

## 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), fabric with multi-compatible sizing (KV-11 - 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
<b>Basalt fiber</b>		
Density	g/cm <sup>3</sup>	2.67
Exploitation temperature range	°C	- 250 + 650°C
Coefficient of linear thermal extension	1/°C	35·10 <sup>-7</sup>
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
<b>Fabric</b>		
Weaving pattern		Plain
Weight	g/sqm	<b>190 ± 20</b>
Width	cm	100 ± 1
Count	Warp	F/10cm
	Weft	F/10cm
Tensile strength	Warp	N
	Weft	N
Edge		Stitched
Thickness	mm	0.19
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 2 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<sup>\*\*\*</sup> (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 250 m. The roll is packed into a special packaging cellular tape, with the identification label. On request the roll could be placed into a 122x30x32 cm box and fixed with a special cardboard spacers.

\* - production of basalt fabric TBK-100 on KV-11 sizing starts from volumes of 10-15 km<sup>2</sup> (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.