#### SECTION 01 43 39 - MOCKUP

#### **PART 1 - GENERAL**

## 1.1 SUMMARY

- A. Provide the work of this Section in accordance with requirements of the Contract Documents.
- B. Section Includes:
  - 1. General mockups.
  - 2. Room mockups.
- C. Related Requirements:
  - 1. Section 08 40 00 "Exterior Enclosure System Requirements" for mockup and testing of the building enclosure systems and assemblies including integrated exterior mockups as part of the exterior enclosure system.

## 1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Meet with Owner, Design-Builder, Architect, testing and inspecting agency representative, and installers of major systems whose Work is included in mockups.
  - 2. Review locations and extent of mockups.
  - 3. Review testing procedures to be performed on mockups.
  - 4. Review and finalize schedule for mockups, and verify availability of materials, personnel, equipment, and facilities needed to complete mockups [and testing] and maintain schedule for the Work.

#### 1.3 ACTION SUBMITTALS

- A. Shop Drawings:
  - Include plans, elevations, sections, and mounting, attachment, and support details for mock-ups.
  - 2. Indicate manufacturer and model number of individual components, subassemblies, and assemblies.
  - 3. Revise and resubmit Shop Drawings to reflect approved modifications in details and component interfaces resulting from changes made during testing procedures.
- B. Delegated Design Submittal: For temporary structural supports for mockups not attached to building structure, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

# 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For testing agency.
- B. Preconstruction Test Reports: For mockups.

# 1.5 QUALITY ASSURANCE

- A. Build mockups to do the following:
  - 1. Verify selections made under Sample submittals.
  - 2. Demonstrate aesthetic effects.
  - 3. Demonstrate the qualities of products and workmanship.
  - 4. Demonstrate acceptable coordination between components and systems.
- B. Fabrication: Before fabricating or installing portions of the Work requiring mockups, build mockups for each form of construction and finish required. Use materials and installation methods as required for the Work.
  - 1. Build mockups of size indicated.
  - Build mockups in location indicated or, if not indicated, as directed by Architect or Design-Builder
  - 3. Employ supervisory personnel who will oversee mockup construction. Employ workers who will be employed to perform same tasks during the construction at Project.
  - 4. Demonstrate the proposed range of aesthetic effects and workmanship.
  - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
  - 6. Demolish and remove mockups when directed by Architect or Design-Builder.

## C. Notifications:

- 1. Notify Architect and Design-Builder seven (7) days in advance of the dates and times when mockups will be constructed.
- 2. Allow seven (7) days for initial review and each re-review of each mockup.
- D. Approval: Obtain Architect's approval of mockups before starting fabrication or construction of corresponding Work.
  - 1. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
  - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
  - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

## 1.6 COORDINATION

A. Coordinate schedule for construction of mockups, so construction, testing, and review of mockups do not impact Project schedule.

## **PART 2 - PRODUCTS**

#### 2.1 PERFORMANCE REQUIREMENTS

A. Fabrication Engineering and Design Data: Engage a qualified professional engineer, as defined in Section 01 33 16 "Fabrication Engineering Design Data," to design support structure for free-standing mockups.

## B. Structural Performance:

- 1. Seismic Performance: Mockups and support structure to withstand the effects of earthquake motions.
- 2. Wind Loads: As indicated on Drawings.
- C. Mockup Testing Performance Requirements: Perform tests using design pressures and performance criteria indicated for assemblies and products that are specified in other Sections and incorporated into mockups.

## 2.2 GENERAL MOCKUPS

A. Refer to Divisions 02 - 49 for general mockup requirements.

#### 2.3 ROOM MOCKUPS

- A. Build room mockups according to approved mockup Shop Drawings or as indicated on Drawings to evaluate constructability, demonstrate the coordination of trades and sequencing of Work, and to demonstrate aesthetic requirements. Include each visible finish, component, and equipment item within room mockups; include operable lighting.
- B. Provide integrated room mockups of items as outlined in the technical specifications.
  - 1. Room corner of public toilet room, in situ mockup including but not limited to:
    - a. Wall tile in accordance with Division 09.
    - b. Floor file / wall base in accordance with Division 09.
    - c. Corner guards in accordance with Division 10.
    - d. Acoustical panel ceiling system in accordance with Division 09.
    - e. Linear floor drain in accordance with Division 23.
    - f. Toilet partitions in accordance with Division 10.
    - g. Water closets in accordance with Division 22.
    - h. Washroom accessories in accordance with Division 10.
    - i. Typical countertop with plumbing fixtures in accordance with Divisions 06 and 22.
    - j. Restroom traffic management system in accordance with Division 10.
  - 2. Room corner of gate and boarding area, in situ mockup including but not limited to:
    - a. Carpet tile in accordance with Division 09.
    - b. Terrazzo flooring complete with base.
    - c. Transitions from carpet tile to terrazzo flooring in accordance with Division 09.
    - d. Gate counter in accordance with Division 12.
    - e. Furniture in accordance with Division 12.
    - f. Decorative railing in accordance with Division 05.
    - g. Metal baffle ceilings in accordance with Division 09.
    - h. Back lit metal panel ceiling system in accordance with Division 09.
    - i. Transitions between different ceilings in accordance with Division 09.
    - j. Mechanical and electrical devices, diffusers, and the like specified in Divisions 21, 22, 23, 26, 27, and 28.
    - k. Lighting in accordance with Division 26.
    - I. Magnetic base stanchions in accordance with Division 12.

**PART 3 - EXECUTION** 

**NOT USED** 

**END OF SECTION**