

1 GENERAL

- .1 Submit to the Consultant for review, shop drawings, product data and samples specified in the respective specification Sections.
- .2 Submit promptly and in an orderly sequence so as not to cause a delay in the Work.
- .3 Failure to submit in ample time is not considered sufficient reason for an extension of Contract time and no claim for extension by reason of such default will be allowed.
- .4 Until a submission is reviewed, work involving the relevant product may not proceed.
- .5 Present shop drawings, samples and mock-ups in SI Metric units. Where items or information is not produced in SI Metric units, converted values are acceptable.
- .6 Generally, submittals shall be in .pdf digital format.
- .7 For submittals that cannot be transmitted digitally (i.e. samples), arrange and pay for all deliveries and pick-ups to and from the office of the Consultant.
- .8 Maintain an email inbox capable of accepting minimum 20 Mb of data.

2 SHOP DRAWINGS AND PRODUCT DATA

- .1 Shop drawings to be originals prepared by the Contractor, Subcontractor, Supplier or Distributor, which illustrate the appropriate portion of the Work; showing fabrication, layout, setting or erection details, as specified in the appropriate Sections.
- .2 Identify details by reference to sheet and detail numbers shown on the Contract Drawings.
- .3 Indicate materials, methods of construction and attachment or anchorage, erection diagrams and connections, explanatory notes and other information necessary for the completion of the work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of the Section under which the adjacent items will be supplied and installed. Indicate cross references to Contract Drawings and Specifications.
- .4 Drawing Format Submissions:
 - .1 Digital files in .pdf format.
 - .2 Upon return to the Contractor of reviewed digital submissions, the Contractor shall be responsible for printing and distribution of reviewed submissions to the appropriate Subcontractors and affected parties.
- .5 Product Data:
 - .1 Certain specification Sections specify that manufacturer's standard schematic drawings, catalogue sheets, illustrations and other standard descriptive data will be accepted in lieu of shop drawings.
 - .2 The above will be accepted only if they conform to the following:
 - .1 Delete information which is not applicable to project.

- .2 Supplement standard information to provide additional information applicable to project.
- .3 Show dimensions and clearances required.
- .4 Show performance characteristics and capacities.
- .5 Show wiring diagrams (where applicable) and controls.
- .3 Submit as .pdf files.

3 COORDINATION OF SUBMISSIONS

- .1 Review and stamp shop drawings, product data and samples prior to submission.
- .2 Verify:
 - .1 Field measurements.
 - .2 Field construction criteria.
 - .3 Catalogue numbers and similar data.
- .3 Coordinate each submission with the requirements of the Work and the Contract Documents. Individual shop drawings will not be reviewed until all related drawings are available.
- .4 The Contractor's responsibility for errors and omissions in submission is not relieved by the Consultant's review of submittals.
- .5 The Contractor's responsibility for deviations in submission from the requirements of the Contract Documents is not relieved by the Consultant's review of the submission, unless the Consultant gives written acceptance of specified deviations.
- .6 Notify the Consultant, in writing at the time of submission, of deviations from the requirements of the Contract Documents.
- .7 After the Consultant's review, the .pdf file will be returned to the Contractor who shall distribute copies.
- .8 Originators preparing more than one submission, shall prepare a list of all shop drawings, complete with submission dates to the Consultant. Include this list with the first submission.

4 SUBMISSION REQUIREMENTS

- .1 Schedule submissions at least twenty (20) days before the dates reviewed submissions will be needed.
- .2 Accompany each electronic submission with an email.
- .3 Submissions shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name of:
 - .1 Contractor.
 - .2 Subcontractor.
 - .3 Supplier.

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- .4 Manufacturer.
 - .5 Separate detailer when pertinent.
 - .4 Identification of product or material.
 - .5 Relation to adjacent structure or materials.
 - .6 Field dimensions, clearly identified as such.
 - .7 Specification section number.
 - .8 Applicable standards, such as CSA or CGSB numbers.
 - .9 Where applicable, the code used in the Contract Documents to identify the product
 - .10 Originator's stamp and signature, certifying review of submission, verification of field measurements and compliance with the Contract Documents.
 - .11 Contractor's stamp and signature, certifying review of submission.
 - .12 Professional engineer's stamp and signature, where specific sections of the specification so direct. Note that drawings will not be reviewed unless the Professional Engineer's stamp and signature is present.
 - .13 CSA/CGSB/ASTM or other conformance certificates where applicable.
- .4 The Contractor's stamp and signature, certifying review of the Submission shall be interpreted to mean that the Contractor has reviewed the drawings and coordinated them with the work of other trades. Drawings which have not been so reviewed and coordinated by the Contractor will be returned for resubmission before Consultant review will be undertaken.

5 SHOP DRAWINGS REVIEW

- .1 Submittal review times for large-size drawings or sheet quantities such as curtain wall, door hardware, etc. to be advised by the Consultant. Standard submittals will be reviewed within 10 days of receipt.
- .2 Adjustments and resubmittals due to non-conformance with the Contract Documents shall not adversely affect the Project Schedule.
- .3 Adjustments made on the shop drawings by the Consultant are not intended to change the Contract Price. If the Contractor claims such adjustments affect the value of the Work, state such in writing to the Consultant prior to proceeding with the Work.
- .4 Make such changes in the shop drawings as the Consultant may require, consistent with the Contract Documents. When resubmitting, notify the Consultant in writing of changes other than those requested.
- .5 The review of shop drawings by the Consultant is for the sole purpose of ascertaining conformance with the general concept. This review shall not mean that the Consultant approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the construction and contract documents.
- .6 Without restricting the generality of the foregoing, the Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for coordination of the work of all sub-trades.

- .7 After the Consultant's review, distribute copies to affected parties.

6 SAMPLES AND MOCK-UPS

- .1 Submit samples in sizes and quantities specified in the applicable specification Sections.
- .2 Prepare mock-ups of the Work as specified in the applicable specification Sections. Include the work of other Sections required to complete the mock-ups
- .3 Locate mock-ups where directed by the Consultant.
- .4 Prepare mock-ups for the Consultant's review with reasonable promptness and in an orderly sequence so as not to cause delays in the Work.
- .5 Failure to prepare mock-ups in ample time is not considered sufficient reason for an extension of Contract time and no claim for extension by reason of such default will be allowed.
- .6 Submit a schedule of all required mock-ups. If requested, the Consultant will assist in the preparation of the schedule, fixing dates for construction of mock-ups.
- .7 Notify the Consultant in writing at the time of submission of deviations in samples or mock-ups from the requirements of the Contract Documents.
- .8 Remove mock-ups at the conclusion of the Work unless indicated otherwise in the applicable specification Section.
- .9 Where colour, pattern or texture is a criterion, submit the manufacturer's full range of samples in hard copy.
- .10 Construct field samples and mock-ups at locations acceptable to the Consultant.
- .11 Construct each sample or mock-up complete, including work of all trades required to finish work.
- .12 Make such changes in the sample or mock-ups as the Consultant may require, consistent with the Contract Documents.
- .13 Adjustments made to samples or mock-ups are not intended to change the Contract Price. If the Contractor claims such adjustments affect the value of the Work, state such in writing to the Consultant prior to proceeding with the Work.
- .14 Reviewed samples or mock-ups will become the standards of workmanship and material against which installed work will be checked on the project.

END OF SECTION