SECTION 12 32 00
MANUFACTURED WOOD CASework

SPEC WRITER NOTE: Delete between //----// if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section specifies wood veneer casework, plastic laminate casework as detailed on the drawings, including related components and accessories required to form integral units. Wood casework items shown on the drawings, but not specified below shall be included as part of the work under this section, and applicable portions of the specification shall apply to these items. Each like item of casework shall be of the same design and by one manufacturer.

SPEC WRITER NOTE: Edit and add to the following lists as required by project drawings.

B. Where shown, provide plastic laminate casework items as follows:
   1. Base cabinets in Dental Service Darkroom , ________________.
   2. Cabinets and counters in Radiology Darkroom ________________.
   //4. ____________________________________________________________________./

C. Where shown, provide wood veneer casework items as follows:
   1. Wall cabinets, base cabinets at Dental Service Radiology Service ________________./
   //2. ____________________________________________________________________./

1.2 RELATED WORK

A. Custom Casework: Section 06 20 00, FINISH CARPENTRY.
B. Color and Finish of Plastic Laminate: Section 09 06 00, SCHEDULE FOR FINISHES.
C. Lavatories and Plumbing in Casework: Section 22 40 00, PLUMBING FIXTURES.

1.3 MANUFACTURER'S QUALIFICATIONS

The fabrication of casework shall be by a manufacturer who produces casework similar to the casework specified and shown.

1.4 SUBMITTALS

A. Submit in accordance with Section `01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
B. Manufacturer's Literature and Data:
   Sinks, trim and fittings.
   Locks for doors and drawers
   Adhesive cements
C. Samples:
   Counter top, plastic laminate, 150 mm (six inch) square
   Wood Face Veneer or Hardwood Plywood
D. Shop Drawings (1/2 full size):
   1. All casework, showing details of construction, including materials,
      hardware and accessories.
   2. Cabinets and counters showing faucets in connection with sink bowls,
      and electrical fixtures and receptacles which are mounted on cabinets
      and counters.
   3. Fastenings and method of installation.
//E. Mock-Up: Where required for special casework and where four or more
   similar units are involved, submit a mock-up of a typical unit for
   approval by resident engineer. //</p>

1.5 APPLICABLE PUBLICATIONS
A. The publications listed below form a part of this specification to the
   extent referenced. The publications are referenced in the text by basic
   designation only.
B. American Society for Testing and Materials (ASTM):
   A167-99 (R2009) ........ Stainless and Heat-Resisting chromium-Nickel
      Steel Plate, Sheet and Strip
   A1008-10 ............... Steel, Sheet, Cold-Rolled, Carbon, Structural,
      High Strength Low Alloy
   C1036-06 ............... Flat Glass
C. Composite Panel Association (CPA):
   A208.1-09 ............... Particleboard
D. U.S. Department of Commerce Product Standards (Prod. Std):
   PS1-95 ................. Construction and Industrial Plywood
E. Hardwood, Plywood and Veneer Association (HPVA):
   HP-1-09 .................. Hardwood and Decorative Plywood
F. Architectural Woodwork Institute (AWI):
   Architectural Woodwork Quality Standards, Guide Specifications Quality
   Certification Program – 1999
G. American Society of Mechanical Engineers (ASME):
   A112.18.1-05 ............ Plumbing fixture Fittings
H. National Electrical Manufacturers Association (NEMA):
   LD3-05 .................. High Pressure Decorative Laminates
PART 2 - PRODUCTS

SPEC WRITER NOTE: Make material requirements agree with applicable requirements specified in the referenced Applicable Publications. Update and specify only that which applies to the project.

2.1 PLYWOOD, HARDWOOD FACE VENEER

HPVA HF-1, Premium Grade // plain sliced Red Oak // Rotary cut Select White Birch // ____ //.

2.2 PLASTIC LAMINATE:

A. NEMA LD-3.

B. Exposed decorative surfaces including countertops, both sides of cabinet doors, and for items having plastic laminate finish. General purpose Type HGL.

C. Cabinet Interiors Including Shelving: Both of following options to comply with NEMA, LD3.1 as a minimum.
   1. Plastic laminate clad plywood or particle board.
   2. Resin impregnated decorative paper thermally fused to particle board.

D. Backing sheet on bottom of plastic laminate covered wood tops. Backer Type BKL.

E. Post Forming Fabrication, Decorative Surface: Post forming Type HGP.

2.3 PLYWOOD, SOFTWOOD

Prod. Std. PS1, five ply construction from 13 mm to 28 mm (1/2 inch to 1-1/8 inch) thickness, and seven ply for 31 mm (1 1/4 inch) thickness.

2.4 PARTICLEBOARD

CPA A208.1, Type 1, Grade 1-M-3.

2.5 RUBBER OR VINYL BASE

Straight (for carpet), cove (for resilient floor); 100 mm (4 inch) high, 3 mm (1/8 inch) thick, flexible to conform to irregularities in walls, partitions and floors.

2.6 PLUMBING FIXTURES

ASME A112.18.1, except die-cast zinc-alloy material is not acceptable.

2.7 GLASS: ASTM C1036

For Doors: Type I, Class 1, Quality q4.

2.8 SOLID WOOD

Wood required for edge banding // moldings // legs // shall be of same species as wood face veneer.
2.9 SHEET STEEL
ASTM A1008.

2.10 STAINLESS STEEL
ASTM A167, with No. 4 finish.

2.11 HARDWARE
A. Where pin tumbler locks are specified, disc tumbler lock "Duo A", with brass working parts and case, as manufactured by the Illinois Lock Company will be an acceptable substitute. Locks for each type casework, shall be keyed differently and shall be master-keyed for each type service, such as Nurses, Psychiatric, and Administration. Provide two keys for each lock. Exposed hardware, except as otherwise specified, shall be satin finished chromium plated brass or nickel plated brass.

B. Marking of Locks and Keys:
1. The name of the manufacturer, or trademark by which manufacturer can readily be identified, legibly marked on each lock.
2. The key change number marked on the exposed face of lock, and also stamped on each key.
3. Key change numbers shall provide sufficient information for replacement of the key by the manufacturer.

C. Hinged Doors:
1. Doors 900 mm (36 inches) and more in height shall have three hinges and doors less than 900 mm (36 inches) in height shall have two hinges. Each door shall close against two rubber bumpers.
2. Hinges: Fabricate hinges with minimum 2 mm (0.072 inch) thick chromium plated steel leaves, and with minimum 3.5 mm (0.139 inch) diameter stainless steel pin. Hinges shall be five knuckle design with 63 mm (2-1/2 inch) high leaves and hospital type tips.
3. Fasteners: Provide full thread wood screws to fasten hinge leaves to door and cabinet frame. Finish screws to match finish of hinges.

D. Door Catches:
1. Friction or Magnetic type, fabricated with metal housing.
2. Provide one catch for cabinet doors 1200 mm (48 inches) high and under, and two for doors over 1200 mm (48 inches) high.

E. Locks:
1. Cylinder type pin tumbler.
2. Equip doors and drawers where shown with locks.

F. Drawer and Door Pulls:
Doors and drawers shall have flush pulls, fabricated of either chromium plated brass, chromium plated steel, stainless steel, or anodized aluminum.
G. Drawer Slides:
1. Full extension steel slides with nylon ball-bearing rollers.
2. Slides shall have positive stop.
3. Equip drawers with rubber bumpers.

H. Sliding Doors:
1. Each door shall be supported by two ball bearing bronze or nylon rollers, or sheaves riding on a stainless steel track at top or bottom, and shall be restrained by a nylon or stainless steel guide at the opposite end.
2. Plastic guides are not acceptable.
3. Each door shall have rubber silencers set near top and bottom of each jamb.

I. Shelf Standards (Except For Fixed Shelves):
Bright zinc-plated steel for recessed mounting with screws, 16 mm (5/8 inch) wide by 5 mm (3/16 inch) high providing 13 mm (1/2 inch) adjustment, complete with shelf supports.

J. Gate Bolt:
Surface mounted barrel type with strike.

K. Hinged Gates:
Gates shall have two double-acting // hinges // pivots //, size as required.

SPEC WRITER NOTE: Make selection and edit the following paragraphs.

2.12 FABRICATION

A. Casework shall be of the // flush overlay // exposed face frame // reveal overlay // reveal overlay design and, except as otherwise specified, be of premium grade construction and of component thickness in conformance with AWI Quality Standards.

B. Fabricate casework of // plastic laminated covered plywood or particleboard // factory finished wood veneer // as follows:
//2. Horizontal and vertical reveals between doors and drawer for reveal overlay design shall be 19 mm (3/4 inch) unless otherwise shown. //
//3. Glazed doors shall have 5 mm (3/16 inch) thick glass, set in glazing compound. //
//4. Sliding doors shall have stops to prohibit bypass and be removable without use of tools. //

C. Electrical fixtures, receptacles, wiring and junction boxes required for fixtures and receptacles:
1. Factory installed in casework.
2. For electrical lighting fixtures, see drawings.
3. For electric receptacles and lighting fixtures installed below or adjacent to wall cabinets or above counter tops, see electrical sections or specifications.
4. Install wiring in built-in raceways and terminate at junction box mounted on rear of cabinet and counter.
5. For final hook-up at junction box see electrical sections of specifications.

//D. Provide 18 gage sheet steel sloping tops for casework where shown. Fasten sloping tops with oval-head screws inserted from interior. Exposed ends of sloping tops shall have flush closures fastened as recommended by manufacturer.//

E. Base:
1. Provide rubber or vinyl base with close, flush joints; set with adhesive.
2. Remove adhesive from exposed surfaces.
3. Install base at floor line after casework has been accurately leveled.
4. Rub base to glossy finish.

F. Countertops:
1. Countertops, splashbacks // and reagent type shelves // shall be plastic laminate factory glued to either a plywood (PS1), or particleboard (CPA A208.1) core.
2. Countertops shall be // 19 mm // 32 mm // (// 3/4 inch // 1-1/4 inches) // thick.
3. Splashbacks // and reagent type shelves // shall be finished 19 mm (3/4 inch) thick and be secured to countertops with concealed metal fastenings and with contact surfaces set in waterproof adhesive.
4. Provide cut-outs for plumbing trim where shown.
5. Cover exposed edges of countertops, splashbacks // and reagent type shelves // with plastic.

G. Sink bowls:
1. 18 gage stainless steel, of size and design shown.
2. All interior corners of bowls shall be formed to manufacturer's standard radii.
3. Sinks shall have rims with flanged edges overlapping tops to provide tight joints.
4. Secure sink bowls with concealed fastenings.
5. For service lines from service fixtures, see other sections of specifications.
H. Provide the following plumbing trim and fittings:
   1. Faucets: ASME A112.18.1 Type I, compression type, countertop mounted, chromium plated brass, having two valves and with // swing-spout // and // gooseneck spout // as shown, elevated to clear handles.
   2. Fittings shall have an elongated escutcheon for spout and handles, replaceable valve seats and four arm or lever style indexed chromium plated brass or stainless steel handles; handles either with or without hood.

I. Faucets:
   1. ASME A112.18.1 Type I, compression type, splashback mounted, chromium plated brass, having two valves and with // swing-spout // and // gooseneck spout // as indicated.
   2. Fittings shall have exposed body union inlets and adjustable flanges.
   3. Valves shall have indexed chromium plated brass or stainless steel lever handles and replaceable valves seats; handles either with or without hood.

J. Drain:
   1. Cast or wrought brass or stainless steel with flat strainer.
   2. Surfaces of drains exposed from above shall have a chromium plated finish.

K. Traps: Cast brass.

L. Spray Hose:
   1. Hose shall drop below counter top when not in use and be of sufficient length to reach the entire length of the countertop.
   2. Concealed trim may be rough brass.

M. Support Members for Tops of Tables:
   1. Construct as detailed.
   2. Provide miscellaneous steel members and anchor as shown.

N. Legs For Counters:
   1. Fabricate legs for counters of 1.6 mm (0.0635 inch) thick, 38 mm (1-1/2 inch) square tubular // stainless // steel where shown.
   2. Secure legs to counter tops and provide legs at bottom with shoes not less than 25 mm (one inch) in height.
   3. Fabricate shoes of either stainless steel, aluminum or chromium plated brass.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Set casework in place; level, plumb and accurately scribe and secure to walls, and/or floors.

B. The installation shall be complete including all trim and hardware. Leave the casework clean and free from defects.
3.2 FASTENINGS

A. Fastenings for securing casework to adjoining construction shall be as detailed on the drawings or approved shop drawings.

B. See Section 05 50 00, METAL FABRICATIONS for reinforcement of walls and partitions for casework anchorage.

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