SECTION 105129 - PHENOLIC LOCKERS

TIPS:

To view non-printing **Editor's Notes** that provide guidance for editing, click on MasterWorks/Single-File Formatting/Toggle/Editor's Notes.

To read **detailed research, technical information about products and materials, and coordination checklists**, click on MasterWorks/Supporting Information.

Access Manufacturer-Provided, AIA MasterSpec-Based Sections:

<Double click here for Sections based on specific manufacturer products set as Basis-of-Design at ProductMasterSpec.com.>

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 phenolic lockers[**and related benches**].

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 each type of locker[**and bench**].

B. Sustainable Design Submittals:

1. Product Data: For recycled content, indicating postconsumer and preconsumer recycled content and cost.
2. Product Certificates: For regional materials, indicating location of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include distance to Project and cost for each regional material.
3. Product Certificates: For materials manufactured within 100 miles (160 km) of Project, indicating location of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include distance to Project and cost for each raw material.
4. Product Data: For adhesives, indicating VOC content.
5. Laboratory Test Reports: For adhesives, indicating compliance with requirements for low-emitting materials.

C. Shop Drawings: For phenolic lockers.

1. Include plans, elevations, sections, and attachment details.
2. Show details full size.
3. Show locations and sizes of cutouts and holes for items installed in lockers.
4. Show locker fillers, trim, base, sloping tops, and accessories.
5. Show locker identification system and numbering sequence.

D. Samples for Initial Selection: For each type of locker.

1. Include Samples of hardware and accessories involving material and color selection.

E. Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:

1. Phenolic panels, not less than 3 by 3 inches (76 by 76 mm), for each type, color, pattern, and surface finish.
2. Exposed locker hardware and accessories, one unit for each type and finish.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Sample Warranty: For manufacturer's warranty.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For adjusting, repairing, and replacing locker doors and latching mechanisms to include in maintenance manuals.

1. Include recommendations for periodic cleaning and maintenance of each component.

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. Locker doors, complete with specified door hardware. Furnish no fewer than [**five**] <**Insert number**> doors of each type and color installed.
2. Units of the following locker hardware items equal to [**10**] <**Insert number**> percent of amount installed for each type and finish installed, but no fewer than [**five**] <**Insert number**> units:

a. Hinges.
b. [**Hasp bars**] [**Locks**].
c. Hooks.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Installers certified by manufacturer.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

1. Build mockup of typical corner[**, including one locker on each side of corner and corner filler**][**, including door panel with specified door hardware**] <**Insert Project-specific requirements**>, as shown on Drawings.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store lockers in manufacturer’s original unopened packaging until ready for installation.

B. Do not deliver lockers until painting and similar operations that could damage lockers have been completed in installation areas. If lockers must be stored in other-than-installation areas, store only in areas where environmental conditions are the same as those in final installation location, and comply with requirements specified in "FIELD CONDITIONS" Article.

C. Deliver [**master and control keys**] [**combination control charts**] [**and**] [**End-User manual**] to Owner by registered mail or overnight package service[**.**][**, addressed as follows:**]

1. <**Insert name and address of Owner's representative**>.

1.9 FIELD CONDITIONS

A. Environmental Limitations: Do not deliver or install lockers until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature between 60 and 90 deg F (16 and 32 deg C) and relative humidity between <**Insert number range**> percent during the remainder of the construction period.

B. Field Measurements: Where lockers are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings.

C. Established Dimensions: Where lockers are indicated to fit to other construction, establish dimensions for areas where lockers are to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

1.10 COORDINATION

A. Coordinate sizes and locations of concealed wood support bases.

1. Requirements are specified in [**Section 061000 "Rough Carpentry."**] [**Section 061053 "Miscellaneous Rough Carpentry."**]

B. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of work specified in other Sections to ensure that lockers can be supported and installed as indicated.

C. Hardware Coordination: Distribute copies of approved hardware schedule specified in Section 087100 "Door Hardware" to fabricator of lockers; coordinate Shop Drawings and fabrication with hardware requirements.

1.11 SEQUENCING

A. Ensure that lockers are supplied to affected trades in time to avoid interruption of the construction process.

B. Ensure locating templates and other information required for locker installation are provided to affected trades in time to prevent interruption of the construction process.

