

DESCRIPTION

Diffuser Board is a 4 pcf density board made from strong, resilient glass fibers bonded with a thermosetting resin. The airstream surface of the Diffuser Board features a black-colored surface that minimizes visibility of the board at the diffuser and register boxes. Diffuser Board is available plain or with an FSK (foil-scrim-kraft) facing laminated to the exterior surface of the board.

USES

Diffuser Board provides thermal performance, acoustical performance and a vapor barrier in one product for easy fabrication. It is specifically designed for use in fabricating air diffusers and register boxes.

STORAGE

Diffuser Board should be kept clean and dry during storage, transport, fabrication, installation, and system operation.

SHIPPING

Shipped With E³ Pallet® Technology: The E³ Pallet® is designed to simplify repurposing our 4x8' and 4x10' pallets into more functional, 48x48" and 48x40" pallets (respectively). See instructions on page 2.



FACING INFORMATION

Permeance: 0.02 perms*

*Per ASTM E96, Procedure A for facing material prior to lamination. After lamination, permeance values may be higher.

GENERAL PROPERTIES

Operating temperature (max.) – ASTM C411	250°F (121°C)
Air velocity (max.) – ASTM C1071	2000 fpm (10.2 m/sec)
No evidence of erosion*	5000 fpm (25.4 m/sec)

*ASTM C1071 requires that the insulation be tested to 2.5x the rated velocity and requires that the insulation shall not break away, crack, peel, flake off, or show evidence of delamination or continued erosion when air is passed through typical duct sections at 5,000 fpm (25.4 m/s).

STANDARD THICKNESSES AND PACKAGING

Diffuser Board is available palletized. Available sizes follow:

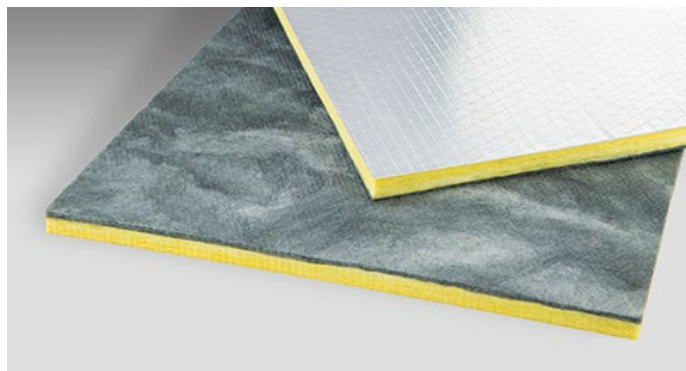
Size		Thickness	
in	mm	in	mm
48 x 96	1219 x 2438	1, 1 3/8	25, 35
44 x 104	1118 x 2642	1, 1 3/8	25, 35
52 x 104	1321 x 2642	1, 1 3/8	25, 35

STANDARD THICKNESSES AND PACKAGING

Diffuser Board meets the Surface Burning Characteristics and Limited Combustibility of the following standards:

Standard/Test Method

• ASTM E84	Maximum Flame Spread Index	25
• UL 723	Maximum Smoke Developed Index	50



THERMAL PERFORMANCE

Thickness		R-value		Conductance	
in	mm	(hr•ft ² •°F)/Btu	m ² •C/W	Btu/(hr•ft ² •°F)	W/m ² •C
1	25	4.3	0.76	0.23	1.31
1 3/8	35	6.0	1.04	0.17	0.96

R-value and Conductance are calculated from the material thermal conductivity tested in accordance with ASTM C518 at 75°F (24°C) mean temperature.

SOUND ABSORPTION COEFFICIENTS (TYPE "A" MOUNTING)

Thickness		Sound Absorption Coefficient at Frequency (Cycles per Second) of						
in	mm	125	250	500	1000	2000	4000	NRC
1	25	0.05	0.20	0.68	0.92	0.94	1.03	0.70
1 3/8	35	0.09	0.32	0.86	0.98	0.97	1.00	0.80

Coefficients were tested in accordance with ASTM C423 and ASTM E795.

RECYCLED CONTENT



ISO 9001:2015 CERTIFICATION

Johns Manville mechanical insulation products are designed, manufactured and tested in our own facilities, which are certified and registered to stringent ISO 9001:2015 (ANSI/ASQC 90) series quality standards. This certification, along with regular independent third-party auditing for compliance, is your assurance that Johns Manville products deliver consistent high quality.

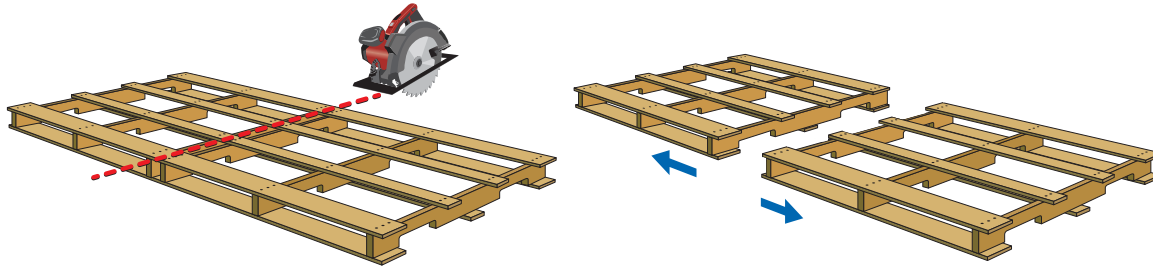
HVAC INSULATION
DIFFUSER BOARD
 FIBERGLASS INSULATION BOARD
 WITH E³ PALLET® TECHNOLOGY
 DATA SHEET




4x8' E³ PALLET® CUT DOWN INSTRUCTIONS

The 4x8' E³ Pallet® can be cut down into two 48x48" pallets. Simply use a circular saw to cut along the red dotted lines shown in the images below.

4x8' E³ PALLET®: TWO 48x48" PALLETS



	48x48" Cut Down
Max Load Capacity (Evenly Distributed)	1,587 lbs*
Lateral Collapse Resistance 	0.60*

*All pallets are subject to abuse, aging and normal wear and tear during use and storage. The data reported in this document represent initial performance of a new pallet after manufacture and do not take into account damage that may occur during handling and use of the pallets.



717 17th St.
 Denver, CO 80202
 800-654-3103
www.JM.com

North American Sales Offices, Insulation Systems

Eastern Region & Canada
 P.O. Box 158
 Defiance, OH 43512
 800-334-2399
 Fax: 419-784-7866

**Western Region & Outside
 North America**
 P.O. Box 5108
 Denver, CO 80217
 800-368-4431
 Fax: 303-978-4661

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of Diffuser Board listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800) 654-3103.