

**STUC-O-FLEX® - ELASTOMERIC ACRYLIC FINISH**

APPLICATION TO PORTLAND CEMENT PLASTER / CONCRETE RENDER

MANUFACTURER'S (SHORT FORM) SPECIFICATION / SECTION 09220 - 09 24 00

**PART 1-GENERAL**

SCOPE:

Manufacturer's specifications containing requirements necessary for proper installation of the STUC-O-FLEX Elastomeric Acrylic finish to properly prepared cement stucco / concrete substrates.

1.01 DESCRIPTION

Provide all labor, materials, and equipment necessary to install field applied STUC-O-FLEX Elastomeric Acrylic Finish.

A. Related work specifications:

1. Unit masonry 04200
2. Sheathing 06100
3. Steel frame (light gauge) 05400
4. Concrete 03300
5. Sealant 07900
6. Portland Cement Plaster 09220

1.02 QUALITY ASSURANCE

Stuc-O-Flex Elastomeric Acrylic Finish / Performance properties:

A. Testing - Finish shall meet standards as outlined below:

1. Finish shall contain only Calcium Aggregates without Silica Sand.
2. Finish shall be comprised of only 100% Acrylic Polymer binders.
3. Finish shall exceed 105% elongation.
4. Finish shall have in excess of 450 million square feet in-service.
5. Finish shall exceed a 1/8" mandrel bend test without rupture of the membrane.
6. Finish shall be manufactured in the United States of America.

Performance properties:

<b>TEST</b>	<b>METHOD</b>	<b>RESULT</b>
ELONGATION % (FINISH)		105 Percent
WATER VAPOR TRANSMISSION	ASTM-E96	13 GRAINS PER HOUR / SQ. FT. (AVERAGE)
SALT SPRAY RESISTANCE	B-117	300 HOURS NO DELETERIOUS EFFECTS
ACCELERATED WEATHERING	G-23-81	2000 HOURS NO DELETERIOUS EFFECTS
ABSORPTION FREEZE THAW	60 CYCLES	NO CRACKING, CHECKING
TENSILE BOND	ASTM C-297	97.9 PSI
WATER PENETRATION TEST	ASTM-E-331	NO WATER PENETRATION OCCURRED ON SUBSTRATE
WATER RESISTANCE TEST	ASTM D-2247	NO CRACKING, BLISTERING, PEELING OR COMPROMISE
MILDEW / FUNGUS RESISTANCE	810 B	NO MOLD OR MILDEW GROWTH DURING TEST
WIND DRIVEN RAIN		NO DELAMINATION NO WATER INTRUSION
FIRE TESTING TUNNEL TEST	ASTM E-84	FLAME SPREAD < 25 SMOKE DEVELOPED < 450 CLASS "A" FIRE RATED

#### CEMENT STUCCO / CONCRETE SUBSTRATES

1. Moisture content of the stucco / concrete shall not exceed 19% at the time of STUC-O-FLEX application.
2. Stucco / concrete base shall be fully cured, clean, dry, and free of all form-break, efflorescence and foreign materials.
3. Portland cement plaster / Stucco / concrete shall be installed as required by the applicable building codes. In the case of a "one-coat" stucco, manufacturer's specifications shall be followed.
4. System interface with adjacent materials and/or terminations shall be designed/detailed as to not to allow moisture behind the stucco system, concrete or STUC-O-FLEX Finish.

#### GENERAL

1. The minimum slope of any surface shall not be less than 4" in 12".
2. To insure long term performance, the stucco / concrete system shall be engineered with regard for intended installation.

3. Expansion joint details required as specified by the design professional in addition to; where dissimilar materials abut, in conjunction with building expansion joints, not exceeding 144 Sq. ft. of wall surface, and where extreme structural movement may occur.

#### 1.03 SUBMITTALS

- A. Contracted applicator shall provide one (1), 2'by 2' foot sample for each texture and color selection. This will be fabricated using the same tools, equipment and techniques as intended for project installation.
- B. Prior to start up, obtain architect's and owner's approval on above samples both in color and texture.
- C. Approved samples shall be maintained throughout project construction in order to judge completed work for acceptance.

#### 1.04 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be delivered in original unopened packages with labels clearly visible.
- B. Products shall be stored out of direct sunlight, protected from the weather, in tightly sealed containers at temperatures above 40°F.
- C. Do not allow products to freeze.

#### 1.05 JOB CONDITIONS

- A. Ambient temperatures shall be 40°F or greater at time of installation, and will remain so for a minimum 24 hours or protection and heat must be supplemented to insure proper drying.
- B. Product installation shall not take place during inclement weather unless adequate protection is provided both during application and until cured. Protect materials from rain until dried.
- C. High humidity conditions (fog, mist, etc.) will significantly extend drying time.

#### 1.06 LIMITED WARRANTY

- A. Upon proper installation and payment of Stuc-O-Flex Elastomeric Acrylic Finish, manufacturer's standard product warranty will be issued.

## **PART 2 - PRODUCTS**

### 2.01 GENERAL

A. In accordance with these specifications, all products required (excluding cement stucco / concrete ) shall be obtained from STUC-O-FLEX INTERNATIONAL or an authorized Distributor, unless otherwise approved in writing.

Stuc-O-Flex International, Inc.

