

KingPlast[®] C400

Single component, high strength pre-mixed cementitious colored textured plaster.

DESCRIPTION

KingPlast C400 is a polymer modified, ready to use cementitious colored textured plaster. KingPlast C400 is composed of a blend of cement, sand, pigments, dry powder aggregates, selected polymers and fibers which when mixed with water produces a thixotropic mortar suitable for plastering on vertical and overhead surfaces.

APPLICATIONS

Plastering of concrete and blocks surfaces internally and externally.

ADVANTAGES

- ☐ Shrinkage controlled polymer modified cementitious plaster.
- ☐ Easy to apply, single component, requires only addition of water.
- ☐ Extremely low permeability to water, providing excellent protection to steel reinforcements and host concrete.
- ☐ Thixotropic properties allowing extra high build, for use in vertical and overhead applications.
- ☐ Suitable for internal and external application.
- ☐ Available in wide range of colors.
- ☐ Can be applied either by trowelling or spray methods.

STANDARDS

KingPlast C400 complies with ASTM C150, Type 1, ASTM C897 and application standard ASTM C926.

METHOD OF USE

Substrate Preparation

Substrate must be wet, clean and free from oil, grease, dust and laitance.

Priming

Normally no primer is required for the application of KingPlast C400, however, areas to be plastered should be soaked with clean water before applying the plaster.

Where increased bonding is required, or where plastering is to be applied on smooth face surfaces. Two priming methods are recommended:

TECHNICAL PROPERTIES

Colour:	Different range of colors
Fresh wet density:	1.8 ± 0.1 gm/ cm ³
Maximum aggregate size:	4 mm

- ☐ Using a polymer based primer such as Proprime CP110 and to apply the plaster while the primer is still tacky (20 - 40 minutes depending on ambient temperature).
- ☐ Using a dash slurry coat like KingPlast C100 which will enhance dramatically the bond of plaster with the smooth substrate soaking with water is needed before applying the plaster. For more information of the dash slurry coat, KINGKRETE Technical Department can be consulted or check the Technical Data Sheet for KingPlast C100.

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

4.8 - 5.2 liters of clean water should be added to clean container. The powder is then added slowly to the water while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued until uniform consistency is obtained.

PLACING AND FINISHING

The suitable thickness of application is between 6 - 25 mm. If higher thickness is required another layer should be applied after the first layer has initially set (6 - 12 hours) using wet on wet technique.

KingPlast C400 is applied by trowel. The mixed mortar should be applied using firm pressure to fully compact the mortar and ensure good adhesion to the substrate. Finishing and levelling should be carried out by metal ruler or steel float.

If textured finish is needed, the applied layer can be scratched using suitable metal brush within the initial setting time. Then the scratched surface can be cleaned using soft brush.

Smooth plastering plane is used for the interior edges of the walls. And galvanized metal angles are used in the wall angles.

KingPlast® C400

SPRAYING APPLICATION

- ☐ Substrate must be clean and free from oil, grease, dust and laitance.
- ☐ Soaking/wetting the surface is required immediately before the application of KingPlast C400.
- ☐ The application thickness is between 6 - 25 mm in a single coat.
- ☐ After spraying, smoothen the surface using a straight edge tool.
- ☐ Quantity of water is dependable on the final consistency required by spray equipment (flow of 350 liters/ hour is a suitable average to start with).

CURING

As KingPlast C400 is a cementitious based material, it should be cured in a similar manner to cement base materials. Soak the applied surfaces with water 2 - 3 times a day after setting. For colored decorative finish, soaking with clean water must be done uniformly to all the applied area. Then it is recommended to use a water repellent material like KingCoat L. This procedure is important to prevent the efflorescence effect.

CLEANING

All tools should be cleaned immediately after application using fresh water. Hardened materials must be cleaned mechanically.

PACKAGING

KingPlast C400 is available in 25 kg bags.

YIELD

Approximately 15 - 16 liters/ bag.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

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