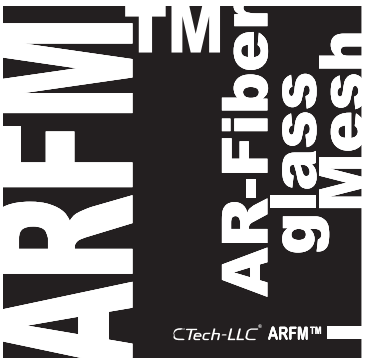
Technical Data Sheet
TDS-886-01421

ARFM™

Alkali-Resistant System's Mesh Fabric

Building & Transportation | Oil, Gas & Industrial | Offshore & Onshore | Water & Wastewater



PRODUCT DESCRIPTION

The CTech-LLC® alkali-resistant system's mesh fabric (**ARFM™**) is made from E-glass woven fabric as its basis mesh, and then should be coated by alkali-resistant agent. After surface treatment, ARFM™ fiberglass mesh has the features of resistance to aging and attack from breakdown, softness and flexibility. With strong elastic modulus and fracture strength, ARFM™ mesh is the ideal material that effectively reinforces cement concrete. The product is available in a range of weights that provide different levels of strength and impact resistance.

ADVANTAGES

- ARFM™ in alkali-resistant system has ability to resist the alkalinity of the base coats.
- Good dimensional stability, stiffness, smooth and not easy to shrinkage and deform, excellent positioning.
- Water resistance.
- Resistance to aging and attack from breakdown.
- Cable of meeting a variety of requirements.
- Low weight.
- Easy to apply.
- Providing impact resistance strength.

TYPICAL USES

CTech-LLC® ARFM™ is used for several structural and non-structural interventions, among them we can include:

- Exterior Insulation Finishing Systems (EIFS): ARFM™ is an integral part of the structure in EIFS. The fiberglass mesh has high strength, good cohesion, and can combine with polystyrene board (insulation board) to prevent the corrosion of alkaline materials in the construction materials. It can effectively prevent wall cracking and enhance resistance to pressure as an ideal reinforcing material.
- Waterproof Roofing: As the waterproof medium (bitumen) is weak itself. The waterproof system is easily cracked due to temperature changes, sunlight and wind. When ARFM™ is added to the system it can strengthen the ability to resist this influence because of its properties of high tensile strength and alkali resistance.
- Concrete Cement: ARFM™ is ideal to reinforce concrete cement because of its high strength, corrosion resistant, strong elastic modulus, fracture strength and balanced structure. Note that adding alkali-silica reactivity-inhibiting admixture to the concrete is required before ARFM™ application.

DESIGN

- Design calculations shall be made and sealed by a licensed, independent engineer knowledgeable with the design of FRCM strengthening systems.
- The purchaser should perform any tests deemed necessary to establish conformance to their requirements before purchase order. The purchaser would be responsible for any conflict between his / her requirements and

TECHNICAL DATA

	Unit	ARFM™110	ARFM™125	ARFM™145	ARFM™200
Total Weight	gsm	110	125	145	200
Mesh Size	per inch^2	6*4	2.5*2.5	5*5	3*3
Tensile Strength in Standard Condition warp/weft*	N/50 mm	1700 / 1600	2400 / 2400	2000 / 2000	3200 / 3200
Elongation in Standard Condition warp/weft*	%	4 / 4	3.5 / 3.5	3.8 /3.8	3.5 /3.5

* In accordance with the standard DIN EN ISO 13934-1
NOTE: ARFM™ is available in a variety of total weight and mesh size by customer order.

the product specifications.

INSTALLATION PROCEDURE

- Installation of CTech-LLC® fiberglass mesh should be performed by licensed and specially trained groups of installers. Before using ARFM™ or any our products, refer to alkali-resistant system's and related component's documents. This section outlines the procedure to install CTech-LLC® ARFM™ product**.**

PREPARATION OF SUBSTRATE

The surface needs to be clean and sound, free of any contamination, which may harmfully affect the adhesion of the coating. The surface must also be thoroughly cleaned from water puddles, prior to application. Old coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Any loose surface pieces and grinding dust need to be thoroughly removed.

APPLICATION

- Apply a coat of the desired base coat according to an appropriate Product Data Sheet's application procedures.
- Embed the ARFM™ fiberglass mesh into the wet base coat using a steel trowel, troweling from the center of the mesh to the edges. Avoid wrinkles in the mesh.
- Ensure that no fiberglass mesh is visible. Add base coat where needed.

Note: Overlap all mesh joints minimum 2.5" (64mm).

STORAGE & SHELF LIFE

Store product in a dry area with no exposure to moisture.

CAUTION

Proper personal protection equipment shall be worn at all times. Avoid contact with skin and eyes. Particulate masks, rubber gloves, safety glasses, and coverall suits are recommended.

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