1.12 WARRANTY

A. Manufacturer’s Warranty: Manufacturer agrees to replace phenolic locker components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: [**25**] <**Insert number**> years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain phenolic lockers from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Accessibility Standard: For lockers indicated to be accessible, comply with applicable provisions in [**the USDOJ's "2010 ADA Standards for Accessible Design"**] [**the ABA standards of the Federal agency having jurisdiction**] [**and**] [**ICC A117.1**] <**Insert requirement**>.

B. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Flame-Spread Index: [**25**] [**75**] or less.
2. Smoke-Developed Index: 450 or less.

C. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 19 percent.

D. Regional Materials: Lockers shall be manufactured within 500 miles (800 km) of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles (800 km) of Project site.

E. Regional Materials: Lockers shall be manufactured within 500 miles (800 km) of Project site.

F. Accessibility Requirements: Comply with requirements of ADA and requirements of authorities having jurisdiction.

2.3 PHENOLIC LOCKERS

A. Basis-of-Design Product: Subject to compliance with requirements, provide Partition Systems International of South Carolina®; [**Phenolic Lockers**] [**Terra Core Phenolic Lockers**] or comparable product by one of the following:

1. Bobrick Washroom Equipment, Inc.
2. Bradley Corporation.
3. Columbia Lockers®, a division of PSiSC.
4. Design Tec.
5. Ideal Products, Inc.
6. <**Insert manufacturer's name**>.

B. Construction Style: Manufacturer's standard mortise and tenon. Butt joints are unacceptable.

C. Final Assembly: Manufacturer's standard factory assembly.

D. Configuration: [**One**] [**Two**] [**Three**] [**Four**] [**Five**] [**Six**] [**Z**] <**Insert number**> tier.

E. Fire Rating: [**Class A**] [**Class B**] fire-rated.

F. Locker Body: Fabricated from solid phenolic panels.

1. Side Panels: 5/16 inch (8 mm) thick.
2. Back Panel: 5/16 inch (8 mm) thick.
3. Top Panel: 3/8 inch (10 mm) thick.
4. Bottom Panel: 3/8 inch (10 mm) thick.

G. Doors: 1/2 inch (13 mm) thick, solid phenolic panel fabricated to full width of locker; frameless with perimeter ventilation.

H. End Panels: 1/2 inch (13 mm) thick, solid phenolic matching door style, material, construction, and finish.

I. Shelves: 3/8 inch (10 mm) thick, solid phenolic.

J. Slope Tops: 1/2-inch- (13-mm-) thick, solid phenolic panel matching door faces.

K. Toe-Kick Plates: 1/2-inch- (13-mm-) thick, solid phenolic panel matching door faces.

L. Colors: As selected by Architect from manufacturer's full range of standard colors.

1. Edge Color: [**Black**] [**Matching panel face**].

2.4 MATERIALS

A. Phenolic: [**Solid phenolic with selected high-pressure melamine matte finish as an integral part of the core material**] [**Solid phenolic with same color throughout material**]. Laminated surfaces are unacceptable.

B. Furring, Blocking, Shims, and Hanging Strips: [**Softwood or hardwood lumber**] [**Fire-retardant-treated softwood lumber**], kiln dried to less than 15 percent moisture content.

C. Anchors: Material, type, size, and finish as required for each substrate for secure anchorage. Provide metal expansion sleeves or expansion bolts for post-installed anchors. Use nonferrous-metal or hot-dip galvanized anchors and inserts at inside face of exterior walls and at floors.

D. Wood Support Base: [**2-by-4-inch nominal-size (51-by-102-mm, actual-size)**] [**2-by-6-inch, nominal-size (51-by-152-mm, actual-size)**] lumber treated with manufacturer's standard preservative-treatment, [**nonpressure**] [**pressure**] process.

2.5 HARDWARE

A. Recessed Locker Handle: 0.060-inch (1.5-mm), 16-gauge, Type 304 stainless steel with a satin finish, and that accommodates recessed padlock hasps and built-in combination locks.

B. Padlock Hasp: Surface mounted, 0.125-inch (3.2-mm), 11-gauge, Type 304 stainless steel with satin finish.

C. Cylinder Lock: Built-in, flush, spring bolt locks with five-pin tumbler keyway, keyed separately and master keyed. Furnish two user operation keys for each lock and [**two**] <**Insert number**> master keys.

1. Bolt Operation: Automatically locking spring bolt.

D. Built-in Combination Lock: Key-controlled, three-number-dialing combination locks; capable of at least five combination changes made automatically using a control key.

1. Bolt Operation: Automatically locking spring bolt.

E. Built-in, Coin-Operated Lock: Self-contained units mounted to door interior with replaceable lock cylinders keyed separately and master keyed. Mount instruction decals to inside door faces. Furnish one change key for each lock and one master key.

1. Bolt Operation: Manually locking deadbolt.
2. Lock Type: Fee [**return/deposit**] [**collect/pay**].
3. Fee Type: [**Token**] [**Coin, one quarter**] [**Coin, two quarters**].
4. Coin Box: Mount collection box to lock unit, key collection boxes alike. Furnish with removable cylinder and key.

F. Built-in, Card-Operated Lock: Self-contained units mounted to door interior with replaceable lock cylinders, keyed separately and master keyed. Mount instruction decals to inside door faces. Furnish one change card key for each lock and one master card key.

1. Bolt Operation: Manually locking deadbolt.

G. Digital Keypad Lock: Battery-powered electronic keypad with reprogrammable manager and owner codes that override access. Three consecutive incorrect code entries disables lock for three minutes.

1. Designed for [**permanently assigned**] [**day care**] access via entry of user's four-digit code.

H. Mechanical Day-Use Lock: Lock to secure with any user-selected four-digit code, is reprogrammable, and has no batteries or wires.

I. Concealed Type Hinges: 0.078-inch (2.0-mm), 14-gauge, Type 304 stainless steel, five-knuckle hinges with satin finish. Concealed hinge to allow door to open 90 degrees.

J. Offset Hinges: 0.078-inch (2.0-mm), 14-gauge, Type 304 stainless steel, five-knuckle hinges, with black, powder-coated finish. Knuckles exposed to allow door to open 180 degrees.

K. Continuous Hinge: Heavy-duty extruded 6063-T5 aluminum, black powder.

1. Pivot Pin: Type 304 stainless steel, 0.1875-inch (5 mm) diameter, fabricated in two parts extending the length of locker body.
2. Quantity: Use one continuous hinge for each single- to six-tier locker.

L. Hooks: Manufacturer's standard, 0.125-inch (3.2-mm), 11-gauge, Type 304 stainless steel with satin finish. Attach hooks with minimum two fasteners.

1. Provide hooks as indicated on Drawings.

2.6 ACCESSORIES

A. Number Identification Plates: Provide a number plate for each door or opening, in sequence indicated on Drawings. Number plate made from black, impact-acrylic-multipolymer ABS, and engrave from back side to prevent accumulation of dirt and grime.

B. Locker Legs: Provide locker legs for each locker, except recessed and base-mounted lockers. Locker leg assembly to be structural and fully adjustable to provide for leveling and plumbing of locker body. Provide toe-kick plates for attachment to front of legs.

2.7 BENCHES

A. Pedestal-Leg Locker Benches: Bench top supported by pedestal legs, minimum of two pedestals for each bench, with overall height of [**17.25 inches (438 mm)**] <**Insert dimension**> measured from top of bench to floor, as follows:

1. Metal Pedestal Legs: 16.5 inches (419 mm) high, [**0.1196-inch (3-mm), 11-gauge, black powder-coated steel with 8-inch (203-mm) diameter flanges**] [**0.125-inch (3.2-mm), 11-gauge, Type 304 stainless steel, satin finish with 8-inch (203-mm) diameter flanges**] [**2-inch (51-mm) square aluminum tubing, black powder-coat finish with 6-inch (152-mm) square plates**].
2. Bench Tops: 3/4-inch (19-mm) thick, solid phenolic.

a. Color: [**Matching Architect's sample**] [**As selected by Architect from manufacturer's full range**] <**Insert color, pattern, and finish**>.
b. Width: [**12 inches (305 mm)**] [**15 inches (381 mm)**] [**18 inches (457 mm)**] <**Insert dimension**>[**except where accessible benches are indicated, provide minimum 20-inch (508-mm) width**].
c. Length: [**36 inches (914 mm)**] [**48 inches (1219 mm)**] [**60 inches (1524 mm)**] [**72 inches (1829 mm)**] [**84 inches (2134 mm)**] [**96 inches (2438 mm)**] [**108 inches (2743 mm)**] [**120 inches (3048 mm)**].

