CONCRETE EXCHANGE

PRODUCT DESCRIPTION:

Basalt fiber is a mineral fiber made from a one-stage process and from a single material, basalt rock. Basalt is the generic term for solidified volcanic lava.

The manufacture of basalt fiber requires heating clean crushed basalt to around 1500°C (2730°F). The molten rock is then extruded through small nozzles to produce continuous filaments of fiber.

Basalt Mesh is a reinforcement textile available in various mesh sizes. It is a biaxial mesh woven from multifilament strands of basalt fiber.

Basalt reinforcement is similar to carbon fiber and fiberglass technologies, having better properties than that of fiberglass, but being significantly cheaper than carbon fiber.

Here are some key benefits and superiority of basalt mesh over traditional reinforcements:

• Improved tensile strength
• Thermal stability
• Natural Product / Environmentally Friendly
• Flexible – easily contour angles or curves
• Corrosion Proof / Weatherproof
• Chemical resistant
• Alkali resistant
• Does not conduct electricity or induce electric fields
• Advanced heat and sound insulating properties
• Non-combustible
• Stronger than steel wire & 3 times lighter weight
• Will not rust or corrode – Steel reinforcement corrosion usually occupy a much larger volume than what used to be the un-corroded steel and result in bursting stresses that cause cracking & spalling of concrete.

Packaging:	Rolled Product – Packaging depends on quantity ordered.

Available Sizes:		
Product SKU:	**Roll Width:**	**Grid Opening:**
FIB-BA-SCRIM-10	1 Meter (39.37 in)	10mm x 10mm (.394 in x .394 in)
FIB-BA-SCRIM-25	1 Meter (39.37 in)	25mm x 25mm (.984 in x .984 in)
FIB-BA-SCRIM-50	1 Meter (39.37 in)	50mm x 50mm (1.97 in x 1.97 in)

** Length: All Sizes are Sold by 1 ft. Increments ******

Coating Compatibility:	
Type of Coating:	Styrene-acrylic latex
Coating Content:	10.4 (% wt)
Resin Compatibility:	Cement, Concrete, Premix Technologies, Shotcrete
Moisture Content:	< 0.1 (% wt)

Finished Mesh Properties:			
	10mm x 10mm FIB-BA-SCRIM-10	**25mm x 25mm** FIB-BA-SCRIM-25	**50mm x 50mm** FIB-BA-SCRIM-50
Total Weight / Area	110 grams / sq. meter	350 grams / sq. meter	370 grams / sq. meter
	3.85 oz. / sq. yard	10.26 oz. / sq. yard	10.85 oz. / sq. yard
Thickness	0.6 - 0.7 mm	0.8 - 0.9 mm	0.8 - 0.9 mm
	0.021 - 0.025 in.	0.031 - 0.035 in.	0.031 - 0.035 in.
Maximum Load - Warp	24,000 N/meter	80,780 N/meter	114,000 N/meter
	1,645 lb. force / ft.	5,536 lb. force / ft.	7,813 lb. force / ft.
Maximum Load - Weft	20,000 N/meter	78,900 N/meter	86,000 N/meter
	1,370 lb. force / ft.	5,407 lb. force / ft.	5,894 lb. force / ft.
Elongation at Break - Warp	6.67 %	6.67 %	6.67 %
Elongation at Break - Weft	3.53 %	3.53 %	3.53 %
Breaking Elongation - Warp	13.34 mm	13.34 mm	13.34 mm
	0.525 in	0.525 in	0.525 in
Breaking Elongation - Weft	7.07 mm	7.07 mm	7.07 mm
	0.278 in	0.278 in	0.278 in

Basalt Fiber Filament - Thermal Properties	
Max Application Temp	982°C (1800°F)
Sustained Operating Temp	820°C (1508°F)
Min Operating Temp	-260°C (-436°F)
Thermal Conductivity	0.031 – 0.038 W/m K
Melting Temp	1450°C (2642°F) ±150°C
Vitrification Conductivity	1050°C (1922°F)
Glow Loss	1.91 %
Thermal Expansion Coefficient	8.0° ppm/ °C