

WW-P-541/9B
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SUPERSEDING
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FEDERAL SPECIFICATION SHEET

PLUMBING FIXTURES (MEDICAL FACILITIES, LAND USE)
(DETAIL SPECIFICATION)

This specification forms a part of the latest issue of
Federal Specification WW-P-541/GEN.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers specific requirements for medical plumbing fixtures, the associated trim and fittings necessary to make a complete installation to rough piping, and certain accessories.

1.2 Classification.

1.2.1 Types, mountings, models, classes, controls, and styles. The medical plumbing fixtures shall be of the following types, mountings, models, classes, styles, and controls as specified (see 6.1):

Type I - Water closets bed pan cleansing bowl.

Mounting F - Floor outlet.

Mounting W - Wall outlet.

Model A - Bed pan cleanser foot operated.

Model B - Bed pan cleanser flush valve operated.

Model C - Bed pan cleanser hand operated.

Type II - Bathtubs and perineal baths.

Class 1 - Bathtub end type.

Class 2 - Perineal baths.

Type III - Lavatories.

Class 1 - Surgeon's lavatory.

Class 2 - Wheelchair lavatory.

Control A - Wrist or elbow control.

Control B - Foot control.

Control C - Automatic control.

Control D - Knee control.

Style 1 - Manual knee control.

Style 2 - Pre-set knee control.

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Type IV - Sinks.

Class 1 - Surgeon's scrub-up sink.

Class 2 - Clinic service sink, wall mounted.

Class 3 - Service sink, flushing rim, wall mounted.

Class 4 - Enema sink, flushing rim, floor mounted.

Controls, classes 1, 2, and 3.

A - Wrist or elbow control.

B - Foot control.

C - Automatic control.

D - Knee control.

Style 1 - Manual knee control.

Style 2 - Pre-set knee control.

Control E - Hand control.

1.2.2 Definitive part numbers (DPN). DPNs have not been established for the plumbing fixtures covered by this specification sheet. The items covered herein are not normally stocked and issued but rather are ordered for specific application and require that option decision be made regarding specific installation criteria. This is best controlled through use of ordering data options (see 6.1).

2. APPLICABLE DOCUMENTS

2.1 Latest issue of WW-P-541/GEN and documents referenced therein.

3. REQUIREMENTS

3.1 Material. Materials shall meet the requirements in the basic specification WW-P-541/GEN.

3.2 Type I, water closet, bed pan cleansing. Water closets shall be vitreous china siphon jet elongated bowl with lugs or slots for holding bed pan.

3.2.1 Mounting F, floor outlet. Water closet bowls shall have a siphon trapway at the rear of the bowl and an integral flushing rim and jet. The minimum water surface shall be 12 by 10 inches with a minimum depth of seal equal to 3 inches.

3.2.2 Mounting W, wall outlet. Water closet shall have siphon trapway at the rear of the bowl and an integral flushing rim and jet. The minimum water surface shall be 12 by 10 inches with a minimum depth of seal equal to 3 inches. Four bolt holes 7/8-inch minimum diameter shall be centered on the corners of a rectangle having dimensions 9 inches wide by 7-1/2 inches high. The outlet shall be centered between the lower bolts. Bolt holes may be elongated to accommodate old mountings.

3.2.3 Model A, bedpan cleanser, foot operated. Cleansing unit shall consist of a foot control to be wall hung single or double pedal valve with loose key stop and supply to wall, vacuum breaker; 4 foot hose with nozzle and spray, heat-resisting handle and wall hook.

3.2.4 Model B, bedpan cleanser, flush valve operated. Cleansing unit shall be flush valve operated with leak proof raise and lower spray arm and spray. When specified (see 6.1), cleansing unit shall be provided with a deodorant-disinfectant attachment.

3.2.5 Model C, bedpan cleanser, hand operated. Cleansing unit shall consist of a single compression valve with handle, loose key stop, supply to wall and vacuum breaker; 4 foot hose, self-closing valve handle, and nozzle with spray and wall hook.

3.2.6 Flushometers. Unless otherwise specified (see 6.1), flushometers shall be exposed large diaphragm or piston type with quiet operating features and furnished with a stop valve, vacuum breaker, flush pipe, inlet and outlet fittings including spud flanges, and wall flanges or escutcheons as applicable and the following:

- (a) A 1-inch IPS angle stop with an adjustable tailpiece feature and a screw driver slot or allen broach on the exposed end of the control stem.
- (b) Flush connection and coupling for the following 1-1/2 inch outside diameter spuds as specified (see 6.1).
 - (1) Top spud.
 - (2) Long flush connection top spud.
 - (3) Back spud.
- (c) Seat bumper mounted on the stop, flushometer, or wall.
- (d) Offset flush connection.
- (e) Nonhold-open side oscillating handle or foot pedal actuated as specified (see 6.1).

Adapter for control stop, flushometer seats and performance of flushometers shall be in accordance with MIL-V-29193.

3.2.7 Water closet fittings and accessories. Floor flange fittings, gaskets, bolts and screws shall be in accordance with MIL-F-19017 and as specified (see 6.1).

3.2.8 Seats. Solid plastic, open front, extended back, without cover, color white. Hinges shall be free rotation, check hinge, or self-sustaining type as specified (see 6.1), in accordance with WW-S-1912.

3.2.9 Chair carrier. Chair carrier shall be in accordance with ANSI A112.6.1.

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3.3 Type II, bathtubs and perineal baths.

3.3.1 Class 1, bathtub. Institutional bath shall be acid-resisting enameled cast iron inside and outside roll rim bathtub for building-in at one end, slip-resistant bottom, approximately 66 by 30 inches and 18 inches high. Drain shall be pop-up 1-1/2 or 2-inch as specified (see 6.1). Base shall be enameled cast iron, concrete, or terrazzo as specified (see 6.1), to set tub 28 inches from floor to rim. Concrete or terrazzo base shall be provided by others. Supply shall be two valve or single control and over rim spout. Shampoo fitting shall be two valve or single control with wall outlet, nozzle with hook, 4 foot minimum hose, spray head, and wall mounted vacuum breaker.

3.3.2 Class 2, perineal bath. Vitreous china bath of armchair design shall be approximately 27 by 23 inches with cast-in channels for water circulation. Water supply shall be capable of delivering properly mixed water in low volume to assure correct water flow in the bath. The supply shall be sufficient height to prevent back siphonage. Removable overflow adapter in waste outlet shall provide required depth of water in bath and shall have an opening of sufficient size as not to allow bath to flow over rim of fixture. Bath shall be supported by chair carrier with feet, or vitreous china pedestal, as specified (see 6.1). Thermostatic mixing valve shall have 6 to 10 gallon per minute flow, with thermometer mounted on the wall, P trap and trap nipple as required.

3.4 Type III, lavatories.

3.4.1 Class 1, surgeon's lavatory. Lavatory shall be vitreous china. The lavatory shall be 28 by 20 inches nominal dimensions with bowl 14 by 11 inches and with two integral instrument trays designed to permit draining into the bowl. Lavatory shall be supported by exposed arms or brackets anchored with steel plates and through bolts or by chair carrier with slab perforated for concealed arms. Punchings for supply fitting shall be as required for fitting selected. Perforated grid strainer, P trap with nipple to wall as required. Supply pipes with stops for wrist, foot or knee control. Gooseneck spout outlet shall be 5 to 8 inches above slab. Controls shall be as specified (see 3.6 and 6.1).

3.4.2 Class 2, wheelchair lavatory. Lavatory shall be vitreous china punched for concealed arm carrier with feet, punched as required for fittings selected. Perforated grid strainer with tail piece to wall, P trap, extended supplies with loose key stops to wall, which accommodates the lavatory. Unless otherwise specified (see 3.6 and 6.1), control shall be 4 or 4-1/2 inch wrist handles, gooseneck spout faucet with outlet 5 inches above slab.

3.4.3 Soap dispenser. When specified (see 6.1), equip lavatory with lavatory mounted, forced pump action, liquid soap dispensing type dispenser. Dispenser shall be copper alloy, stainless steel AISI 302 or 304, or any suitable plastic material at the manufacturer's option. Actuating mechanism shall be copper alloy, stainless steel AISI 302 or 304, or plastic.

3.5 Type IV, sinks.

3.5.1 Class 1, surgeon's scrub-up sink. Vitreous china sink shall be approximately 28 by 22 inches and 12 inches deep, or as specified (see 6.1), with supply punchings as required. Perforated grid strainer and P trap as required. Sink shall be supported on chair carrier with feet or exposed arms or brackets anchored with steel plates and through bolts. Punchings for supply fitting selected. Control shall be as specified (see 3.6 and 6.1).

3.5.2 Class 2, clinic service sink, wall mounted. Service sink shall be vitreous china clinic, blowout action, integral flushing rim, with or without back, minimum size 21-1/2 by 19 inches and minimum depth 14 inches and with stainless steel or other approved rim guard. Sink shall be supported by chair carrier with feet. Flushometer with nonhold-open side oscillating handles and extended flush pipe. Wall mounted faucet with integral stops, fork brace, and with spout outlet 14 to 15 inches from wall, in accordance with roughing specifications. Control shall be as specified (see 3.6 and 6.1).

