## SECTION 01 33 00 SUBMITTALS

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

#### 1.01 DESCRIPTION:

### A. Work included:

- 1. Wherever possible, throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number or by reference to recognized industry standards.
- 2. To ensure that the specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of design data and for its review and approval or rejection by the Architect.

#### **PART 2 - PRODUCTS**

#### 2.01 SHOP DRAWINGS AND PRODUCT DATA:

### A. Shop Drawings

- 1. Unless otherwise specifically directed by the Architect, make all Shop Drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the Work.
- 4 prints shall be submitted of each shop drawing. After the shop drawing has been reviewed and stamped, the print will be filed at the office of the Architect, and one copy returned to the Contractor, from which he shall make as many copies as he feels is needed for the prosecution of the Work.

#### B. Product Data

- 1. The Architect will require a minimum of six (6) copies to be submitted of Product Data which has not been originally prepared on a transparent material. The Architect will retain 1 of these copies, plus any of the others that are required by his consultants, leaving at the very least one copy to be returned to the Contractor. Therefore, if the Contractor desires more than 1 copy returned to him he must add to the minimum number of copies required to be submitted.
- Information not exclusively pertinent to the Project shall be deleted so that there is no
  possible area of confusion as to what product, series, or model is to be examined. The
  Architect or Owner will not take responsibility for having examined a product that was not
  intended by the Contractor to be judged.

### 2.02 SAMPLES, MOCKUPS, AND COLORS:

- A. Unless otherwise specifically directed by the Architect, all Samples and Mockups shall be of the precise article proposed to be furnished.
- B. Samples and mockups shall faithfully represent the product or the assembly as it is proposed to be installed. This shall include, but not be limited to, materials, finishes, method of construction or assembly, relationship to adjacent construction, method of attachment to adjacent construction, plus any electrical or mechanical connection that are required for the product or assembly to function.
- C. Unless the precise color and pattern is specifically described in the Contract Documents, whenever a choice of color or pattern is available in a specified product submit accurate color charts and pattern charts to the Architect for his review and selection.

- D. Samples and color charts shall be physical specimens of materials or colors proposed to be provided. Selections and approval of samples will be made by the Architect from these submitted samples and color charts, without increase in costs to the Owner or Architects. Should the Contractor desire a sample returned, he shall submit a sufficient number in order for the Architect to retain one 1 sample and return the remainder to the Contractor.
- E. In order for the Architect to make a color schedule as quickly as possible and to avoid delivery and pricing problems, the Contractor shall be required to submit all items that require a color selection within 40 days of the Notice to Proceed. Delivery and pricing problems that develop because an item was not submitted within the forty (40) day time limit, shall be the sole responsibility of the Contractor and not that of the Owner.
- F. The color selection on any one item will not be made until after samples of all items that require a color selection have been submitted.

#### 2.03 MAINTENANCE AND OPERATION MANUALS:

- A. Provide information for the Owner's maintenance of each system or operating equipment, including, but not limited to, lubrication, emergency control, parts replacement, spare parts inventory recommendation, listing of tools and accessories needed for maintenance and similar instructions, TAB test reports and other test reports, and including warranty and requirements indicated throughout the Specification.
- B. Provide manufacturer's operating instructions for each item of mechanical equipment and supplement with additional instructions where necessary. Prepare and submit specific operating instructions for each mechanical system which involves multiple items of equipment, including instructions for charging, start-up, control or sequencing or operation, phase or seasonal variations, shut-down, safety, and similar operational instructions. Prepare in typewritten form, completely explained and easily understood.
- C. Organize each maintenance manual to include an index followed by thumb tab marked sections for system operating instructions; emergency instructions including addresses and telephone numbers for service sources; regular system maintenance procedures including lubrication; spare parts listing and stocking recommendations, inspection, adjusting, re-balancing, cleaning, parts replacement, and similar maintenance instructions and recommendations. Manuals shall also include the proper use of tools and accessories; valve schedules and control diagram for each system; manufacturer's data for each operational item in each system; manufacturer's product warranties, and warranties relating to system and equipment items as part of the Work; shop drawings relating to the system, test reports, and Project Record Documents. Bind each maintenance manual in one or more black vinyl covered, 2" thick, three ring binder, plus pocket folder type binders for folded drawings, and mark the back spine of each binder with system identification and volume number.

## 2.04 ADDITIONAL REQUIREMENTS FOR MECHANICAL AND ELECTRICAL:

- A. Prior to submitting shop drawings, assure that equipment proposed for use will fit into space available, considering space for coil removal, filter service, maintenance, and other activities required to keep equipment operating in proper manner.
- B. Note in "red" all deviations in electrical and/or mechanical arrangement from that indicated, including, but not limited to, such items as electrical loads, electrical connections and physical size. It is understood when submittal is received that all items that effect other trades have been coordinated with those trades.
- C. Submittal data shall include, but is not limited to the following:

- 1. Arrangement drawings with complete dimensional data.
- 2. Performance data listing the following:
  - a. Capacities, CFM, GPM, entering and leaving air and water conditions, pressure losses for air and water side and all component pressure losses.
  - b. Horse power, KW, and total unit electrical requirements.
  - c. Fan curves, discharge arrangement, motor locations, sheaves and belt data.
  - d. Power and control wiring diagrams, showing interlock requirements.
  - e. Isolators and isolator location with selection data.
  - f. Filter data with type, size number required and pressure drop.
  - g. Auxiliary equipment by other manufacturers: Provide name, capacity, dimensions, wiring diagrams and power requirements.
- D. Shop Drawings: Contractor to submit to owner for approval complete sheet metal shop drawings of all ductwork, including equipment rooms, shafts, and especially congested areas and areas with possible conflicts. No installation shall proceed without owner stamped approval of shop drawings. Submittal to reflect space requirements coordinated with other trades such as Electrical, Plumbing, Mechanical and Structural. Prior to submission to owner, shop drawings to have stamped approval of all major trades which occupy ceiling space (HVAC, plumbing, piping, sprinkler, and electrical), to substantiate adequate coordination as to space, accessibility and to ensure no conflict exists between contractors.

#### **PART 3 - EXECUTION**

#### 3.01 THE CONTRACTOR'S DUTIES:

- A. The Contractor shall review, stamp with his approval and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all submittals required by the Contract Documents. Submittals will not be examined unless it is plainly evident that the Contractor has himself reviewed and approved the material. He shall legibly mark and date each item submitted indicating his approval of the submission. Under no circumstances will material be examined that comes to the Architect directly from a Subcontractor.
- B. By approving and submitting submittals, the Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- C. The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the submittals by the Architect's approval thereof.
- D. Verbal discussion between the Contractor and the Owner or the Architect of a proposed deviation and any subsequent agreements thereto shall not be considered valid unless confirmed in writing by the Owner or the Architect.
- E. The Contractor shall direct specific attention, in writing or on resubmitted submittals, to revisions other than those requested by the Architect on previous submittals.
- F. Wherever any product is specified in accordance with the Federal Specifications, an ASTM Standard, a United States Standard Specification, or other association standard, the Contractor shall present an affidavit from the manufacturer certifying that the product complies with the particular standard specification. Where necessary and requested or specified, support test data

shall be submitted to substantiate compliance.

#### 3.02 SUBMITTAL LOG:

- A. Maintain an accurate submittal log for the duration of the construction period, showing status of all submittals of all types.
- B. Make the log available to the Architect for review upon request.

#### 3.03 COORDINATION OF SUBMITTALS:

- A. Prior to submittal for Architect's review, use all means necessary to fully coordinate all material, including, but not limited to, the following procedures:
  - Determine and verify all field dimensions and conditions, catalog numbers, and similar data.
  - 2. Coordinate as required with all Trades and will all public agencies involved.
  - 3. Secure all necessary approval from public agencies and others; signify by stamp or other means that all required approvals have been obtained.
  - 4. Clearly indicate, in writing, all deviations from the Contract Document.

#### B. Mechanical and electrical coordination:

- 1. Provide coordination of ductwork, waste, vent, pipes and conduit, as necessary to provide ceiling heights required. Provide necessary information to Architect if relocation of services and/or ceiling height changes will have to be made.
- 2. Provide scaled equipment layout of mechanical room showing dimensioned equipment pads; floor drain locations; sleeve locations; and equipment location showing required code or service clearance.

### 3.04 SUBMITTAL SEQUENCE:

- A. The right is reserved by the Architect to examine submittals and samples in a proper sequence that reflects the logical sequence of erection, installations, and proper assembly. Submittals of products or materials that are the responsibility of separate Trades yet must be assembled in conjunction one with another, shall be submitted at the same time so that they may be examined
  - all together. Should these not be submitted simultaneously, the Architect reserves the right to hold one set while awaiting the arrival of other submittals.
- B. All submittals within the responsibility of one Trade must be submitted at one time together (i.e. Millwork). Numerous submittals of one product or item of construction over a period of time is not acceptable. In the event of this occurrence, the Architect will hold the submittal data arriving first until the last of the material has arrived. Then, and only then, will he make his examination.

#### 3.05 TIMING OF SUBMITTALS:

- A. Make all submittals far enough in advance of scheduled dates for installation to provide all required time for reviews, for securing necessary approvals, for possible revision and resubmittals, and for placing orders and securing delivery.
- C. Costs of delays occasioned by tardiness of submittals may be back-charged as necessary and shall not be borne by the Owner.

#### 3.06 EXAMINATION OF SUBMITTALS:

- A. Architect's review shall be for general conformance with the design concept and Contract Documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the Drawings and Specifications, nor departures therefrom. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly, and for performing his work in a safe manner.
- B. When the Architect has marked the submittals, "Rejected-Resubmit", or word of similar import, the Contractor shall cause the corrections to be made to the original and shall then proceed for a new submission.
- C. The Contractor shall not under any circumstances remove any comments, notes, or drawings made by the Architect on the submittals that have been reviewed and stamped by the Architect. Should a conflict develop, the Contractor shall contact the Architect for instruction.
- D. If the Contractor finds indicated changes to cause a conflict in conjunction with present construction and/or products to be installed at a later date, he must notify the Architect and ask for verification. Should the Contractor not ask for a verification, he shall continue with the construction involving or relating to that product at his own risk.
- E. If there is a cost change notify architect for prior authorization before proceeding with orders, production, or performance of the work. No exceptions.

#### 3.07 COMPOSITE DRAWINGS:

A. In instances where submittals affect the Work of more than one Trade and/or when directed by the Architect, the Contractor shall prepare and submit composite drawings which indicate and define the Work under all affected Trades, and obtain the approval of the Architect. Upon receipt of final approval, the Contractor shall distribute print copies of the approved drawings to all affected Trades. All affected Trades shall cooperate in the preparation of the composite drawings to assure proper coordination.

#### 3.08 DELIVERY OF SUBMITTALS:

A. The Contractor shall be responsible for the delivery and pick-up of the submittals to the office of the Architect.

- END OF SECTION -