

Fabric Type TBK-100

Nomenclature:

Example : TBK-100

TB – basalt fabric

K – to be applied as construction materials when basalt reinforced composites are produced, when polymer bitumen roof materials are produced, as well as in civil engineering

100 – the width of fabric [cm]

Woven fabric of high chemical (acidic and subalkali or cement) and thermal resistance are made of basalt rovings or twisted yarns with epoxy-compatible sizing. The sizing is designed to ensure the fabric compatibility with epoxy matrix and good handling and mechanical properties of the fabric. Besides standard epoxy-compatible sizing (KV-12/KV-42), fabric with multi-compatible sizing (KV-11/KV-41 - epoxy, polyester and vinyl-ester) could be produced on request*.

Basalt fabrics could be used in different compositions for fire, sound and heat protection, in laminates production, in construction elements and equipment – as a replacement to E-glass fabrics.

Property		Unit	Normative Values
Basalt fiber			
Density		g/cm ³	2.67
Exploitation temperature range		°C	- 250 + 650°C
Coefficient of linear thermal extension		1/°C	35·10 ⁻⁷
Monofilament diameter		µm	10-13
Moisture content		wt %	< 0.5
Sizing content		wt %	≥ 0.4
Specific tensile strength of the twisted yarn**		mN/tex	>650
Fabric			
Weaving pattern			Plain
Weight		g/sqm	210 ± 20
Width		cm	100 + 1
Count	Warp	F/100 mm	100± 1
	Weft	F/100 mm	95± 1
Tensile strength	Warp	N	>784
	Weft	N	>784
Edge			Stitched
Thickness		mm	0.19±0.04
Quantity		rolls / pallet	10

Basalt Woven Fabric Technical Data Sheet



Product storage and stability over time:

Basalt fabrics should be stored in the original package at the stock (indoor conditions). Rolls should be placed parallel to each other. Warranty storage period of basalt fabrics is 5 year since the date of production (in case the required conditions are ensured).

Packaging: Fabric rolls could be supplied on a wooden or plastic tube^{***} (tube diameter is 110 mm), the beginning of the fabric is fastened on a tube at the weft yarn. The length of the roll is not less than 200 m. The roll is packed into a special packaging cellular tape, with the identification label.

* - production of basalt fabric TBK-100 on KV-11/KV-41 sizing starts from volumes of 10-15 km² (please, check with us about the possibility of this product to be produced).

** - tensile testing with flat-jaw grips.

*** - please, check or specify before ordering.