

## MULTICOAT HARD COAT STUCCO SYSTEM

### **PART I      GENERAL**

#### 1.01 SECTION INCLUDES

- A. Provide all labor, materials, and equipment necessary to install all aspects of the Multicoat Hard Coat Stucco Systems.

#### 1.02 RELATED SECTIONS

- A. 03300- Cast-in-Place Concrete
- B. 04200- Unit Masonry
- C. 05400- Light gauge cold-formed steel framing
- D. 06110- Wood Framed Construction
- E. 06160- Sheathing
- F. 07900- Joint Sealers
- G. 09220- Portland Cement Plaster
- H. 09250- Gypsum Board

#### 1.03 REFERENCES

- A. ASTM C79 Gypsum Sheathing
- B. ASTM A641 – Zinc-Coated (Galvanized) Carbon Steel Wire
- C. ASTM C91 – Masonry Cement
- D. ASTM C150 – Portland Cement
- E. ASTM C206 – Finishing Hydrated Lime
- F. ASTM C207 – Hydrated Lime for Masonry Purposes
- G. ASTM C847 – Standard Specification for Metal Lath
- H. ASTM E119 – Method for fire test of Building Construction Materials

- I. ASTM C926 – Application of Portland Cement-Based Plaster
- J. ASTM C1063 – Installation of Lathing and Furring for Portland Cement Based Plaster
- K. PCA (Portland Cement Association) – Plaster (Stucco) Manual
- L. Plaster and Drywall Systems Manual, Third Edition
- M. UBC – Uniform Building Code

#### 1.04 DEFINITIONS

- A. Accessories – Linear formed metal, metal and paper, or plastic members fabricated for the purpose of forming corners, edges, control joints, or decorative effects in conjunction with plaster assemblies.
- B. Base coat – Coat of plaster directly beneath the finish coat. Brown coat or base coat refers to the base coat plaster applied over wire lath/ metal lath.
- C. Fiberboard – Minimum ½” thick, asphalt impregnated substrate complying with UBC Standard 25-24.
- D. Gypsum Sheathing- Water- resistant core gypsum sheathing complying with UBC Standard 25-24.
- E. Fasteners- Nails or staples are utilized in compliance with UBC 47-C.
- F. Finish Coat- A decorative material that provides a protective, textured coating applied to the base coat.
- G. Flashings – Metal or other membrane flashing material used to intercept and redirect the flow of water to prevent it from entering the building.
- H. Lath – A reinforcement to receive plaster. It is secured to framing or furring members.
- I. Weather Restive Barrier – Minimum grade “D” Kraft building paper complying with UBC Standard 17-1, or asphalt saturated rag felt complying with UBC Standard 32-1. Must comply with section 1707 of the UBC.

## 1.05 SYSTEM DESCRIPTION

- A. General: The Multicoat Hard Coat Stucco System is an Exterior Stucco System and is comprised of a weather-resistant barrier, lath, base coat, and a finish coat.
- B. Application Methods: The Multicoat Hard Coat Stucco System are applied directly to a structure at the construction site, or may be applied to prefabricated panels.

## 1.06 SUBMITTALS

- A. Submit under provisions of Section 01300 Submittal Procedures
- B. Product Data: All product data sheets and details that pertain to the project
- C. Samples: Submitted upon request:
  - 1. Samples of Multicoat Hard Coat Stucco System shall be of an adequate size as required to represent each color and texture to be utilized on the project and using the same techniques and tools required to complete the project.
  - 2. Retain approved samples at the construction site throughout the application process

## 1.07 QUALITY ASSURANCE

- A. Qualifications:
  - 1. System component materials shall be manufactured or approved by Multicoat and shall be distributed by the same or its authorized dealers
  - 2. Plastering Contractor:
    - a. Shall specialize in cement plasterwork with documented experience.
    - b. Shall provide proof of current contractor's license and bond where required.
    - c. Shall show proof of current applicator's training certificate issued by Multicoat Inc.
- B. Mock-Ups: Produced upon request

1. Prior to commencement of work, provide a mock-up for approval
  - a. Size suitable to represent the products to be installed and each color and texture constructed using the same tools and techniques to be utilized on the project
  - b. Retain approved mock-up at job site throughout the application process

#### 1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all materials to the construction site in their original, unopened packaging with labels intact
- B. Inspect the materials upon delivery to assure that specified products have been received. Report defects or discrepancies to the responsible party according to the construction documents; do not use reported material for application
- C. Store materials in a cool, dry place, protected from direct sunlight, weather, And other damage (not in direct contact with the ground)

#### 1.09 PROJECT CONDITIONS

- A. Environmental Requirements:
  1. Before, during and following the application of the Multicoat Hard Coat Stucco System, the ambient and surface temperatures must remain above 40°F (4°C) for a minimum period of 24 hours.
- B. Existing Conditions:
  1. Access to electrical outlets, clean, potable water, and a suitable work area at the construction site throughout the application of the Multicoat Hard Coat Stucco System.

