



**Kamenny Vek**  
ADVANCED BASALT FIBER

## Advanced basalt fibers for civil engineering

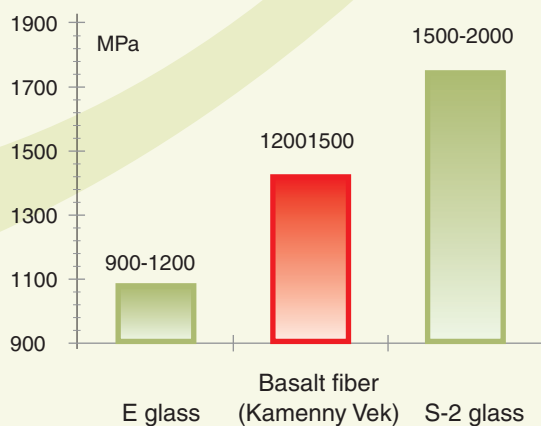
Kamenny Vek company offers a wide range of products for civil engineering. Product line includes chemical resistant chopped strand for concrete reinforcement, high strength roving for pultruded load bearing parts and concrete reinforcing bars, basalt woven fabrics for heat, sound insulation and fire protection, geogrids for road and land reinforcement, stucco nets for wall reinforcing and renovation.

### Buildings and bridges

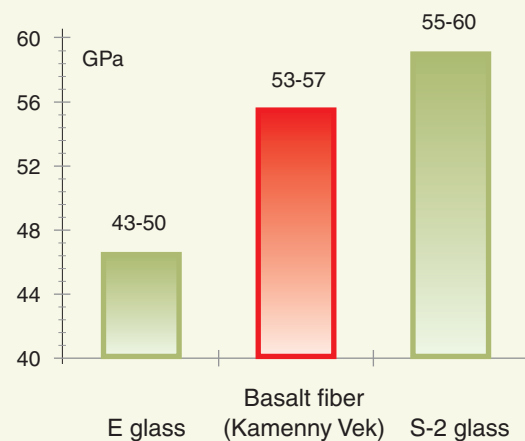
Kamenny Vek provides high strength basalt roving specially designed for pultrusion. This product has high tex and various sizing to meet your requirements. If your bridge beams are too heavy with E-glass or expensive with S-glass or carbon fiber reinforcement, if you need durable & inexpensive concrete rebars you can use our basalt fiber to produce stiffer and stronger product without increase of its price.

**Properties of pultruded rods based on epoxy resin (60-65% fiber vol.)**

**Tensile strength (ASTM D3039)**



**Tensile modulus (ASTM D3039)**



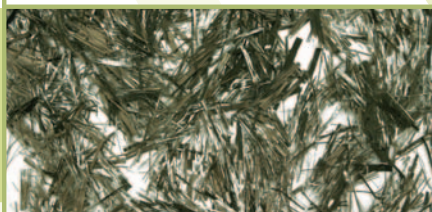
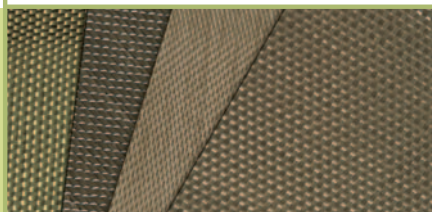
Our basalt chopped strand for concrete application is especially designed for cement based products reinforcement to provide outstanding performance in a wide range of applications. This basalt chopped strand is dressed with special sizing agent to provide good compatibility with different types of concretes and easy mixing even at high content.

Kamenny Vek can provide various types of yarns and woven fabrics for fire protection, thermal and sound insulation. Our advanced basalt fibers have higher sound insulation properties, 150°C more heat resistance than glass fibers.

Thermal properties	Basalt fiber (Kamenny Vek)	E glass
Application temperature, °C	-260 up to +600	-60 up to +460
Heat conductivity, W/(m.°K)	0.031-0.038	0.034-0.04

Advanced basalt stucco nets are ideally suited for renovation of old concrete structures and for reinforcing of outer coating of buildings.

## Pavement reinforcement



Basalt geonets and geogrids are designed for reinforcing road and highway overlays to prolong the pavement life span by reducing the effects of reflective cracking caused by traffic loading, age hardening and temperature cycling. Pavement life between maintenance can be prolonged significantly. Basalt reinforcing mesh make it possible to reduce thickness of asphalt concrete pavement up to 20%. Typical paving temperatures will not cause any loss of strength or distortion which may occur with synthetic material. Basalt fibers significantly outperform synthetic materials by their ability to withstand low temperatures that is extremely important for roads and highways in the north regions.