Technical Services Information Bureau

PLASTER TEXTURES & ACRYLIC FINISHES



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Depicted in this book are specimens of plaster textures which are in most common use today. The term "plaster" is used generally to describe material prepared with either Portland cement or gypsum. The term "stucco" used herein describes a factory-prepared, integrally colored finish which over the years has come to be used to describe all colored Portland cement finishes.

Each of the pictures shown herein was photographed from the same distance of approximately four feet and depicts a one-square-foot panel. Plaster prepared in a plastic state may create a great variety of design configurations or texture patterns. Note: weather will affect color and/or texture.

Plaster is the most commonly used exterior cladding the Southwest. Since it lasts the life of the building, redecoration is necessary only when a change in color and/or texture is desired. Nevertheless, stucco is one of the most economical materials a designer can specify. Marblecrete, for example, produces a highly attractive surface at a fraction of what exposed aggregate concrete costs. The architect is limited only by his or her imagination in choice of texture treatments.

Designers, builders and contractors can pick from a wide variety of textures in this catalog. It is recommended that the contractor prepare samples before construction to assure that all parties agree on the finish to be produced. Color selection should be made at the time specifications are written. Special colors not included in the manufacturer's current color chart usually require an additional charge. Deeper colors call for additional pigment and are therefore priced higher and can also affect the texture.

The textures illustrated are not intended to show the whole range of possibilities. These are only the most commonly used. Identifying names are those by which the texture is commonly referred to in the trade. It should be noted that a designer, contractor or journeyman may have differing concepts of such terms as Spanish, Monterey or English. Suggested application procedures are included as general, abbreviated guidelines to the production of each texture. The textures shown can be used on either exterior or interiors. Interior plaster is formulated with gypsum rather than Portland cement. Generally speaking, heavier textures with deeper relief are used on the outside.

Mill-mixed colored stucco is produced under controlled conditions in modern plants to insure uniformity from batch to batch.

The textures depicted in this catalog can be achieved using field mixed or proprietary packaged stucco mixes. For best results, specify ASTM C926 for application of Portland cement-based plaster over plaster reinforcing conforming to ASTM C1063.

Please Note: the suggested application procedures under each texture are just that, <u>suggested</u>. TSIB understands that a knowledgeable and experienced contractor will have his own means and methods to ultimately achieve the specified finish or texture.

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Portland Cement "Stucco" Textures









Fine Sand Float

SUGGESTED APPLICATION PROCEDURES:

- Apply a first coat and double back with a second application. Plaster mix is to be formulated with a blend of a 20/30 aggregate.
- Using circular motion, rub surface with float to achieve uniform pattern, bringing sand particles to surface. An absolute minimum of water should be used in floating.

Medium Sand Float

- Apply a first coat and double back with a second application. Plaster mix is to be formulated with a blend of a 16/20 aggregate.
- Using circular motion, rub surface with float to achieve uniform pattern, bringing sand particles to surface. An absolute minimum of water should be used in floating.

Heavy Sand Float

1. Apply a first coat and double back with a second application. Plaster mix is to be formulated with coarse aggregate or relatively coarse blend.

2. Using circular motion, rub surface with float to achieve uniform pattern, bringing sand particles to surface. An absolute minimum of water should be used in floating.

Light Dash SUGGESTED APPLICATION PROCEDURES:

color coverage.

- 1. Apply a first coat to produce complete
- 2. Apply a second dash coat for texture depth and uniformity when first coat is dry, using a plaster mix of thinner consistency.
- 3. Use proportionately more atomizing air at the gun nozzle.



Medium Dash

- 1. Apply a first coat to produce complete color coverage.
- Apply a second dash coat for texture depth and uniformity when first coat is dry.
- 3. Use a medium amount of atomizing air at the gun nozzle.







Heavy Dash SUGGESTED APPLICATION PROCEDURES:

color coverage.

- 1. Apply a first coat to produce complete
- 2. Apply a second dash coat for texture depth and uniformity when first coat is dry, mortar to be of relatively stiff consistency.
- 3. Use relatively less atomizing air at the gun nozzle and lower water ratio of the plaster.

Tunnel Dash

SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to produce complete color coverage.
- 2. When surface moisture leaves, or on second day, apply a second heavy coat.
- 3. Use low atomizing air and reduce water ratio of the plaster.



Knockdown Dash

- 1. Apply a first coat in thin consistency to produce complete color coverage.
- 2. Apply a coarse second dash coat for texture depth and uniformity, allowing some of the first coat to show through.
- 3. Trowel lightly after moisture surface leaves.

Smooth

SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- 2. Apply a second coat and steel trowel to a smooth finish.

