SECTION 01600 MATERIAL EQUIPMENT AND APPROVED EQUALS

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Product options.
- E. Substitutions.
- F. Approved Equals.

1.2 PRODUCTS

- A. Product means new material, machinery, components, equipment, fixtures, and systems forming the work, it does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work. 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.

1.3 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's 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.

1.4 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible.
- B. Store sensitive products in weather-tight, climate controlled enclosures.
- C. For exterior storage of fabricated products, place on sloped supports, above ground.
- D. Provide off-site storage and protection when site does not permit on-site storage or protection.
- E. Cover products subject to deterioration with impervious sheet covering, and provide ventilation to avoid condensation.
- F. Store loose granular materials on solid flat surfaces in a well-drained area avoid mixing with foreign matter.
- G. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- H. Arrange product storage to permit access for inspection, and periodically inspect for damage and correct storage conditions, if damaged or incorrect storage conditions take corrective action.
- I. Store products requiring building interior ambient acclimatization on-site in accordance with the manufacturer's installation instructions.

1.5 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.
- D. Florida Tech is located in a Coastal Environment, all exterior materials subject to corrosion shall be Stainless Steel, Hot-Dipped Galvanized, Aluminum or painted in accordance with Section 09900 Painting, unless otherwise approved.

1.6 SUBSTITUTIONS

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period to requirements specified in this section.
- B. If a product becomes unavailable through no fault of the Contractor, substitutions may be considered
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Bidder or Contractor:
 - 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 that may be required for the work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension, which may become apparent.
 - 5. Will reimburse Owner for review or redesign services associated with re-approval.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or if acceptance requires revision to the contract documents.
- F. Installation of substitutions without the Owner's approval, shall be cause for immediate rejection and removal
- G. Substitutions that diminish life safety systems are prohibited.

1.7 APPROVED EQUAL

- A. It is not Florida Tech's intention to limit open competition of products supplied on the construction of schools, but it is our intention to provide products that are cost effective do not sacrifice Florida Tech's needs.
- B. If the specifications list a vendor or manufacturer, the contractor may submit a written request for a substitution. This applies if one or more vendors or manufacturers are listed (May include a statement "or approved equal" or "Engineer and Owner approved").
- C. All request for "approved equal" shall be in writing with the proper back-up information:
 - 1. Product literature/specifications with warranty information.
 - 2. Product approval or evaluation from Florida Building Code approved agency.
 - 3. List of three local projects and contacts with this product installed.
 - 4. Life Cycle Cost evaluation.
- D. The Owner and A/E shall review the request and either approve or deny the request in writing.
- E. The Contractor shall not use the proposed substitution in the bid, unless the Owner and A/E approve the request in writing.

PART 2 PRODUCTS

2.1 Not Used.

PART 3 EXECUTION

3.1 Not used.

END OF SECTION