

**1 GENERAL**

**1.1 Reference Standards**

- .1 If there is question as to whether any product or system is in conformance with applicable standards, Departmental Representative reserves right to have such products or systems tested to prove or disprove conformance.
- .2 Cost for such testing will be born by Departmental Representative in event of conformance with Contract Documents or by Contractor in event of non-conformance.
- .3 Conform to latest date of issue of referenced standards in effect on date of submission of Tenders, except where specific date or issue is specifically noted.

**1.2 Quality**

- .1 Products, materials, equipment and articles (referred to as products throughout specifications) incorporated in Work shall be new, not damaged or defective, and of best quality (compatible with specifications) for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2 Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .3 Should any dispute arise as to quality or fitness of products, decision rests strictly with Departmental Representative based upon requirements of Contract Documents.
- .4 Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.
- .5 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.

**1.3 Storage, Handling and Protection**

- .1 Handle and store products in 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 seal and labels intact. Do not remove from packaging or bundling until required in Work.
- .3 Store products subject to damage from weather in weatherproof enclosures.
- .4 Store sheet materials, lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.

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- .5 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
  - .6 Remove and replace damaged products at own expense and to satisfaction of Departmental Representative.
  - .7 Touch-up damaged factory finished surfaces to Departmental Representative's satisfaction. Use touch-up materials to match original. Do not paint over name plates.

#### **1.4 Transportation**

- .1 Pay costs of transportation of products required in performance of Work.

#### **1.5 Manufacturer's Instructions**

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Departmental Representative in writing, of conflicts between specifications and manufacturer's instructions, so that Departmental Representative may establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Departmental Representative to require removal and re-installation at no increase in Contract Price or Contract Time.

#### **1.6 Quality of Work**

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

#### **1.7 Co-Ordination**

- .1 Ensure cooperation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

**1.8 Concealment**

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

**1.9 Remedial Work**

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Coordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

**1.10 Location of Fixtures**

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

**1.11 Fastenings**

- .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 non-corrosive hot dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested in 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 material plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

**1.12 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.

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- .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.

**1.13 Protection of Work in Progress**

- .1 Prevent overloading of any part of building. Do not cut, drill or sleeve any load bearing structural member, unless specifically indicated without written approval of Departmental Representative.

**1.14 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.
- .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 PRODUCTS**

**2.1 Acceptable Products/Materials**

- .1 Acceptable Products/Materials means, those items named and specified by manufacturer's reference, meet the specification in all respects and are acceptable to the Departmental Representative.

**2.2 No Substitution**

- .1 All products listed as No Substitution in various sections are to be supplied as specified.

**3 EXECUTION** Not applicable

**END OF SECTION**