

PRODUCT DESCRIPTION

CRMPTM cement plaster is a single-component powder product that, when combined with water, undergoes chemical reactions to form a flowable matrix suitable for application by trowelling. After application and a short period of time, $\mathsf{CRMP^{TM}}$ cement plaster hardens into a strong and durable material with properties such as high resistance to various types of forces such as tension, compression, bending, and lateral loads, high resistance to heat, long service life, high resistance to moisture and associated damage, excellent adhesion strength, physical stability, ease of installation, and high execution speed, among others. CRMPTM cement plaster is a highly versatile and effective stabilizing and coating material widely used in many construction processes, particularly in the application of mesh walls, FRCM systems, construction and coating of wall surfaces, interior and exterior ceilings, and others. It can perform well in any part of the building (interior and exterior) under any environmental conditions. Formulated with engineering precision, CRMPTM cement plaster is a strong and suitable alternative to other conventional and traditional building matrices. CRMPTM cement plaster is an ideal option for the coverage and stabilization of various surfaces in the construction industry. With its superior features, it can be used as a reliable and sustainable solution in various construction projects. This product, with its high performance, can effectively meet all the needs of FRCM and mesh wall systems at a lower cost compared to conventional methods.

PRODUCT FEATURES

- High flexural strength
- High compressive strength
- High tensile strength
- High resistance to various lateral forces
- Impact resistance
- Physical stability
- Long service life
- High hardness
- Suitable flexibility
- Excellent corrosion resistance
- Appropriate setting time
- Excellent adhesive strength
- Acceptance of various colors
- Excellent heat resistance
- Easy transportation
- Easy installation
- Cost-effective
- Minimal shrinkage due to drying

PRODUCT USES

- Various wall mesh types for non-structural wall mitigation.
- FRCM system for lateral force reinforcement of structural elements.
- Covering for ceilings, floors, concrete surfaces, and walls (brick, block, stone, etc.).
- Use in construction industry as mortar, adhesive, etc.
- Coating walls and ceilings to prevent water/moisture infiltration.
- Coating structures for corrosion prevention.
- Repairing and rehabilitating damaged surfaces.
- Creating fire-resistant coatings.



Cementitious Ready-Mix Plaster - CRMP™

- Application in tunnel/bridge construction.
- Application in dam/retaining wall construction and repair.
- Coating interior/exterior facades of buildings.

TECHNICAL DATA

Physical Form	powder
Colour	grey
Density of wet mortar	1900 kg/m³
Water powder Ratio	0.21 - 0.23
Application temperature	+5°C to 35°C
workability time of wet mortar	approx. 60 mins
Minimum applicable thickness	10 (mm)
Maximum applicable thickness per layer	20 (mm)
Compressive strength after 28 days	≥ 5 (N/mm²)
Adhesion to substrate	≥ 0.8 (N/mm²)

HOW TO USE

Cement plaster is one of the most commonly used matrices in construction, and is applied similarly in most applications. The use of CRMPTM cement plaster in stabilizing and restraining non-structural walls with wall mesh or in strengthening with the use of FRCM system is described below.

SURFACE PREPERATION

In every usage of CRMPTM cement plaster, the surface of the wall or other desired surfaces must be prepared first, so that the surface is free from any contaminations such as grease, paint, loose particles, dust, etc., by using tools such as hammer, grinder, wire brush, etc. Additionally, if there are any holes or cracks on the surface, they should be filled with suitable materials. The prepared surface must be moistened before applying the cement plaster.

FRP MESH INSTALLATION

After surface preparation, in applications such as wall mesh or FRCM system, before applying CRMPTM cement plaster, it is necessary to temporarily install reinforcing frp mesh such as fiberglass mesh or carbon fiber mesh using spike wall mesh. Please note that in such applications, if fiberglass mesh is used, it must be AR or alkali-resistant due to the corrosive and alkaline environment of the cement matrix.





MIXING

CRMPTM cementitious plaster must be prepared prior to use. To prepare the CRMPTM cementitious plaster, preprepared dry powdered content should be combined with clean water (potable water) in a weight ratio of 21 to 23 percent, using a low-speed mixer for 3 to 5 minutes. Once a homogeneous mixture is achieved, the cementitious plaster is ready for use. It should be noted that the prepared CRMPTM plaster has a usage time of only 60 minutes. Therefore, considering the usage time, it should be prepared in an appropriate amount for consumption.

APPLICATION

After the CRMPTM cementitious plaster is prepared for use, it can be applied to walls or other desired surfaces using manual techniques such as troweling or the shotcrete method. In applications such as wall mesh installation or strengthening with FRCM system, the CRMPTM cementitious plaster should be uniformly distributed to the required thickness to bury the FRP mesh. In any case, it is recommended to apply the cementitious plaster with a minimum thickness of 5 and a maximum of 15 millimeters per pass. This process can be continued up to a layer of 30 millimeters of the cementitious plaster.

Note: After finishing the cementing process with CRMPTM cementitious plaster, the surface should be left to dry or reach final setting for at least 24 to 48 hours. Once dried, the surface can be put into operation. Therefore, the irregularities present on the surface covered with cementitious plaster can be smoothed out and polished to prepare it for subsequent processes or operations.

STORAGE

To ensure proper storage of CRMPTM cementitious plaster, it is recommended to keep it in a covered, dry, and cool environment with a temperature that ranges between 5 to 30 degrees Celsius and a relative humidity level of less than 75%. It is crucial to protect the CRMPTM cementitious plaster from any contact with water or moisture and store it in its original packaging. If the bag of plaster is already open, it should be resealed in an airtight container to prevent the entry of air and moisture effectively. Additionally, it is advisable to stack the bags of CRMPTM cementitious plaster at a distance from the ground and walls of the storage area.

CLEANUP

Clean all tools and application equipment with water immediately after use. Hardened and/or hardened material can only be removed mechanically.

FIRST AID

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

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