



DESCRIPTION

EcoGuard™ 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. In addition, the facing furthers the liner's durability, thus protecting the airstream.

EcoGuard is engineered to provide exceptional R-values with remarkable noise reduction values.

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 from handling.
- **Engineered for water-based adhesives:** Eliminates the need for toxic or expensive adhesives.
- **Labor saving alternative to elastomeric duct liner:** Saves you time and money.
- **Recycled make-up 25%:** Increasing sustainability value of the project.
- **Mildew and mold resistant:** Does not promote nor support the growth of mold or mildew.
- **Lightweight design with excellent rebound:** Reduces the overall weight of the duct system.

INSTALLATION

EcoGuard is installed using common duct liner installation methods and materials. Insulation should be applied using a water based duct liner adhesive 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.

LIMITATIONS

EcoGuard 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

EHG warrants that EcoGuard™, when properly installed and maintained, will be free from defects in material and workmanship, and will comply with all written specifications made by EHG at the time of sale. EHG'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 EHG 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 EcoGuard™, 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, EHG's sole obligation, and Purchaser's sole and exclusive remedy, shall be, at EHG's option, repair or replacement of any defective products, or refund of an applicable portion of the purchase price. EHG 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 EHG be obligated to pay damages to the Purchaser in any amount exceeding the purchase price that the Purchaser paid to EHG for the allegedly defective product.

Notes The technical specifications of EHG EcoGuard 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.

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 Density, optical Ds at 4 minutes Toxicity, ppm CO HBr, HCl, HCN, HF, NOx, So2	ASTM E662/ ASTM E800 ASTM E662 flaming (non flaming) ASTM E800 (flaming exposure)	2.5 (0.54) 21 0
Volatile Organic Content (VOC), ppm	ASTM D5116 (CA1350)	0
Greenguard® Environmental Institute		Compliant, CS

SOUND ABSORPTION COEFFICIENTS AT FREQUENCY (ASTM Standard C423)

EcoGuard

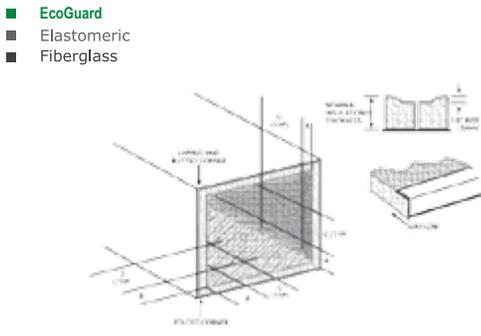
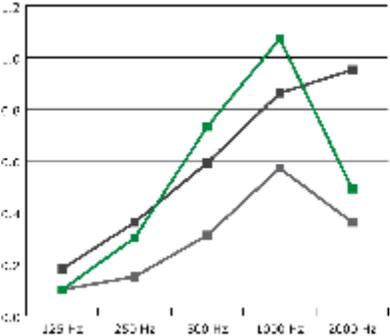
Material	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	NRC
Min. 1"	0.10	0.30	0.73	1.07	0.49	0.65

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"