795	Meets requirements
Thickness and density	ASTM C167	
Water Vapor Sorption	ASTM C1104/1104M	<5% weight-120°F (49°C), 95% R.H.
Thermal performance (Thermal conductivity)	ASTM C518	0.033 W /m.°C. at 24°C Mean Temp.) Typical value (0.23 BTU.in/hr.ft².°F at 75°F Mean Temp.)
Lineal shrinkage	ASTM C356	2% Maximum
Fungi Resistance	ASTM C1338	Meets requirements
Odor Emission	ASTM 1304	Meets requirements
Surface Burning Characteristics	ASTM E84 UL 723**	Flame Spread Index <25 Smoke Developed Index <50
Limited Combustibility -plain	NFPA 259	<3500 BTU/lb
DBE Content	Oregon State	FREE, Meets requirements

\*\* Products MFL: UL File R18971.

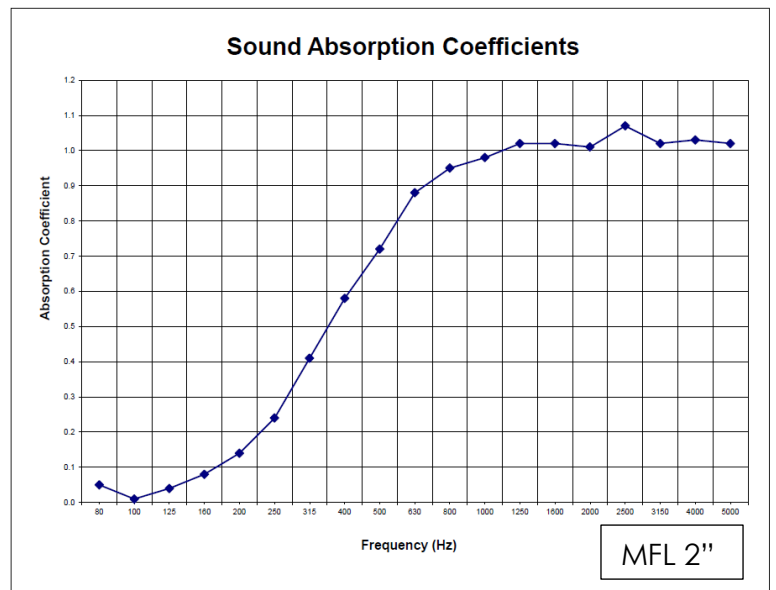
**ACOUSTICAL PERFORMANCE:**

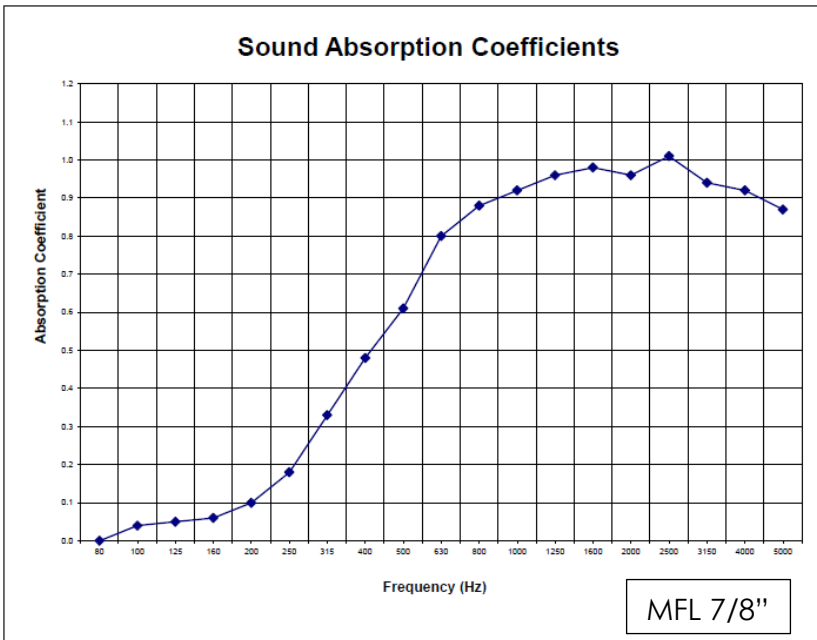
THICKNESS	DENSITY		OCTAVE BAND CENTER FREQUENCIES, Hz						
	pcf	kg/m³	125	250	500	1000	2000	4000	NRC (1)
MFL 1"	6	96	0.04	0.24	0.72	0.98	1.01	1.03	0.75
MFL 2"	6	96	0.20	0.87	1.06	1.02	0.99	1.04	1.00
MFL 7/8"	6	96	0.05	0.18	0.61	0.92	0.96	0.92	0.65

