ARGC™

AR Glass Fiber Chopped Strand

AFZIR
Advanced Solutions
Strengthening Company

PRODUCT DESCRIPTION

Afzir alkali resistant glass fiber chopped strand (ARGC™) are used for the production of GRC products and also for renders, crack control in in-situ concrete by spray-up, glass fiber reinforced concrete premix, fiber-reinforced concrete, and other cementitious based products to improve the toughness of precast concrete and to reinforce lime-based plasters. Afzir AR Glassfibre is essential for GRC because of its resistance to the high alkalinity levels in cement. The fibres add strength and flexibility to the concrete resulting in a strong yet light-weight end product.

AR Glass Fiber Chopped Strand- ARGC™

PRODUCT FEATURES

- High-quality alkali-resistant glass fibre containing a high percentage of zirconia (ZrO_2)
- Makes highly durable GRC elements
- Suitable for both premix and spray
- Available in a variety of strand lengths and sizing to meet specific applications and processing requirements
- Improves mechanical performance of GRC elements
- Excellent workability characteristics
- Easy to handle
- Remains integral during mixing.
- Ease of incorporation even at high dosage.
- Abrasion resistant strand.

PRODUCT USES

- Preparation of pre-bagged mixes of repair and top screed mortars.
- In the manufacture of glass fiber reinforced concrete (GRC) composites by both premix and simultaneous spray methods.
- For strengthening and retrofitting of any concrete structure reinforced with GRC.

HOW TO USE
APPLICATION

SPRAYED GRC

In the manufacture of GRC by the spray process, simultaneous sprays of cement / sand mortar slurry and chopped AR glass fiber are deposited from a spray – head into or on a suitable mold. The spray head may be hand held or mounted on a machine. The recommended dosage in sprayed GRC is 5% by weight.

TECHNICAL DATA

	Total Weight (gsm)	Mesh Size (per inch^2)	Tensile Strength longitudinal/transverse (KN/m)
Fiber Diameter	65	1.5*1.5	27 / 27
Chop Length	100	3.54*4	49 / 44
Linear Density	130	2.95*2.95	59 / 59
ZrO2 Content	200	2.36*2.36	74 /74

PRI-MIXED GRC

All premix processes involve the blending together of the cement, sand, water, admixtures and chopped stands of AR fiber in a mixer prior to being formed. To produce a premix of the correct quality it is necessary to mix in two stages. The first stage is designed to produce high quality slurry to achieve the necessary workability and allow for the uniform incorporation of fiber. The second stage is the blending of fibers into the slurry. It is more convenient to carry out both stages in the same piece of equipment, but separate mixers can be used for each stage. The recommended dosage in premix GRC is 3% by weight.

STORAGE

AR fiberglass chopped strand should be stored dry in their original package until just prior to their use, the best conditions being at a temperature of between 15 and 35, and at a relative humidity of between 35 and 65%

FIRST AID

All components of FRP systems may cause skin irritation and sensitization. Use of chemical resistant gloves is recommended. Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty. Resins products can cause strong eye irritation. Avoiding eye contact and Using safety goggles is necessary.

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.

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