

# TEXTILE DUCT LINER FIBERGLASS INSULATION



### **Product Specifications and Key Features**

Quietflex Textile Duct Liner is a black mat faced and edge coated liner made from continuous textile-type glass fibers with thermosetting resin. A tough, durable black facing is applied during the manufacturing process to ensure a strong, long-lasting bond between the base blanket and the facing.

### Uses

Quietflex Textile Duct Liner is used as a lining for sheet metal ducts in HVAC systems. Its primary uses are to enhance environmental quality by absorbing unwanted noise within the duct, and increasing indoor comfort and energy efficiency by decreasing heat loss or gain through the duct walls.

www.quietflex.com

# **KEY FEATURES & BENEFITS**

• Sound absorption

Helps reduce unwanted noise created by the air ventilation system.

• Low thermal conductivity

Creates a more efficient and comfortable indoor environment.

• Energy efficient

Saves energy compared to uninsulated sheet metal duct work.

• Edge coated

Black edge coating is applied to the edges of the liner core, assuring coverage of the leading edges.

• Resistant to bacterial and fungal growth In accordance with ASTM C1071. • Fabrication and installation

Textile fiber yields high bond strength, allowing the product to adhere to the walls of the duct consistently. This type of construction provides a simple, fast and easy installation within the sheet metal duct.

- Easy to clean and maintain Should be maintained in accordance to NAIMA.
- Specification compliance ASTM C1071, Type 1 ASTM G21 and G22 NFPA 90A and 90B



## **TEXTILE DUCT LINER**

#### FIBERGLASS INSULATION

#### **PHYSICAL PROPERTIES**

TEST METHOD OR PROPERTY	DESCRIPTION	RESULTS			
ASTM C411	Maximum operating temperature	350°F (177°C)			
UL 181 air erosion test – ASTM C1071	Maximum air velocity	6000 FPM (30.5 m/sec)			
ASTM E84	Flame spread index	Less than 25			
ASTM E84	Smoke developed index	Less than 50			
ASTM C518	Thermal resistance	See table			
ASTM C1104	Water vapor sorption	Less than 1.0% by weight.			
ASTM C1338, G21, G22	Microbial growth	Does not support the growth of mold, fungi, and bacteria			
ASTM C665	Corrosion resistance (steel only)	Pass			
NFPA 259, 90A and 90B	Limited combustible	Less than 3500 BTU/lb			
ASTM C1304	Odor	Pass			
ASTM C423	Sound absorption	See table			
Tensile strength	Material property	>= 2 PSI (15 kPa)			
Density tolerance	Material property	+/- 15%			
Width tolerance	Material property	+/- 6 mm or -0 mm/ +12 mm (+/- 0.25 in or -0 in / + 0.50 in)			
Length tolerance	Material property	+2% or 610 mm / -0mm (+2% or +2 ft / -0 ft)			
Thickness tolerance	Material property	+/- 6 mm or -0 mm/ +12 mm (+/- 0.25 in or -0 in / + 0.50 in )			

#### **THERMAL VALUE**

NOMINAL THICKNESS DEN		SITY	THERMAL CONDUCTIVITY, k		CONDUC	TANCE, C	R VALUE, R		
inch	mm	lbs/ft³	kg/m³	BTU-in/hr/ ft²/°F	W/m/°k	BTU/hr/ft²/°F	W/m²/°k	hr/ft²/°F/BTU	m²/°k/W
0.50	13	2.0	32	0.26	0.038	0.48	2.70	2.1	0.37
1.00	25	1.5	24	0.30	0.044	0.30	1.72	3.3	0.58
1.00	25	2.0	32	0.26	0.038	0.24	1.35	4.2	0.74
1.50	38	1.5	24	0.30	0.043	0.20	1.14	5.0	0.88
1.50	38	2.0	32	0.27	0.039	0.17	0.95	6.0	1.06
2.00	51	2.0	32	0.27	0.038	0.12	0.71	8.0	1.41

Actual thicknesses are: 0.55" (nominal 0.5"), 1.1" (nominal 1.0", 2.0 pcf), 1.6" (nominal 1.5", 2.0 pcf), 2.1" (nominal 2.0")

#### ACOUSTICAL VALUE (Sound absorption coefficients, 1/3 octave bands (ASTM C 423, type A mounting)

NOMINAL THICKNESS DENSITY			ABSORPTION COEFFICIENTS - SABINS/FT <sup>2</sup>							
inch	mm	lbs/ft³	kg/m³	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	4,000 Hz	NRC*
0.50	13	2.0	32	0.05	0.09	0.23	0.48	0.61	0.66	0.35
1.00	25	1.5	24	0.24	0.31	0.46	0.66	0.77	0.81	0.55
1.00	25	2.0	32	0.21	0.34	0.57	0.84	0.92	0.83	0.65
1.50	38	1.5	24	0.21	0.51	0.71	0.87	0.92	0.87	0.75
1.50	38	2.0	32	0.37	0.57	0.83	1.00	1.01	0.92	0.85
2.00	51	2.0	32	0.42	0.73	1.03	1.12	0.98	0.90	0.95

\*Noise reduction coefficient

4518 Brittmoore Road • Houston, Texas 77041 • 713.849.2163 • quietflex.com

#### WARNING

Textile glass fibers are used to manufacture the fiberglass insulation product. Handling, installing, or removing the product may result in some fiberglass contact. Users of this product are therefore advised to wear appropriate personal protective equipment so as not to experience skin, eye, or respiratory irritation. Gloves and eye protection, long sleeved, loose fitting clothing are recommended when installing or otherwise handling the product. Avoid breathing fiberglass dust and avoid contact with skin or eyes. A NIOSH approved (N95 or higher disposable or reusable dust respirator properly fitted is recommended whenever the product is handled. Respiratory protection is mandatory when the dust level in the workplace exceed OSHA permissible exposure limits or if worker irritation occurs. Work clothes should be washed separately and the washer rinsed after use.

#### FIRST AID MEASURES

If dust gets in eyes flush eyes with water to remove the fiber dust. If symptoms persist, seek medical attention. Fibers can be removed by washing the skin with soap and warm water after handling this product. Further product safety information is available from your employer. The Material Safety Data Sheet is available from your distributor, directly from QuietFlex or on the QuietFlex website at www.quietflex.com.

The physical and chemical properties of the QuielFlex Faced Versatile Blanket represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. Check with QuietFlex Manfacturing Company LP to obtain current information.