SECTION 01 33 23

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1.1 GENERAL

A. Description

1. Work Included:

a. Submit to the Architect all shop drawings, product data and samples required by the specification sections.

2. Related Work Described Elsewhere:

a. Project Record Documents in Section 01 77 00.

3. Schedules:

a. Prepare and submit, with Construction Schedule, a separate schedule listing dates for submission and dates for review of shop drawings, product data and samples that will be needed for each product.

4. Definitions:

a. The definitions of the terms "Shop Drawings", "Product Data", and "Samples" shall be as defined by the General Conditions of the Contract for Construction.

5. The Phrase "By Others":

a. Where the phrase "By Others" (or a similar expression) appears on a submittal, and refers to any of the Contract Work, it shall be construed to mean "By the Contractor". The Architect's approval of any Submittal containing such phrase shall not be considered permission to delete any work from the Contract.

6. Time for Making Submissions:

a. The Contractor will be held responsible for any delay in the progress of the Work which may be due to his failure to make submittals as required herein.

7. Submittal Information:

a. Project title and number.
b. Consecutive number revised.
c. Data drawn and data revised.
d. Contractors certification that submittals have been checked by him for compliance with Contract Requirements.
e. Space for approval stamps.
f. Working dimensions and erection dimensions.
g. Arrangements.

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h. Sectional views.
I. Details and methods of fabrications, assembly and erection.
j. Details of connections with contiguous work.
k. Fastenings.
l. Equipment, accessories and trimmings.
m. Kinds of materials.
n. Protective coatings and factory finishes.
o. Complete schedules.
p. Other pertinent data.

1.2 SHOP DRAWINGS

A. Composite Shop Drawings and Field Installation Layouts:

1. The Contractor shall prepare composite shop drawings and field installation layouts, when required, to solve tight conditions. Such drawings shall consist of dimensioned plans and elevations and must give complete information particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, and structural interferences. The composite shop drawings and field installation layouts shall be coordinated in the field by the Contractor and involved subcontractors for proper relationship to the work of other trades, based on field conditions, and shall be checked and approved by them before submission to the Architect for his final review. The Contractor shall have competent technical personnel readily available for such coordination and checking, as well as for the supervision of the field installation of the work in accordance with the approved shop drawings field installation layouts.

2. Identify details by reference to sheet and detail numbers shown on Contract Drawings.

3. Minimum sheet size shall be 8-1/2" x 11".

B. See submission requirements for additional requirements.

1.3 PRODUCT DATA

A. Manufacturer's Standard Schematic Drawings:

1. Modify drawings to delete information which is not applicable to project.

2. Supplement standard information to provide additional information applicable to project.

B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.

1. Clearly mark each copy to identify pertinent materials, products or models.

2. Show dimensions and clearances required.

3. Shop performance characteristics and capacities.

4. Show wiring diagrams and controls.

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1.4 SAMPLES

A. Submit in selected color and finish for final approval and comparison with products to be installed.

B. Office Samples: Of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of product or material, with integrally related parts and attachment devices.

2. Submit samples of extreme color or texture ranges.

C. Color and Finish Selections Kits:

1. Submit samples in book or kit form as necessary for selection of color or finish.

2. Samples shall represent the full range of color and finish which are or will be available in the specified product at the time the project is built.

3. Colors or finishes of unusually high cost, slow delivery, or available only on special order shall be submitted along with normal range items. Their special nature shall be noted.

D. Submission of Samples:

1. Except where otherwise specified, samples shall be submitted in duplicate accompanied by a letter of transmittal (signed by the Contractor in triplicate.) Any samples received without a cover letter will be considered "unclaimed goods" and held for a limited time only. The letter shall contain the following:

a. Contractor's name.
b. Project name and number.
c. List of samples being submitted.
d. Trade section to which samples refer.
e. Number of standard (ASTM, USASI, Commercial Standard, Federal Spec.) if any, with which samples complies.
f. Manufacturer's name or source of supply.
g. Trade name.
h. Catalog number.
i. Other pertinent information.
j. Any deviation from contract requirements.
k. Contractors certification that he has checked all samples for compliance with contract requirements and availability of material represented thereby.

2. Each samples shall be labeled with the project name, project number, Contractor's name, trade name or other identification related to letter transmittal.

E. Rejection of Work Not Conforming to Approved Samples:

1. Samples submitted shall clearly show the full range of quality, color and texture which will be evident in finished work. Materials which do not conform to approved samples

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shall not be used on this project and shall be discarded immediately upon their discovery. The approval or acceptance of samples will not preclude the rejection of any material not complying with contract requirements which is discovered prior to end of warranty period.

1.5 CONTRACTOR'S RESPONSIBILITIES

A. Contractor's Approval:

1. Before submitting shop drawings, product data, or samples for approval, the Contractor shall check them for accuracy, shall ascertain that all work contiguous with and having bearing on other work is accurate and that the work shown is in conformance with the Contract requirements. All submittals at the time of submission must bear the Contractor's stamp of approval as evidence that such submittals have been checked by the Contractor. Any submittals forwarded without such executed stamp of approval or whenever it is evident (despite the stamp) that the submittals have not been checked, they will be returned to the Contractor for resubmission without further consideration; In such event, it will be deemed that the Contractor shall bear the risk of all delays to the same extent as if no submittals at all have been forwarded.

2. Before submitting samples to Architect for approval, the Contractor shall assure himself that material represented thereby conforms to Contract requirements and is readily available in quantity required.

B. Improper Checking or Coordination:

1. The cost, if any, of change in the work necessitated by improper checking or improper coordination shall be paid for by the Contractor.

C. Claims for Extra Cost:

1. All claims for extra cost must be justified in writing by the subcontractor as hidden/unknown conditions discovered after the time of bid, such claim is to be made on the Contractor's letterhead of transmittal accompanying the submittal.

D. Delivery of Submissions to the Architect:

1. Submittals shall be sent to the Architect's office. Submittals shall be forwarded by the Contractor only, unless he has authorized another party to make submissions and has notified the Architect to this effect.

E. Contractor's Compliance:

1. The Contractor shall read and be familiar with all requirements of the Contract Documents concerning Shop Drawings, including the following:

a. The Contractor shall review and approve all shop drawings and stamp them accordingly, before forwarding them to the Architect.

b. By approving, stamping, and submitting shop drawings to the Architect, the Contractor represents that he has verified:

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all field dimensions
all field construction criteria
all materials and respective finishes
all catalog numbers, and coordinated each shop drawing with the requirements of the work and Contract Documents

c. When submitting shop drawings, the Contractor shall notify the Architect, in writing of any deviations from the Contract Documents on the shop drawings.

d. The Contractor understands that the Architect's review and approval of shop drawings does not relieve the Contractor of responsibility for:

Deviations from the Contract Document requirements, unless the Architect is informed, in writing of the deviations and approval is received, in writing, from the Architect for such deviation.

The Contractor understands that the Architect's review and approval of shop drawings does not indicate approval of changes in the Contract Time or cost.

The Contractor understands that no work shall be started on any item requiring shop drawings until proper approval of shop drawings is given by the Architect and that such work shall be in accordance with approved shop drawings.

Submission and processing of shop drawings will be in accordance with Contract Document requirements and the related responsibilities herein.

1.6 SUBMISSION REQUIREMENTS

A. Shop Drawings:

1. Shop drawings shall be submitted in the form of prints in a quantity sufficient for final distribution of reviewed submittals accompanied by a letter of Transmittal in triplicate, signed by the Contractor. Drawings shall be bound in complete sets and transmitted to the Architect.

2. Manufacturer's brochure, products, product data and other descriptive information which cannot be submitted in sepia form shall be submitted as multiple copies. Submit in quantity sufficient for final distribution of approved submittals.

B. Submission for Mechanical and Electrical Work

1. In accordance with requirements specified for the mechanical and electrical work of the project, (plumbing, heating, ventilating, air-conditioning, electrical work,) the Contractor shall submit a complete list of material and other required information as specified under the respective Mechanical and Electrical Specification sections. No consideration will be given to partial lists submitted from time to time.

