UNFACED VERSATILE BLANKET
OEM FIBERGLASS PRODUCT

Product Specifications and Key Features

Quietflex Versatile Blanket is produced using textile-type glass fibers that have been chopped to a length of 2 to 6 inches and bonded with a thermal setting phenolic resin. The glass fibers and resin are combined in an air lay system that produces a random fiber orientation for exceptional strength and resiliency coupled with thermal and acoustic performance. Available in amber color.

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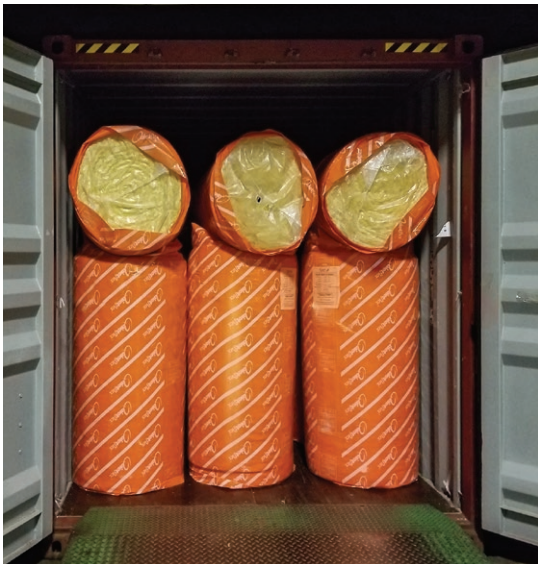
ADVANTAGES

- **High thermal efficiency**
  Reduces heat transfer, lowering energy consumption
- **High acoustical performance**
  Reduces unwanted noise
- **Excellent bond strength**
  Blanket resists separation
- **Increased tensile strength**
  For high tensile applications, and stands up to lamination and other fabrication processes
- **Enhanced thickness recovery/resiliency**
  Resists settling and breakdown from vibration and impact
- **Excellent dimensional stability**
- **Resistance to vibration**
  Due to excellent bond strength
- **Ease of handling and fabrication**
  Easily cut in die cut press or with a knife
- **Fibers are non-combustible and do not absorb water**
- **Resistant to bacterial and fungal growth**
- **Compression packed**
  Saves freight costs, storage space and protects against damage

APPLICATIONS

- **HVAC equipment**
  Fan coils, air conditioners, furnaces, other HVAC equipment
- **Acoustical panels**
- **Recreational vehicles**
- **Metal buildings**



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THERMAL VALUES @ 75°F mean temperature (ASTM C 518)

DENSITY	THICKNESS	K-VALUE*	C-VALUE	R-VALUE
lb/ft³	inch	BTU-in/h-ft²-°F	BTU/h-ft²-°F	h-ft²-°F/BTU
0.75	1.0	0.365	0.37	2.7
	1.5		0.24	4.1
	2.0		0.18	5.5
1.00	1.0	0.325	0.33	3.1
	1.5		0.22	4.6
	2.0		0.16	6.1
1.50	0.5	0.284	0.57	1.8
	1.0		0.28	3.5
	1.5		0.19	5.3
	2.0		0.14	7.0
2.00	0.5	0.263	0.53	1.9
	1.0		0.26	3.8
	1.5		0.18	5.7
	2.0		0.13	7.6
3.00	0.5	0.240	0.48	2.1
	1.0		0.24	4.2
	1.5		0.16	6.3

**K-Value: Nominal thermal conductivity is shown. Value tolerance is + or - 10%*

THICKNESS AND DENSITY

THICKNESS	MIN DENSITY	MAX DENSITY
inch	lb/ft³	lb/ft³
0.5	1.50	3.00
1.0	1.00	4.00
1.5	0.75	4.00
2.0	0.75	3.00
2.5	0.75	2.40
3.0	0.75	2.00
3.5	0.75	1.70
4.0	0.75	1.50
5.0	0.75	1.20
6.0	0.75	1.00

SIZE

WIDTH	LENGTH	THICKNESS
Minimum: 6" Maximum: 120"	Length will be based on density and width to keep roll weights under 130 lbs.	Between ½" and 6"

