

This specification outlines the general requirements for Product quality, availability, storage, handling, protection, transportation, and installation. Requirements that are more specific may be outlined in other specifications.

PART 1 REFERENCES

- .1 Within the text of each specification section, reference may be made to reference standards. Conform to these standards, in whole or in part, as specifically requested in each the specifications.
- .2 Conform to latest date of issue of reference standards in effect on date of submission of bids.
- .3 If there is question as to whether any Product or system is in conformance with applicable standards, the Owner reserves the right to have such Products or systems tested to prove or disprove conformance.
 - .1 The cost for such testing will be borne by the Owner in the event of conformance with the Contract Documents or by the Contractor in the event of non-conformance.

PART 2 GENERAL

2.1 QUALITY

- .1 In accordance with the General Conditions, GC 34 - Labour and Products.
- .2 Products, materials, equipment and articles incorporated in Work shall be new, not damaged or defective, and of best quality for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .3 Procurement policy is to acquire, in cost effective manner, items containing highest percentage of recycled and recovered materials practicable consistent with maintaining satisfactory levels of competition. Make reasonable efforts to use recycled and recovered materials and in otherwise utilizing recycled and recovered materials in execution of work.
- .4 Defective Products, whenever identified prior to the completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is a precaution against oversight or error. Remove and replace defective Products at own expense and be responsible for delays and expenses caused by rejection.
- .5 Should any dispute arise as to the quality of fitness of Products, the decision rests strictly with the Owner based upon the requirements of the Contract Documents.

- .6 Unless otherwise indicated in the specifications, maintain uniformity of manufacture for any particular or like item throughout the building.
- .7 Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

2.2 AVAILABILITY

- .1 Immediately upon signing the Contract, review Product delivery requirements and anticipate foreseeable supply delays for any items. If delays in supply of Products are foreseeable, notify the Owner of such, in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of Work.
- .2 In the event of failure to notify the Owner at commencement of Work and should it subsequently appear that Work may be delayed for such reason, the Owner reserves the right to substitute more readily available Products of equal or better character, at no increase in Contract Price or Contract Time.

2.3 STORAGE, HANDLING AND PROTECTION

- .1 Handle and store Products in a manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled Products in original and undamaged condition with manufacturer's seals and labels intact. Do not remove from packaging or bundling until required in the Work.
- .3 Store Products subject to damage from weather in weatherproof enclosures.
- .4 Store cementitious Products clear of earth or concrete floors, away from walls and in a dry area.
- .5 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .6 Store sheet materials and lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .7 Store and mix paints in a heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.

- .8 Remove and replace damaged Products at own expense and to the satisfaction of the Owner.
- .9 Touch-up damaged factory finished surfaces to the Owner's satisfaction. Use touch-up materials to match original. Do not paint over name plates.
- .10 Security of stored materials shall be the responsibility of the Contractor.
- .11 Storage of Owner supplied Products shall be appropriate for the Product and adequately secured.

2.4 TRANSPORTATION

- .1 Pay costs of transportation of Products required in the performance of Work.
- .2 Transportation cost of Products supplied by the Owner will be paid for by the Owner. The Contractor shall unload, handle and store such Products as necessary.

2.5 MANUFACTURERS' INSTRUCTIONS

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's latest printed instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify the Owner in writing of any conflict between these specifications and manufacturer's instructions. Allow the Owner ten (10) business days to provide direction.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes the Owner to require removal and re-installation at no increase in Contract Price or Contract Time.

2.6 PERFORMANCE

- .1 When material or equipment is specified by standard or performance specifications, upon request of the Owner, obtain from manufacturer an independent testing laboratory report, stating that material of equipment meets or exceeds specified requirements.

2.7 CONSTRUCTION EQUIPMENT

- .1 On request, prove to the satisfaction of the Owner that the construction equipment and plant are adequate to manufacture, transport, place and finish Work to quality and production rates specified. If inadequate, replace or provide additional equipment or plant as directed.

- .2 Maintain construction equipment and plant in good operating order.

2.8 QUALITY OF WORK

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in the respective duties for which they are employed. Immediately notify the Owner if required Work is such as to make it impractical to produce required results.
- .2 Do not employ any unfit person or anyone unskilled in their required duties. The Owner reserves the right to require the dismissal from the site, workers deemed incompetent, careless, insubordinate or otherwise objectionable.
- .3 Decisions as to standard or fitness of the Work in cases of dispute rest solely with the Owner, whose decision is final.

2.9 CO-ORDINATION

- .1 Ensure co-operation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for co-ordination and placement of openings, sleeves and accessories.
- .3 The Contractor shall be responsible for the co-ordination of work by their sub-contractors.

2.10 CONCEALMENT

- .1 In finished areas conceal pipes, ducts and wiring in floors, walls and ceilings, except where indicated otherwise.
- .2 Before installation inform the Owner if there is interference. Install as directed by the Owner.