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Redmond, WA 98052

800-305-1045

[info@stucoflex.com](mailto:info@stucoflex.com)

[www.stucoflex.com](http://www.stucoflex.com)

### 2.02 MATERIALS

A. PRIMESEAL, (Acrylic based stain blocking primer), protects substrate from moisture, provides for uniform porosity and prevents any potential bleed through which could discolor finish coat (optional).

B. STUC-O-FLEX, Elastomeric Acrylic Finish as manufactured by STUC-O-FLEX INTERNATIONAL, factory premixed, acrylic based, color integrated, textured finish for use with this application. Numerous textures can be achieved using a variety of application methods. Spray application or by hawk & trowel - Sand finish, skip trowel, knock down, lace, etc. Provided in 20 standard colors, special colors upon request, see STUC-O-FLEX standard color chart for special color policy.

C. WATER, shall be clean and potable in clean containers without any residue or foreign materials.

D. Sealant system (CAULKING), Shall be of appropriate quality to prevent potential water intrusion. Consult construction documents and manufacturer for specific recommendations and details.

### 2.03 MIXING AND PREPARATION

- A. PRIME SEAL: Mix to a uniform consistency (do not add water). Optional.
- B. STUC-O-FLEX Elastomeric Acrylic Finish:
  - 1. Mix with paddle type mixer and 1/2 inch (13 mm) drill to assure consistency prior to use. Small amounts of clean water can be added to the Stuc-O-Flex Elastomeric Acrylic Finish to aid workability. Spraying the finish requires thinning with water, approximately 12-20 oz. of water per pail. Use caution not to introduce air into the finish
- C. Never add modifiers, admixtures or other products to any STUC-O-FLEX products.

## **PART 3 – EXECUTION**

### 3.01 INSPECTION

- A. Stucco / concrete assembly shall be examined for compliance with construction documents and system specifications prior to installation of Stuc-O-Flex Finish coat. 1/4" inch shall be the maximum allowable planar irregularity within 8 feet in any direction.
- B. Architect and General Contractor will be made aware of any such substrate concerns. All problem areas shall be rectified before installation may continue.
- C. Details for proper sealant joints shall be required.

### 3.02 INSTALLATION

A. CEMENT STUCCO / CONCRETE shall be installed in accordance with manufacturer's recommendations or applicable building codes providing a smooth, dry substrate on which to accept the STUC-O-FLEX Elastomeric Acrylic Finish.

- 1. Appropriate curing times shall provide for a structurally sound substrate with a moisture content of 19% or less.

B. Pre-based EPS Foam shapes, if used, shall be installed at this time. These are adhesively attached by coating the back of the shape with Stuc-O-Base or PRM base-coat/adhesive. Then, using manufacturer supplied fiberglass mesh and base coat, the shape shall be feathered into the adjacent wall area leaving a minimum 6" of mesh on both the shape and the wall surface. Installation at this time insures trim details will be fully embedded in base coat and fiberglass reinforcing mesh, providing a structurally sound, aesthetically pleasing detail.

- 1. Allow Base coat to dry minimum 24 hours or until dried below 19% moisture content.

C. PRIMESEAL (Optional): Apply primer with airless sprayer, medium nap roller, or paint brush to all areas which Stuc-O-Flex Finish coat is to be applied. A uniform pinhole free layer should be provided to insure no shadowing or discoloration will occur from the Stucco / concrete substrate below.

1. Back-rolling while wet is recommended for spray applications
2. Allow to dry completely.

D. STUC-O-FLEX ELASTOMERIC ACRYLIC FINISH - Installation:

1. Mask all areas not to receive finish, including areas to receive sealant, adjacent materials, and abutting areas of different color or texture finish, to provide straight, clean lines.
2. Mix finish thoroughly with a low speed, rust free mixer until a workable consistency is obtained. A small amount of clean water may be added to aid workability. If water is added, measure and add the same amount to all pails of finish to assure uniform color.
3. Apply finish to thoroughly clean, cured, and dry basecoat / stucco.
4. Apply finish with uniform texture. Apply with sufficient number of applicators so a wet edge is always maintained. Work continuously to prevent cold joints. Stop work only at joints, color changes, or inside/outside corners.
5. Avoid application in direct sunlight.
6. Provide final appearance to match approved samples to the satisfaction of the Architect/Owner.

E. Do not use finish on horizontal or near horizontal weather-exposed surfaces, such as tops of parapets, projecting ledges, sills, or other projecting features. Protect such surfaces with metal coping or flashing with drip edge.

F. Prevent application of finish over isolation, expansion, cold, or control joints in construction.

G. Prevent application of finish along inside edges of joint. Apply to outside face of wall only.

### 3.03 PROTECTION

- A. Provide protection of installed materials from water infiltration into or behind them.
- B. Provide protection of installed stucco from dust, dirt, precipitation, and freezing during installation.
- C. Provide protection of installed finish from dust, dirt, precipitation, freezing and continuous high humidity until fully cured and dry.
- D. Clean exposed surfaces using materials and methods recommended by the manufacturer of the material or product being cleaned. Remove and replace work that cannot be cleaned to the satisfaction of the Architect/Owner.
- E. Secure fixtures, signs, and similar items, and make watertight.

### 3.03 JOB SITE CLEAN UP

- A. STUC-O-FLEX applicator shall remove all excess wall system materials from completed project areas.
- B. Coverings, scaffolds, etc. shall be removed.