

SECTION 01 40 00

~~~ PROJECT NOTE ~~~~~

AOR/EOR IS RESPONSIBLE FOR REVIEWING THIS SPECIFICATION SECTION IN DETAIL FOR COORDINATION WITH THE PROJECT SCOPE OF WORK.

ALL "PROJECT NOTE" TEXT IS TO BE REMOVED FOLLOWING REVIEW OF THE CONTENT OF EACH NOTE BY THE AOR/EOR.

EDIT THE DOCUMENT FOOTER TO INCLUDE THE PROJECT NAME AND NUMBER.

EDIT THE DOCUMENT HEADER TO INDICATE THE "AOR PROJECT ISSUE" DATE. THE "CPS CONTROL" DATE SHOULD NOT BE EDITED.

ALL DIVISION 00 AND DIVISION 01 SECTIONS ARE TO BE REVIEWED BY THE DESIGN MANAGER/CONSTRUCTION MANAGER FOR THE PROJECT. AOR/EOR TO COORDINATE ACCORDINGLY.

~~~ END OF PROJECT NOTE ~~~~~

QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E.

~~~ PROJECT NOTE ~~~~~

DELETE DELEGATED DESIGN PARAGRAPH BELOW IF NONE ARE REQUIRED BY PROJECT SCOPE

~~~ END OF PROJECT NOTE ~~~~~

- F. Delegated Design
- G. Control of installation.
- H. Mock-ups.
- I. Tolerances.
- J. Manufacturers' field services.
- K. Defect Assessment.

1.02 REFERENCE STANDARDS

- A. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2017.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Test Reports: After each test/inspection, promptly submit two copies of report to Architect/Engineer of Record and to Contractor.
 - 1. Test report submittals are for Architect/Engineer of Record's knowledge as construction contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Board's information.
- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect/Engineer of Record, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Board's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- E.

~~~ PROJECT NOTE ~~~~~

**DELETE E DELEGATED DESIGN DOCUMENTS PARAGRAPH BELOW IF NONE ARE REQUIRED BY PROJECT SCOPE**

~~~ END OF PROJECT NOTE ~~~~~

- F. Delegated-Design Documents: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.

1.04 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time specialist and responsible officer.
 - 2. Provide documentation that the agency has experience and capability to conduct testing and inspecting indicated.
 - 3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.

1.05 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.

- C. Should specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer of Record before proceeding.
- D. Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- E. Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from the publication source and make them available on request.
- F. Abbreviations and acronyms are frequently used in the Project Manual and other Contract Documents to represent the name of a trade association, standards-developing organization, authorities having jurisdiction, or other entity in the context of referencing a standard or publication. Where abbreviations and acronyms are used in the Contract Documents, they mean the recognized name of these entities.

1.06 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. Testing and inspecting services are intended to verify compliance with requirements specified. These services do not relieve the Contractor of the responsibility for compliance with the Contract Documents.
- B. Board will employ and pay for services of an independent testing agency to perform certain specified testing and inspections as indicated in individual specifications sections.
 - 1. Fully cooperate and coordinate with Board's testing agency. Provide a minimum of 24 hours advance notice to allow scheduling of tests. Do not cover up work requiring testing.
 - 2. The Board will furnish the Contractor with names, addresses, and telephone numbers of testing agencies engaged by the Board and a description of the types of testing and inspecting they are engaged to perform.
- C. Unless explicitly indicated as Board engaged testing, Contractor shall employ and pay for services of an independent testing agency to perform other specified testing and inspections.
- D. Contractor Employed Agency:
 - 1. Do not employ the same entity engaged by the Board unless agreed to in writing by the Board.
 - 2.

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~~~ END OF PROJECT NOTE ~~~~~

1.07 DELEGATED DESIGN

- A. Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
- B. If criteria indicated are not sufficient to perform services or certification required, request clarification from Architect/Engineer of Record before proceeding.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer of Record before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

3.03

~~~ PROJECT NOTE ~~~~~

**DELETE REFERENCE TO PROJECT MOCK-UP SECTION IF NOT REQUIRED. TYPICALLY PROJECT MOCK-UPS ARE ONLY REQUIRED FOR NEW CONSTRUCTION, ADDITIONS, AND ANNEXES. CONFIRM WITH CPS.**

~~~ END OF PROJECT NOTE ~~~~~

- A. See 01 62 10 - Pre-Construction Project Mock-Up for full-scale, integrated, project mock-up.
- B. Before installing portions of the Work where mock-ups are required, for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
- C. Construct mock-ups in location and size indicated or, if not indicated, as directed by Architect/Engineer of Record.
- D. Accepted mock-ups establish the standard of quality the Architect/Engineer of Record will use to judge the Work. Maintain mock-ups during construction in an undisturbed condition.
- E. Notify Architect/Engineer of Record five (5) working days in advance of dates and times when mock-ups will be constructed.
- F. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

- G. Obtain Architect/Engineer of Record's approval of mock-ups before starting work, fabrication, or construction.
- H. Where mock-up has been accepted by Architect/Engineer of Record and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect/Engineer of Record.
- I. Where possible salvage and recycle the demolished mock-up materials.

3.04 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer of Record before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.05 TESTING AND INSPECTION

- A. See individual specification sections for testing and inspection required.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect/Engineer of Record and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect/Engineer of Record and Contractor of observed irregularities or non-conformance of Work or products.
 - 5. Perform additional tests and inspections required by Architect/Engineer of Record.
 - 6. Submit reports of all tests/inspections specified to Contractor, Architect/Engineer of Record, and authorities having jurisdiction, when they so direct.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 - 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 - 4. Notify Architect/Engineer of Record and Testing Agency 24 hours prior to expected time for operations requiring testing/inspection services.

5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 6. Arrange with Board's Testing Agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 7. Coordinate sequence of activities to accommodate required testing and inspection services with a minimum of delay and to avoid removing and replacing construction to accommodate testing and inspecting.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect/Engineer of Record.
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

3.06 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment and other inspections as applicable, and to initiate instructions when necessary.
- B. Report, in writing, observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.07 DEFECT ASSESSMENT

- A. Replace work or portions of the work not conforming to specified requirements.

3.08 REPAIR AND PROTECTION

- A. On completion of testing, inspecting, sample taking, and similar activities, repair damaged construction and restore substrates and finishes.
- B. Repair and protection are Contractor's responsibility, regardless of assignment of responsibility for testing and inspections.

END OF SECTION 01 40 00