

SECTION 01 43 39  
INTEGRATED EXTERIOR MOCKUP

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes: Erection and testing of an integrated exterior mockup for workmanship and performance evaluation purposes.

1.2 PRECONSTRUCTION MEETING

- A. Arrange and conduct a building envelope preconstruction meeting with subcontractors responsible for erecting building envelope related materials in attendance.

1.3 SYSTEM DESCRIPTION

- A. Work includes: Constructing mockup, including reviewed submittals required by the Contract Documents, to establish compliance with the design intent as well as the specified requirements to provide a complete and watertight facility.
- B. Perform photo documentation of mockup as it is being constructed. Maintain photographs and videos at the site for reference.
- C. Complete envelope mockup and obtain review and approval of Owner and Architect prior to commencing installation of envelope material.

1.4 SUBMITTALS

- A. Product Data: Technical data and details, material descriptions, and profiles including manufacturer written installation recommendations and procedures. Submit items applicable to the project.
- B. Samples: Submit Samples of building system components, including accessories, prior to delivery to project site or installation on integrated exterior Mockup.
- C. Shop Drawings: Provide manufacturer's approved details of conditions, projection conditions, connections, joinery, and additional special project conditions which require details other than indicated in the Drawings.
  - 1. Scale and Measurement: Make Shop Drawings accurately to a scale sufficiently large enough to show pertinent aspects of the item and its method of connection to the work.
  - 2. Manufacturer's Details: Furnish termination details and related details normally required by the manufacturer details including both standard details and special details and obtain written approval from the manufacturer, the company project manager, and the Owner's representative prior to final installation.

- D. Qualifications: Written statement from the materials manufacturer approving the installer.
- E. Warranty: Submit proposed warranties, complete with addenda necessary to comply with warranty requirements specified.

#### 1.5 QUALITY ASSURANCE

- A. Coordination of product submittals and construction installation:
  - 1. Prior to each submittal, carefully review and coordinate each item submitted.
  - 2. Verify each item submitted complies with specified requirements.
  - 3. By affixing the Contractor's signature to each submittal for the integrated exterior mockup, the Contractor certifies that this coordination has been performed.
  - 4. Contractor shall construct the integrated exterior mockup with the same workmanship and quality, using the same anticipated work crews, used for the new construction.
  - 5. Submit installation materials for Architect review for compliance, prior to installation of materials on the integrated exterior mockup.

#### 1.6 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Owner will engage Engage a qualified testing agency to perform preconstruction testing on field mockups.
- B. Perform Preconstruction Tests indicated in the Section where the specific building component or system required by the integrated mockup is specified.

### PART 2 - PRODUCTS

#### 2.1 INTEGRATED EXTERIOR MOCKUP REQUIREMENTS

- A. Construct integrated exterior mockups to verify selections made under sample submittals to evaluate aesthetic effects, qualities of materials, workmanship, and performance. Mockup construction shall be coordinated by the Contractor and constructed by the subcontractors and work crews responsible for the actual construction. Establish conditions and used materials for the work that have included in the integrated exterior mockup. Build integrated exterior mockups to comply with the Specifications, using materials indicated for the completed work based on, but not limited to, the following list:
  - 1. Waterproofing materials.
  - 2. Air barriers
  - 3. Vapor Retarders
  - 4. Thermal insulation.
  - 5. Flexible through wall flashing membrane.
  - 6. Metal through wall flashing.
  - 7. Preformed flashing pieces.

8. Wall ties.
  9. Masonry with mortar, grout and all accessories.
  10. Precast wall panels.
  11. CMU with mortar and weeps.
  12. EIFS
  13. Metal panels, wall and soffit.
  14. Storefront Systems.
  15. Curtain Wall Systems.
  16. Glazing.
  17. Louver unit(s).
  18. Low slope roof systems.
- B. Comply with manufacturer's written installation instructions.
- C. Colors and Patterns: Unless colors and patterns are specifically indicated in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate color and pattern charts to the Architect for selection.
- D. Coordinate with Architect for layout or design of patterns and textures and indicated installation on the mockup.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION OF MATERIALS

- A. Install materials on mockup in same manner required for the main structure. Refer to specification sections for basis of design of all material being installed on this mockup.
- B. Materials or systems installed in multiple layers or passes such as masonry, wall cladding etc. shall be installed in a "stepped" or "staged" manner, leaving a portion of each layer exposed in the final integrated exterior mockup configuration. This portion of the mockup is for workmanship evaluation and shall be covered and sealed during performance testing.
- C. Maintain photo manifest of mockup construction for Architect and Owner to review.
- D. Quality of installation is of utmost importance and shall be monitored for completeness and conformance.
- E. Upon completion of mockup, Architect and Owner's Representative will review for compliance with the Contract Documents and for quality of workmanship.
- F. Install components and materials in same sequence as required by industry standards and manufacturer written installation instructions.

### 3.2 INSTALLATION OF WINDOW SYSTEMS AND ASSOCIATED FLASHINGS

- A. Coordinate the installation of the windows and openings with associated trades to maintain proper compatibility of material.
- B. Comply with the specifications.
- C. Install perimeter flashing as detailed to create a sealed and watertight condition.
- D. Upon installation of window and flashing, notify Architect and Owner for review for compliance and water test wall flashing. Notify Architect and Owner to observe the testing. Perform tests in accordance with the Specifications.

### 3.3 INSTALLATION OF FLASHING AT THROUGH WALL LOCATIONS

- A. Coordinate the installation of the wall flashing with associated trades to maintain proper compatibility of materials.
- B. Install through wall flashing in accordance with the Specifications.
- C. Upon installation, notify Architect and Owner for review for compliance and provide a water test of all wall flashing. Contractor shall notify Architect and Owner to observe the testing. Perform testing in accordance with the Specifications.

END OF SECTION