

Basalt Fiber Products

Basalt is a natural material that has high strength, good thermal & sound insulation properties, resists corrosive environments, and products made from basalt have a long operation life.



Basalt Roving

- High natural strength
- Resistance to corrosive environment
- Long operation life
- Excellent electric insulation properties

Applications

- Basalt fabric production
- Manufacture of geotextile mesh for asphalt
- Auto composite materials
- Pipes for the oil and gas industry
- Basalt plastic and fittings
- Making needled felts for thermal & sound insulation

Type	Filament diameter, microns	Linear density, tex	Tolerance in linear density %	Tensile strength, not less than, mN/tex (gf/tex)	Loss on ignition, %, not less than.
BC16 1200H-76 (200)	16 ±1	1200	±5	396 (40)	0.6
BC16 2400H-76 (200)	16 ±1	2400	±5	396 (40)	0.6

Basalt Chopped Strands

- Reinforcing additive for concrete
- Reinforcement for composite materials

Type	Filament diameter, microns	Chopped length, mm	Loss on ignition, %, not less than	Moisture, %, not less than
BC16 6 76	16 ±1	6 ±1	0.6	0.1
BC16 12 76	16 ±1	12 ±2	0.6	0.1
BC16 24 76	16 ±1	24 ±2	0.6	0.1

Basalt Yarn

Used in the production of:

- basalt fabrics
- Tapes
- Cords

Type	Linear density, tex	Tolerance in linear density, %	Number of twists per meter	Tensile strength, mN/tex (gf/tex)	Loss on ignition, %
BC12 110 Z20 76	110	+5 -7	20	460 (47)	Not less than 0.6

Basalt Fabric

Good for the following:

- Insulation
- Reinforcing
- Filter medium

Applications

- Thermal insulation for welding, industrial equipment, furnaces and pipelines
- Covering for thermal insulation felts
- Production of composite materials
- Filters for gas, dust, and metallurgical works

Type	Fabric density, yarns/cm	Surface density, g/m ²	Width, cm	Loss on ignition, %	Thickness, mm	Tensile strength, N/2.5cm
TBK-100 (100)	10 ±1 warp, 9±1 weft	210 ±20	100 ±1	Not less than 0.6	0.19 ±0.025	Not less than 784 warp & weft

It is possible to make basalt thermal insulation (needle felts). The difference between basalt and e-glass thermal insulation lies with basalt's higher heat resistance which can be used up to 800 degrees C (1472 degrees F) thus the range of usability is greatly expanded.

File: basalt_products