#### 1.10 SEQUENCING AND SCHEDULING

- A. The installation of the Multicoat Hard Coat Stucco System shall be coordinated with all other construction trades
- B. Provide sufficient manpower to ensure continuous operation, free of cold joints, scaffolding lines, variations in texture, etc.

## 1.11 WARRANTY

- A. Upon the completion of the installation of the Multicoat Hard Coat Stucco System, Multicoat shall provide a standard limited warranty when requested in writing

## 1.12 MAINTENANCE

- A. The following materials shall be presented to the owner following the installation of the Multicoat Hard Coat Stucco System:
  - 1. One container of finish for each color and texture utilized on the Project.
  - 2. A maintenance program for finishes as required

## **PART II: PRODUCTS**

### 2.01 MANUFACTURERS

- A. Acceptable Manufacturer: Multicoat.

### 2.02 COMPONENTS

- A. Weather Resistive Barrier: Minimum grade "D" Kraft building paper complying with UBC Standard 17-1, or asphalt saturated rag felt complying with UBC Standard 32-1. Must comply with section 1707 of UBC.
- B. Lath
  - 1. Expanded-Metal lath
  - 2. Woven-Wire Mesh
    - a. Minimum No. 20 gage, 1-inch (25mm) galvanized steel, woven-wire fabric. Lath must be self-furring or furred when applied over all substrates except un-backed polystyrene board. Self-furring lath for coatings must comply with the following requirement: The maximum total coating thickness is ½" (12.7mm).
- C. Accessories
  - 1. Corner Mesh: Formed steel, minimum 26-gage thick; expanded

Flanges shaped to permit complete embedding in plaster; minimum 2 in. wide; galvanized finish.

2. Strip Mesh: Metal lath,  $\frac{3}{4}$  lb/yd<sup>2</sup> expanded metal, galvanized, 6in wide x 18 in long
3. Vent Screed: Minimum 24-gage thick; thickness governed by plaster thickness; minimum 4in width, double “V” profile, with perforated expanse between “V’s” of longest possible lengths; galvanized finish
4. Casing Bead: Formed steel; minimum 24-gage thick; thickness, minimum 3½ in high flange, of longest possible lengths; galvanized finish
5. Drip Screed: Minimum 26-gage thick, depth governed by plaster thickness, minimum 3½ in high flange, of longest possible lengths; galvanized finish
6. Control and Expansion Joints: depth to conform to plaster thickness, maximum practical lengths, with Unijoint II, galvanized finish
7. Fasteners: Nails, staples, or other approved metal supports, of type and size to suit application, galvanized to rigidly secure lath and associated metal accessories in place.
8. Penetration Flashing: Type I, Grade A building paper conforming to UBC Standard 17-1, 9 in wide x length required
9. Wire: ASTM A641, Class I coating (galvanized), soft temper

D. Water: Clean and potable without foreign matter

E. Base Coat

1. Stucco Base, manufactured by Multicoat.

F. Finish Coat

1. Multi-Tex® Stucco Mix, manufactured by Multicoat.

## 2.03 MIXES

- A. All materials mixing and tinting instructions are contained in appropriate Product Data Sheets written and published by Multicoat.
- B. Protect base coat and finish coat from frost, contamination, and rapid evaporation.

## Part III EXECUTION

### 3.01 EXAMINATION

- A. Substrates
  - 1. Acceptable substrates must be securely fastened per applicable building code requirements.
  - 2. Acceptable substrates and adjacent materials must be dry, clean, and sound. Substrate surface must be flat, free of fins or planar irregularities greater than 6mm in 3m (¼" in 10').
- B. Flashings: As per Multicoat's details, all flashing around windows, at deck attachments, utility penetrations, roof lines, etc. and all kick-out flashing must be properly installed prior to application of Multicoat's Hard Coat Stucco System.
- C. Unsatisfactory conditions shall be reported to the general contractor and/or builder and /or architect and /or owner. Do not proceed until all unsatisfactory conditions have been corrected.

### 3.02 SURFACE PREPARATION

- A. Clean the substrate to which the Multicoat Hard Coat Stucco System is to be applied, ensuring that there are no foreign materials present
  - 1. Foreign materials include, but are not limited to, oil, dirt, dust, form release agents, efflorescence, paint, wax, water repellants, moisture, frost, and or extended nails that may rupture the weather resistive barrier
- B. Protect surfaces near the work or this section from damage, disfiguration, and overspray. Mask off all ventilation screeds occurring in plastered areas.

### 3.03 INSTALLATION

#### A. Secondary Moisture Protection Barrier (Not required on unit masonry/ non-insulated concrete substrates).

1. Installation should be in accordance with the secondary moisture protection barrier manufacturer's specifications and applicable building code requirements.

#### B. Lath

##### 1. Wire Fabric Lath

- a. Wire or lath shall be applied with minimum 25mm (1 inch) end laps and side laps.
- b. Furring crimps shall occur at maximum 152.4-mm (6 inch) intervals each way. Furring crimps shall provide a minimum 3.18-mm (1/8-inch) clearance from the substrate after installation.