C. Manufacturer's Certificate

1. Where required by the specifications, submit manufacturer's affidavit certifying that

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material furnished for this project complies with Contract requirements.

D. Submittals Marked "Approved"

1. Submittals which require no corrections by the Architect will be marked "Approved".

E. Submittals Marked "Approved as Noted"

1. Submittals which require only a minor amount of correcting will be marked "Approved as Noted". This mark shall mean that checking is complete and all corrections are obvious without ambiguity. Fabrication will be allowed on work "Approved as Noted", provided such action will expedite construction and noted corrections are adhered to. If fabrication is not made strictly in accordance with corrections noted, the item shall be rejected in the field and the Contractor will be required to replace such work in accordance with corrected submittals, at his own expense.

F. Submittals Marked "Revise and Resubmit"

1. When submittals are marked "Revise and Resubmit", details of items noted by Architect shall be further clarified before approval can be given and noted items must not be fabricated until corrected and approved. Unmarked items may be fabricated unless otherwise directed.

G. Submittals Marked "Not Approved"

1. When submittals are contrary to contract requirements or too many corrections are required, they shall be marked "Not Approved". No work shall be fabricated under this mark. The Architect shall list his reasons for rejection on the submittals or in the transmittal letter accompanying their return. The submittals must be corrected and resubmitted for approval.

H. Return of Submittals to Contractor Unchecked

1. The Architect may return submittals to the Contractor for any of the following reasons, in which case the submission will not be considered official:

a. Submitted in violation of specified procedure.
b. Inadequately checked by Contractor.
c. Inaccurate and in substantial error.

1.7 RESUBMISSION REQUIREMENTS

A. Resubmission of Corrected Submittals

1. No changes shall be made by the Contractor to resubmitted shop drawings or product date in excess of those corrections noted by the Architect unless accompanied by a letter explaining the additional changes.

1.8 DISTRIBUTION OF SUBMITTALS AFTER REVIEW

A. After all corrections, changes and resubmittals have been made, the Contractor shall provide the following number of reviewed submittals, bearing his stamp of final approval, distributed

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as follows:

	Letter	Selection Sample	Record Sample	Shop Drawing	Report Certificate
Owner	1			2	1
Architect	1	1	1	1	1
Contractor	1			4	

1.9. ARCHITECT'S DUTIES

A. Architect's Approval

1. The Architect's approval will be only general in nature and shall not be construed as permitting any departure from Contract requirements, or as relieving the Contractor of responsibility for any errors, including details, dimensions or materials. If submittals show variations from Contract requirements the Architect may approve any or all such variations, subject to proper adjustment in the Contract. If the Contractor fails to describe such variation he shall not be relieved of the responsibility for executing the work in accordance with the Contract Documents, even though such submittals have been approved.

B. Approval of Products and Workmanship

1. Work of all trades (especially those which when finished will be permanently visible or must function faultlessly) will be subject to the following sequence of approval by the Architect.

a. Each trade shall submit one complete list of all materials proposed for use on the Project, which shall be approved by the Architect. The list shall include all necessary information to show compliance with requirements of the Specification.

b. Required product samples shall be submitted to the Architect for their approval.

c. Before work on any portion is started and if requested by the Architect, representative in-place samples of any specified work, shall be installed in the Architect's presence. In-place samples, when approved by the Architect shall become the standard for all similar work on the Project. The Contractor shall coordinate and schedule all in-place sample installations, which have been requested by the Architect so that:

All sample work shall be done on the same day, when one or more samples are requested of one or more trades.

Forty-eight (48) hours notice shall be given to the Architect before work starts.

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C. Architect's Retention of Submittals for Future Checking

1. Where partial submissions cannot be checked until the complete submission has been received, or where correlation is required between material submitted and material not yet submitted, the Architect will advise the Contractor in writing that the submission will not be checked until all pertinent information is received and that the submission will not be considered official until it is complete in every aspect.

END OF SECTION

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