(1) NRC: Noise reduction coefficient. 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).



TEST CHARACTERISTICS	Empty	Full
Temperature (°C)	22.0	22.0
RH (%)	50	50
B.P. (mb)	1012	





TEST CHARACTERISTICS	Empty	Full
Temperature (°C)	20.5	22.2
RH (%)	51	49
B.P. (mb)	1015	

**APPEARANCE STANDARD**

REFERENCE		DESCRIPTION
MF	Mat Faced	Flat, rigid, acoustical boards, mat faced, with smooth surface on one side. Mat faced could be MFL Type when a low weight low covering mat is applied or MFH Type when a high weight, high covering capacity is applied. Final appearance of the color from pale yellow to dark yellow.

**SURFACE APPEARANCE**

**1. Surface Color**

**With Low Mat Weight**

The board mat face can have color variations depending of the glass fiber substrate. The color might change from light to dark yellow.

**With Heavy mat Weight**

The board mat face has a beige color pattern.



**2. Top Surface with mat**

It might have up to two uneven flights with maximum ± 1.5 mm deviation. For thickness below 1"(25.4 mm) up to two uneven flights with maximum ± 2 mm deviation.

**3. Bottom surface**



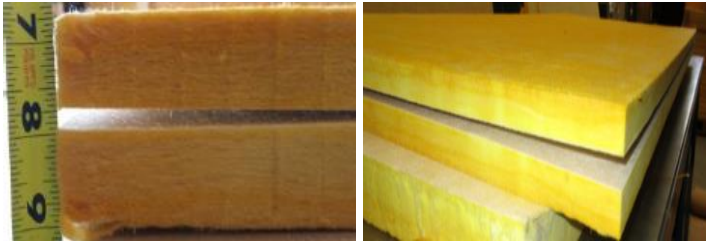
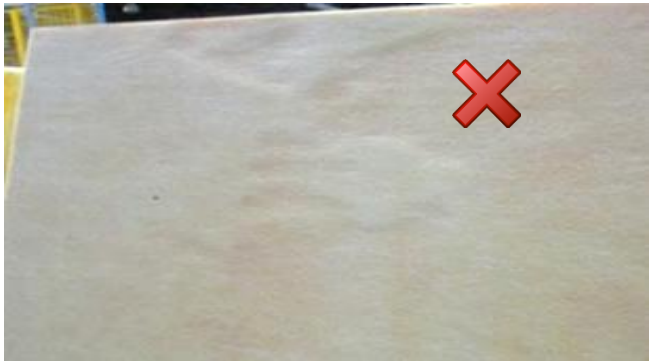


It might have flight marks (prints from the flight holes as well as the cross section vein between flights), wrinkles up to 3 mm deep, up to two uneven flights with maximum ± 2 mm deviation. For thickness below 1" (25.4 mm) up to two uneven flights with maximum ± 2.5 mm deviation. Not waves accepted on any part of the surface, some brown spots accepted at random.



**4. Mat faced alignment**

Mat can have up to 0.2" (5 mm) disalignment provided the surface does not show marks.



