

SECTION 016000
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 DEFINITIONS

- A. Definitions used in this Section are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.
- B. Products are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously-purchased stock. Within this Section, the term Product shall include material, equipment, system, and terms of similar intent.
- C. Named Products are items identified by a manufacturer's product name, including make and model designation, and indicated in the manufacturer's published product literature that is current as of the date of the Contract Documents.
- D. Foreign Products are distinguished from Domestic Products, except where defined in the General Conditions.
- E. Materials are Products that are substantially shaped, cut, worked, mixed, finished, refined, or otherwise fabricated, processed, or installed to form a part of the Work.
- F. Equipment is a Product with operational parts, whether motorized or manually operated, that requires service connections such as wiring or piping, to be incorporated into or as part of the Work.

1.02 PRODUCT SELECTION

- A. The Contractor shall provide Products that meet or exceed the quality specified in the Contract Documents, and that are new, undamaged, and unused at the time of installation, unless otherwise allowed. The Contractor shall produce, upon request, evidence supporting the source of materials used in the Work.
- B. Products shall be provided complete with all accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for the intended use and effect.
- C. Standard Products, or types of standard Products, that have been produced and used successfully in similar situations on other projects, shall be provided, when available.
- D. To the fullest extent possible, Products of the same kind from a single source shall be provided.
- E. When the Contractor is given the option of selecting between two or more Products for use on the Project, the Product selected shall be compatible with Products previously selected, even if previously-selected Products were also options.
 - 1. Each Separate Prime Contractor is responsible for providing Products that are compatible and coordinated with Products of other Separate Prime Contractors.

2. If a dispute arises between Separate Prime Contractors over concurrently-selected and incompatible Products, the University will determine which Products shall be retained and which Products must be replaced.

F. Product Specification Types.

1. Proprietary Specification: Where the Contract Documents specifically state that a single Product, manufacturer, and applicable model number has been approved as a proprietary item by the Contracting Officer, the Contractor shall provide only that Product. No substitution will be permitted.
2. Non-Proprietary Specification: Where the Contract Documents identify two or more Products, listing the manufacturers and applicable model numbers, the Contractor shall provide one of those named Products, unless a Product substitution has been approved and issued as an addendum during the bidding period or under the procedures listed in Specification Section 016200, Product Options.
3. Design Specification: Where the Contract Documents describe a Product, listing exact physical characteristics required, with or without use of a brand or trade name, the Contractor shall provide a Product that provides the required characteristics and which otherwise complies with the Contract requirements.
4. Performance Specification: Where the Contract Documents describe performance requirements for a Product, the Contractor shall provide a Product that meets or exceeds the required performance and is recommended by the manufacturer for the application indicated, and which otherwise complies with the Contract requirements.
5. Compliance with Standards, Codes, and Regulations: Where the Contract Documents only require compliance with an imposed code, standard, or regulation, the Contractor shall provide a Product that complies with those requirements, and which otherwise complies with the Contract requirements.

G. Visual Criteria.

1. Where the Contract Documents require matching an established sample, the University's decision will be final as to whether a proposed Product satisfactorily matches the sample.
2. Where there is no Product available in the specified category that satisfactorily matches the sample and which complies with other Contract requirements, the Contractor shall comply with procedures listed in Specification Section 016200, Product Options, for selection of a substitute Product.

H. Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures...", or a similar phrase, the Contractor shall select a Product and manufacturer that complies with other Contract requirements. The University will select the color, pattern, and texture from the product line selected.

I. Refer to the Contract Special Requirements for Foreign Product Limitations.

1.03 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Products shall be delivered, stored, and handled in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, or loss, including theft.

- B. Delivery shall be scheduled to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
- C. The University will not accept delivery of Products on behalf of the Contractor.
- D. Delivery shall be coordinated with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, or other losses.
- E. Products shall be delivered to the site in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- F. Products shall be inspected upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected. Damaged and defective items shall be rejected.
- G. Products shall be stored at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
- H. Heavy materials shall be stored away from the Project structure in a manner that will not endanger the supporting construction.
- I. Products subject to damage by the elements shall be stored above ground and under cover or in a weather-tight enclosure with ventilation adequate to prevent condensation. Temperature and humidity shall be maintained within a range required by the manufacturer's instructions.

1.04 INSTALLATION OF PRODUCTS

- A. The Contractor shall inspect both the substrate and conditions under which work is performed. Installation shall not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Measurements and dimensions shall be verified and re-checked before starting each installation.
- C. Products shall be installed in a manner that complies with manufacturer's instructions and recommendations for the applications indicated. If manufacturer's instructions and recommendations are more explicit or stringent than requirements contained in the Contract Documents, the manufacturer's instructions and recommendations shall take precedence.
- D. Where mounting heights are not indicated, individual Products shall be installed at standard mounting heights recognized within the industry for the particular application indicated. Questionable mounting height decisions shall be referred to the University for final decision.
- E. Products shall be anchored securely in place, and shall be accurately located and aligned with other Work. Attachment and connection devices and methods necessary for securing work shall be used. Work shall be secured true to line and level, and there shall be allowances for expansion and building movement.
- F. Joint widths in exposed work shall be uniform, and shall be arranged to obtain the best visual effect. Questionable choices shall be referred to the University for final decision.
- G. Products shall be installed during weather conditions and project status that will ensure the best possible results. Each part of the completed construction shall be isolated from incompatible material as necessary to prevent deterioration.

- H. The use of temporary enclosures shall be coordinated with required inspections and tests to minimize the necessity of uncovering completed construction for that purpose.
- I. Exposed surfaces shall be cleaned and protected as necessary to ensure freedom from damage or deterioration at time of Substantial Completion.
- J. Name Plates.
 - 1. Except for required labels and operating data, manufacturer's or producer's nameplates or trademarks shall not be attached or imprinted on surfaces of products that will be exposed to view in occupied spaces or from the exterior.
 - 2. Required product labels and stamps shall be located on a concealed surface. When required for observation after installation, required labels and stamps shall be located on an accessible surface that is not conspicuous.
 - 3. A permanent nameplate shall be provided on each item of service-connected or power-operated equipment. The nameplate shall be located on an easily-accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain at least the following information and other essential operating data, as applicable:
 - a. name of product and manufacturer
 - b. model and serial number
 - c. capacity
 - d. speed
 - e. ratings

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

(Not Used)

END OF SECTION 016000