

## SECTION 01600

## MATERIAL &amp; EQUIPMENT

## PART 1 GENERAL

## 1.01 SECTION INCLUDES

- A. Requirements for transportation, delivery, handling, and storage of materials and equipment.

## 1.02 MEASUREMENT AND PAYMENT

- A. Unless indicated as a Bid Item, no separate payment will be made for Work performed under this Section. Include cost in Bid Items for which this work is a component.
- B. No payment for stored material will be made unless stipulated or approved by owner.

## 1.03 PRODUCTS

- A. Products: Means material, equipment, or 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 designated for reuse.
- B. Do not reuse materials and equipment, designated to be removed, except as specified by the Contract Documents.
- C. Provide equipment and components from the fewest number of manufacturers as is practical, in order to simplify spare parts inventory and to allow for maximum interchangeability of components. For multiple components of the same size, type or application, use the same make and model of component throughout the Work.

## 1.04 TRANSPORTATION

- A. Make arrangements for transportation, delivery, and handling of equipment and materials required for timely completion of the Work.
- B. Transport and handle products in accordance with instructions.
- C. Consign and address shipping documents to the proper party giving name of Project, street number, and City. Shipments shall be delivered to the Contractor.

## 1.05 DELIVERY

- A. Arrange deliveries of products to accommodate the Construction Schedule and in ample time to facilitate inspection prior to installation. Avoid deliveries that cause lengthy delays or overburden of limited storage space.

- B. Coordinate deliveries to avoid conflict with Work and conditions at the Project Site and to accommodate the following:
  - 1. Work of other contractors or the Owner.
  - 2. Limitations of storage space.
  - 3. Availability of equipment and personnel for handling products.
  - 4. Owner's use of premises.
- C. Have products delivered to the Project Site in manufacturer's original, unopened, labeled containers.
- D. Immediately upon delivery, inspect shipment to assure:
  - 1. Product complies with requirements of Contract Documents.
  - 2. Quantities are correct.
  - 3. Containers and packages are intact; labels are legible.
  - 4. Products are properly protected and undamaged.
  - 5. Insure provisions on material safety data sheets (MSDS) are followed.

#### 1.06 PRODUCT HANDLING

- A. Coordinate the off-loading of materials and equipment delivered to the Project Site. If necessary to move stored materials and equipment during construction, Contractor shall relocate materials and equipment at no additional cost to the Owner.
- B. Provide equipment and personnel necessary to handle products, including those provided by the Owner, by methods to prevent damage to products or packaging.
- C. Provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.
- D. Handle products by methods to prevent over bending or overstressing.
- E. Lift heavy components only at designated lifting points.
- F. Handle materials and equipment in accordance with Manufacturer's recommendations.
- G. Do not drop, roll, or skid products off delivery vehicles. Hand carry or use suitable materials handling equipment.

#### 1.07 STORAGE OR MATERIAL

- A. Store and protect materials in accordance with manufacturer’s recommendations and requirements of these Technical Specifications. Control storage of potential water pollutants in compliance with all applicable provisions of all Sections of these specifications.
- B. Make necessary provisions for safe storage of materials and equipment. Place loose soil materials, and materials to be incorporated into the Work to prevent damage to any part of the Work or existing facilities and to maintain free access at all times to all parts of the Work and to utility service company installations in the vicinity of the Work.
- C. Keep materials and equipment neatly and compactly stored in locations that will cause a minimum of inconvenience to other contractors, public travel, adjoining owners, tenants, and occupants. Arrange storage in a manner to provide easy access to inspection.
- D. Provide adequately ventilated, watertight storage facilities with floor above ground level for materials and equipment susceptible to weather damage.
- E. Restrict storage to areas available on the construction site for storage of material and equipment as shown on Plans or approved by the Owner’s Representative.
- F. Provide off-site storage and protection when on-site storage is not adequate.
- G. Do not use lawns, grass plots, or other private property for storage purposes without written permission of the owner. Damage to lawns, sidewalks, streets or other improvements shall be repaired or replaced to the satisfaction of the Owner’s Representative.
- H. Protect stored materials and equipment against loss or damage. Contractor is fully responsible for loss and/or damage of stored material.
- I. Store materials in manufacturers’ unopened containers.
- J. Materials delivered and stored along the line of the Work shall be not closer than 3 feet to any fire hydrant. Public and private drives and street crossings shall be kept open.
- K. The total length which materials may be distributed along the route of construction at any one time is specified in Section 01015 – Contractor’s Use of Premises.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION