DUCTMATE

Poly Armor™

Polyester Duct Liner

Polyester Duct Liner

Fiberglass Free Duct Liner

- R-4.2 (nom. 1”), R-5 (nom. 1¼”) R-6 (nom. 1½”), and R-8 (nom. 2”) material available
- Excellent Sound Absorption
- Smooth and extremely durable facing
- Made of soft user friendly polyester
- Made of 25% recycled content
- Labor saving fiber glass free alternative

DUCTMATE® Green Products

PolyArmor™

Polyester Duct Liner

DESCRIPTION

Ductmate PolyArmor duct liner is engineered from strong and safe polyester. The hypoallergenic polyester material is webbed into a thermal blanket which is then bonded with a FSK facing to resist damage during system installation and operation. This also provides excellent durability in the airstream. PolyArmor is engineered to provide outstanding R-values with excellent noise reduction values and superior indoor air quality.

INSTALLATION

PolyArmor is installed using common duct liner installation methods and materials. Insulation should be applied using a water based duct liner and pinned in accordance with the SMACNA HVAC Duct Construction Standards, Metal and Flexible. A metal nosing and water based edge coating should be applied in accordance with the SMACNA HVAC Duct Construction Standards, Metal and Flexible.

FEATURES & BENEFITS

High Noise Reduction Coefficient (NRC) value	*Provides excellent sound absorption*
Smooth and extremely durable facing	*Reduces damage during fabrication and transportation*
Made of soft user friendly and hypoallergenic polyester	*Eliminates irritation during handling*
Engineered for application with water based adhesives	*Eliminates the need for toxic or expensive adhesives*
Labor saving alternative to elastomeric duct liner	*Saves you time and money*
Made of 25% recycled content	*For increased sustainability*
Mildew and mold resistant	*Does not promote or support the growth of mold or mildew*
Light weight design with excellent rebound	*Reduces the overall weight of the duct system*

LIMITATIONS

PolyArmor should not be used in duct systems with fan velocities exceeding 4,000 fpm or at temperatures above 250°F.

Polyester and Mold

Polyester insulation will not support mold growth. However, mold can grow on virtually any surface when it is contaminated with organic materials or becomes wet. Be sure to inspect any insulation that has been exposed to water before installing it. If it shows any sign of mold, it must be replaced with dry insulation. If the material is wet but shows no evidence of mold, it can be dried thoroughly and used. However, if it shows signs of facing degradation from wetting, it should be replaced with intact insulation. Air handling insulation used in the air stream must be discarded and replaced if exposed to water.

LIMITED PRODUCT WARRANTY

Ductmate warrants that PolyArmor™, when properly installed and maintained, will be free from defects in material and workmanship, and will comply with all written specifications made by Ductmate at the time of sale. Ductmate's warranty shall run for a period of one year from the date of manufacture.

Warranty Limitation
The warranty stated above is in lieu of all other warranties, express or implied, including but not limited to the implied warranties of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Although Ductmate may have suggested the product, or provided written or oral advice to the Purchaser, it is the Purchaser's responsibility to test and determine the suitability of PolyArmor™, for the intended use and purpose, and Purchaser and/or its customer assumes all risk and liability whatsoever regarding such suitability.

Limitation of Liability
In the event of a breach of the above warranty, Ductmate's sole obligation, and Purchaser's sole and exclusive remedy, shall be, at Ductmate's option, repair or replacement of any defective products, or refund of an applicable portion of the purchase price. Ductmate shall have no liability for costs of removal or reinstallation of the product. The Purchaser agrees that no other remedy, including but not limited to loss of profits, loss sales, injury to person or property, or any other special, incidental or consequential damages, shall be available to the Purchaser for any claim arising out of this Agreement, regardless of whether such claim is made in contract or in tort, including strict liability in tort. In no event will Ductmate be obligated to pay damages to the Purchaser in any amount exceeding the purchase price that the Purchaser paid to Ductmate for the allegedly defective product.

Notes
The technical specifications of Ductmate PolyArmor represent typical values determined in accordance with accepted test methods. The data is subject to normal manufacturing and testing variations. The information is supplied as a technical service and can be changed without notice. The values stated for the flame spread ratings are not intended to indicate actual hazards by these or any other materials under real fire conditions.

Check with a Ductmate sales representative to assure information is current or to receive current material.

STANDARD SIZES

Width	R-Value, Thickness, And Length				
	R-4.2 1"x 100'	R-5 1¼"x 100'	R-6 1½"x 50'	R-8 2"x 50'	
47.5"	PA475F1W100	PA475F125W100	PA475F15W50	PA475F2W50	Part Number
48"	PA48F1W100	PA48F125W100	PA48F15W50	PA48F2W50	
56.25"	PA5625F1W100	PA5625F125W100	PA5625F15W50	PA5625F2W50	
59"	PA59F1W100	PA59F125W100	PA59F15W50	PA59F2W50	
60"	PA60F1W100	PA60F125W100	PA60F15W50	PA60F2W50	

TECHNICAL SPECIFICATIONS

Item	Test Method	Result
Thermal resistance 1” material, ft2.F.hr/Btu 1¼” material, ft2.F.hr/Btu 1½” material, ft2.F.hr/Btu 2” material, ft2.F.hr/Btu	ASTM C518, 75 F	 R-4.2 R-5 R-6 R-8
Surface burning characteristics Flame spread index Smoke developed	ASTM E84	 <25 <50
Density, lb/ft3 1” material 1¼” material 1½” material 2” material	ASTM D 1667	 1.6 1.5 1.5 1.4
Corrosiveness	ASTM C665	Pass
Fungi Resistance	ASTM C1338	Pass
Mold Growth	ASTM G-21	Meets Requirements
Odor	ASTM C1304	Pass
Moisture vapor absorption, %	ASTM C1104	0.24
Temperature Resistance Upper Limit	ASTM C411	 Up to 250°F
Erosion Resistance	ASTM C 1071 (tested to maximum throughput of 10,000 fpm (4,719 lps))	Rating 4,000 fpm
Smoke density and toxicity	ASTM E662/ ASTM E800	
Density, optical Ds at 4 minutes	ASTM E662 flaming (non flaming)	2.5 (0.54)
Toxicity, ppm	ASTM E800 (flaming exposure)	
CO		21
HBr, HCl, HCN, HF, NOx, So2		0
Volatile Organic Content (VOC), ppm	ASTM D5116 (CA1350)	0
Greenguard® Environmental Institute		Compliant, CS

SOUND ABSORPTION COEFFICIENTS AT FREQUENCY - ASTM Standard C423

PolyArmor

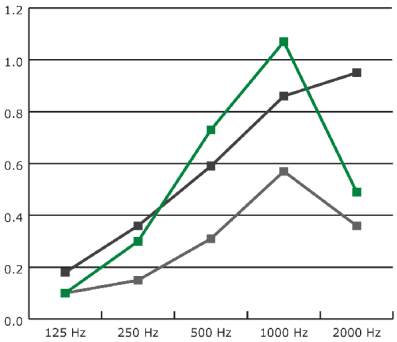
Material	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	NRC
Min. 1”	0.10	0.30	0.73	1.07	0.49	0.65

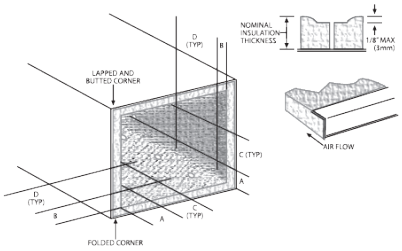
Elastomeric

Material	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	NRC
Min. 1”	0.10	0.15	0.31	0.57	0.36	0.35

Fiberglass

Material	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	NRC
Min. 1”	0.18	0.36	0.59	0.86	0.95	0.70





Liner Interior Width

No. Pins	Inches	(mm)
0	≤ 8	≤ 203
2	9-16	229-406
3	17-28	432-711
4	29-40	737-1016
5	41-52	1041-1321
6	53-64	1346-1626
7	65-76	1651-1930
8	77-88	1956-2235
9	89-100	2261-2540

MECHANICAL FASTENER LOCATION

Velocity/FPM	0-2500	2501-5000
A. From Corners of duct	4”	4”
B. From transverse of duct	3”	3”
C. Across width of duct, on centers (min. 1/side)	12”	6”
D. Across length of duct, on centers (min. 1/side)	18”	16”

LIGHTWEIGHT MODEL 534

Eastman's lightweight model 534 Cardinal® provides lightweight maneuverability with enough power to cut low lays of a variety of materials.

Like all Eastman round knives, the Lighweight Cardinal® is perfect for cutting large radius curves and straight lines.

SPECS

Motors:	110v, 1ph, 50/60Hz // 220v, 1ph or 3ph, 50Hz. High speed (3600/3000 RPM)
Horsepower:	.20hp, 1ph // .34hp, 3ph
Weight:	16 lbs. (7.26kg)
Blades:	Standard: Carbon Steel. Optional: High Speed Steel, Grooved, PTFE coated
Sharpener Stones:	Standard: 120 Heavy. Optional: 150 Medium, 220 Fine
Options:	Knife lubricator, stationary base plate
Blade Size:	4" (10.2 cm)
Cutting Capacity:	2.125" (5.4 cm)

FALCON® 548 HEAVY-DUTY END CUTTER

Eastman equips Cardinal model 548 with a special baseplate and handle to work with the Falcon guide track.

The 548 Falcon is compatible for cutting Ductmate PolyArmor™ in 1", 1.25", 1.5" and 2" thicknesses.

SPECS

Table Widths Available:	48" - 144" (1.22m-3.66m)
Motors:	110v, 1ph, 50/60Hz // 220v, 1ph or 3ph, 50/60Hz
Horsepower:	.20hp, 1ph // .48hp, 3ph
Weight With Track & Lifters:	70 lbs. (31.75kg)
Standard Features:	Toggle Manual Switch, Pull Handle
Options:	Manual Lifter, Bias Lifter, Air Lifters, Material Alignment, Push Handle, Swivel Handle
Blade Size:	5" (12.7 cm)
Cutting Capacity:	1" (2.54 cm)

Knives are available for purchase from Eastman®, please contact them for more information about their products.

716-856-2200
Eastmancuts.com
sales@eastmancuts.com

DUCTMATE® Green Products

Charleroi, PA
210 Fifth Street
Charleroi, PA 15022
800-245-3188
724-258-0500
FAX: 724-258-5494

Lodi, CA
810 S. Cluff Avenue
Lodi, CA 95240-9141
800-245-3188
724-258-0500
FAX: 209-333-4678

www.ductmate.com

SFI
www.sfiprogram.org
This spec data is printed on paper that meets the Certified Fiber Sourcing requirements of the SFI program and contains 10% recycled content

Distributed By:

Ductmate is a proud member of the following organizations:

SMACNA
SPIDA
SPIRAL DUCT MANUFACTURERS ASSOCIATION

© *Copyright Ductmate Industries, Inc. All rights reserved.*