

## SECTION 10516 - WOOD LOCKERS

### 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. This Section includes the following:
  - 1. Wood lockers with flush wood-veneer-faced wood doors.
- B. Related Sections include the following:
  - 1. Division 06 Section "Rough Carpentry" for concealed wood support base, furring, blocking, shims, and hanging strips required for installing wood lockers and concealed within other construction before wood locker installation.

#### 1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for wood lockers.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.
  - 1. Show details full size.
  - 2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.
  - 3. Show locations and sizes of cutouts and holes for items installed in wood lockers.
  - 4. Show wood locker fillers, trim, base, and accessories.
  - 5. Show wood locker numbering sequence.
- C. Samples for Initial Selection: For the following:
  - 1. Factory-applied transparent finishes.
  - 2. Thermoset decorative overlays.
- D. Samples for Verification: For the following:
  - 1. Wood-veneer-faced panels with transparent finish, not less than 8 by 10 inches, for each species and cut. Include at least one face-veneer seam and finish as specified.

2. Corner pieces of wood locker front frame joints between stiles and rail, as well as exposed end pieces, not less than 18 inches high by 18 inches wide by 6 inches deep.
  3. Exposed cabinet hardware and accessories, one unit for each type and finish.
- E. Qualification Data: For manufacturer.
- F. Research/Evaluation Reports: Showing that fire-retardant-treated wood complies with building code in effect for Project.
- G. Maintenance Data: For adjusting, repairing, and replacing wood locker doors and latching mechanisms to include in maintenance manuals.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer.
- B. Source Limitations: Obtain wood lockers through one source from a single manufacturer.
- C. Product Options: Drawings indicate size, profiles, and dimensional requirements of wood lockers and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements."
1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- D. Regulatory Requirements: Where wood lockers are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."
1. Provide not less than one shelf located within required reach ranges.
  2. Provide hardware that does not require tight grasping, pinching, or twisting of the wrist, and that operates with a force of not more than 5 lbf (22.2 N).
- E. Mockups: Build mockups to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution.
1. Build mockup of typical corner, including one wood locker on each side of corner and corner filler including door panel with specified door hardware, as shown on Drawings.
  2. Approval of mockups is also for other material and construction qualities specifically approved by Architect in writing.
  3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless such deviations are specifically approved by Architect in writing.
  4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

- F. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination."

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver wood lockers until painting and similar operations that could damage wood lockers have been completed in installation areas. If wood lockers must be stored in other-than-installation areas, store only in areas where environmental conditions are same as that in final installation location and comply with requirements specified in "Project Conditions" Article.
- B. Deliver master and control keys to Owner by registered mail or overnight package service.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install wood lockers until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Verify concealed framing, blocking, and reinforcements that support wood lockers by field measurements before being enclosed and before wood locker fabrication, and indicate measurements on Shop Drawings.

#### 1.7 COORDINATION

- A. Coordinate size and location of concealed wood support bases.
  - 1. Requirements are specified in Division 06 Section "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 wood lockers can be supported and installed as indicated.
- C. Hardware Coordination: Distribute copies of approved hardware schedule specified in Division 08 Section "Door Hardware" to fabricator of wood lockers; coordinate Shop Drawings and fabrication with hardware requirements.

#### 1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of wood lockers that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:
  - 1. Structural failures.
  - 2. Faulty operation of locks or hardware.
  - 3. Deterioration of wood, wood finishes, and other materials beyond normal use.

- B. Warranty Period: Three years from date of Substantial Completion.

## 1.9 EXTRA MATERIALS

- A. Furnish extra materials described below, before construction begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Full-size units of the following wood locker hardware items equal to 10 percent of amount installed for each type and finish installed, but no fewer than 5 units.
    - a. Hinges.
    - b. Pulls.
    - c. Shelf rests.
    - d. Cylinder locks.
    - e. ADA digital locks.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Basis-of-Design Product: The design for wood lockers is based on Series Imperial 1000 (WV) as manufactured by Ideal Products, Inc. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
  - 1. Classic Woodworking, Inc.
  - 2. Dimension Millworks.
  - 3. Famous Lockers.
  - 4. Fiberesin Industries, Inc.
  - 5. Hollman, Inc.
  - 6. Ideal Products, Inc.
  - 7. Multispace; Div. of Club Resource Group.
  - 8. Treeforms.
- C. Locker Arrangement as indicated on the Drawings.

