

SECTION 115123
LIBRARY STACK SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
1. Library shelving.
 2. Accessories.
- B. Related Sections:
1. Section 066116 "Solid Surfacing Fabrications" for end panels of Library Stack Systems.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for library stack systems and accessories.
- B. Shop Drawings:
1. Include plans, elevations, sections, and details.
 2. Show clear-aisle widths from face of units.
 3. Show location to column grids from center of shelving units.
 4. Detail fabrication and installation of library stack systems including methods of anchoring to building structure at locations recommended by manufacturer and as required for seismic restraint.
- C. Samples for Verification: For the following products, one of each, in manufacturer's standard sizes:
1. Flat shelving.
 2. Each type of specialized shelving.
 3. End panels.
 4. Top panels.

D. LEED Submittals:

1. Complete the LEED Material Buyout Form (MBoF) with all materials provided to the project. A complete submittal includes providing all material costs in the MBoF and all of the supporting documentation for the following credits:
 - a. MRc2 - Environmental Product Declarations (EPD): Provide Industry-Wide or Product-Specific EPD.
 - b. MRc3 - Sourcing of Raw Materials - Recycled Content: Provide product data for pre- and post- consumer recycled content.

- 1.4 MRc4 - Material Ingredients, Provide manufacturers Declare label, Health Product Declaration (HPD), Cradle to Cradle Certification, or Cradle to Cradle Health Product Certificate.

INFORMATIONAL SUBMITTALS

 - A. Qualification Data: For Installer.
 - B. Sample Warranty: For manufacturer's special warranty.

- 1.5 CLOSEOUT SUBMITTALS
 - A. Maintenance Data: For library stack systems to include in maintenance manuals.

- 1.6 MAINTENANCE MATERIAL SUBMITTALS
 - A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Shelf Units: Five percent of quantity installed for each size and type indicated, but no fewer than 10 units.

- 1.7 QUALITY ASSURANCE
 - A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

- 1.8 WARRANTY
 - A. Special Warranty: Manufacturer agrees to repair or replace components of library stack systems that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Deterioration of metals, metal finishes, and other materials beyond normal wear.
 2. Warranty Period: [Five] <Insert number> years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 LEED REQUIREMENTS

- A. IW/PS EPD: Products specified under this section shall have either a Type III Product Specific EPD or the company shall be listed in the industry group responsible for the Industry Wide Externally Verified EPD.

2.2 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Library stack systems shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

2.3 SHELVING

- A. Mobile Shelving:
 - 1. Basis-of-Design: MJ Industries "Concealed Canaster Mobile Shelving" or the following equal alternates:
 - a. MJ Industries "Concealed Canaster Mobile Shelving".
 - b. Ross McDonald Co.
 - c. Or equal.
- B. Cantilever Shelving: Shelving designed for library use and consisting of full end, top, and back panels, with end panels made to receive adjustable shelves in slots or to receive clips to support adjustable shelves.
 - 1. Basis-of-Design: Estey Designer Series by Tennsco or the following equal alternates:
 - a. Or equal.

2.4 GENERAL FINISH REQUIREMENTS

- A. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.5 STEEL FINISHES

- A. Baked-Enamel: Manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to achieve a minimum dry film thickness of 2 mils (0.05 mm).
 - 1. Color and Gloss: Custom as selected by Architect.

2.6 ACCESSORIES

- A. Floor Anchors: Galvanized steel, post-installed expansion anchors, power-actuated fasteners, or threaded concrete screws as required to securely attach stack system.
- B. Wall Anchors: Manufacturer's standard galvanized-steel anchors.
- C. Top Bracing: Minimum 1- by 1-3/4-inch (25- by 44-mm) transverse struts, 0.048-inch- (1.22-mm-) thick steel channels, welded or bolted to top of stack units and securely fastened to structure.
- D. Bookstops: Match stacks.
- E. End Panels: Custom-fabricated, as specified in Section 064023 "Interior Architectural Woodwork."
 - 1. **Provide finishes per shelving plans on drawings. (Addendum 03)**
- F. Accessories: To be specified through manufacturer's shop drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of framing and reinforcements, and other conditions affecting performance of library stack systems.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean finished floor over which shelving is to be installed.

3.3 INSTALLATION

- A. Install library stack systems at locations indicated on Drawings and according to manufacturer's written instructions.
- B. Starter/Adder Units: Connect groups together with standard fasteners according to manufacturer's written instructions, using concealed fasteners where possible.
- C. Enclosure Panels: Install end panels with concealed fasteners.
- D. Level and plumb bookstack units to a tolerance of 1/8 inch in 96 inches (3 mm in 2438 mm).
- E. Filler Panels: Install corner and intermediate wall filler panels where indicated to fill gaps at abutting shelving units.

- F. Install type of shelves at locations indicated and at spacing indicated or, if not indicated, at equal spacing in each unit.
- G. Mark the reference section on each shelf or group of shelves.

3.4 ANCHORAGE

- A. Bookstack Anchorage: Install bookstacks using floor anchors, wall anchors, or top bracing in locations recommended by manufacturer and as indicated on Shop Drawings.

3.5 CLEANING AND PROTECTING

- A. Repair or remove and replace defective work as directed on completion of installation.
- B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.
- C. Protect installed products from damage during remainder of the construction period.

END OF SECTION

This Page Left Intentionally Blank