

[INCH-POUND]
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INTERIM REVISION OF
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INTERIM FEDERAL SPECIFICATION

LOCKERS, CLOTHING, STEEL

This Interim Federal Specification was developed by the General Services Administration, Federal Supply Service, Washington, D.C. 20406, based upon currently available technical information. It is recommended that Federal agencies use it in procurement and forward recommendations for changes to the preparing activity at the address shown above.

The General Services Administration has authorized the use of this Interim Federal Specification as a valid exception to federal Specification AA-L-486G, dated January 11, 1967.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers requirements for single-tier and double-tier clothing lockers (see 6.1).

1.2 Classification.

1.2.1 Types, sizes, and styles. The lockers shall be of the following types, sizes, and styles as specified (see 6.2).

Type I - Single-tier lockers (semi-louvered door)

Size 1 - 15 inches wide, 15 inches deep, 78 inches high, overall.
Size 2 - 15 inches wide, 18 inches deep, 78 inches high, overall.
Size 3 - 18 inches wide, 21 inches deep, 78 inches high, overall.
Size 4 - 18 inches wide, 24 inches deep, 78 inches high, overall.

Type II - Double-tier lockers (semi-louvered door)

Size 1 - 15 inches wide, 15 inches deep, 78 inches high, overall.
Size 2 - 15 inches wide, 18 inches deep, 78 inches high, overall.
Size 3 - 18 inches wide, 22 inches deep, 72 inches high, overall.

Style 1 - Single unit.
Style 2 - Sectional groups.

2. APPLICABLE DOCUMENTS

2.1 Government publications. The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

Federal Specifications:

FF-P-101 - Padlocks.
TT-C-490 - Cleaning Methods and Pretreatment of Ferrous Surfaces for Organic Coatings.

Federal Standards:

Fed. Std. No. 595 - Colors.

FSC 7125

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(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and handbooks as outlined under General Information in the Index of Federal Specifications, Standards, and Commercial Item Descriptions and at the prices indicated in the Index. The Index, which includes cumulative supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.

(Single copies of this specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, D.C., Atlanta, Chicago, Kansas City, Mo., Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.

(Sample panels of color chips of Fed. Std. No. 595 are obtainable from the Regional Business Service Center, Federal Supply Service, General Services Administration.)

Military Specifications:

MIL-W-12332 - Welding, Resistant, Spot and Projection for Fabricating Assemblies of Low Carbon Steel.

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 First article. Unless otherwise specified (see 6.2), a sample of the finished commodity and each component part shall be furnished for first article testing and approval (see 4.2).

3.2 Materials and components. Materials and components shall conform to requirements specified herein. All materials shall be unused and free from defects that affect serviceability or appearance of the finished product.

3.2.1 Fastening devices. Fastening devices, such as threaded fasteners, washers, rivets, and clips, shall be commercially available items, fabricated from steel. Alternatively, if rivets are used to secure the sides, back, and top of lockers shipped set-up, they may be of a nonferrous material and shall have a rated single shear strength of 900 p.s.i. minimum. Steel fastening devices shall be cadmium, zinc, or nickel plated.

3.2.2 Built-in-locks.

3.2.2.1 Built-in key locks. Except as otherwise specified herein, the lock component parts shall be fabricated from steel and shall be cadmium or zinc coated after fabrication and prior to assembly. All locks within the key change range specified herein shall be master keyed. Each lock shall also

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have its own keys and shall not be operable by the keys of any other lock within the key range, other than the master key. In addition, the locks shall conform to the following:

- (a) Case shall be approximately 1-1/2 by 1-5/8 inches, with top and bottom attaching ears.
- (b) Backset shall be a maximum of 1 inch.
- (c) Dead bolt shall be brass, rust proof steel or die cast zinc alloy.
- (d) Tumblers shall consist of 3 to 6 secured levers, or 5 or 6 tumblers.
- (e) Unless otherwise specified (see 6.2), 200 key changes, but not to exceed 7500.
- (f) Two keys for each lock and master keys in the specified quantity (see 6.2).

3.2.2.2 Built-in combination lock. The lock shall be set proof, pick proof, keyless, 3 point combination mechanism and capable of not less than 24,000 combinations without duplication. The mechanism shall be self-locking so that upon door closure, it will automatically throw off the combination (with or without moving the dial) and shall require complete resetting to open. A knurled rotating dial shall be incorporated and shall contain not less than 40 setting points, indicated by depressed white figures in a black dial. The lock shall not open when any individual combination number is varied 1-1/2 full points. No setting point shall be revealed in operation. The rotating dial shall be secured to resist effort to insert an instrument between the edge of the dial and the escutcheon. The lock shall permit at least 4 changes in the combination setting that can be made after delivery. Each lock combination shall be different and the factory setting shall be clearly noted on a tag attached to the lock.

3.2.3 Finishing materials.

3.2.3.1 Primer. The primer shall be compatible with the finishing enamel used.

3.2.3.2 Enamel. Enamel for the finishing shall be the baking type. It shall pass the tests in 4.5.

3.2.3.2.1 Color of finish. Unless otherwise specified (see 6.2), the color of the finishing enamel shall be gray, color chip no. 26134 of Fed. Std. 595 (see 6.3).

3.2.4 Coat hooks. Coat hooks shall be commercially available items of ferrous or nonferrous metal, nickel, chrome, cadmium or zinc plated, and shall have ball shaped hook ends. Wall hooks shall have one or more prongs and may include a retainer for a hanger rod. Under shelf and ceiling hooks shall have 2 or more prongs. Each coat hook shall have not less than 2 mounting holes provided.

3.2.5 Hanger rods. Hanger rods shall be not less than 3/8 inch diameter round steel bar, tubing or pipe, having protective hot dipped galvanized coating or electrodeposited zinc, cadmium, nickel, or chrome plating.

3.2.6 Door handles. Door handles shall be of ferrous or nonferrous metals and shall be a commercially available design for surface or recess mounting and interconnection to a door latching mechanism. In either case, a 3/8 inch (plus or minus 1/16 inch) diameter padlock eye shall be incorporated to immobilize the operating mechanism by means of a padlock. A padlock strike shall be incorporated when the padlock eye location would permit an attached padlock to strike the painted locker surface. Aluminum alloy handles shall have a satin anodized finish. Zinc alloy or steel handles shall be chromium

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or nickel plated.

3.3 Design and construction. Details of design and construction not specifically defined herein shall be left to the discretion of the manufacturer. The height of each compartment within Type II lockers shall be the same. The permissible tolerance shall be 1/4 inch. Except where otherwise permitted herein, the entire assembly shall be of steel. Like components shall be interchangeable among all lockers of the same type and size furnished under any one contract or purchase order.

3.3.1 Illustration. Figure 1 is included to illustrate the general appearance of the Types I and II lockers and is not intended to restrict exact details of design and construction.

3.3.2 Locker dimensions. The following tolerances shall be applicable to the overall dimension specified in 1.2.1.

Width - plus or minus 1/16 inch.
Depth - plus 1/8 minus 1/16 inch.
Weight - plus or minus 1/8 inch.

When legs are not required (see 3.3.14) the overall height specified in 1.2.1 shall be reduced by 6 inches. When lockers in sectional groups are required, the tolerances specified are applicable to each single unit in the group.

3.3.3 Assembly. Assembly of the lockers furnished in the knocked-down condition shall be by means of bolts and nuts, spring clips, interlocking of members, or by any combination of these methods. When set-up lockers are required, assembly shall be by means of rivets conforming to 3.2.1, spring clips, or bolt and nut assembly. Vertical and horizontal spacing of the fasteners shall not exceed 12 inches. Except for door hinges all bolts shall pass through round bolt holes which shall not exceed the diameter of the bolt by more than 1/16 inch. Bolt holes in door hinges may be elliptical instead of round. The minor axis shall not exceed the diameter of the bolt by more than 1/16 inch and the major axis shall not exceed the diameter of the bolt by more than 1/8 inch. All assembly joints on the exterior of the lockers shall be designed so that sheet metal edges shall not be exposed directly at the exterior vertical edges of assembled lockers.

3.3.3.1 Bolts, nuts, and rivets. Heads of bolts used to assemble panel sections and the top and bottom shall be round (truss) head, slotless type. All bolts, regardless of head style, shall be inserted from outside surfaces and secured by self-energizing locknuts or by lockwashers and nuts. Rivets shall be not less than size 10 with a nominal diameter of 0.134 inch when used to attach hinges. Other rivets used shall have oval or truss heads and a body diameter of at least 5/32 inch.

3.3.3.2 Spring clips. Spring clips shall be a one piece design and shall require access to the locker interior before removal from the outside can be accomplished. The spring clips shall be capable of installation and removal without the need for special tools.

3.3.3.3 Spot welding. Spot welding shall be in accordance with Mil-W-12332. The spot welds shall be located not closer to the edge of either adjoining member than one half the greatest dimension of the spot weld. Squeeze time, weld time and hold time shall be controlled to produce uniform welds that will conform to the visual examination and peel test specified in 4.6.

3.3.4 Locker arrangement. The lockers shall be furnished in single units

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or sectional groups, as specified (see 6.2). Sectional groups shall consist of 2 or more lockers, side by side, and assembled as an integral unit. Type I sectional groups shall not exceed 10 lockers (10 openings) per sectional group. Type II sectional groups shall not exceed 10 double-tier lockers (20 openings) per sectional group. Single partitions may be used between each locker of the sectional groups.