<b>5. Waves on the surface</b>	
<p>No waves accepted on any part of the surface top/bottom.</p>	
<b>6. Wrinkles on the top surface</b>	
<p>Top surface can not have any wrinkles.</p>	
<b>7. " Bowing Effect "</b>	
<p>The surface isn't have to be flat from end to end or widht to widht. The surface can have "the bowing effect" that does not surpass more than 6 mm (0,24") for MFL and 12 mm (0,47") for MFH.</p> <p><i>** On the flat measuring table take two boards facing against facing and take the measurement of the distance between the 4 corners of the boards. The real data is the average of measurements from 4 corners of the board (Internal test method "Bowing effect measurement").</i></p>	
<b>8. Bubbles on the mat surface</b>	
<p>The mat on the top surface is intended to obtain a flat surface, however the surface can have at least one "bubble", no more than 1 mm of height, per board.</p>	
<b>9. Stripes on the surface</b>	
<p>Longitudinal stripes are not accepted, on the mat surface.</p>	
<b>10. Stains/spots oil on the surface</b>	
<p>Top surface might have visible dark spots, it can show maximum 3 spots of 5 mm per board. Moreover the surface might have paint spots with the same mat color, this paint is used to cover the oil spots and some darks stain on the surface.</p>	

**\*\* The internal test methods are available for reviewed by the customer if required.**

**PACKAGING**

PRODUCT	UNITS/PACKAGE	AREA/PACKAGE (m <sup>2</sup> )	NET WEIGHT ± 10% kg/PACKAGE
6# MFL 48" x 24" x 7/8"	11	8.17	16.50
6# MFL 48" x 24" x 15/16"	10	7.43	16.12
6# MFL 96" x 48" x 1"	6	17.83	41.18
6# MFL 96" x 48" x 1.5"	4	11.88	41.22
6# MFL 96" x 48" x 1.7/8"	3	8.91	38.67
6# MFL 96" x 48" x 2"	3	8.91	41.25
6# MFH 48" x 24" x 7/8"	11	8.17	16.50
6# MFH 96" x 48" x 1"	8	23.77	54.90
6# MFH 96" x 48" x 2"	3	8.91	41.25

GROSS WEIGHT (kg/package) = NET WEIGHT (kg/package) + 0.3 kg approx.  
 Package: Cardboard corner with polyethylene thermo shrinkable and self-adhesive label.

**INSTALATION RECOMENDATIONS**

- Set the panels in the room where they will be installed.
- 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.
- 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
- 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.
- 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.
- Continue installing the panels. Leave approximately 1/8" space between each of the panels to allow for expansion and contraction.
- 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.

**RECYCLED CONTENT**

(1) PI Post Industrial Recycled Content: Collected from Manufacturers or industry

(2) PC Recycled Content Post-Consumer: Collected from end uses

PRODUCT	TOTAL RECYCLED CONTENT	POST-INDUSTRIAL RECYCLED CONTENT (1)	POST-CONSUMER RECYCLED CONTENT (2)
6# MFL 48" x 24" x 7/8"	<b>68,60%</b>	68,60%	0%
6# MFL 48" x 24" x 15/16"	<b>68,71%</b>	68,71%	0%
6# MFL 96" x 48" x 1"	<b>68,80%</b>	68,80%	0%
6# MFL 96" x 48" x 1.5"	<b>69,25%</b>	69,25%	0%
6# MFL 96" x 48" x 1.7/8"	<b>69,43%</b>	69,43%	0%
6# MFL 96" x 48" x 2"	<b>69,48%</b>	69,48%	0%
6# MFH 48" x 24" x 7/8"	<b>66,47%</b>	66,47%	0%
6# MFH 96" x 48" x 1"	<b>66,93%</b>	66,93%	0%
6# MFH 96" x 48" x 2"	<b>68,54%</b>	68,54%	0%

Update: January/2016



**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 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 9001:2008**

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 updates 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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