Note: An accelerator can be used in the first coat. Smooth finishes are subject to moderate cracking. Also, "burn" lines and color mottling can be expected. TSIB recommends further decorating of this finish with an approved coating.



Santa Barbara

SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- Apply a second coat and steel trowel to a smooth finish, leaving minor tool marks and "open" areas.

Note: An accelerator can be used in the first coat. Smooth finishes are subject to moderate cracking. Also, "burn" lines and color mottling can be expected. TSIB recommends further decorating of this finish with an approved coating.





Cat Faces SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- Apply a second coat and steel trowel to a smooth finish leaving the first coat exposed in the design specified.

Note: An accelerator can be used in the first coat. Smooth finishes are subject to moderate cracking. Also, "burn" lines and color mottling can be expected. TSIB recommends further decorating of this finish with an approved coating.



Light Lace SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- When surface moisture leaves, trowel apply light second coat in random directions.
- 3. Knock down surfaces lightly with trowel.

Heavy Lace SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- 2. When surface moisture leaves, hand apply second coat in random directions.



California

- 1. Apply a first coat to completely cover base.
- 2. Apply a thin texture coat with trowel in a random pattern, overlapping strokes.
- 3. Flatten high areas with trowel.





Spanish SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat, leaving relatively smooth.
- 2. Apply second coat in a random texture, using overlapping strokes.



Monterey SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat, leaving relatively smooth.
- 2. Apply second coat in a random texture, using overlapping strokes.

Arizona SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a heavy texture coat.
- 2. After surface moisture is absorbed, apply heavy second coat, leaving it rough under the trowel with small area texture pats.



- 1. Apply a first coat using double-back method, and rake with a coarse brush or broom.
- 2. Splatter dash sparingly with dash broom, using mortar of fairly stiff consistency to partially cover the surface.
- 3. After moisture leaves surface, trowel down high spots, retaining general pattern of dash texture.





English SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- 2. Using a rounded trowel, apply a thick texture coat with short strokes in varying directions, leaving a rough, irregular pattern.
- 3. After moisture leaves surface, trowel down high spots, retaining general pattern.



- Apply a finish coat approximately 1/4["] thick and allow to take up until surface moisture leaves.
- Scrape vertically with a steel joint rod or trowel held at right angles to the plane of the wall. Remove sufficient material to leave a torn surface, free from smooth spots and joinings.

Trowel Sweep SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- 2. Apply a second coat with fan-shaped strokes, lapping each other so as to form narrow, high ridges where mortar flows over the toe of the trowel.



- 1. Apply a first coat and broom lightly in varying directions, using a sweeping motion.
- Using a trowel, apply a texture coat in strips approximately 2" x 6" forming a more or less rectangular pattern.
- 3. Trowel surface lightly.





Briar SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- 2. Apply a texture coat, holding trowel at angle to surface. With heel of the trowel serving as a pivot point, produce fan-like ridges in radiating pattern.
- 3. Flatten higher areas with trowel.



Combed

SUGGESTED APPLICATION PROCEDURES:

- Apply a finish coat in sufficient thickness to accommodate depth of grooves without exposing base (brown) coat.
- 2. Rod and darby, leaving surface reasonably straight and true.
- Using a strip as a guide, comb surface vertically (or horizontally) with a template, formed to achieve pattern detailed on drawings.

Note: Special mix required.

Rock 'n' Roll

SUGGESTED APPLICATION PROCEDURES:

- 1. Apply a first coat to completely cover base.
- 2. Apply a second coat of a specially prepared finish plaster containing selected sized pebbles to achieve desired texture.
- 3. The action of the trowel or float rolls the pebbles to create miniature troughs in a linear or circular pattern.



Glacier

- 1. Apply a first coat to completely cover base.
- 2. Float the surface to raise the aggregate.
- 3. Apply a light texture coat over the floated surface.





Marblecrete SUGGESTED APPLICATION PROCEDURES:

- 1. Apply bedding coat to proper thickness.
- 2. Straighten with rod and darby, leaving surface reasonably smooth.
- 3. Apply aggregate to bedding coat.
- 4. After material takes a set, tamp in aggregate to embed into cement.

Note: This finish should only be performed by one qualified applicator for any one project.

Simulated Timber

- 1. Spread finish coat plaster to desired panel texture.
- Lay on a narrow band approximately
 6" to 8" wide of same material in pattern of half-timber.
- 3. Cut shallow groove on each side of simulated timber.
- 4. Lightly trowel face of simulated timber to relatively smooth surface.
- 5. If peg marks are desired, lightly press large screw head near ends of simulated timber.

