# **TECHNICAL DATA SHEET**

# AEROCOR

Acoustic insulation presented of bio soluble fiber glass sheets; it is designed with internal surface insulation of metallic ducts for conditioning air. The material consists of fiber glass bonded with a thermosetting resin, uniform texture in semi rigid sheets. External surface with exposition to air is reinforced with a black glass-fiber mat.



# END USE CHARACTERISTICS AND LIMITATIONS

The product is designed as acoustic insulation, not to be directly exposed at environmental conditions such as outdoor kitchens; places where can suffer physical abuse or wear areas with a temperature above of 60°C (140 °F). Maximum temperature of air transported inside of duct should not exceed of 121°C (250°F). **ASTM C1071** Standard Specification for Fibrous Glass Duct Lining Insulation (Thermal and Sound Absorbing Material) **Type II**.

The system must be used to transport air ventilation or air conditioning, all ducts, grilles and diffusors should be properly sealed to prevent moisture. Typical applications of this product are energy saving and better acoustic installation. It is thermal-acoustic insulation used for rectangular metal ducts in commercial or residential places with systems of ventilation, air conditioning, heating or cooling.

The air must be free of solids that causes erosion on the walls of the ducts, install ducts filters in the air suction of the system.

Damage on reinforced mesh, such as perforation, decrease considerably the mechanical performance of the air conditioning system, therefore any damage to reinforcement should be repaired with an adhesive that meets the requirements of ASTM C916.

# PRODUCT SPECIFICATION

PRODUCT	LENGHT mm (in)	WIDE mm (in)	NOMINAL THICKNESS mm (in) (1)	WEIGHT +/- 10% kg/m² (g/ft²)
AEROCOR REFORZADO 117" X 48" X 1" (2.5#)	<b>2972</b> ± 6 mm	1219 ± 3mm	152 ± 3mm	1.01 (94.4)

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

(2) Squareness: Edges at 90°, maximum deviation: 3 mm

PROPERTIES	STANDARD	DESCRIPTION	
Maximum temperature	ASTM C447	121°C (250°F)	
Thermal performance (Thermal Conductivity)	ASTM C518	0.033 W/m.°C (24°C Mean Temp) Typical value (0.23 BTU.in/hr.ft².°F a 75°F Mean Temp.)	
Noise Reduction Coefficient (NRC)	ASTM 423 (1)	NRC: 0.7 (1 in) A Mounting NRC: 0.95 (2 in)	
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	
Corrosiveness	ASTM C665 / ASTM C795	Meets requirements	
Rigid	C1101 /C1101M	Semi – Rigid	
Fungi Resistance	ASTM C1338	Meets requirements	
Odor Emission	ASTM C1304	Meets requirements	
Burning Characteristics	NFPA 259	Meets requirements	
DBE Content	Oregon State	Meets requirements	

NRC (Noise reduction coefficient): Expected values based on similar designed products and a limit number of samples, ASTM C423 Standard method Sound Absorption coefficients by reverberation method (A Mounting): Material on solid support such as block wall.



#### **VISUAL STANDARD**

CHARACTERISTICS	ACCEPTANCE GUIDE
Color	The coated surface and the sheet are black, the color can ranging since dark gray to black.
Facing Appearance	The reinforcement should be clean and without perforations and evidence or landslides. Either of two surfaces should not be present burrs that exceed 3 mm (1/8 in) in height or depth and no more than 25 mm (1in) in wide or diameter. Occasionally, external surface expose to air could be present withe patches, maximum three by sheet without exceed an area of 0,04 m <sup>2</sup> (20 cm of diameter). Sometimes appear a wear patch but it should not exceed the same area. The visual standard of the finished product does not affect thermal and acoustic characteristics on the installed product. Thus, the presence of wrinkles in any direction within of sheet, deep less not than 1.5 mm (1/16in) wide no more than 3.0 mm (1/8 in) and a maximum length of 30.48 cm (12 in) are consider property of material. However, the following characteristics are considering such as defect product: Air pockets between the sheet and the film, evidencing of serious landslides, finishing torn, stained, it does not cover the complete surface with maximum tolerance of 6 mm (-1/4in). The sheet should be left easily cut with reasonable tools, it must not present spots on the blade and the cut should be clean and uniform surface.

#### **RECYCLED CONTENT**

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

TOTAL RECYCLED CONTENT	POST INDUSTRIAL RECYCLED CONTENT (1)	POST CONSUMER RECYCLED CONTENT (2)
64.33 %	64.33 %	0 %

### INSTALLATION RECOMMENDATIONS

### **Before Installation**

The designer of ducts system must:

- Define each one plane, section of air conduction that will be coating
- Specify type and thickness of installed coating and the adhesives to be used.

## Coating Cut

Coating internal of ducts should be cut:

- With hands supporting with a right knife
- With machines, following carefully recommendations of equipment manufactures.
- With program machine, which should be property for cut rectangular shapes for straight sections of the duct or special forms such as elbows, tees and offsets.

#### **Adhesives and Mechanical Fixes**

Attach AEROCOR to metal sheet; it must cover minimum 90% of the surface with an adhesive that meets the requirements of ASTM C916. Apply with spray, roller or brushing.

# PACKAGING

PRODUCT	UNITS/ PACKAGE	AREA/ PACKAGE (m <sup>2</sup> )	WEIGHT +/-10% kg/Package
AEROCOR			
REFORZADO	6	21.74	21.95
117" X 48" X 1"			

GROSS WEIGHT (kg/Package) = NET WEIGHT (kg/Package) + 0.6 kg (package)

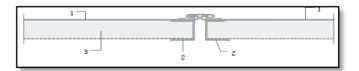
Package: Cardboard liner, polyethylene, auto-adhesive label.

Following carefully instructions and warnings of application indicated for manufactures of the adhesives. Mechanical elements must be located respect to internal dimensions of duct, regardless of direction of air flow.

#### Fabrication and Installation Principles

Coating AEROCOR should be cover 100 % of internal surface and the section of ducts will be property finishing. The product must be installed with the reinforcement expose to air stream. During cutting of the coating is necessary take care of tolerance dimensions for metal base.

After installation of internal coating and before that the system begins to operate, verify the correct installation and confirm that the duct system is free of construction debris.



- 1. Steel sheet Duct
- 2. U-profile fixed to steel sheet with rivets
- 3. Aerocor Fiberglass Isover





#### 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.

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

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