3.5.3 Class 3, service, sink, flushing rim, wall mounted. Service sink shall be vitreous china flushing rim wall hung, with or without back, minimum size 24 by 20 inches, depth 12 to 13 inches, and with stainless steel or other approved rim guard. Sink shall be supported by chair carrier with exposed arms and feet, or brackets with steel back-up plate in wall and through bolts. When specified (see 6.1), sink shall be free standing on trap standard. Flushometer with nonhold-open foot pedal and extended flush pipe. Drain plug with metal grid 3 by 2 inches. P trap with nipple to wall. Wall mounted combination fitting with integral stops, fork brace, bucket hook and spout, and with spout outlet 14 to 15 inches from wall. Control shall be as specified (see 3.6 and 6.1).

3.5.4 Class 4, enema sink. Enema sink shall be vitreous china, free standing, floor mounted, siphon jet, flushing rim, clinic sink, approximately 28 by 21 inches by 18 to 20 inches high. Flushometer with nonhold-open side oscillating handle and extended flush pipe. When specified (see 6.1), flushometer shall be an automatic motor operated flushometer controlled by remote timer. Valve motor shall be cycled in sequence by single or three-circuit timer as specified (see 6.1), set to operate flushometer at specified intervals. Timer and motor shall operate on a nominal 120-volt, 60 Hertz, alternating current system and shall conform to UL requirements.

3.6 Controls.

3.6.1 Control A, wrist or elbow control. Control shall be 4 or 4-1/2 inch wrist handles or 6-inch elbow handles, as specified (see 6.1).

3.6.2 Control B, foot control, wall hung. Control shall be mechanical pedal mixing valve with single or double self-closing pedal valve with stops, renewable seats, and supply from valve to spout, indexed lift up pedals having a clearance of not less than 1-1/2 inches above the floor and not less than 14 inches from wall when in operation. Exposed brass parts shall be chromium plated.

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3.6.3 Control C, automatic control. Control shall be an electronic control operating on the proximity of the body; the ON and OFF cycle automatic and adjustable for distance of the body from the fixture. Temperature control preset and changeable in control box or an alternate temperature control by thermostatic mixing valve. Electrical components shall conform to UL requirements.

3.6.4 Control D, knee controls.

3.6.4.1 Style 1, knee control. Control shall be manual knee-action control mixing valve with renewable seats, screwdriver stops, 3/8 or 1/2 inch supplies, punched as required, escutcheons, and support. Mixing valve shall be controlled by a stirrup handle. The travel of the handle shall be approximately 90°. Parts shall be renewable without removing the valve from its fixed position or disturbing pipe connections. Exposed brass parts shall be chromium plated. Ferrous brackets, when furnished as regular equipment, shall be coated with white enamel.

3.6.4.2 Style 2, knee control. Control shall be automatic knee-action push-plate control actuated by knee pressure on push-plate. Temperature pre-set and changeable by wall mounted thermostatic control mixing valve. Exposed parts shall be chromium plated. Ferrous brackets, when furnished as regular equipment, shall be coated with white enamel.

3.6.5 Control E, hand control. Hand control shall have four arm handles.

4. QUALITY ASSURANCE PROVISIONS (see WW-P-541/GEN).

5. PREPARATION FOR DELIVERY (see WW-P-541/GEN).

6. NOTES

6.1 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type, mounting, model, class, style, and control
(see 1.2.1 and 1.2.2).

Type I, water closets.

- (c) Deodorant-disinfectant attachment, when required (see 3.2.4).
- (d) Flushometers (see 3.2.6).
- (e) Flush connection (see 3.2.6).
- (f) Water closet fittings and accessories (see 3.2.7).
- (g) Seats and hinges (see 3.2.8).

Type II, bathtubs.

- (h) Drain (see 3.3.1).
- (i) Base (see 3.3.1).

Type II, perineal baths.

(j) Chair carrier (see 3.3.2).

Type III, lavatories.

(k) Type control for lavatory (see 3.4.1, 3.4.2, and 3.6).

(l) When soap dispenser required (see 3.4.3).

Type IV, sinks.

(m) Depth of surgeon's sink (see 3.5.1).

(n) Trap standard when required (see 3.5.3).

(o) When motor operated flushometer is required (see 3.5.4).

(p) Type control for sink (see 3.6).

MILITARY CUSTODIANS:

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Navy - YD

Air Force - 99

CIVIL AGENCY COORDINATING ACTIVITIES:

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GSA - FSS

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DLA - CS

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User activities:

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