

Structural Mortar Mix

High Strength Mortar (4000 psi)

PRODUCT DESCRIPTION

Structural Mortar Mix is a single component Portland cement based plaster containing additives and reinforced with fiber for a superior bonding strength. Depending upon application, Structural Mortar Mix may be sprayed or hand-troweled. The product is less permeable and easy to place and finish. Packaged in 50 lb bags, Structural Mortar Mix is simple to use, requiring only addition of water at the jobsite.

PHYSICAL PROPERTIES

Structural Mortar Mix has a high degree of adhesion, shear and compression strength which ensures correct bonding of patched areas with existing structures. The durability of structural reinforcements obtained with Structural Mortar Mix is enhanced by the product's high levels of resistance to sulfate attack and chloride ingress.

YIELD

A 50 lb bag will yield approximately 0.45 ft³ of mixed material. Coverage will be approximately 20 ft² at 1/4" thickness.

ADVANTAGES

- High compressive and bond strengths are achieved at a normal set time; with strength gains through 56 days.
- Low heat of hydration reduces the risk of shrinkage/thermal cracking.
- Excellent bond to concrete and other construction material substrates. Lowered rebound if used as shotcrete; notable savings in material and labor on jobsite.
- Excellent finishing characteristics.
- Better adherence to the substrate.
- Environmentally friendly.
- Improved workability.
- Environmentally friendly — Contain local regional materials.

MACHINE MIXING INSTRUCTIONS

The mixture is obtained by adding water into a clean container and then gradually adding the powder. Add approximately 1 gallon of water for each 50 lb bag of Structural Mortar Mix to be used. If the mortar becomes too difficult to mix, add additional water until the desired consistency is achieved. The mixing process can be performed in a cement mixer or in a bucket (working manually or with a mechanical agitator) or using a continuous mixer until homogeneous, lump-free mortar is obtained. It is also possible to use a plaster sprayer to mix and simultaneously pump the mortar, using a rotor/stator system suitable for the granulometric grading of the mixture.

HAND MIXING INSTRUCTIONS

In a suitable mixing container add approximately 1 gallon of water for each 50 lb bag used, and then empty the Structural Mortar Mix

bag. Work the mix with the necessary tools, and add additional water as needed until the desired consistency is achieved. Make sure all the material is adequately wet before proceeding with the application.

APPLICATION

Structural Mortar Mix must be applied with a trowel or by spraying, with subsequent passes, until the required thickness has been obtained. All cavities must be filled, the reinforcement rods must be carefully surrounded with the patching material and the mortar must be made compact, exercising adequate pressure during application. Finish off the mortar as it begins to set, using the appropriate floating equipment (rigid float, sponge spreader, smooth spreader). Structural Mortar Mix must be applied after having moistened the substrate to saturation point.

CURING

Provide sufficient moisture to permit continuous hydration of the cementing materials and to minimize cracking. The effectiveness of the curing procedure will depend on climate and job conditions. Do not apply when temperature is forecast to be above 100 degrees F (38 degrees C) without taking the required hot weather precautions.

TECHNICAL DATA

Physical State	Powder
Color	Gray, Beige
Shelf Life	1 year in original bag, in dry place.
Mixing Ratio	3.78 L (1 gal) of water for each 50 lbs bag
Density	130 lbs/ft ³

Compressive Strength - **ASTM C-109:**

28 days 4000 psi (27.6 MPa)

Approximate Coverage per Thickness for a 50 lbs bag:

1/4" (6,3 mm) 20-22 sq. ft (1,9-2,0 m²)



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