### 2.2 MATERIALS

- A. Medium-Density Fiberboard: ANSI A208.2, Grade MD-Exterior Glue.
- B. Particleboard: ANSI A208.1, Grade M-2-Exterior Glue, minimum 45-lb/cu. ft. density.

- C. Hardwood Face Veneers: HPVA HP-1, Grade A.
- D. Thermoset Decorative Overlay: Particleboard complying with ANSI A208.1, Grade M-2, or medium-density fiberboard complying with ANSI A208.2, Grade MD, with surface of thermally fused, melamine-impregnated decorative paper complying with LMA SAT-1.
  - 1. Provide material made from particleboard or medium-density fiberboard made without urea formaldehyde.
- E. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln dried to less than 15 percent moisture content.
- F. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage.
  - 1. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance.
- G. Concealed Wood Support Base: 2-by-4-inch nominal size (with ½” plywood top) for mounting of rubber base (by others).

### 2.3 WOOD LOCKER HARDWARE

- A. General: Provide manufacturer's standard wood locker hardware and accessories complying with the following:
- B. Frameless Hinges (European Type): Fully concealed, self-closing, nickel-plated steel, with not less than 125 degrees of opening.
  - 1. Provide 2 hinges for doors 36 inches tall and less.
  - 2. Provide 3 hinges for doors more than 42 inches tall.
- C. Wire Pulls: Back mounted; 5 inches long, 2-1/2 inches deep, and 5/16 inch in diameter.
- D. Shelf Rests: BHMA A156.9, B04013.
- E. Exposed Hardware Finishes: Unless otherwise indicated, provide finish that complies with BHMA A156.18 for BHMA finish number indicated.
  - 1. Satin Chromium Plated: BHMA 626 for brass or bronze base; BHMA 652 for steel base.
  - 2. Satin Stainless Steel: BHMA 630.

### 2.4 DOOR LOCKS

- A. General: Fabricate wood lockers to receive locking devices. Provide one locking device for each wood locker door, unless otherwise indicated.

- B. Cylinder Locks: Built-in, flush cam locks with five-pin tumbler keyway, keyed separately and master keyed. Furnish two change keys for each lock and five master keys.
- C. Digital Locks (for ADA unit): Manufacturer's standard to comply with ADA requirements.

## 2.5 WOOD-FACED WOOD LOCKERS

- A. Construction Style: Flush overlay.
- B. Locker Body: Fabricated from particleboard or medium-density fiberboard core panels covered on both sides with thermoset decorative overlay.
  - 1. Side Panels: Manufacturer's standard 3/4 or 5/8 inch thick.
  - 2. Back Panel: Manufacturer's standard 1/2 or 3/8 inch thick.
  - 3. Top Panel: Manufacturer's standard 3/4 or 5/8 inch thick.
  - 4. Bottom Panel: Manufacturer's standard 3/4 or 5/8 inch thick.
  - 5. Exposed Panel Edges: 1-mm-thick PVC.
- C. Flush, Wood-Veneer-Faced Doors: Wood veneer applied over 3/4-inch thick, particleboard or medium-density-fiberboard core.
  - 1. Wood species and cut as follows:
    - a. Maple, plain sliced.
  - 2. Wood Edges: 2 mm edge banding to match same wood species as face veneer.
- D. End Panels: Match style, material, construction, and finish of wood-faced wood doors.
- E. Shelves: Fabricated from particleboard core panels covered on both sides with thermoset decorative overlay; fixed, unless otherwise indicated.
  - 1. Thickness: 3/4 inch.
  - 2. Exposed Edges: 1-mm-thick PVC.
- F. Corners and Filler Panels: Wood-veneer-faced, 3/4-inch thick panel that matches door faces.
- G. Grain Matching: Run and match grain vertically for doors and fixed panels.
- H. Veneer Matching:
  - 1. Matching of Veneer Leaves: Book match.
  - 2. Vertical Matching of Veneer Leaves: End match.
  - 3. Veneer Matching within Panel Face: Balance match.

## 2.6 LOCKER ACCESSORIES

- A. Hooks: Manufacturer's standard ball-pointed, aluminum or steel; finished to match other wood locker hardware. Attach hooks with at least two fasteners.
  - 1. Provide one double-prong ceiling hook and two single-prong wall hooks for each compartment of single-tier wood lockers.
- B. Number Plates: 1-1/2-inch diameter, etched, embossed, or stamped, stainless-steel plates with black numbers and letters at least 1/2 inch high. Identify wood lockers in sequence indicated on Drawings. Finish plates to match other wood locker hardware.

## 2.7 WOOD LOCKER FABRICATION

- A. Unit Principle: Fabricate each wood locker with an individual door and frame, individual top, bottom, back, and shelves, and common intermediate uprights separating compartments.
  - 1. Fabricate wood lockers to dimensions, profiles, and details indicated.
- B. Fabricate components square, rigid, without warp, and with finished faces flat and free of scratches and chips. Accurately machine components for attachments in factory, with no chips. Make joints tight and true.
  - 1. Fabricate wood lockers using manufacturer's standard construction with joints made with dowels, dados, or rabbets. Dado side panels to receive shelving, except where indicated to be adjustable.
- C. Venting: Fabricate wood lockers with space between doors and locker assembly of not less than 1/4 inch, with painted metal security screen attached to each shelf between doors.
- D. Number Plates: Inlay number plates flush in each wood locker door, near top, centered.
- 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 various parts fit as intended and check measurements of assemblies against field measurements indicated on Shop Drawings before disassembling for shipment.
- 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. Sand edges of cutouts to remove splinters and burrs.

- G. Attach PVC edging to panels by thermally fusing edging to panels after panel fabrication.

## 2.8 FACTORY FINISHES FOR WOOD-FACED WOOD LOCKERS

- A. General: Finish wood lockers at factory as specified in this Section. Defer only final touchup, cleaning, and polishing until after installation.
- B. Preparations for Finishing: Sand, fill countersunk fasteners, seal concealed surfaces, and perform similar preparations for finishing wood lockers, as applicable to each unit of work.
- C. Transparent Finish: Manufacturer's standard two-coat, clear, catalyzed lacquer finish with sanding between coats. Seal with moisture-resistant topcoat.
  - 1. Stain: As selected by Architect from manufacturer's full range.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine walls, floors, and wood bases for suitable conditions where wood lockers will be installed.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Condition wood lockers to average prevailing humidity conditions in installation areas before installation.
- B. Before installing wood lockers, examine factory-fabricated work for completeness and complete work as required, including removal of packing.

### 3.3 INSTALLATION

- A. Install concealed wood support base with 1/2-inch thick plywood top.
- B. Assemble knocked-down wood lockers with manufacturer's standard fasteners, with no exposed fasteners on face frames.
- C. Install level, plumb, and true; shim as required, using concealed shims.
- D. Connect groups of wood lockers together with manufacturer's standard fasteners, through predrilled holes, with no exposed fasteners on face frames. Fit wood lockers accurately together to form flush, tight, hairline joints.



- E. Install wood lockers without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.
  - 1. Installation Tolerance: No more than 1/8 inch in 96-inch sag, bow, or other variation from a straight line. Shim as required with concealed shims.
  - 2. Maintain veneer sequence matching of wood-faced wood lockers with transparent finish.
  - 3. Fasten wood lockers through back, near top and bottom, at ends with No. 8 pan-head sheet metal screws through metal backing or metal framing behind wall finish spaced not more than 16 inches o.c.
  - 4. Fasten wood lockers through wood locker base, at ends and not more than 36 inches o.c. with No. 8 flush-head wood screws sized for 1-inch penetration into wood base.
- F. Scribe and cut corner and filler panels to fit adjoining work using fasteners concealed where practical. Repair damaged finish at cuts.
- G. Attach sloping top units to wood lockers, with end panels covering exposed ends.
- H. Number Plates: Install plates after wood lockers are in place.
  - 1. Attach number plate on each wood locker door, near top, centered, with at least two screws with finish matching number plate.

### 3.4 ADJUSTING AND CLEANING

- A. Clean, lubricate, and adjust hardware. Adjust doors and drawers to operate easily without binding. Verify that integral locking devices operate properly.
- B. Protect wood lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit wood locker use during construction.
- C. Touch up marred finishes, or replace wood lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by wood locker manufacturer.

END OF SECTION 10516