

AR-GMESH™

Alkali-Resistant Fiberglass Mesh

AR-GMesh™ fiberglass mesh is a ready-to-use, thin, strong yet flexible alkali-resistant mesh used as part of WallMesh system and FRCM system. AR-GMesh™ fiberglass mesh can be cut to size with scissors or a razor knife, and has excellent compatibility with all types of plasters. The product is available in different weight and sizes that provides different levels of strength.

The WallMesh system is the newest type of wall posts, which has replaced conventional wall posts in order to stabilize building walls against earthquakes and wind.

The FRCM system can be used for structural strengthening of concrete, stone, brick and tuff masonry and a general improvement of the structure's strength and ductility.



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ADVANTAGES

- AR-GMesh™ fiberglass mesh has ability to resist the alkalinity of the base coats.
- High strength to thickness or weight ratio – Appreciable increase in strength and load carrying capacity without significant increase in dead load
- High dimensional stability
- Excellent tensile strength.
- Low weight.
- High durability and stability within the inorganic matrix.
- Easy to cut and fold to suit the shape of the substrate.
- Economical- Easy to install, time & labour saving.
- Available in different weight and sizes that provides different levels of strength.

THE WALL MESH SYSTEM IS MADE OF



Fiberglass Mesh



Cementitious / Gypsum
Plaster



Epoxy Adhesive



Galvanized Angle Bar



TYPICAL USES

AR-GMesh™ fiberglass mesh is part of WallMesh system to stabilize building walls against earthquakes and wind. WallMesh system has features that cannot be seen in conventional wall posts. Among these features, we can mention high execution speed, lower price, removal of bed joint reinforcement, removal of vertical and horizontal posts, high flexibility, good adhesion level and high tensile strength. For this reason, the wall mesh system has replaced the steel wall posts.

AR-GMesh™ fiberglass mesh is part of FRCM system. Fiber-reinforced cementitious matrix (FRCM) is a thin structural layer which combines specially designed plaster with carbon or glass fiber mesh reinforcement. It is an economical solution exceptionally suitable for repair and strengthening of concrete, masonry and historical structures.

INSTALLATION PROCEDURE

BUILDING THE WALL

In the first step, it is necessary to build the wall. As it is possible to implement WallMesh system on all walls type, the implementation of Hoplex block, brick wall, clay block or even cement block is unimpeded.

PREPARATION OF THE PLASTER

Add the ready mix plaster to the water and mix with a mechanical plaster mixer or low speed electric drill fitted with a suitable paddle for 3-4 minutes, until a uniform, lump-free consistency is achieved. Consult the plaster's technical datasheet for the recommended amount of added water.

APPLICATION OF THE FIRST LAYER OF PLASTER

Apply the first layer of prepared plaster in a single or two layers on the wall to achieve the desired thickness.

FIBERGLASS MESH INSTALLATION

After applying the first layer of plaster and while it is still wet, place AR-GMesh™ fiberglass mesh over the wall surface and press it down lightly with a flat trowel so that it adheres perfectly to the plaster.

APPLICATION OF THE SECOND LAYER OF PLASTER

After placing AR-GMesh™ fiberglass mesh on the wall surface, apply the second layer of prepared plaster in a single or two layers on the wall to achieve the desired thickness.

PREPARATION OF THE PLASTER

Epoxy compounds are usually supplied in two different containers. Before pouring the contents of component B into contents of component A, each part should be stirred separately to avoid deposit in container. Then part A and B should be mixed together depending

on the required quantity. Process of mixing should take 3-5 minutes with a low speed mixer.

ANGLE BAR INSTALLATION

After applying the second layer of plaster, install angle bar on the AR-GMesh™ fiberglass mesh by the use of ES-Adhesive™ epoxy structural adhesive.

TECHNICAL CHARACTERISTICS

MESH PROPERTIES	AR-GMESH™ 60	AR-GMESH™ 75	AR-GMESH™ 75	AR-GMESH™ 110	AR-GMESH™ 120	AR-GMESH™ 120	AR-GMESH™ 160
Total Weight	60 gsm	75 gsm	75 gsm	110 gsm	120 gsm	120 gsm	160 gsm
Mesh Size	4*4 mm*mm	4*4 mm*mm	5*5 mm*mm	5*5 mm*mm	5*5 mm*mm	10*10 mm*mm	5*5 mm*mm
Standard roll length	50-100 m	50-100 m	50-100 m	50-100 m	50-100 m	50-100 m	50-100 m
Standard roll width	10-200 cm	10-200 cm	10-200 cm	10-200 cm	10-200 cm	10-200 cm	10-200 cm

NOTE: mesh Fiber modulus of elasticity 70Gpa , **AR-GMESH™** is available in a variety of total weight and mesh size by customer order.

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