

Carmelo Structural Mortar Mix

PRODUCT DESCRIPTION

Carmelo Structural Mortar Mix is a single component Portland cement based plaster containing admixtures for added bonding strength. Depending upon application, **Carmelo Structural Mortar Mix** may be sprayed or hand-troweled. It incorporates fly ash as a mineral admixture making it easy to convey, place, and finish. Contained in 50 lb bags, **Carmelo Structural Mortar Mix** is simple to use requiring only jobsite addition of potable water.

The following are different textures and application techniques that are possible with **Carmelo Structural Mortar Mix**.

- Smooth Finish
- Rough Coarse finish
- Irregular patterns
- Artistic and decorative patterns
- Stone texture

YIELD – An 50 lb bag will approximately yield 0.45 ft³ of material. Coverage will be approximately 22 ft² at 1/4"

PHYSICAL/CHEMICAL PROPERTIES

Carmelo Structural Mortar Mix is a Portland cement based mortar. Typical compressive strength results obtained with **Carmelo Structural Mortar Mix**, when tested in accordance with ASTM C109, are as follows: 2,200 psi (15.1 MPa) at 7 days, 3,000 psi (20.6 MPa) at 28 days.

ADVANTAGES:

- High compressive and bond strengths are achieved at a normal set time; with strength gains through 56 days.
- The use of fly ash as a mineral admixture lowers the heat of hydration reducing shrinkage cracks.
- Excellent bond to concrete and other construction material substrates. Lowered rebound if used as shotcrete — notable savings in material and labor to remove rebound from jobsite. Excellent finishing characteristics.
- Better adherence to the substrate
- Environmentally friendly
- High workability

HAND MIXING INSTRUCTIONS

- Empty mortar bags into a suitable mixing container
- Add approximately 1 gallon of water for each 50 lb bag of **Carmelo Structural Mortar Mix** to be mixed
- Work the mix with the necessary tools and add additional water as needed until achieving the desired consistency
- Make sure all the material is wet before proceeding with the application

APPLICATION

Carmelo Structural Mortar Mix can be applied with any standard mason tool.

- Apply a minimum 1/4" thickness of **Carmelo Structural Mortar Mix** by spray or trowel and smooth. Surface textures can be achieved with a brush or trowel
- Any desired texture of finish must be achieved while the mix is still plastic and workable
- Avoid overlapping fresh plaster over previously dried areas as this will result in color variations

TECHNICAL DATA

(before mixing)

Physical State: Powder

Color: Gray, Beige

Shelf Life: 1 year in original bag, in dry, covered place.

(after mixing)

Mixing Ratio: 4 qts of water for each 50 lbs bag.

Density: 138 lbs/ft³

Compressive Strength (ASTM C109):

1 day: >500 psi (3.4 MPa)

7 days: >2,100 psi (14.5 MPa)

28 days: >3,000 psi (20.6 MPa)

Approximate Coverage per Thickness for a 50 lbs bag

1/4" (6,3 mm) 22 sq. ft (1,9 m²)

1/2" (12,7 mm) 11 sq. ft (0,93 m²)

APPLICATION

Application of **Carmelo Structural Mortar Mix** can be made more efficient and easier by using Mortar Mixing pumps (contact Carmelo Technical Service for recommendations)