3.3.5 Doors. Doors shall be of the louver type, formed from not less than 16 gage (0.0598 inch) steel, and shall close within a door frame or against formed edges of the locker side panels, top and bottom. The doors shall be hinged on the right hand side and shall latch on the left hand side. Each door shall be equipped with a handle conforming to 3.2.6, and unless otherwise specified (see 6.2) a built-in lock. The lock shall conform to 3.2.2.1 unless a combination lock conforming to 3.2.2.2 is specified (see 6.2). Door handles and built-in locks shall be attached by concealed fasteners, slotless truss head bolts, rivets, or other methods equally secure against removal from the outside of the closed door.

3.3.5.1 Door flanges and reinforcements. All edges of the door shall be flanged not less than 3/4 inch. The flanges shall be of the closed square bead type, or 90 degree flanges with an additional return flange of not less than 1/4 inch in channel formation on the hinge and latch sides. The inside of doors of all lockers 18 inches wide shall have a minimum 0.0299 inch thick reinforcing hat section, or a similar formation, centrally located laterally and extending the full distance between the top and bottom. sets of louvers. This formed piece shall be not less than 5-1/2 inches wide overall, with a minimum 1/2 inch deep channel. It shall be spot welded to the door with welds located not more than 8 inches on centers and starting within one inch of the top and bottom edges. Additional flanging, will be permitted when considered necessary by the manufacturer.

3.3.5.2 Louvers. Each door shall have 2 sets of louvers not less than 5 inches wide. They shall be centrally located laterally and shall start not less than 2 inches nor more than 6 inches from the top and bottom of the door. Type I lockers shall have door louver sets consisting of from 6 to 9 louvers each. Type II lockers shall have door louver sets consisting of from 3 to 6 louvers each.

3.3.5.3 Hinges. Type I locker doors shall have not less than 3 hinges. Type II locker doors shall have not less than 2 hinges. The required hinges shall be of the fast pin type. Attachment of all hinges to the door and locker shall be so concealed that the hinges are not removable or separable when the locker door is closed. The heads of the fastening devices shall not touch any part of the door frame, nor shall they cause the door to bind while being closed or opened. The attached hinges shall permit the door to open at least 160 degrees.

3.3.5.4 Latching mechanism. The door latching mechanism shall be of the prelocking type, permitting the latching-mechanism to be locked with the door open, by means of a padlock through the padlock eye of the handle and, when furnished, a built-in lock as well as a padlock. The entire mechanism shall be fully or partially enclosed and mounted inside the door on the vertical latching edge.

3.3.5.5 Padlocks. When specified (see 6.2), a padlock shall be furnished for each locker. The padlock shall conform to FF-P-101, in the specified type and size.

3.3.6 Latch strikes. Not less than 3 latch strikes shall be provided for the Type I locker and not less than 2 for each compartment of the Type II

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locker. The strikes shall be permanently fixed to engage the latching mechanism near the top and bottom, of the door. The remaining strikes, when applicable, shall be located between the top and bottom strikes. The strikes shall be further positioned to preclude any free motion of the closed door greater than 1/8 inch and to be shielded from view when the door is closed.

3.3.7 Silencers. Replaceable silencers of rubber or a comparable material shall be provided on each locker to minimize the noise and metal to metal contact when the locker door is closed. The silencers shall be incorporated at or in close proximity to each latching point of the locker.

3.3.8 Back and side panels. Back and side panels shall each be formed of one piece of sheet metal. The panels shall be formed to eliminate exposed sheet metal edges directly at the exterior corners of the assembled locker or at the locker door opening. The sides may have at least, but not more than, the number of holes necessary to permit interchangeability between Types I and II lockers plus one additional set of coat hook mounting holes. Two holes are permitted near the top of the back panel (above the shelf) for use as paint hook holes. The holes shall be reinforced on the inside of the unit if necessary to prevent the weight of the unit from permanently distorting the back panel. Unless a flush condition is provided between the back panel flanges and side panel any seam resulting from the joining of sides to the back shall be at the back of the locker. There shall be no sharp edges along the exterior of seams.

3.3.9 Door opening. The door opening shall be formed as required to impart strength and rigidity to the side panels, top and bottom, and shall serve as a stable mount for the hinged door and door latch strikes. When the door closes within a door frame, clearance between the closed door and frame shall not exceed 1/8 inch at top, bottom, and at each side. When the door closes against the face of the open side, clearance between the face and closed door shall not exceed 1/16 inch at any point and the closed door shall not protrude beyond the top, bottom, and sides of the locker.

3.3.10 Tops. Tops shall be flat and formed as required to secure the top to the back, front and side walls.

3.3.11 Shelves. The front edge of shelves shall be formed to any one of the following configurations:

- (A) One half inch diameter, 270 degree coiled bend.
- (B) Channel formed and flanged, with a minimum 3/4-inch front face.
- (C) Formed to two or more bends, with a minimum 3/4-inch front face 90 degrees from the shelf top, and with a return flange formed inward approximately 45 degrees from the front face. Any additional bends shall be returned toward the shelf bottom.

