

**CONSTRUCTION STANDARD SPECIFICATION**

**SECTION 07241**

**POLYMER EXTERIOR WALL FINISH COAT SYSTEM**

	<u>Page</u>
<b><u>PART 1 - GENERAL</u></b>	
1.01 Summary .....	2
1.02 References .....	2
1.03 Submittals .....	2
1.04 Quality Assurance .....	3
1.05 Delivery, Storage, And Handling .....	3
1.06 Project Conditions .....	3
 <b><u>PART 2 - PRODUCTS</u></b>	
2.01 Materials .....	3
2.02 Mixes .....	4
2.03 Delivery System Equipment .....	5
 <b><u>PART 3 - EXECUTION</u></b>	
3.01 Applicator Inspection .....	5
3.02 Preparation .....	5
3.03 Application .....	6
3.04 Curing .....	7
3.05 Adjust And Clean .....	7

**CONSTRUCTION STANDARD SPECIFICATION**

**SECTION 07241**

**POLYMER EXTERIOR WALL FINISH COAT SYSTEM**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. The extent of polymer exterior wall finish coat system covering cast-in-place or precast prestressed concrete is indicated on the contract drawings.
- B. Required concrete surface preparation for the exposed concrete area specified to receive the polymer exterior wall finish coat system is described herein.

**1.02 REFERENCES**

- A. Cast-in-Place Concrete, Section, 03300.
- B. The General Contractor shall coordinate the work performed under the related specifications listed above with the work required under this specification as applicable.

**1.03 SUBMITTALS**

- A. Manufacturer's technical product information.
- B. Manufacturer's approved applicator certification.
- C. Method of installation, installation instructions and recommendations.
- D. Texture and coverage information.
- E. Delivery system equipment information.
- F. MSDS for each material used.

#### 1.04 QUALITY ASSURANCE

- A. Applicator Qualifications: Applicators specializing in the installation of polymer exterior wall finish systems shall have a minimum of 5 years experience in work similar to that required by this section.
- B. Samples: Submit 12" x 12" (minimum size) samples of finish color(s) and texture. Work shall not proceed until samples have been approved by the engineer.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver manufactured materials in original unopened packages or containers, with manufacturer's labels intact and legible.
- B. Protect liquid materials from freezing conditions.

#### 1.06 PROJECT CONDITIONS

- A. Cold Weather Requirements
  - 1. Do not use frozen materials in exterior wall finish.
  - 2. Do not apply exterior wall finish when wall surface temperature is below 38 degrees F.
  - 3. Do not apply skim/leveling coat when ambient temperature is forecast to be less than 38 deg. F within a 6-hour period following application.
- B. Hot Weather Requirements
  - 1. Do not apply exterior wall finish when wall surface is above 100 deg. F.
  - 2. Water may be added to the materials at the job site to adjust consistency of the materials. Maximum amount of water permitted shall be 10% per volume of material.
- C. Protection
  - 1. Protect finish surfaces and work of other trades installed prior to installation of work of this section.
  - 2. Maintain protection in place until completion of work.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. Patching Compound: Manufacturer's recommended pre-mixed acrylic polymer modified cement patching material. Standard of quality shall be:

1. Insul-Bond (sanded) by El Rey Stucco.
  2. Xtra Patch by Dryvit System.
  3. Sto Leveler by Sto Industries.
  4. 410 (fiberglass reinforced) by Wellborn Pinnacle.
- B. Skim/Leveling Coat: Manufacturer's recommended pre-mixed acrylic polymer-based leveling coat. Standard of quality shall be:
1. Insul-Bond by El Rey Stucco.
  2. Primus by Dryvit System.
  3. Sto Leveler by Sto Industries.
  4. 410 by Wellborn Pinnacle.
- C. Stabilizer/Concrete Conditioner: Manufacturer's recommended bonding agent.
- D. Primer: Manufacturer's recommended acrylic polymer primer. Standard of quality shall be:
1. Heavy-duty Primer by El Rey Stucco.
  2. Color Prime by Dryvit System.
  3. Sto Primer by Sto Industries.
  4. 420 by Wellborn Pinnacle.
- E. Exterior Wall Finish Coat System: Manufacturer's recommended pre-mixed acrylic polymer base with integrally colored textured finish coat system. Standard of quality shall be:
1. Perma-flex by El Rey.
  2. Dryvit Finish by Dryvit.
  3. Sto Finish by Sto Industries.
  4. 415 by Wellborn Pinnacle.
- F. Water: Potable.