-Or-

##### 1. Metal Lath

- a. The metal lath shall be applied with minimum 13-mm (½") side laps and 25mm (1") end laps.
- b. When end laps occur between supports, lace or wire tie  
The ends of the sheets with 1.2mm (0.0475")  
galvanized annealed steel wire.
- c. Refer to ASTM C-1063 for additional information.
- d. Corrosion resistant fasteners for lath attachment shall  
Penetrate a minimum of 25.4mm (1") into wood  
framing.

#### F. Application Over Solid Backing

##### 1. Fiberboard

- a. Minimum thickness 12.7-mm (½ inch) fiberboard sheathing shall be installed directly over wood or steel framing spaced a maximum of 609.6mm (24 inches) on center. All walls shall be braced in accordance with the applicable code. The fiberboard shall be temporarily



held in place with corrosion-resistant staples, roofing nails, or self-tapping screws. A weather-resistive membrane shall be applied over the fiberboard. The lath shall be attached to the studs through the sheathing with fasteners and spacing as described for insulation boards in this specification. Exposed sheathing edges shall be protected with screeds. Holes in the substrate surface shall be caulked. Apply the Multicoat Hard Coat Stucco System Stucco System over steel framing {minimum No. 20 gauge, 0.912mm (0.0359 inch) thick}, lath is secured to framing No.8-18, S-12, panhead, self tapping screws spaced a Maximum of 152.4mm (6 inches) on center.

## 2. Gypsum Sheathing

- a. Minimum thickness 12.7mm (½ inch), water resistant core, Gypsum sheathing shall be installed directly on wood or steel framing with studs spaced a maximum of 610mm (24 inches) on center
- b. The gypsum sheathing shall be fastened to wood framing with minimum 38.1mm (1½ inch) long, No.11 gauge [3.75mm (0.148 inch) shaft diameter, 11.1mm (0.438 inch) head diameter] galvanized roofing nails or No. 16 gauge [1.59mm (0.0625 inch) shaft diameter] galvanized staples spaced a maximum of 152.4mm (6 inches) on center at the edges and at intermediate supports
- c. For steel framing the sheathing shall be attached to No.20 Gauge [0.91mm (0.0359 inch) thick] steel studs with No.8-18, S-12, panhead, 25.4mm (1 inch) long, self tapping screws spaced a maximum of 254.0 mm (10 inches) on center to all furring members. A weather-resistive membrane shall be applied over the gypsum sheathing. The metal lath and coating shall be as described in sections of this specification.

## 3. Plywood

- a. Plywood shall be applied directly to wood or steel framing
- b. The plywood shall be fastened to wood framing with a minimum of 6d common nails or minimum No.16 gauge [1.59mm (0.0625 inch) shaft diameter] staples with 11.1mm (7/16 inch) outside diameter crowns, spaced a

maximum of 152.4 mm (6 inches) on center at the edges and a maximum of 304.8 mm (12 inches) on center at intermediate supports.

- c. The plywood is applied to steel framing [minimum No. 20 gauge, 0.912mm (0.0359 inch) thick] in accordance with the applicable building code.
- d. The weather-resistive membrane and fabric lath and coating shall be applied as described for fiberboard.

#### 4. Oriented Strand Board (OSB)

- a. The oriented strand board is installed on wood or steel framing.
- b. The OSB shall be fastened to wood framing as described for plywood.
- c. The OSB shall be fastened to steel framing {minimum No. 20 gauge, 0.192mm (0.0359 inch) thick] in accordance with applicable building code.
- d. The weather-resistive membrane, lath and coating shall be installed as described.

#### C. Base Coat

- 1. Stucco Base by either mechanical sprayer or hand application method to the correct thickness shown below:
  - a. Over gypsum sheathing, plywood sheathing , or fiber Board using 1 inch x 20 gauge wire lath shall be a minimum of 3/8 inch thick or maximum 1/2 inch thick.
  - b. Over Foam-Core board using 1 1/2 inchx17 gauge wire Lath shall be a minimum of 5/8 inch thick.
  - c. Leveling Coat over concrete or concrete block using no Wire lath shall be a maximum of 1/2 inch thick.

#### D. Finish

- 1. Multicoat Stucco Mix shall be applied no sooner than 24 hours following the application of the base coat. Refer to the installation instructions on the appropriate data sheet.

- a. Stucco Base must cure for a minimum of 24 hours and concrete must cure for a minimum of 28 days. The pH level of these products must be below 10 prior to the application of the Multicoat Hard Coat Stucco System.
2. Multi-Tex Stucco Mix shall be applied no sooner than 24 hours following the application of the base coat. Refer to the instructions on the appropriate data sheet.

E. Tolerances

1. Maximum variation from true flatness:  $\frac{1}{4}$  inch in 10 feet

3.04 CLEANING

- A. Remove any and all materials used, overspray from surrounding materials, and all protective masking

END OF SECTION