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PHYSICAL PROPERTIES

TEST METHOD OR PROPERTY	DESCRIPTION	RESULTS
Temperature range	Operating temperature	-247°F to 450°F
ASTM C411	Standard test method for hot-surface performance of high temperature insulation	Passes up to 900°F
ASTM C553 Type 1, 2 and 3	Standard specification for mineral fiber blanket thermal insulation for commercial and industrial applications	Passes all requirements at varying densities
ASTM E162	Radiant panel	Passes
ASTM C1304	Odor	Passes
NFPA 259, 90A and 90B limited combustibility	Standard test method for potential heat of building materials (less than 3500 BTU/lb (8141 kJ/kg)	Passes
ASTM C665	Corrosion resistance	Passes with aluminum, steel or copper.
ASTM C1104	Water vapor sorption	Passes less than 1.0% by weight.
ASTM E84 and UL 723 Fire	Flame spread index	Passes class A target less than or equal to 25.
ASTM E84 and UL 723 Smoke	Smoke developed index	Passes class A target less than or equal to 50.
ASTM C1338, G21, G22	Test methods for determining resistance of insulation materials and facings to fungi and bacteria	Passes; does not support the growth of mold, fungi or bacteria
ASTM C423	Sound absorption coefficients, 1/3 octave bands Unit: Sabins/ft^2	Passes; see **notes A and B**
Tensile strength	Material property	>= 1 PSI (6.6 kPa)
Density tolerance	Material property	+/-15%
Width tolerance	Material property	+/-0.25 in or -0 in/+0.50 in
Length tolerance	Material property	+2% or +2 ft/-0 ft
Thickness tolerance	Material property	+/-0.25 in or -0 in/+0.50 in

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NOTE A*

Frequency (Hz)	1 in. Unfaced Versatile
100	0.02
125	0.11
160	0.13
200	0.19
250	0.24
315	0.32
400	0.38
500	0.47
630	0.55
800	0.62
1000	0.69
1250	0.76
1600	0.79
2000	0.84
2500	0.87
3150	0.88
4000	0.89
5000	0.88
SAA	0.56
NRC	0.55

** 2.0 lb/ft³ (32 kg/m³)*

NOTE B: UNFACED VB AT OTHER THICKNESSES AND DENSITIES Passes ASTM C423

Sample		#1	#2	#3	#4	#5	#6	#7
Thickness	inch	0.5	0.5	0.75	0.75	0.75	1.0	1.0
	mm	12.7	12.7	19.1	19.1	19.1	25.4	25.4
Mass	lbs	5.724	10.16	7.328	8.360	11.73	9.187	19.78
	kg	2.602	4.616	3.331	3.800	5.332	4.176	8.989
Density	lbs/ft^3	2.0	3.0	1.5	2.0	3.0	1.5	3.0
	kg/m^3	32	48	24	32	48	24	48
Measured surface density	lbs/ft^2	0.079	0.141	0.101	0.116	0.162	0.127	0.274
	kg/m^2	0.388	0.688	0.496	0.566	0.795	0.622	1.34

ABSORPTION COEFFICIENT

Frequency	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7
100 Hz	0.00	0.05	0.07	0.01	0.07	0.03	0.01
125 Hz	0.03	0.05	0.08	0.08	0.04	0.13	0.09
160 Hz	0.04	0.07	0.11	0.10	0.09	0.15	0.14
200 Hz	0.09	0.08	0.13	0.13	0.11	0.18	0.17
250 Hz	0.13	0.14	0.20	0.19	0.21	0.27	0.29
315 Hz	0.18	0.17	0.27	0.26	0.26	0.34	0.42
400 Hz	0,21	0.23	0.31	0.31	0.32	0.37	0.50
500 Hz	0.24	0.28	0.36	0.38	0.41	0.44	0.59
630 Hz	0.33	0.38	0.44	0.45	0.50	0.54	0.72
800 Hz	0.36	0.47	0.51	0.53	0.58	0.58	0.83
1000 Hz	0.41	0.52	0.56	0.59	0.65	0.63	0.87
1250 Hz	0.45	0.60	0.61	0.63	0.71	0.65	0.91
1600 Hz	0.49	0.64	0.66	0.69	0.76	0.70	0.94
2000 Hz	0.53	0.70	0.70	0.73	0.80	0.74	0.95
2500 Hz	0.58	0.75	0.75	0.79	0.84	0.78	0.97
3150 Hz	0.63	0.79	0.78	0.81	0.88	0.78	0.97
4000 Hz	0.63	0.81	0.79	0.82	0.87	0.77	0.95
5000 Hz	0.66	0.83	0.79	0.83	0.89	0.78	0.91
SAA	0.33	0.41	0.46	0.47	0.51	0.52	0.68
NRC	0.35	0.40	0.45	0.45	0.50	0.50	0.70

Note on Single Number Ratings: *The Sound Absorption Average (SAA) is calculated as the arithmetic average of the all absorption coefficients from 200 – 2500 Hz, inclusive. The Noise Reduction Coefficient (NRC) is calculated as the arithmetic average (rounded to the nearest 0.05) of the absorption coefficients in the shaded bands only (250, 500, 1000 & 2000 Hz).*

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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 QuietFlex 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.