PLASTERMAX™

Description

PlasterMax™ is a revolutionary abuse resistant interior plaster coating. Its high strength provides the ultimate tough, fire rated finish specifically designed for the insulated concrete form (ICF) industry**.** The standard thin application utilizes fiberglass mesh and is directly applied over properly prepared EPS. **PlasterMax™** provides twice the resistance to abrasion than a standard CMU block and is can achieve smooth or textured finishes. **PlasterMax™** conforms to ASTM E136, ASTM E84, ASTM G21 and NFPA 286.

Jobsite Considerations

Temperature

PlasterMax™ shall be applied in ambient room temperatures between 55°F and 85°F (13°C - 30°C) with a minimum wall surface temperature above 50°F (10°C).

Humidity

Relative humidity shall not drop below 35% during the **PlasterMax™ PIF** installation or during its initial 48 hour cure.

Air Movement

Air movement can assist in maintaining good drying conditions in high humidity environments. Avoid direct air movement across the **PlasterMax™** surface as it may prematurely dry the **PlasterMax™** surface and promote surface cracking.

Direct Sunlight

Shade the **PlasterMax™** from direct sunlight during the installation and its initial 48 hour cure.

Moisture

Ensure that the application substrate is free of surface moisture prior to the **PlasterMax™** application and that the source of the moisture is properly addressed. **PlasterMax™** shall not be moistened during the application or during the initial cure period.

ACCESSORIES

Control Joints

Control joints are necessary to compensate for potential structural movement, thermal and humidity expansion/contraction and provide installation stop and start points. It is recommended that joints are placed at intervals not exceeding 30'. Plastic 093V by Trim-Tex or 093 zinc joints typically used in the wallboard industry are installed by hot knifing or cutting a groove into the EPS allowing the joint flanges to rest flush with the surface. They may be fastened through the flange with 2" roofing nails or by adhering with low expansion urethane foam adhesive. Plastic "V" joints are preferred as it is easier to maintain the target installation depth along a temporary tear away strip that runs along each side of the center groove.

Casing Bead

Casing beads are necessary to isolate **PlasterMax™** from dissimilar building materials such as door frames, window frames, ceilings, floors and walls. Plastic Flat Tear Away by Trim-Tex (or similar) is preferred as it is flush mounted to the EPS and provides a temporary removable strip to trowel against. Fastening may be done with 2" roofing nails or low expansion urethane foam adhesive.

Outside Corner Bead

Outside corner beads are optional but recommended. Wide flange metallic or plastic bead may be used. Corner bead is fastened to the EPS with low expansion urethane foam adhesive or with 2" roofing nails.

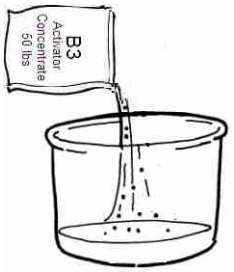
PlasterMax™ Mixing Guide

PlasterMax™ Package

Material Bag

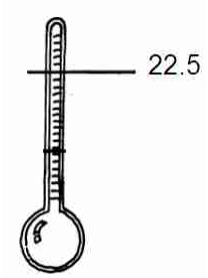
Activator

Mixing PlasterMax™



1. Empty the **50 pounds of B3 Activator Concentrate** into a plastic barrel capable of holding at least 15 gallons. A clean trash barrel will work fine.

2. Add **8 gallons 16 fluid ounces** of cool water and stir to fully dissolve all solids. Allow the activator solution to rest 8 hours– preferably overnight. Cover the barrel to prevent evaporation and to keep out possible contaminates. Store in cool area and prevent the B3 solution from exceeding 70°F.



3. B3 Activator and water creates a solution much denser than water. The target density is **22.5° Baume or a specific gravity of 1.18**. Using an appropriate hydrometer, check the B3 solution for actual density and adjust accordingly. Higher density will require adding water and lower density will require more concentrate. Consult a GigaCrete representative with questions.

4. Pour approximately **7 quarts of B3 Activator** into a 10 gallon mixing bucket.

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5. Add the entire contents of the PlasterMax™ bag and mix to a lump free consistency. Mix time is 3+ minutes. Add additional B3 Activator solution if needed.

- Mix using B3 solution only. **DO NOT MIX WITH PLAIN WATER**.
- Ensure all B3 concentrate has fully dissolved
- B3 solution greater than 70°F will greatly reduce material pot life.
- B3 Solution must be allowed to “age” before use. **Immediate use is not recommended**
- Ensure B3 is at the correct liquid density before using

INSTALLATION

Direct Application to EPS

Preparation

Rasping is necessary to remove potential bond breakers and to ensure good adhesion. Survey the substrate for irregularities that may adversely affect the application such as minor protrusions and voids.

Mechanical chase voids cut into the EPS need to be filled prior to the **PlasterMax™** installation. Low expansion spray foam is applied into the void, allowed to cure and shaved flat with the surface. Wind-Lock's Foam2Foam is recommended for this purpose.

Fiberglass Mesh

4.5 ounce (minimum) fiberglass mesh typically used in the EIFS industry is a critical part of the **PlasterMax™** application. A 1/16" coat of **PlasterMax™** is applied to the EPS and worked flat. Pre cut the mesh and embed into the first coat working material through while ensuring that the mesh is flat and free of wrinkles. Overlap adjoining mesh by a minimum of 2". A second coat of **PlasterMax™** is immediately applied over the mesh to the specified thickness.

Spraying

PlasterMax™ may be applied by hawk and trowel but spray application is recommended for best results. Spray in a fashion that allows the trowel person to stay in close proximity to the sprayer and allows a continuous wet edge. Working wall areas in sections from top to bottom works best.

Hawk & Trowel

PlasterMax™ is hand applied like most conventional plaster material.

Trowel Timing

Dry and set times depend on material viscosity, temperature and humidity. Generally, the first trowel pass is approximately 20 minutes after the initial application and in 20 minute intervals for subsequent trowel passes. Troweling from top to bottom each time helps to keep a good wall profile.

FINISHES AND TEXTURES

Smooth

Obtaining a smooth finish is easy when good installation practices are adhered to. **PlasterMax™** has good trowel ability but differs from conventional plasters

where no surface water is used to aid the trowel pass. Additionally, over troweling at any one time may result in material drag and surface blistering. A dense, smooth finish for paint specified walls may be realized in few trowel passes-at times only one pass is necessary.

Decorative

When **PlasterMax™** is specified as the wall finish (exposed not painted) then additional trowel passes are necessary beyond the acceptably smooth stage. Make passes from top to bottom at 15-20 minute intervals using the usual trowel pressure until the surface begins to mottle and shine. Extra pressure is not necessary as the material will begin to polish regardless. Surface blackening becomes more pronounced with each additional pass. Subtle mottling is generally more desirable so use caution not to over trowel.

Texture

Spray textures such as orange peel, splatter and splatter knockdown are also possible. Texturing is performed during the second coat application.

Stamp texturing is easily achieved with a 9" urethane texture roller. Liquid or "bubble gum" release agent is lightly sprayed on the PlasterMax surface and on the roller. A wide variety of textures are possible with this method.

Delivery Equipment

Hopper Gun

Hopper texture guns may be used to apply **PlasterMax™**. Hopper guns are typically used on smaller volume projects and for producing textures. Air pressure, air flow, material viscosity and orifice size depend upon the application intention.

Peristaltic Pump

Portable Peristaltic pumps or "Squeeze Pumps" offer automation to the installation and greatly increase application efficiency. **PlasterMax™** never interfaces with pumping parts reducing the set up and wash out time and minimizes required maintenance. Peristaltic pumps deliver material safely and effectively.

Rotor Stator Pump

Portable progressive cavity or rotor stator pumps offer the similar versatility and performance as peristaltic pumps and may be used to deliver **PlasterMax™.** However**,** more attention is required with respect to maintenance, set up and clean out time

Spray Specifications

Nozzle	Material Orifice	Air Orifice	CFM	Max Hose Length
Blow cap	¼"	1/8"	4	50'

*Note: use a "dash" or fine spray pole assembly when spray applying **PlasterMax™***

Surface Protection and Decoration

Paint

Wall paint is most commonly used to seal, protect, and provide a consistent decorative finish to cured **PlasterMax™**. Breathable latex primers and paint typically used for conventional veneer plasters are recommended after a minimum 7 day cure period. In cooler and/or more humid environments additional cure time may be needed before painting. Consult with the paint manufacturer for recommendations.

GENERAL

Clean Up

All mixing and finishing equipment must be thoroughly washed immediately after use. Potable water is sufficient for cleaning.

Curing

Ensure that **PlasterMax™** is allowed to cure in temperatures within the application temperature and humidity ranges.

Coverage

Each 75 lb. (34 kg) of **PlasterMax™** covers approximately 45 sq. ft. at an approximate thickness of 3/16 in.

Storage

PlasterMax™ bags should be stored in a secure, indoor and dry space. It is important that bags maintain their seal and are free of puncture or tear. **PlasterMax™** should be brought to room temperature 24 hours prior to being mixed and applied.

Shelf Life

When properly stored in original sealed packaging, **PlasterMax™** has a shelf life of one year from the date of manufacture.

Tech Support Contact GigaCrete, Inc. at (702) 643-6363 (PST) or (508) 294-8249 (EST)

Warning! Keep out of reach of children.