

SECTION 01400
QUALITY CONTROL

PART 1 - GENERAL

1.1 PERFORMANCE OF WORK

- A. Except where specifically required otherwise in the technical specifications the Contractor shall be responsible for all construction quality control and shall perform or coordinate all tests and inspections in accordance with Article 13.5 of the AIA General Conditions. See SECTION 01300 - SUBMITTALS

1.2 DEFINITIONS

- A. Certified Test Reports: Certified test reports are reports of tests signed by a qualified professional attesting that the test results reported are accurate and that items tested either meet or fail to meet the stated minimum requirements. These test reports include those performed by Factory Mutual, Underwriters Laboratories, Inc., and others.
- B. Certified Inspection Reports: Certified inspection reports are those signed by approved inspectors attesting that the items inspected meet the specification requirements other than those exceptions included in the report.
- C. Manufacturer's Certificate of Conformance or Compliance: A certificate signed by an authorized manufacturer's official attesting that the material or equipment delivered meets the specification requirements.

1.3 TESTS All testing shall be divided into three categories as follows:

- A. Field Tests made at, or in the vicinity of the job site in connection with the actual construction including, but not limited to, concrete batch plants, and similar establishments directly involved in the construction process.
- B. Factory Tests, made at the point of manufacture of various products which are shipped to the job site as a unit, including but not limited to such items as transformers, boilers, air conditioning equipment, and electrical equipment.
- C. Certified Tests, made by approved testing agencies on material and equipment which are to be incorporated into the structure under the Contract. These tests are such as are performed by Factory Mutual, Underwriters Laboratories, Inc., and others.

1.4 FIELD TESTS

- A. Field Tests by the Contractor: The Contractor shall perform certain field testing specifically required of him in the contract specifications. In those cases, he shall furnish all equipment, instruments, qualified personnel, and facilities necessary to perform all tests required by the Contract Documents. Testing services shall be performed by the Contractor or acquired by the Contractor through qualified commercial testing laboratory. If a commercial testing laboratory is retained to perform tests under this contract, all test reports shall be certified by a representative of the testing laboratory who is authorized to sign certified test reports for the laboratory. Test reports shall include the acceptable value for each specification item, the actual test results obtained, and the test methods used. Each report shall be conspicuously stamped on the cover sheet in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements as the case maybe. The Contractor shall arrange for immediate and direct delivery of the signed original of all reports, certifications, and other documentation to the Architect.
- B. Factory Tests: The Contractor will arrange for factory tests when such tests are required.
- C. Manufacturer's Certified Tests: Certified tests on materials to be incorporated into the work will be acceptable, provided they are performed by the manufacturer or by Government approved agencies or laboratories, show that the materials conform to the specification, and that the tests and certifications meet the requirements of the paragraph entitled "Certificates and Certifications" below.

- D. Approval of Laboratories: All laboratory work performed under this contract shall be done by a laboratory approved by the Architect. The basis of approval includes the following:
1. Laboratories performing work in connection with concrete, steel and bituminous materials must conform to American Society for Testing and Materials (ASTM) Designation # 329-77.
 2. Laboratories performing work not in connection with concrete, steel and bituminous materials must conform to Sections 3 and 4 of ASTM Designation E 329-77.

1.5 INSPECTION: All inspection shall be divided into two categories as follows:

- A. Field Inspection is that inspection in the vicinity of the job site which, when performed properly, will result in the complete compliance of all work-in-place with the contract drawings and specifications.
- B. Factory Inspection is that inspection at the point of manufacture of the various products which are shipped to the job site, including but not limited to such items as transformers, boilers, air conditioning equipment, and electrical equipment.
- C. Contractor Field Inspection: The Contractor or his designated representative shall inspect all work under this contract.

1.6 SUBMITTALS

- A. Submittals shall be prepared in accordance with SECTION 01300 – SUBMITTALS. Each submittal shall be accompanied by a cover letter signed by the Contractor. Each item proposed to be incorporated into the Contract shall be clearly marked and identified in the submittals, and shall be cross-referenced to the contract drawings and specifications so as to identify clearly the use for which it is intended. Each sheet of submittal shall be stamped with the Contractor's certification stamp. Data submitted in a bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. The Contractor's certification stamp shall be worded as follows:
 - B. "It is hereby certified that the (equipment) (material) shown and marked in this submittal is that proposed to be incorporated into the project. It is in compliance with the contract drawings and specifications, can be installed in the allocated spaces, and is submitted for the Architect's review.
Certified by: _____ Date: _____"
- C. The person signing the certification shall be one designated in writing by the Contractor as having that authority. The signature shall be in original ink. Stamped signatures are not acceptable.
- D. Submittal Status Logs: The Contractor shall maintain at the job site an up-to-date submittal status log showing the status of submittals required by the contract.
- E. Shop drawings, manufacturer's data and samples shall be identified clearly and submitted in accordance with the General Conditions.
- F. Certified Test Reports: Before delivery of materials and equipment, certified copies of the reports of all tests listed in the technical sections shall be submitted and approved. The testing shall have been performed in a laboratory meeting the requirements specified herein. Test reports shall be accompanied by certificates from the manufacturer certifying that the material and equipment proposed to be supplied is of the same type, quality, manufacture, and make as that tested.
- G. Formwork, Falsework and Erection Procedures Certification: When the Contractor is required to submit a design or certification for formwork, falsework, or erection procedures, daily inspection report must indicate that the work has been inspected for conformance to the design or certification. A specific statement for these items rather than a general statement is required.

1.7 CERTIFICATES AND CERTIFICATIONS

- A. Manufacturer's certification may be furnished by the Contractor, on items of materials and equipment incorporated into the work, only when this method will assure full compliance with the provisions of the Contract, as determined by the Architect. Pre-printed certifications will not be acceptable. All certifications shall be in the original. The original of all manufacturer's certifications shall name the appropriate item of equipment or material, specification, standard or other document specified as controlling the quality of that item of equipment or material, specification, standard or other document specified as controlling the quality of that item and shall have attached thereto certified copies of test reports upon which the certifications are based.

1.8 RECORD OF INSPECTIONS

- A. Pursuant to the Contractor's Inspection, the Contractor shall maintain, on a day-to-day basis, a record of all inspections and field tests performed that day.

1.9 REPEATED TESTS AND INSPECTIONS

- A. The Contractor shall repeat tests and inspections after each correction made to nonconforming materials and workmanship until tests and inspections indicate the materials, equipment, and workmanship conform to the Contract requirements. The retesting and re-inspections shall be performed at no cost to the Owner.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION