

# **SECTION 01600**

## **MATERIAL AND EQUIPMENT**

### **PART 1. GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Products
- B. Transportation and Handling
- C. Storage and Protection
- D. Product Options
- E. Substitutions

#### **1.02 RELATED SECTIONS**

- A. Section 01010 - Summary of Work
- B. Section 01400 - Quality Control: Product Quality Monitoring

#### **1.03 PRODUCTS**

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer for similar components.

#### **1.04 TRANSPORTATION AND HANDLING**

- A. Transport and handle products in accordance with manufacturers' instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

#### **1.05 STORAGE AND PROTECTION**

- A. Provide to the Authority the manufacturers' instructions as to storage and maintenance of stored products. Also supply documented proof that such storage requirements are being followed throughout the temporary storage period as per the recommended procedures. All seals and labels shall be kept intact and legible. Store sensitive products in weather-

tight, climate controlled enclosures.

- B. For exterior storage of fabricated products, place on sloped supports above ground.
- C. Provide off-site storage and protection when site does not permit on-site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

#### **1.06 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

#### **1.07 SUBSTITUTIONS**

- A. Engineer will consider requests for Substitutions after date of Authority-Contractor Agreement.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the Substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work, which may be required for the Work to be complete with no additional cost to Authority.
  - 4. Waives claims for additional costs or time extension, which may subsequently become apparent.
  - 5. Will reimburse Authority for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals without separate written request or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:

1. Submit 3 copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
3. The Authority will notify Contractor, in writing, of decision to accept or reject request.

**END OF SECTION**