2.11 CUTTING AND REMEDIAL WORK

- .1 In accordance with the General Conditions, GC 38 - Cutting and Remedial Work.
- .2 Perform cutting and remedial Work required to repair or replace parts of the Work identified as defective or unacceptable and make them come together properly. Co-ordinate adjacent affected Work as required.
- .3 Perform remedial work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

- .4 Should Work performed outside this contract necessitate cutting and/or remedial Work to be performed, the cost of such Work will be valued by the Owner in accordance with the General Conditions, GC 19 - Valuation and Certification of Changes in the Work.

2.12 LOCATION OF FIXTURES

- .1 Consider location of fixtures, outlets, and mechanical and electrical items indicated as approximate.
- .2 Inform the Owner of conflicting installation. Install as directed.

2.13 FASTENINGS - GENERAL

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Use noncorrosive hot dip galvanized steel fasteners, anchors and spacers for securing exterior Work, unless stainless steel or other material is specifically requested in the affected specification Section.
- .4 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood or any other organic materials plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum space evenly and install neatly.
- .6 Fastenings that cause spalling or cracking of material to which anchorage is made are not acceptable.

2.14 FASTENINGS - EQUIPMENT

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Use heavy hexagon heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .3 Bolts may not project more than one diameter beyond nuts.
- .4 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

2.15 PROTECTION OF WORK IN PROGRESS

- .1 Adequately protect Work completed or in progress. Work damaged or defaced due to failure in providing such protection is to be removed and

replaced, or repaired, as directed by the Owner, at no increase in Contract Price or Contract Time.

- .2 Prevent overloading of any part of the structure. Do not cut drill or sleeve any load bearing structural member, unless specifically indicated, without written approval of the Owner.

2.16 EXISTING UTILITIES

- .1 When breaking into or connecting to existing services or utilities, execute Work at times directed by local governing authorities, with minimum of disturbance to Work, and/or building occupants and pedestrian and vehicular traffic.
- .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

2.17 SELECTION OF MATERIAL AND EQUIPMENT

- .1 Material and equipment will be specified in the tender documents, and selected by Contractor, by one or more of the following methods:
 - .1 Specification by reference to a relevant Standard, such as CSA, ASTM, ULC, etc., select any material or equipment that meets or exceeds the specified.
 - .2 Specification by reference to an accepted product evaluation publication, such as the CGSB "Qualified Products List", or CCMC Registry of Product Evaluations", - select any manufacturer's product so listed.
 - .3 Specification by Prescriptive or Performance specification – select any material or equipment meeting or exceeding specification.
 - .4 Specification by identification of one or more Manufacturer's specific product(s) as an "Acceptable Product", along with a listing of other manufacturers who may offer equivalent products – select any product so named, or select from equivalent product(s) of other listed manufacturers.
- .2 "Acceptable Product" is deemed to be a complete and working commodity as described by a manufacturer's name, catalogue number, trade name, or any combination thereof, and will constitute the minimum standard of acceptance.
- .3 Owner will determine acceptability of Contractor's selection of material and equipment at time of Shop Drawing review.

- .4 When material or equipment is specified by a Standard, Prescriptive or Performance specification, upon request of the Owner, obtain from manufacturer an independent laboratory reporting, showing that material or equipment meets or exceeds the specified requirements.

2.18 SUBSTITUTION OF MATERIAL AND EQUIPMENT

- .1 Substitution prior to Tender closing will be considered by Owner only if the conditions of Section 01330 are met.
- .2 After Contract award substitutions of material or equipment, other than as selected by Contractor from those specified, will be considered by Owner only if the conditions of Section 01330 are met.
- .3 Requests for substitutions after Contract award must be accompanied by sufficient information in the form of shop drawings, manufacturer's literature, samples or other data to permit proper investigation of the substitutes used. Requests must also include statements of respective costs of material or equipment originally specified and the proposed substitution.
- .4 Should a proposed substitution be accepted after Contract award either in part or in whole, assume full responsibility and costs when substitution affects other work on Project. Contractor to pay for design or drawing changes required as a result of the substitution.
- .5 Amounts of all credits arising from approval of substitutions after Contract award will be determined by Owner and the Contract amount will be reduced accordingly.

PART 3 PRODUCTS

3.1 NOT APPLICABLE

PART 4 EXECUTION

4.1 NOT APPLICABLE

PART 5 PAYMENT

5.1 MEASUREMENT FOR PAYMENT

- .1 Not Applicable

5.2 BASIS OF PAYMENT

- .1 No separate or direct payment will be made for the Work specified in this section. Costs of all Work are deemed to be included in the lump sum and unit prices quoted in the MERX Schedule of Quantities and Prices.

Not For Construction