## 2.02 MIXES

### A. General

1. To ensure consistent color throughout the project, the manufacturer shall tint the mix in one batch at the plant site. Tint shall be one of the manufacturer's standard colors.

2. Mix factory prepared exterior wall finish in accordance with manufacturer's written instructions and recommendations.
- B. Mechanical Mixing: Mix materials with machine-driven paddle as recommended by manufacturer. Materials shall be mixed during application to avoid material separation/stratification.

### 2.03 DELIVERY SYSTEM EQUIPMENT

- A. Pump
1. Heavy duty commercial/industrial type; standard of quality shall be as manufactured by Grayco or Binks.
  2. Air powered with minimum 10:1 air to material ratio.
  3. Material delivery capacity of 3.5 gallons/minute minimum.
- B. Application Gun
1. Internal air mix type.
  2. Pressure regulator device at orifice to ensure even flow.

## PART 3 - EXECUTION

### 3.01 APPLICATOR INSPECTION

- A. Applicator shall verify that surfaces to receive exterior wall finish coat are free of dust, loose particles, oil and other deleterious materials which would adversely affect bond of exterior wall finish.
- B. Applicator shall notify the General Contractor and the Sandia Contracting Representative in writing of any conditions detrimental to proper and successful installation of exterior wall finish coat system. Do not proceed with installation until unsatisfactory conditions are corrected.

### 3.02 PREPARATION

The General Contractor shall coordinate the work performed under the related specifications listed in Section 1.02 above with the work required under this section. Said coordination effort shall produce a final concrete surface in good condition to receive the exterior finish coat.

- A. Sandblasting: Lightly sandblast entire area to receive exterior wall finish coat making sure all oils, dirt, grease, etc., have been removed.

B. Patching

1. Spalled, chipped and honeycombed areas of the concrete surface to receive the exterior finish coat shall be chipped back to sound concrete to obtain a good mechanical bond and rebuilt with patching compound.
2. Holes and aggregate pockets 3/16" in diameter and in depth and greater shall be filled with patching compound or skim/leveling coat.
3. All cracks not considered hairline shall be filled with patching compound or skim/leveling coat.
4. Rough areas and high spots shall be rubbed or ground to match the plane of adjacent surfaces and to the manufacturer's required smoothness.

C. Leveling

1. Surfaces to receive exterior wall finish coat shall be true to line, plane, level, and plumb.
2. Allowable Tolerances: Maximum deviation from true plane of 1/8" in 10' as measured by straight edge placed at any location on the surface.

3.03 APPLICATION

A. General: Apply patching compound, skim/leveling coat, stabilizer primer, and exterior wall finish coat system in accordance with manufacturer's instructions and recommendations.

B. Patching Compound and Skim/Leveling Coat: Apply locally to areas requiring patching and leveling as specified in 3.02 above.

C. Stabilizer and Primer

1. Stabilizer and primer may be combined and applied simultaneously if approved by the manufacturer and so noted on the installation information submittal.
2. Primer coverage thickness shall be the greater of the following:
  - a. Manufacturer's recommended coverage.
  - b. 15 mils wet, 8 mils dry.

D. Finish Coat

1. Finish coat sprayed or troweled texture shall be a medium texture consisting of 1.5 mm (minimum) aggregate.
2. Finish coat coverage thickness shall be the greater of the following:
  - a. Manufacturer's recommended coverage.

- b. 30 square feet per gallon material.
- c. 50 mils wet, 35 mils dry.
3. Apply exterior wall finish in number of coats and consistency required to achieve texture to match approved sample.
4. Applicator shall maintain a "wet edge" during application to prevent color and texture variation due to differences in curing (lap marks).

### 3.04 CURING

Protect applied finish from freezing for a minimum of six hours following application.

### 3.05 ADJUST AND CLEAN

#### A. Patching

1. Upon completion, point up exterior wall finish coat around trim and other locations where finish coat terminates or meets dissimilar materials.
2. Cut out and replace defective or damaged exterior wall finish coat.
3. Match pointing and patches to surrounding finish coat in form and texture.

#### B. Cleaning

1. Remove exterior wall finish and protective materials from perimeter trim and adjacent surfaces.
2. Remove all excess materials from the project site.

END OF SECTION