

# C-Plaster™

## Ready Mix Cementitious Plaster

C-Plaster™ is a ready mix, easy to use and strong cementitious plaster used as part of WallMesh system and FRCM system. C-Plaster™ ready mix cementitious plaster only requires addition of water before application to prepare the product for use, reducing the hassle of measuring and maintaining various individual elements to create a conventional plaster.

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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Structures



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### ADVANTAGES

- **High strength:** High compressive and tensile strength increases load bearing capacity.
- **Save times:** Huge time saving can be observed for plaster work and completion of project. There is no need to mix individual materials like cement and sand.
- **Easy application:** The material is premixed and only water has to be added on site. This makes the process of plastering much easier and quicker.
- **Minimum Cracks:** Shrinkage cracks are minimized as raw materials are tested and accurately mixed with specific particle size and quantity.
- **Premixed:** No site mix and lending of powder is required. Only water is to be added.

### THE WALL MESH SYSTEM IS MADE OF



Fiberglass Mesh



Cementitious / Gypsum  
Plaster



Epoxy Adhesive



Galvanizes Angle Bar



## TYPICAL USES

C-Plaster™ ready mix cementitious plaster 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.

C-Plaster™ ready mix cementitious plaster 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 Heplex block, brick wall, clay block or even cement block is unimpeded.

### *PREPARATION OF THE PLASTER*

Add C-Plaster™ ready mix cementitious 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. To prepare C-Plaster™ plaster, the plaster should be mixed with clean water in a weight ratio of 40 to 60 percent.

### *APPLICATION OF THE FIRST LAYER OF PLASTER*

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

### *FIBERGLASS MESH INSTALLATION*

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

## TECHNICAL CHARACTERISTICS

PLASTER PROPERTIES	C-Plaster™
Appearance	Powder
Powder Density	1700 – 2000 kg/m <sup>3</sup>
Compressive Strength	≥5 MPa
Compression Modulus	≥2 GPa
Flexural Strength	≥2.5 Mpa
Flexural Modulus	≥1 GPa
Tensile Strength	≥1.5 MPa
Tensile Modulus	≥0.5 GPa
Consumption	1.5–1.6 kg/m <sup>2</sup> per mm
Water / Plaster Mix Ratio (by weight)	40 -60 percentage
Pot Life	Approx. 1 hr
Max. Layer Thickness	15 mm
Final Setting Time	Approx. 24 – 48 hrs.
Shelf Life	12 months

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