B. Wall Brackets: Black, powder-coated aluminum plate, 0.125 inch (3.2 mm) thick.

2.8 FABRICATION

A. Fabricate and provide factory preassembled lockers, complete with hardware and accessories.

B. Fabricate each locker with shelves, a single door and frame, a single top, bottom, and back, and with common intermediate uprights separating compartments.

1. Fabricate lockers to dimensions, profiles, and details indicated.

C. Fabricate lockers square, rigid, without warp, and with finished faces flat and free of scratches, and chips. Factory machine components to suit attachments. Make joints tight and true.

1. Fabricate lockers using manufacturer's standard mortise and tenon construction.
2. Provide slope tops and end panels as required to complete installation as indicated by Drawings.

D. Accessible Lockers: Fabricate as follows:

1. Locate bottom shelf no lower than 15 inches (381 mm) above finished floor.
2. Where hooks, coat rods, or additional shelves are provided, locate no higher than 48 inches (1219 mm) above finished floor.

E. Complete fabrication, including assembly, finishing, and hardware application, to maximum extent possible, before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.

1. Trial fit assemblies at fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that the parts fit as intended, and check measurements of assemblies against field measurements indicated on Shop Drawings before disassembling for shipment.
2. Use only manufacturer's brackets, nuts, bolts, screws, and other anchoring devices for assembly.

F. Shop cut openings, to maximum extent possible, to receive hardware, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine walls and floors or support bases, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Verify that furring is attached to concrete and masonry walls receiving lockers.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Condition lockers to average prevailing humidity conditions in installation areas before installation.

B. Before installing lockers, examine factory-fabricated work for completeness and complete work as required, including removal of packing.

C. Thoroughly clean surfaces prior to installation.

3.3 INSTALLATION

A. Install lockers in accordance with manufacturer's written instructions.

B. Install wood support base[**with 1/2-inch- (13-mm-) thick, plywood top**].

C. Install lockers level, plumb, and true; use concealed shims.

D. Connect groups of lockers together with manufacturer's standard stainless steel, theft proof fasteners, through predrilled holes in locker interior. Fit lockers accurately together to form flush, tight, hairline joints.

E. Install lockers without distortion for doors and drawers to fit and align with openings. Adjust hardware to center doors and drawers in openings, and provide unencumbered operation. Complete installation of hardware and accessory items as indicated.

1. Installation Tolerance: Maximum 1/8- in 96-inch (3- in 2400-mm) sag, bow, or other variation from a straight line. Shim as required with concealed shims.

F. Locker Anchorage: Fasten lockers through back, near top and bottom, at ends with anchoring devices furnished, and spaced not more than 16 inches (400 mm) o.c.

G. Scribe and cut corner and filler panels to fit adjoining work using fasteners concealed where practical. Repair damaged finish at cuts.

H. Attach sloping-top units to lockers, with end panels covering exposed ends.

I. Install [**number identification plates**] [**and**] [**name identification plates and holders**] after lockers are in place.

1. Attach number identification plate on each locker door, mounted behind locker pull handle or lock.
2. Attach name identification plate holder on each locker door, centered, with a minimum two screws with finish matching name identification plate holder.
3. Insert name identification plate into matching nameplate holder on each door.

J. Fixed Locker Benches: Provide no fewer than two pedestals for each bench, uniformly spaced not more than 60 inches (1524 mm) apart. Securely fasten tops of pedestals to undersides of bench tops, and anchor bases to floor.

3.4 ADJUSTING

A. Clean, lubricate, and adjust hardware. Adjust doors[**and drawers**] to operate easily without binding.[**Verify that integral locking devices operate properly.**]

3.5 PROTECTION

A. Protect lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit use during construction.

B. Clean exposed surfaces of lockers and hardware.

C. Touch up marred finishes, or replace lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION 105129