



Basalt

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Basalt fibres are melt-spun from igneous rock. Solid basalt has been used for years especially in architectural applications and as aggregate in concrete. Basalt fibre is now used as reinforcement in composites. It offers performance similar to glass fibre, and may in some circumstances be used as a lower-performance alternative to carbon fibre. First made in France, much further development was done in the USA, but the greatest impetus came from work in the old USSR. So most basalt fibre activity is found today in the old Soviet bloc.

Basalt fibres are extruded, much like glass. Basalt fibre laminates are claimed to be stronger than E-glass laminates – though they are weaker than carbon. Basalt is not used as widely as glass, but it has found many applications, including tripods and monopods for photography, snowboards, and concrete reinforcement rods.

As with glass, splicing basalt poses problems:

- Brittleness
- Heavy count (in some cases)
- Sizing
- Coarse filaments (in some cases)

Airbond research has solved the problem of brittleness, and the problem of heavy count (counts of greater than 10000 tex are commonly spliced).