SECTION 01 60 00 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Administrative and procedural requirements, labor, materials, equipment and services for selection of products for use in Project product delivery, storage and protection, ; identifying markings; manufacturers' standard warranties on products; substitution requirements and comparable products.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Section 01 25 00 Substitution Procedures
- C. Section 01 33 00 Submittal Procedures
- D. Section 01 42 16 Definitions
- E. Section 01 74 19 Construction Waste Management
- F. Section 01 77 00 Closeout Procedures

1.03 TRANSPORTATION

- A. Materials, products and equipment shall be properly containerized, packaged, boxed and protected to prevent damage during transportation and delivery. Transport materials in covered trucks to prevent contamination of product or littering of surrounding areas.
- B. Driveways and parking lots may be used by the Contractor only with expressed permission of the NYCHA Designated Representative(s) The CM in coordination with the Project Manager, in compliance with requirements of NYCHA and municipal regulations. Any and all damage as a result of the Contractor's use to driveways and parking lots must be repaired by the Contractor at the Contractor's expense to the satisfaction of the NYCHA Designated Representative(s).
- C. Do not drive any delivery vehicle over any unpaved or landscaped area of the site. Any damage to unpaved or landscaped areas as a result of incurred during delivery of materials or equipment shall be repaired by the Contractor at their own expense to the satisfaction of the NYCHA Designated Representative(s).

1.04 PRODUCT DELIVERY, HANDLING AND STORAGE

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

- 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
- Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- Manufacturer's containers shall be delivered with unbroken seals and shall bear proper labels.
- 6. Coordinate deliveries in order to avoid delay in, or the impeding of the progress of the Work. Deliveries shall be made during regular work hours, unless approved otherwise by NYCHA.

C. Storage and Protection

- 1. All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, and cleaned in accordance with the manufacturer's directions unless otherwise specified.
- 2. Provide a secure location and enclosure at Project site for storage of materials and equipment by contractor's construction forces. Coordinate location with NYCHA.
- 3. Store and handle materials in a manner that prevents loss from weather, exposure to sunlight and other damage. Keep materials covered and off the ground, and store in a dry secure area.
- 4. Protect all materials and installations from damage by activities of other trades.
- 5. Store products to allow for inspection and measurement of quantity or counting of units.
- 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 7. Should it become necessary during the course of the Work to move materials or equipment stored on the Site, the Contractor, at the direction of NYCHA, shall move such material or equipment.
- 8. All materials shall be properly stacked adjacent to the Work, to allow for inspection and measurement of quantity or counting unit.
- 9. If approval is given to store materials in any part of the building area, they shall be stored so as to cause no damage or overloading of the existing structure.
- 10. If it becomes necessary to remove and restack materials to avoid impeding the progress of any part of the Work or interfering with the Work to be done by any other contractor, or interfering with the project's activities, the Contractor shall remove and restack such materials at no additional cost to NYCHA.

1.05 IDENTIFYING MARKINGS

A. Name plates and other identifying markings shall be removed from exposed surfaces of manufactured items installed unless required by Code.

1.06 REMOVAL OF PACKING MATERIAL

A. The Contractor shall be responsible for removal and legal disposal of all packing material as required under the Cleaning and Waste Management section.

1.07 PRODUCT WARRANTIES

A. Manufacturer's warranties shall be supplied to NYCHA as required in the contract document as specified in the Closeout Procedures. Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of obligations under requirements of the Contract Documents.

1.08 PRODUCT SELECTION REQUIREMENTS

- A. General Product Requirements: Provide products that comply with the Contract Documents, specific specifications, Submittal Procedures and Mock-up and Sample Installations section.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. The descriptive, performance, and referenced standard requirements in the Specifications establish salient characteristics of products to be used.

1.09 APPROVED EQUALS

A. Conditions for Consideration: Designer of Record will consider Contractor's request for Approved Equal when the following conditions are satisfied. If the following conditions are not satisfied, Designer of Record may return requests without action, except to record noncompliance with these requirements:

- 1. Evidence that the proposed product does not require revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
- 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
- 3. Evidence that proposed product provides specified warranty.
- 4. List of similar installations for completed projects with project names and addresses and names and addresses of Designer of Records and owners, if requested.
- 5. Samples, if requested.

1.10 GENERAL REQUIREMENTS

- A. Equipment, plant, and appliances, such as hoists, centering, concrete lifts, construction elevators, cranes, rigging, towers, derricks, walks, ramps, chutes, scaffolding, implements, transportation, cartage and other things necessary and required for the adequate execution of the work and as required by law and applicable Union rules shall be provided and shall be maintained in good and safe mechanical working order, be responsible for their safe use, and remove them when no longer required. Applicable requirements of OSHA shall become and form a part of this document.
- B. During handling and installation of work at project site clean and protect work in progress and adjoining work on a basis of perpetual maintenance. Apply suitable protective covering on newly installed work where reasonably required to ensure freedom from damage or deterioration at time of substantial completion; otherwise, clean and perform maintenance on newly installed work as frequently as necessary through remainder of construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. To extent possible through reasonable control and protection methods, supervise performance of work in a manner and by means which will ensure that none of the work whether completed or in progress, will be subjected to harmful, dangerous, damaging, or otherwise deleterious exposures during construction period. Such exposures include (where applicable, but not by way of limitation) static loading, dynamic loading, internal pressures, external pressure, high or low temperatures, thermal shock, high or low humidity, air contamination or pollution, water, ice, solvents, chemicals, light, radiation, puncture, abrasion, heavy traffic, soiling, bacteria, insect infestation, combustion, electrical current, high speed operation, improper lubrication, unusual wear, misuse, incompatible interface, destructive testing, misalignment, excessive weathering, unprotected storage, improper shipping/handling, theft and vandalism.
- D. Require installer of each major unit of work to inspect substrate to receive the work, and conditions under which the work will be performed, and to report (in writing to Contractor) unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.
- E. Where installations include manufactured products, comply with manufacturer's applicable instructions and recommendations for installation to whatever extent these are more explicit or more stringent than applicable requirements indicated in the Contract Documents.
- F. Inspect each item of materials or equipment immediately prior to installation and reject damaged and defective items.
- G. Provide attachment and connection devices and methods for securing work properly as it is installed; true to line and level, and within recognized industry tolerance if not otherwise indicated. Allow for expansions and building movements. Provide uniform joint widths in exposed work, organized for best possible visual effect. Refer questionable visual-effect choices to the Designer of Record for final decision.
- H. Recheck measurements and dimensions of the work as an integral step of starting each installation
- I. Install work during conditions of temperature, humidity, exposure, forecasted weather, and status of project completion which will ensure best possible results for each unit of work in

- coordination with entire work. Isolate each unit of work from non-compatible work, as required to prevent deterioration.
- J. Coordinate enclosure (closing-in) of work with required inspections and tests, so as to avoid necessity of uncovering work for that purpose.
- K. Mounting Heights: Except as otherwise indicated, mount individual units of work at industry-recognized standard mounting heights, for applications indicated. In CMU walls mount units at height closest to manufacturer's recommendations so as to minimize cutting of block coursings. Refer questionable mounting height choices to the Designer of Record for final decision.

PART 2 PRODUCTS (NOT USED)
PART 3 EXECUTION (NOT USED)

END OF SECTION