

## **1. PRODUCTS**

### **1.1 Quality of Materials**

- .1 Provide new materials, equipment and articles incorporated in the Work, not damaged or defective and of the best quality (compatible with specifications) for the purpose intended. If requested furnish evidence as to type, source and quality of products provided.
- .2 Defective materials, equipment and articles whenever found may be rejected regardless of previous inspection. Inspection by the Contract Administrator or an inspector does not relieve the Contractor of his responsibility but is merely a precaution against oversight or error. Remove and replace defective materials at own expense and be responsible for all delays and expenses caused by rejection.
- .3 Should any dispute arise as to the quality or fitness of materials, equipment or articles, the decision rests strictly with the Contract Administrator based upon the requirements of the Contract Documents.
- .4 Unless otherwise indicated in the Specifications, maintain uniformity of manufacturer for any particular or like item throughout the building.
- .5 Permanent labels, trademarks and nameplates on materials, equipment and articles are not acceptable in prominent locations except where required for operating instructions and when located in mechanical or electrical rooms.

### **1.2 Availability of Materials**

- .1 Immediately upon signing the Contract, review Product requirements and anticipate foreseeable delivery delays in any items. If delays in deliveries of materials, equipment or articles are foreseeable, propose substitutions or other remedial action in ample time to prevent delay in performance of the Work.
- .2 If such proposal is not given to the Contract Administrator, the Contract Administrator reserves the right to substitute more readily available Products later in order to prevent delays at no additional cost to the City.
- .3 No substitution of any item will be permitted unless the item cannot be delivered to the job site in time to comply with the Schedule.
- .4 To receive approval, proposed substitutes must equal or exceed the quality, finish and performance of those specified and/or shown, and must not exceed the space requirements allotted on the Drawings.
- .5 Provide documentary proof of equality, difference in price (if any) and delivery dates in the form of certified quotations from suppliers of both specified items and proposed substitutions.

### **1.3 Storage, Handling and Protection of Materials**

- .1 Handle and store materials in a manner to prevent damage, contamination, deterioration and soiling and in accordance with manufacturer's recommendations when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturers' seals and labels intact. Do not remove packaging or bundling until required in the Work.
- .3 Materials subject to damage from weather are to be stored in weatherproof enclosures.
- .4 Store cementitious materials clear of earth or concrete floors and away from walls.
- .5 When used for grout or mortar materials, keep sand clean and dry. Store on polyethylene and cover with waterproof tarpaulins during inclement weather.
- .6 Store sheet material, lumber, etc. on flat, solid supports and keep clear of ground.
- .7 Store and mix paints in a room assigned for this purpose. Keep room under lock and key at all times. Remove oily rags and any other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .8 Remove and replace damaged products at own expense.

### **1.4 Manufacturers' Directions**

- .1 Unless otherwise specified, install or erect all products in accordance with manufacturers' recommendations. Do not rely on labels or enclosures provided with products. Obtain instructions directly from manufacturers.
- .2 Notify the Contract Administrator, in writing, of any conflicts between the specifications and manufacturers' instructions so that the Contract Administrator may establish the course of action.
- .3 Improper installation or erection of products due to failure in complying with these requirements authorizes the Contract Administrator to require any removal and re-installation that may be considered necessary, at no increase in Contract Price.

### **1.5 Transportation Costs of Materials**

- .1 Pay all costs for transportation of materials required for the Work.

## **2. WORKMANSHIP**

### **2.1 General Requirements**

- .1 Workmanship is to be of the best quality executed by workers fully experienced and skilled in their respective trades.

- .2 At all times enforce discipline and good order among workers. Do not employ any unfit person or anyone unskilled in the duties assigned to him. The Contract Administrator reserves the right to require the removal from site of workers deemed incompetent, careless, insubordinate or otherwise objectionable.
- .3 Decisions as to the quality or fitness of workmanship in cases of any dispute rests solely with the Contract Administrator whose decision is final.

## **2.2 Coordination**

- .1 Coordinate the work of all Subcontractors.
- .2 Ensure that all Subcontractors examine the Drawings and Specifications for other parts of the Work which may affect the performance of their work.
- .3 Ensure that sleeves, openings and miscellaneous equipment bases are provided as required for the Work.
- .4 Ensure that items to be built in are supplied when required with all necessary templates, measurements and shop drawings.

## **2.3 Concealment**

- .1 In finished areas conceal all pipes, ducts and wiring except where indicated otherwise on Drawings or in Specifications.
- .2 Before installation inform the Contract Administrator if there is a contradictory situation. Install as directed.

## **2.4 Location of Fixtures**

- .1 Consider the location of fixtures, outlets, and other mechanical and electrical items indicated on Drawings as approximate. The actual location of these items is to be as required or directed to site conditions at the time of installation and as is reasonable.
- .2 Before installation inform the Contract Administrator if there is a contradictory situation. Install as directed.

## **2.5 Cutting and Remedial Work**

- .1 Perform all cutting and remedial work that may be required to make the several parts of the Work come together properly. Coordinate and schedule the Work to ensure that cutting and remedial work are kept to a minimum.
- .2 Employ specialists familiar with the materials affected in performing cutting and remedial work. Perform in a manner to neither damage nor endanger any portion of the Work.
- .3 Do not cut, drill or sleeve any load-bearing members without written acceptance of the Contract Administrator.

- .4 The Contractor is to perform work so that no dust is generated.

## **2.6 Fastenings**

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent material unless otherwise specified.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Use non-corrosive, non-staining fasteners and anchors for securing exterior work unless otherwise specified.
- .4 Space anchors within their load limit or shear capacity and ensure that they provide positive permanent anchorage. Wood plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly and lay out neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

## **2.7 Protection of Work In Progress**

- .1 Adequately protect all work completed and in progress. Repair or replace all damaged work.
- .2 Prevent overloading of any part of the Work.

## **2.8 Cleaning**

- .1 Remove waste materials and debris from the site at regular intervals. Do not burn waste materials and debris on site.

## **3. MEASUREMENT**

### **3.1 Metric Project**

- .1 Unless otherwise noted, this Project has been designed and is to be constructed in the S.I. metric system of measurements.
- .2 During construction, when specified metric elements are unattainable at the time they are required to meet the Construction Schedule, the Contractor shall notify the Contract Administrator in writing and suggest alternative substitutions. Costs due to these substitutions shall be borne by the Contractor.

**END OF SECTION**