



Basfiber mat®

Technical Data Sheet

Advanced Basalt Fiber Non-Woven: BFT – NW06/08/10/12

1. Description:

A new noncombustible heat insulation material — Basfiber mat®. This product allows to realize the main advantages of the basalt fiber over the traditional fibers — E-glass and mineral wool.

The continuous temperature application rates about 300°C higher than the comparative product made from E-Glass. The final application, its environment, the heat conditions, the heat directions, the density of the mat itself, as well as its thickness are only a few determining factors for the appropriate continuous application temperature. It seems that a good safe number will be 1000°C for the Basfiber mat®. Higher values may apply, depending on the particular application. In order to enhance temperature reflective properties, an aluminum foil can be added to the product.

While the Basfiber mat® is widely used in thermal applications, it also can be treated with resins and turned into a constructional board.

2. Characteristics

Type	6/130	8/130	10/130	12/130
Volumetric Density [kg/m ³]	130	130	130	150
Surface Density [g/m ²] (1)	780	1.040	1.300	1.800
Tolerance [%]	± 12	± 12	± 12	± 12
Thickness [mm] (2)	6	8	10	12
Tolerance [mm]	± 1	± 1	± 1	± 1
Width [cm]	100			
Tolerance [cm]	± 1	± 1	± 1	± 1
Roll Length [m]	50			
Tolerance [%]	± 1	± 1	± 1	± 1

Thermal Conductivity (W/m²k) with 5% tolerance

Average Temp. (°C)	20°	100°	200°	300°	400°	500°	600°	700°
130 kg/m ³	0.031	0.034	0.042	0.056	0.080	0.115	0.161	0.200
150 kg/m ³	0.031	0.033	0.041	0.054	0.078	0.115	0.154	0.209
170 kg/m ³	0.031	0.032	0.039	0.053	0.075	0.105	0.143	0.191

Filament diameter [µm] (ASTM D578)	12 - 15
Sizing type	Silane
Sizing content [%] (ISO 1887)	0.1 – 1.5
Thermal stability [°C]	At continuous temperature of 550 °C and peak temperatures till 1200 °C
Fire behaviour (DIN 4102)	Incombustible
Safety measures	Technical and personal not necessary
Make-up	Rolls on cardboard tubes with 76 mm inside diameter, wrapped and sealed in plastic foil
Storage	Dry, protected against moisture. Transportation In clean covered vehicles or closed containers

3. Packaging

Standard roll length amounts to 10 m (other lengths available on request). Tube interior diameter is 76 mm. Fabrics rolls are individually wrapped in foil and delivered on a pallet.

4. Storage

Basalt fabrics should be stored in the package at the stock (indoor conditions). Rolls should be placed parallel to each other.