

SECTION 01 40 00

QUALITY REQUIREMENTS

SUMMARY OF CHANGE(S):

REV	DATE	DESCRIPTION / JUSTIFICATION	AUTHOR
0	11 March 2025	LL-01 IFB	M. Lindstrom

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes requirements regarding quality assurance and control of installation, tolerances, references, field samples, inspecting and testing laboratory services and manufacturers' field services and reports.
- B. Related Sections:
 - 1. Section 01 33 00 – Submittal Procedures.
 - 2. Section 01 43 39 – Mockups.

1.2 QUALITY CONTROL AND 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 for handling, storage, installation, and start-up, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from the A/E 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. Perform and Inspect Work in conformance with Special Inspection requirements of the Authority Having Jurisdiction and the Contract Documents.
- F. Perform Work by persons qualified to produce required and specified quality consistent with other prominent installers in comparable business.
- G. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.

- H. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
- I. Products, materials, and equipment may be subject to review by the A/E and/or the Owner at place of manufacture or fabrication. Such reviews shall not relieve Contractor of complying with requirements of Contract Documents.
- J. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

1.3 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. When manufacturers' tolerances conflict with Contract Documents, request clarification from the A/E before proceeding.
- C. Adjust products to appropriate dimensions, position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trades, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from the A/E before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract, nor those of the A/E shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.5 LABELING

- A. Attach label from agency approved by Authority Having Jurisdiction for products, assemblies, and systems required to be labeled by code.

- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, any safety labels per OSHA requirements and the following information, as applicable, on each label.
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.

1.6 MOCK-UP REQUIREMENTS

- A. Tests will be performed under provisions identified in this section and identified in respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. Document comments at mockup and distribute to Owner and the A/E.
- D. Accepted mock-ups shall be comparison standard for remaining Work.
- E. See Section 01 43 39 – Mockups, for additional mockup requirements.

1.7 TESTING AND INSPECTION SERVICES

- A. Employ and pay for services of an independent testing agency or laboratory acceptable to Owner to perform specified testing.
 - 1. Prior to start of Work, submit testing laboratory name, address, and telephone number, and names of full-time specialist and responsible officer.
 - 2. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards during most recent inspection, with memorandum of remedies of deficiencies reported by inspection.
- B. Utilize an independent firm, except as allowed by the American Institute of Steel Construction certification programs for steel fabrication and erection, to perform tests, inspections and other services specified in individual specification sections and Contract Documents and as required by Authority Having Jurisdiction and Owner.
 - 1. Laboratory: Authorized to operate at Project location and in conformance with ASTM E329.
 - 2. Laboratory Staff: Maintain full time specialist on staff to review services.
 - 3. Testing Equipment: Calibrated at reasonable intervals with devices of accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.
- C. Testing, inspections and source quality control may occur on or off project site. Perform off-site testing as required by the A/E or Owner.

- D. Submit test and inspection reports to the A/E, Contractor, and Authority Having Jurisdiction for record, indicating compliance or non-compliance with Contract Documents within three weeks of completion of the inspection and testing.
 - 1. Submit reports of non-conforming work within 7 days of completion of the inspection or tests.
 - 2. Submit final report indicating correction of Work previously reported as non-compliant at the conclusion of the project.

- E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify the A/E and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

- F. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

- G. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm per a testing plan developed by the independent firm coordinated with and approved by the Contractor and the A/E. Payment for re-testing or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.

- H. Agency Responsibilities:
 - 1. Test samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at site. Cooperate with the A/E and Contractor in performance of services.
 - 3. Perform specified sampling and testing of products in accordance with specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify the A/E and Contractor of observed irregularities or non-conformance of Work or products.
 - 6. Perform additional tests required by the AA/E.
 - 7. Attend preconstruction meetings and progress meetings.

- I. Agency Reports: After each test, promptly submit two copies of report to the A/E, Contractor, and Authority Having Jurisdiction. When requested by the A/E, provide interpretation of test results. Include the following:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and specifications section.
 - 6. Location in Project.
 - 7. Type of inspection or test.

8. Date of test.
9. Results of tests.
10. Conformance with Contract Documents.

J. Limits on Testing Authority:

1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Agency or laboratory may not approve or accept any portion of the Work.
3. Agency or laboratory may not assume duties of Contractor.
4. Agency or laboratory has no authority to stop the Work.

1.8 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 equipment, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment, and training of Owner's personnel as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to the A/E 30 days in advance of required observations. Observer subject to approval of Owner.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Refer to Section 01 33 00 – Submittal Procedures, Manufacturers' Field Reports article.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION