

**SECTION 12 35 70.21
MEDICATION CABINET**

SPEC WRITER NOTE: Delete text between
// // not applicable to project. Edit
remaining text to suit project.

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Medication cabinets with self-contained refrigerator and fixtures.

1.2 RELATED WORK

SPEC WRITER NOTE: Update and retain
references only when specified elsewhere
in this section.

- A. Section 08 80 00, GLAZING: Laminated Glass for Doors.
- B. Division 22, PLUMBING: Plumbing Connections.
- C. Division 26, ELECTRICAL: Electrical Connections and Power Characteristics.

1.3 APPLICABLE PUBLICATIONS

- A. Comply with references to extent specified in this section.
- B. American Society of Mechanical Engineers (ASME):
 - A112.18.1/CSA B125.1-18.Plumbing Supply Fittings.
- C. ASTM International (ASTM):
 - A240/A240M-20.....Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - A463/A463M-15(2020)e1...Steel Sheet, Aluminum-Coated, by Hot-Dip Process.
 - B209-14.....Aluminum and Aluminum-Alloy Sheet and Plate.
 - B209M-14.....Aluminum and Aluminum-Alloy Sheet and Plate (Metric).
 - B221-14.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - B221M-13.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - D4802-16.....Poly (Methyl Methacrylate) Acrylic Plastic Sheet.
- D. Federal Specifications (Fed. Spec.):

AA-R-211H.....Refrigerators, Mechanical, Household
(Electrical Self-contained).

E. National Fire Protection Association (NFPA):
70-20.....National Electrical Code.

F. UL LLC (UL):
Listed.....Online Certifications Directory.

1.4 SUBMITTALS

A. Submittal Procedures: Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA,
AND SAMPLES.

B. Submittal Drawings:

- 1. Show size, configuration, and fabrication and installation details.
- 2. Show utility connection, sizes, and locations.
- 3. Show fastening methods and locations, including required blocking.

C. Manufacturer's Literature and Data:

- 1. Description of each product.
- 2. Installation instructions.

D. Test reports: Certify products comply with specifications.

- 1. Medical cabinets.

E. Certificates: Certify products comply with specifications.

- 1. Certificate signed by manufacturer that servicing of component parts can be made from front of cabinet.
- 2. Show cabinets are UL Listed for specified application.

F. Qualifications: Substantiate qualifications comply with specifications.

- 1. Manufacturer // with project experience list //.

G. Operation and Maintenance Data:

- 1. Care instructions for each exposed finish product.
- 2. Start-up, maintenance, troubleshooting, emergency, and shut-down instructions for each operational product.
 - a. Show parts list with part number.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications:

- 1. Regularly manufactures specified products.

1.6 WARRANTY

SPEC WRITER NOTE: Always retain construction warranty. FAR includes Contractor's one year labor and material warranty.

A. Construction Warranty: FAR clause 52.246-21, "Warranty of Construction."

PART 2 - PRODUCTS**2.1 MATERIALS**

- A. Stainless Steel: ASTM A240/A240M.
- B. Aluminum:
 - 1. Alloys suitable for intended use.
 - 2. Extrusions: ASTM B221.
 - 3. Sheets and Plates: // ASTM B209 // ASTM B209M //.
- C. Aluminum-Coated (Aluminized) Steel: ASTM A463/A463M.
- D. Acrylic Plastic: ASTM D4802.
- E. Glass: Laminated as specified in Section 08 80 00, GLAZING.
- F. Plumbing Fittings and Trim: ASME A112.18.1/CSA B125.1, except die-cast zinc alloy is not acceptable.

2.2 PRODUCTS - GENERAL

- A. Provide medication cabinets from one manufacturer.
- B. Electrical Components: UL Listed to suit application.

2.3 MEDICATION CABINETS

- A. Medication Cabinet: // Open // Recessed // mounted cabinets provided with refrigerator, countertop with sink, shelves, narcotics locker, doors, drawers, storage compartment, waste compartment and accessories as indicated on drawings.
- B. Cabinet Dimensions:
 - 1. Size 1, Width: 900 mm (36 inch).
 - 2. Size 2, Width: 1200 mm (48 inch).
 - 3. Size 3, Width: 1500 mm (60 inch).
 - 4. Size 4, Width: 1800 mm (72 inch).
 - 5. Depth: 750 mm (30 inches) maximum.
 - 6. Height: 2400 (95 inches) maximum, excluding sloping top.
- C. Refrigerators:
 - 1. Self-defrosting type meeting the fabrication and performance requirements of Fed. Spec. AA-R-211, without ice-making compartment.
 - 2. Refrigerator Sizes:
 - a. Medication Cabinet Size 1: 0.07 cubic meter (2.5 cubic feet).
 - b. Other Medication Cabinet Sizes: 1.0 cubic meter (3.5 cubic feet).
 - 3. Shelves: One adjustable shelf or minimum two perforated stainless steel pans with stainless steel or 19 mm (3/4 inch) clear plastic hinged or sliding doors equipped with magnetic catches.
 - 4. Condensing Unit: Air cooled.

5. Temperature Controls: Maintain temperature within range of 2 degrees C to 8 degrees C (36 degrees F to 46 degrees F).
6. Thermometer: Accurate within 5 percent of actual temperature.
- D. Countertop: Full width countertop fabricated from 1.2 mm (0.05 inch) thick stainless steel with inverted "V" curbing at front edge and integral back splash.
- E. Sink: Form sinks integral with countertop.
 1. Width: Minimum 200 mm (8 inches), maximum 250 mm (10 inches).
 2. Length: Minimum 225 mm (9 inches), maximum 325 mm (13 inches).
 3. Depth: Minimum 150 mm (6 inches), maximum 200 mm (8 inches).
- F. Plumbing Fittings and Trim:
 1. Countertop Mounted Faucets: Compression type, chromium plated brass, separate hot and cold water valves, // swing-spout // gooseneck spout // as indicated on drawings, elevated to clear handles.
 - a. Fittings: Elongated escutcheon for spout and handles, replaceable valve seats and four-arm or lever style indexed chromium plated handles; handles // with // without // hood.
 2. Backsplash Mounted Faucets: Compression type, chromium plated brass, separate hot and cold water valves, // swing-spout // gooseneck spout // as indicated on Drawings.
 - a. Fittings: Indexed chromium plated four-arm or lever handles and replaceable valve seats; handles // with // without // hood.
 3. Drain: // Cast brass // Wrought brass // Stainless steel //.
 - a. Strainers:
 - 1) Cabinet Size 1B: Cup type.
 - 2) Other Cabinet Sizes: Flat type.
 - b. Brass Finish: Satin chromium plated.
 4. Trap: Cast brass.
- G. Cabinet Upper Section Shelves: Minimum two removable adjustable shelves // one adjustable and one tiered shelf //, as indicated on drawings, fabricated from minimum 1.2 mm (0.05 inch) thick stainless steel.
 1. Shelf Depth: 175 mm to 250 mm (7 to 10 inches).
- H. Cabinet Upper Section Narcotics Locker:
 1. Configuration: // Single door with two locks. // Two doors, outer and inner, with one lock each door. //
 2. Shelves: One adjustable or tiered shelf, fabricated from minimum 1.2 mm (0.05 inch) thick stainless steel.
 3. Illuminate locker interior when door is open.

4. Warning Light: Mounted on cabinet front, lit when narcotics locker is not secured.
5. Locks: Tamperproof wardrobe type.
 - a. Single Door Lockers: Key locks differently.
 - b. Two Door Lockers: Key locks differently.
 - c. Key // one lock of single door locker // outer door lock of two door locker // alike with other medication cabinet locks.
- I. Cabinet Upper Section Doors: Hinged, sliding double doors, or roll-up type doors, equipped with wardrobe or cylindrical type locks. Key locks alike.
 1. Roll-Up Doors: Aluminum construction, integral with cabinet, coil up into head box at top of cabinet. Add-on, surface mounted roll-up doors are not acceptable.
- J. Cabinet Lower Section Storage Compartment: Minimum one compartment.
 1. Shelf: One adjustable, removable, stainless steel.
 2. Doors: Hinged or sliding stainless steel.
- K. Cabinet Lower Section Waste Compartment:
 1. Waste Receptacle: Concealed stainless steel, aluminum, or rigid plastic.
 2. Receptacle Access Opening: Through cabinet front or through countertop.
- L. Accessories:
 1. Paper cup dispenser, designed to hold 200 g (7 ounce) cups.
 2. Paper towel dispenser.
 3. 24 card plastic medicine card rack.
- M. Closures: One of the following:
 1. Flat Closure Strips: 1.1 mm (43 mils) thick steel, closure strips scribed to required contours.
 2. Machined Closure Strips: 0.75 mm (30 mils) thick steel, formed with returns for fastening with sheet metal screws to tubular or channel members of cabinets or with bolts where exposed on inside.

2.4 FABRICATION

- A. Cabinets:
 1. Fabricate cabinets as single unit or sectional fabrication, constructed of steel angles or formed sheet metal panels and structural members welded into unitized assembly.

2. Enclose open mounted cabinets on sides with stainless steel panels 1 mm (40 mils) thick. Enclose backs and concealed sides with stainless steel or aluminized steel, 1 mm (40 mils) thick.
3. Recess base of cabinets on front to provide minimum 75 mm (3 inches) toe space.
4. Fabricate sloping tops from 1 mm (40 mils) thick stainless steel.

B. Doors:

1. Hinged Doors: Fabricate frames from stainless steel with 6 mm (1/4 inch) thick laminated glass for glazing.
2. Sliding Doors: Fabricate from 9 mm (3/8 inch) clear plastic and ride in stainless steel track or channel. Fabricate and install track in a manner to prevent removal of doors when doors are locked.

2.5 ACCESSORIES

- A. Fasteners: Type and size recommended by medication cabinet manufacturer to suit application.

1. Toggle or expansion bolts, minimum 6 mm (1/4 inch) diameter.

PART 3 - EXECUTION

3.1 EXAMINATION

3.2 PREPARATION

- A. Examine and verify substrate suitability for product installation.
1. Verify blocking required for medication cabinet fastening is installed and located correctly.
- B. Do not proceed with the work until unsatisfactory conditions detrimental to proper and timely completion of the work have been corrected.

3.3 INSTALLATION

- A. Install medication cabinets according to manufacturer's instructions // and approved submittal drawings //.
1. When manufacturer's instructions deviate from specifications, submit proposed resolution for Contracting Officer's Representative consideration.
- B. Install medication cabinets, square, plumb, and level.
- C. Anchor fixed components to adjacent construction as indicated on drawings. Do not fasten wood grounds or wood blocking.
1. Space fastenings maximum 600 mm (24 inches) on center.
- D. Closures:

1. Close openings larger than 6 mm (1/4 inch) wide between medication cabinets and adjacent walls, and where indicated on drawings, with closures.
 2. Where ceilings interfere with sloping tops, omit sloping tops and install closures.
 - a. Secure closures exceeding 150 mm (6 inches) in width at top edge and fasten by screws to continuous 25 mm by 25 mm (1 inch by 1 inch), 1.7 mm (68 mils) thick steel angle secured to ceiling with toggle bolts.
 3. Paint closures to match adjacent walls.
- E. Connect utilities and make fixtures and equipment operational.

3.4 FIELD QUALITY CONTROL

- A. Manufacturer Services:
1. Examine anchorage, check operation of equipment and hardware, and examine finish for damage.
 2. Submit report in writing installation is satisfactory and indicate minor adjustments and minor repairs required for final acceptance.

3.5 CLEANING

- A. Clean exposed metal surfaces. Remove contaminants and stains.
- B. Polish exposed glass surfaces.

3.6 PROTECTION

- A. Protect medication cabinets from construction operations.
- B. Repair damage.

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