"Wet" Grooved Plaster

SUGGESTED APPLICATION PROCEDURES:

- 1. Apply finish coat $1/4^{"}$ to $3/8^{"}$ thick over the damp base.
- 2. Rod and darby.
- Layout the design as shown on drawings. To simulate joints, stamp in lines with a joint rod or rake out with a raking tool.
- 4. Water trowel smooth, retaining indentations.



Brick

- 1. Apply a first coat of mortar-colored joint material.
- 2. Apply a second coat of brick colored stucco material.
- Comb or broom the surface with a coarse fiber brush or broom to achieve desired grain. A light troweled texture may also be applied.
- 4. Using a brick template or straight-edge, rake joints to depth required to expose mortar joint material.



Acrylic Finishes



Acrylic finishes are a blend of 100% acrylic co-polymers, an aggregate either composed of marble or quartz, liquid pigments and other proprietary ingredients. This "high performing" finish was originally designed to go over Exterior Insulation Finish Systems known as EIFS. EIFS are designed to be very flexible and crack resistant. Therefore, the finish must have the same characteristics as the rest of the assembly. While acrylic finishes won't stop Portland cement plaster from cracking, they have a higher crack resistant quality than cement-based finishes.

Acrylic finishes have other qualities that make them a more popular alternative to cementbased stucco finishes: namely color. The finish uses very stable "wet pigments" to make the product integrally colored. These stable pigments along with the specially formulated 100% acrylic binder, promote superior resistance to fading, chalking and yellowing. As a result, the finishes tend to maintain their original appearance over time. Acrylic finishes give your plaster assembly a consistent and durable finish with an unlimited color selection. Many textures are also available to suit your design needs. "Specialty" finishes are available that provide other aesthetic options and/or have increased "mar resistance" than the standard finishes.

Many acrylic finish manufacturers have Dirt Pick-up Resistant technology in their products. This "DPR" technology causes the finish to cure into a tough, non-tacky coating that resists the accumulation of dirt, mold and pollutants. Many manufacturers also offer "upgrades" to standard acrylic finishes including: adding "light-weight" finishes to make them more "user-friendly," adding silicone to boost durability to withstand the most damaging environmental conditions, and adding biocides to the products during the manufacturing process designed for extra resistance to fungi and algae growth. One more advantage of acrylic finishes is that they are less moisture permeable than cement stucco. Acrylic finishes won't darken or discolor during prolonged rainstorms. They also add weather resistance to the Portland cement assembly while still allowing the assembly to breathe.

"Smooth steel trowel" finishes are not recommended. Applying a "smooth" finish requires the substrate beneath the finish to be very smooth and making a plaster brown coat smooth is difficult at best and also an expensive process. It is recommended to use either sand fine or sand coarse finish over a traditional plaster brown coat. It is also recommended that an acrylic primer that matches the color of the finish be applied to the brown coat prior to the application of the finish. This will allow the finish to dry evenly and the end result will be a more consistent and "brighter" colored wall!

In the event a "smooth steel trowel finish" is required, many acrylic finish manufacturers offer "smooth" finishes. Some manufacturers would recommend the use or even require the application of an acrylic base coat (an EIFS base coat) between the finish and the brown coat to "level out" the brown coat surface.

Nevertheless, when applying acrylic finishes right over a traditional brown coat, the brown coat should be as level, uniform and "closed" as possible. In addition, many if not all acrylic manufacturers recommend the use of an acrylic primer prior to the application of the finish (primer should be avoided with some acrylic "smooth" finishes). For more information and application procedures, call your local acrylic finish manufacturer representative.



Worm, Swirl or "Putz"

Also known as a "rilled" or "circle" finish, is typically 1.5 mm aggregate and can be hand or machine applied. Finish is typically textured with a plastic float in a figure 8 or circular motion. The aggregate "rolls" around in this acrylic paste to achieve desired look.



Heavy Worm or Swirl

This finish has a heavier aggregate (3 mm) than the "putz" but is applied the same way.

Semi-Smooth

Finish with the smallest aggregate available. Material is typically "steel troweled" twice and textured "smooth" using a "non-burning" trowel or float. This finish is the most labor-intensive, difficult and expensive of the acrylic finishes.



Fine Sand

A 1 mm aggregate size finish, its stucco "cousin" is 20/30 sand. It has a tight aggregate matrix that allows for a uniform texture. The finish can be hand or machine applied. Floating method will determine the outcome of the finish.





Medium Sand

The aggregate size of this finish is approximately 1.5 mm and resembles a 16/20 stucco sand finish. Like the fine sand finish, the material can be hand or machine applied. Both finishes can be "dashed" but precautions should be taken to achieve color uniformity.



Colored Aggregate

Decorative multicolored single or multisize aggregate wall finish in a clear acrylic binder. Finish is ideal in high traffic areas and is a highly durable, scratch-resistant product for both interior and exterior use.

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