

SECTION 26 0512 - ELECTRICAL SUBMITTALS

PART 1 - GENERAL

1.1 DESCRIPTION OF SUBMITTAL CATEGORIES:

- A. Submittals required are defined below and specified in each section. Refer to Division 01 regarding submittals procedures.
- B. Shop Drawings include fabrication, layout, wiring diagrams, erection, setting, coordination, similar drawings and diagrams and performance data.
- C. Samples are units of work, materials or equipment items, showing the workmanship, pattern, trim and similar qualities proposed.
- D. Manufacturer's Data is standard printed product information concerning the standard portions of the manufacturer's products.
- E. Certifications are written statements, executed specifically for the project application by an authorized officer of the contracting firm, manufacturer or other firm as designated, certifying to compliance with the specified requirements.
- F. Test Reports are specific reports prepared by independent testing laboratories, showing the results of specified testing. Industry Standards are printed copies of the current standards in the industry.
- G. Manufacturer's Product Warranties are manufacturer's standard printed commitment in reference to a specific product and normal application, stating that certain acts of restitution will be performed by the manufacturer if the product fails under certain conditions and times limits.
- H. Operating Instructions are the written instructions by the manufacturer, fabricator or installer of equipment or systems, detailing the procedures to be followed by the Owner in operation, control and shut-down.
- I. Maintenance Manuals are the compiled information provided for the Owner's maintenance of each system of operating equipment. Maintenance Materials are extra stock of parts or materials for the Owner's initial use in maintaining the equipment and systems in operation.
- J. Guarantees are signed commitments to the Owner that certain acts of restitution will be performed if certain portions of work fail within certain conditions and time limits.
- K. Product Data includes manufacturer's data pertaining to the products, materials and equipment of the work.

1.2 SUBMITTAL FORM AND PROCEDURES:

- A. Submittals shall be made within 30 days of contract signing for projects of 12 months construction time or less. Make within 60 days for longer than 12 months construction time.
- B. Submit shop drawings for all material and equipment furnished under Division 26 Architect. Refer to Division 01 for submittal procedures.
- C. Multiple System Items: Where a required submittal relates to an operational item of equipment used in more than one system, increase the number of copies as necessary to complete maintenance manuals for each system.
- D. Response to Submittals: Submittals will be returned with indication that documents comply with specifications or that documents do not comply and what action must be taken to be in compliance.
- E. Coordinate electrical submittals through Contractor to Architect and assist Contractor in preparation of submittal.
- F. Submittals shall bear the stamp and signature of electrical and general contractor. Failure to place same on drawings require re-submittal before review.

- G. Quantity of all equipment is the responsibility of the electrical contractor.

1.3 SPECIFIC SUBMITTAL REQUIREMENTS:

- A. Shop Drawings:
1. To accurate scale except where diagrammatic representations are specifically indicated.
 2. To show clearance dimensions of critical locations and show dimensions of spaces required for operation and maintenance of equipment.
 3. To show conduit and conductor connections and other service connections.
 4. To show interfaces with other work including structural support.
 5. To include complete descriptive data, with dimensions, operating data and weight.
 6. To indicate deviation from the contract documents.
 7. To explain deviations.
 8. To show how deviations coordinate with portions of the work, currently or previously submitted.
- B. Review of shop drawings shall not relieve Contractor of responsibility for errors or omissions in shop drawings. Any equipment which will not fit into space shown on drawings shall be called to the attention of the Architect in writing.
- C. Samples: Architect's review of sample submittals:
1. Limited to general type, pattern and finish.
 2. Not to include testing and inspection of the submitted samples.
 3. Compliance with specified requirements is exclusive responsibility of the Contractor.
- D. Manufacturer's Data:
1. Where pre-printed data covers more than one distinct item, mark copy to indicate which item is to be provided.
 2. Delete portions of data not applicable.
 3. Mark data showing portion of operating range required for project application.
 4. Elaboration of standard data describing a non-standard product processed as a shop drawing.
- E. For each product include:
1. Manufacturer's production specifications.
 2. Installation or fabrication instructions.
 3. Source of supply.
 4. Sizes, weights, speeds and operating capacities.
 5. Conduit and wire connection sizes and locations.
 6. Statements of compliance with required standard and governing regulations.
 7. Performance data, where applicable.
 8. Other information needed to confirm compliance. Manufacturer's recommended parts list.
- F. Certifications: Submit with notarized execution.
- G. Test Reports: Submit notarized test reports signed and dated by firm performing test.
- H. Manufacturer's Product Warranties: Where published warranty includes deviation from required warranty, product is disqualified from use on project, unless manufacturer issues a specific project warranty.
- I. Operating Instructions submittal required:
1. Manufacturer's operating instructions for each item of electrical equipment.
 2. Supplement with additional project application instructions where necessary.
 3. Specific operating instructions for each electrical system which involves multiple items of equipment. Instructions for charging, start-up, control or sequencing of operation, phase or seasonal variations, shut-down, safety and similar operations.
 4. Typewritten in completely explained and easily understood English language.
- J. Maintenance Manual Requirements:
1. Emergency instructions including addresses and telephone numbers for service sources.
 2. Regular system maintenance procedures.
 3. Proper use of tools and accessories.
 4. Wiring and control diagram for each system.

5. Manufacturer's data for each operational item in each system.
 6. Manufacturer's product warranties and guarantees relating to the system and equipment items in the system.
 7. Shop drawings relating to the system.
 8. Bind each maintenance manual in one or more vinyl-covered, 2", 3-ring binders, plus pocket-folders for folded drawings. Index with thumb tab for sections. Mark the back spine and front cover of each binder with system identification and volume number.
- K. Maintenance Materials: Deliver to Owner in fully identified containers or packages suitable for storage.
- L. Guarantees: Where indicated as "Certified", provide guarantee which, in addition to execution by an authorized officer of each guarantor, is attested to by the Secretary of each guarantor and bears the corporate seal. Submit draft of each guarantee prior to execution.

END OF SECTION