The shelf shall be not more than 2-3/8 inches back from the front of the locker and from there shall extend the full depth and width of the locker interior.

3.3.12 Bottoms. Locker bottoms shall serve as reinforcing components for the lower section of the lockers. They shall be formed as required for secure assembly to the units.

3.3.13 Base panels. When specified (see 6.2), front, back and end base panels shall be supplied. The four panels may be incorporated into fewer pieces, but regardless of construction, they shall close the spaces that extend between the legs of the lockers and between the bottom of the locker and the floor. The bottom edges of the base panels shall have at least a

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channel formation. Provision shall be made for secure attachment of the base panels.

3.3.14 Legs. Unless otherwise specified (see 6.2) all lockers shall be provided with legs. Types I and II single unit lockers shall have a leg at each of the four corners. Sectional groups shall have not less than one front leg and one back leg for each side panel. The legs shall elevate the lockers 6 inches above the floor and shall incorporate a vertical adjustment feature having a range of not less than 1/2 inch to compensate for irregular floor surfaces. In addition, base pads and floor mounting holes shall be incorporated for use in securing the lockers to the floor.

3.3.15 Number plate. An aluminum, brass, or zinc number plate with attaching hardware shall be supplied by the contractor for each locker door. When specified, (see 6.2) numbers shall be stamped, embossed, or engraved by the manufacturer in accordance with a system or sequence furnished by the contracting officer. The height of numbers shall be not less than 3/8 inch. The manufacturer's name or trademark of such known character as to be easily identifiable with said manufacturer shall appear on the number plate. Unless otherwise specified (see 6.2), number plates will be attached in the field at the time of assembly and installation. The plates shall be ready for proper attachment without the need for drilling of holes or for any other modification in the locker door.

3.3.16 Label holder. When specified (see 6.2), each locker shall be equipped with a label holder of satin finish, natural color anodized aluminum; Type 302 corrosion resisting steel; satin chromium on steel or die cast zinc or bronze. The label holder shall be secured to the door adjacent to the handle by not less than 2 concealed or slotless head machine screws, lock washers, and nuts. The attached holders shall accommodate label cards not less than 3-1/4 inches wide and 2-1/4 inches high.

3.3.17 Interior arrangement.

3.3.17.1 Type I lockers. All Type I lockers shall be equipped with a shelf specified in 3.3.11, located 9 to 10 inches below the locker top.

3.3.17.1.1 Type I, size 1 lockers. In addition to a shelf, Type I, Size 1 lockers shall be equipped with coat hooks conforming to 3.2.4. One shall be located on each side wall, two shall be located on the back wall and one shall be centered under the shelf.

3.3.17.1.2 Type I, sizes 2, 3 and 4 lockers. In addition to a shelf, Type I, Sizes 2, 3 and 4 lockers shall have a full width hanger rod conforming to 3.2.5, located 2 to 3 inches below the shelf and approximately midway between the front and the back of the locker. The lockers shall be equipped with coat hooks conforming to 3.2.4. One shall be located on each side wall and two shall be located on the back wall.

3.3.17.2 Type II lockers. Coat hooks for Type II lockers shall conform to 3.2.4. Each compartment shall be equipped with one ceiling mounted coat hook, one wall mounted coat hook on each side wall and two wall mounted coat hooks on the rear wall.

3.3.17.2.1 Optional shelves. When specified (see 6.2) in lieu of coat hooks, each compartment of the Type II lockers shall be equipped with two shelves conforming to 3.3.11. The clear distance between the inside bottom of the compartment and the front of the lowest shelf shall be 10-1/2 inches. There shall be a clearance of 5 inches between this shelf and the other shelf above. A plus or minus tolerance of 1/4 inch shall be applicable to both

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dimensions.

3.4 Finish. All ferrous metal parts of the door latching mechanism shall be painted, hot dip galvanized or electrodeposited, zinc or cadmium plated after fabrication and prior to assembly. All other visible ferrous metal surfaces of the knocked-down locker shall be prepared for painting in accordance with requirements hereinafter specified.

3.4.1 Surface preparation. Surfaces to be painted shall be prepared for painting in accordance with any method of TT-C-490.

3.4.2 Priming. Except as otherwise indicated in 3.4.3, all prepared surfaces shall be uniformly coated with primer specified in 3.2.3.1.

3.4.3 Enameling. Primed surfaces shall be coated with enamel specified in 3.2.3.2 and baked as recommended by the enamel supplier's directions. The enamel finish shall level out and dry to produce a smooth surface of uniform color and free of runs, wrinkles, grit, blisters, pronounced orange peel, checks, peeling, and color separation. Total dry film thickness of primer and enamel shall be not less than 1.4 mils on all exterior surfaces with no reading less than 1.0 mil on remaining surfaces. Primer may be omitted from any surface prepared in accordance with Type I or II of TT-C-490, provided the dry enamel film thickness averages not less than 1.0 mil with no reading less than 0.7 mil, except that doors, front frame and legs shall have an average film thickness of 1.4 mils, and no reading less than 1.1 mils.

3.5 Performance characteristics.

3.5.1 Leg stability. When applicable (see 3.3.14) legs or any other component shall not fail; there shall be no breaks or cracks in the sheet metal; and the legs shall take no permanent set in excess of two degrees when the locker, assembled as specified in 4.4 and with a 50 pound internal load is dragged across a firm, clean, wood surface in the upright position and across a 3-1/2 inch barrier in the tilted position in accordance with the test procedure in 4.4.2. In addition, the wood floor surface shall reveal no torn grain resulting from the upright portion of the drag test.

3.5.2 Static loads. When the static loads indicated in Table I are applied to the assembled lockers as prescribed in 4.4.1, the door shall not bind or otherwise fail, neither shall any other component fail and there shall be no cracks or permanent set in any component except for sides, back, and hanger rod. A permanent set not exceeding 1/16 inch will be permitted in those components. When measuring to determine permanent set, one point of reference shall be in the area where the loads were applied.

| TABLE I. Static loads | |
|-----------------------|------------------|
| Location of load | Load (lbs. min.) |
| Sides | 75 |
| Back | 75 |
| Bottom: | |
| Front edge | 225 |
| Center | 100 |
| Shelf | 50 |
| Coat hooks | 50 |
| Hanger rods | 50 |
| Doors | 200 |

3.5.3 Impact loads.

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3.5.3.1 Free fall. Backs and sides of the assembled locker, loaded as prescribed in 4.4.3.2 shall withstand tilt and free fall test conducted in accordance with 4.4.3.2 without any breaks, cracks or permanent sets. The door shall not bind or otherwise fail, and no other component, assembly or sub-assembly shall become loose, dislocated or fail. Slightly crushed corners at the top of the locker, an impression of the ends of the hanger rod in its sides or superficial indentations in back and sides because of protruding bolt heads shall not constitute failure of the test.

3.5.3.2 Door locking. The locked and closed door of the fully assembled lockers shall resist all attempts at opening when subjected to mallet bows and impacting in accordance with 4.4.3.1 through 4.4.3.1.2.

3.6 Identification marking. The inside of the door of each locker shall be permanently and legibly marked with the letters "U.S.", the specification number, Federal stock number, Contract number, month and year of manufacture and the manufacturer's name and trademark so that the source of supply may be readily determined.

3.7 Assembly instructions and parts list. When shipped knocked-down, one set of legible, comprehensive assembly instructions, printed on paper or cloth; and a list of all parts, including fastening devices, shall be furnished in each individual unit package or sectional unit package, as applicable. The list of parts shall include the quantity of each individual item required to assemble the unit.

3.8 Workmanship. The finished lockers shall be clean and free from any defects or features affecting appearance, serviceability or safety of the users. The occurrence of defects shall not exceed the acceptable quality levels specified herein. All surfaces and edges of the knocked-down and assembled lockers accessible to erection personnel and users shall be free of sharp edges and burrs. Assembly of the lockers shall be accomplished using regular hand tools such as screwdrivers and wrenches. The fit of components and the alignment of holes shall be such as to negate the need to modify any component or to require the use of exceptional force to assure proper alignment of component parts. The assembled lockers shall not reveal any visible evidence of twists, buckle or out-of-square conditions.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 First article inspection. When a first article is required, it shall be a production unit of identical design, materials, and production methods as the units to be furnished under the contract. A sample from the manufacturer's current inventory may be used provided it meets the above requirement.

4.2.1 First article examination and testing. The first article sample shall be examined and tested for all provisions of this specification applicable to the end product.

4.3 Sampling for inspection and acceptance. Sampling for inspection and

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acceptance shall be performed in accordance with MIL-STD-105 except where otherwise specified herein.

4.3.1 Component and material inspection. In accordance with 4.1 above, the supplier is responsible for insuring that components and materials used are manufactured, tested and inspected in accordance with the specified requirements of referenced subsidiary specifications and standards to the extent specified herein; or if none, in accordance with this specification.

4.3.2 In-process examination. Examination shall be made during the manufacturing process for the requirements in Table II, to establish that no deviation is made from indicated requirements. When nonconformance is noted, correction shall be made to affect items and process.

TABLE II. In-process examination

| Requirements | Requirement paragraph |
|-----------------------|-----------------------|
| Surface preparation | 3.4.1 |
| Application of primer | 3.4.2 and 3.4.3 |
| Baking of enamel | 3.4.3 |

4.3.3 Inspection of the end item. The lot shall be all lockers of the same type, size and style offered for inspection at one time. Except as otherwise permitted in 4.3.4 the sample unit shall be one locker or one sectional group, as applicable.

4.3.3.1 Visual examination. The locker shall be examined for defects in Table III. The inspection level shall be I, with an acceptable quality level (AQL) of 4.0 for major defects and 10.0 for total defects, expressed in terms of defects per hundred units.

TABLE III. Classification of defects of lockers

| Examine | Defect | Classification | |
|------------------------------|--|----------------|-------|
| | | Major | Minor |
| Enamel finish | Poor adhesion, i.e. blistered, checked, peeling; not dry to touch, color separation, stain, not smooth and uniform, runs, sags, foreign matter in coating, area of thin coating or abrasion. | | X |
| | Wrong color. | | X |
| | Scratch through to base metal, bare spots, rust under coating. | X | |
| Metallic coatings | Not coated as specified. | | X |
| | Poor adhesion, i.e. blistered, peeling. | | X |
| Construction and workmanship | Any part or component missing. | X | |
| | Any part of component malformed or damaged. | X | |
| | Any rough or sharp edges or burrs. | X | |
| Doors | Not louver type. | X | |
| | Not hinged on right hand side and latched on left hand side. | X | |
| Louvers | Less than 2 sets per door. | | X |

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| Examine | Defect | Classification | |
|------------------------------------|--|----------------|-------|
| | | Major | Minor |
| Built-in lock (when applicable) | More or less than specified quantity of louvers per set. | | X |
| | Not attached as specified. | X | |
| | Keys missing for keyed lock. | X | |
| Handles | Master keys not furnished for keyed lock. | | X |
| | Means of attaching handle permits removal from outside of door. | X | |
| Door flanges | Not flanged as specified. | | X |
| Hinges | Return flange on hinge side and latch side omitted (when applicable). | | X |
| | Less than specified number. | X | |
| | Required hinges not fast pin type. | X | |
| Latching mechanism | Attachment not concealed. | | X |
| | Not fully or partially enclosed on vertical latching edge. | | X |
| Latch strikes | Less than number specified. | X | |
| Silencers | Location not as specified. | | X |
| | Not replaceable. | | X |
| | Not located as specified. | | X |
| Backs and sides | More than one missing. | | X |
| | Backs not one piece construction. | X | |
| | Sides not one piece construction. | X | |
| Tops | Tops not flat. | | X |
| Shelves | Front edge not formed as specified. | | X |
| Bases (when applicable) | Bottoms not flanged 90 degrees. | | X |
| Legs (when applicable) | Not specified quantity. | X | |
| Number plates | Vertical adjustment provisions missing. | | X |
| | Floor mounting holes not provided. | | X |
| | Not marked as specified. | | X |
| Label holders (when applicable) | Not attached or not furnished unattached as applicable. | | X |
| | Not specified finish. | | X |
| | Not attached or not attached adjacent to the handles. | | X |
| | Not attached by concealed or slotless head machine screws, lockwashers and nuts. | | X |

4.3.3.2 Visual examination of assembly and assembled locker. Knocked down lockers shall be erected in accordance with the supplier's assembly instruction sheet and examined for defects in Table IV. The sample unit shall

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be one locker or section group, as applicable. The inspection level shall be S-2 with an AQL of 4.0, expressed in terms of defects per hundred units.

TABLE IV. Visual defects of assembly and assembled lockers

| Examine | Defect |
|----------------------------|--|
| Assembly of lockers | Requires other than simple hand tools for erection. ¹ Not easily assembled, i.e., requires modification, excess force, or enlargement of holes. ¹ Not assembled by rivets (when applicable, see 3.2.1), threaded fasteners, clips, interlocking of members or a combination of same. Any component or fastener missing. Exposed sheet metal edges directly at the vertical outside edges of backs and sides or at door opening. Any component fits improperly, affecting serviceability or appearance. Any malfunctioning of fastening device. Assembly twisted, buckled, or visibly out of square. |
| Doors | Not prelocking type. Padlock strikes any painted surface (use padlock having shackle 7/32 to 1/4 inch diameter by 11/16 to 3/4 inch long. Does not engage all latch strikes. Closed door extends beyond the sides, top or bottom of locker. Hinge mounting not concealed. Door opens less than 160 degrees. Any free motion of closed door in excess of 1/8 inch. Latch strikes or latches visible on closed door. Any metal to metal contact between door and door stop. |
| Marking for identification | Missing, incorrect, illegible, wrong color, or method of application. |
| Assembly instructions | Missing, illegible, or incorrect. |

¹Applicable when lockers are to be furnished in knocked-down condition.

4.3.3.3 Dimensional examination. Assembled lockers shall be examined for compliance with specified dimensions. Any deviation from specified dimensions shall constitute a defect. The inspection level shall be S-2 with an AQL of 4.0, expressed in terms of defects per hundred units.

4.3.3.4 Examination of preparation for delivery. Tests shall be performed as required in PPP-P-15 to determine compliance with requirements specified therein. In addition, a visual examination shall be made for defects specified in Table V. The sample unit for this examination shall be one shipping container fully prepared for delivery, except that it need not be sealed. Defects of closure shall be examined on shipping containers fully prepared for delivery. The lot shall be all containers offered for acceptance at one time. The inspection level shall be S-2 with an AQL of 4.0, expressed in terms of defects per hundred units.

TABLE V. Examination of preparation for delivery

| Examine | Defect |
|---------|--------|
|---------|--------|

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| | |
|-------------|--|
| Marking | Missing, incorrect; illegible; of improper size, location, sequence, or method of application. |
| Materials | Component missing or damaged. |
| Workmanship | Inadequate application of components such as container flaps, loose strapping; inadequate or missing barrier material; inadequate stapling; bulging or distortion of containers; blocking or bracing inadequate, missing, or improper. |
| Contents | Contents per container more or less than required. |

4.3.4 Testing of the end item. Assembled lockers shall be tested as specified in 4.4 through 4.4.3.2. The inspection level shall be S-2. Failure of any locker in any test shall constitute basis for rejection. When sectional groups are applicable, single unit lockers may be substituted for test purposes, provided the lockers tested are identical to the sectional groups in all other respects. Frequency of testing shall be at the discretion of the Government.

4.4 End item tests. Except as otherwise specified herein tests shall be performed on fully assembled lockers to determine compliance with the requirements under 3.5. When legs are required they shall be attached. Bases may be omitted.

4.4.1 Static loads. Static load tests for the back and sides shall be performed with the locker in the horizontal position and the test surface facing up. The remaining tests shall be performed with the locker upright.

4.4.1.1 Sides and back. Not less than a 75 pound test load shall be applied to the sides and back for not less than 5 minutes each, midway between supports, and shall be retained within the area circumscribed by a 10 inch diameter circle.

4.4.1.2 Top, bottom center, and shelf. Test loads of not less than 100 pounds for the top, not less than 100 pounds for the bottom center, and not less than 50 pounds for the shelf shall be applied simultaneously for not less than 5 minutes, midway between supports, and shall be retained within an area not to exceed the area circumscribed by a 10 inch diameter circle.

4.4.1.3 Bottom front edge. During conduct of the test in 4.4.1.2, an additional test load of not less than 225 Pounds shall be applied not less than 6 times to the center of the bottom front edge to represent a user stepping on and off. On Type II double-tier lockers, the test shall apply to the bottom front edge of the lower unit.

4.4.1.4 Doors. During conduct of the test in 4.4.1.2, a 200 lb. test load shall be suspended from the door by a rope located not more than 3 inches back from the latch side of the top edge of the door. In a normal manner, the door shall then be pivoted on its hinges, back and forth, at least 150 degrees in each direction and not less than 6 times each way. To preclude tilting or upsetting during this test, counterweights may be placed within the locker.

4.4.1.5 Coat hooks. The installed coat hooks may be tested simultaneously or separately. A 50 pound test load shall be suspended by a rope from the coat hook for not less than 5 minutes. The test load for multiple prong coat hooks may be equally distributed between the individual hooks.

4.4.1.6 Hanger rods. When the hanger rod is retained by coat hooks, the test load shall be applied to the hanger rod while the hanger rod and coat

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hooks are being tested (see 4.4.1.5). A 50 pound test load shall be suspended by a rope at the center of the hanger rod for not less than 5 minutes.

4.4.2 Legs. A fifty pound sandbag shall be placed in the bottom of the locker and the door or doors closed. The locker then shall be dragged, in the upright position, not less than 10 feet across the grain of a firm, clean, wood surface. The locker then shall be tilted to a conventional dragging angle (approximately 20 degrees from the horizontal) and dragged across a barrier fixed to the wood surface. The barrier shall be at least 3-1/2 inches high with a length sufficient to permit each leg being tested to contact it at the same time. The locker shall be dragged so that each leg being tested contacts the wood surface and the barrier as applicable, at the same time and dropped from the barrier so that the legs impact at the same time. The locker shall not be dragged after the impact. This test shall be conducted on all four sides of the locker (see 3.5.1).

4.4.3 Impact loads.

4.4.3.1 Door locking. With the door open and not prelocked, insert a 3/16 inch diameter rod, shackle, or padlock with a 3/16 inch diameter shackle through the door handle padlock eye. Close the door and proceed in accordance with 4.4.3.1.1 and 4.4.3.1.2 to determine compliance with 3.5.3.2. When doors with built-in locks are required, the tests shall be repeated after prelocking the door by means of the built-in lock only.

4.4.3.1.1 Hammer blows. Alternately strike the closed locker door and door frame with moderate blows from a 24 ounce rubber mallet throughout the perimeter of each component (door and door frame), while manipulating the door handle in every possible manner in an attempt to open the door. This test shall be conducted with the locker in the upright position and the inverted position and with the locker rocking from side to side in the inverted position.

4.4.3.1.2 Impact. Elevate the closed locker 6 to 8 inches above an unpadded floor, in the upright and inverted positions; release in a free fall and upon impact attempt to open the door.

4.4.3.2 Free fall. With a 50 pound sandbag on the bottom of the closed locker and a 25 pound bag sandbag on the top shelf, when applicable, manually tilt the locker to its point of balance. At this point, allow the locker to fall free to a smooth concrete floor surface. This test shall apply to the back and 2 sides only (see 3.5.3.1).

4.5 Finish tests. The finish tests shall be performed on 20 gage sample panels prepared in accordance with 3.4.

4.5.1 Flexibility. The dried film shall show no evidence of cracking or flaking, under seven power magnification after a panel has been bent through 180 degrees over a 1/8 inch diameter rod.

4.5.2 Hardness. The dried film shall withstand the firm stroke of a 2H pencil held at a 45 degree angle and pushed across the film surface without evidence of marring when viewed at an oblique angle in a strong light.

4.5.3 Adhesion. The dried film shall not be removed from the panel when the latter has been scored with a razor blade through the film to the bare metal in such a manner as to produce a grid of 1/8 inch squares, and a one inch wide piece of cellophane tape (Scotch Brand No. 600 or equal) is applied firmly to the grid surface and then quickly pulled from the surface.

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4.6 Spot weld test. A welded specimen representing the process utilized in the construction of the lockers shall be offered for test. The specimen shall conform to the spot weld test provisions in paragraph 7.3 in Mil-W-12332.

5. PREPARATION FOR DELIVERY

5.1 Preservation, packaging, packing, and marking. The preservation, packaging, packing and marking shall be as specified in the contract or order.

6. NOTES

6.1 Intended use. The lockers covered by this specification are intended to be used for storing the clothing and personal effects of personnel in barracks, gymnasiums, schools, hospitals, shops, office buildings, and other similar types of structures.

6.2 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, size and style of locker required (1.2 and 3.3.4).
- (e) If first article requirement is waived (3.1).
- (d) Key changes for built-in key locks, when other than specified (3.2.2.1).
- (e) Number of master keys required, when applicable (3.2.2.1).
- (f) Color required, if other than specified (3.2.3.2.1).
- (g) When sectional groups are required, specify the number of units per sectional group (see 3.3.4).
- (h) When built-in locks are not required or when built-in combination locks are required, as applicable (3.3.5).
- (i) When required, specify type and size of padlocks required (3.3.5.5).
- (j) When base panels are required (3.3.13).
- (k) When legs are not required (3.3.14).
- (l) When number plates are to be numbered by the supplier and when number plates are to be attached before shipment of lockers (3.3.1.5).
- (m) When label holders are required (3.3.16).
- (n) When optional shelves for type II lockers are required (3.3.17.2.1).
- (o) When lockers are to be shipped assembled (5.1).
- (p) Applicable levels of packaging and packing required (5.1).

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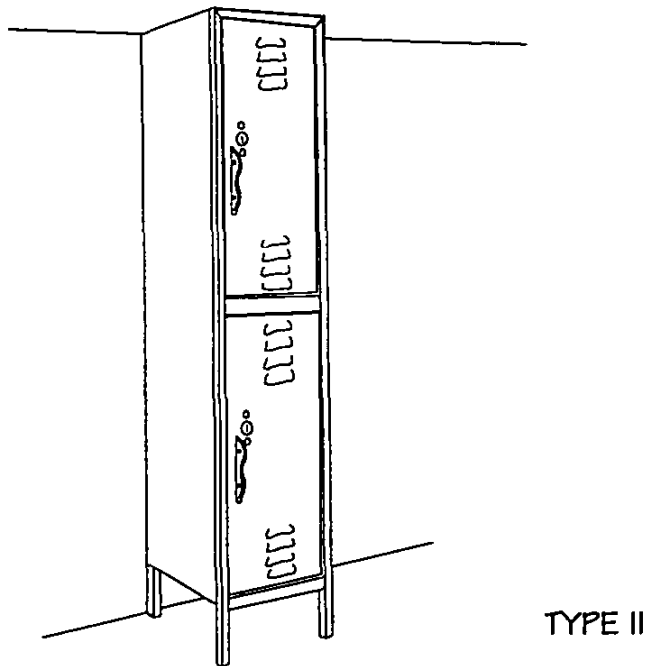
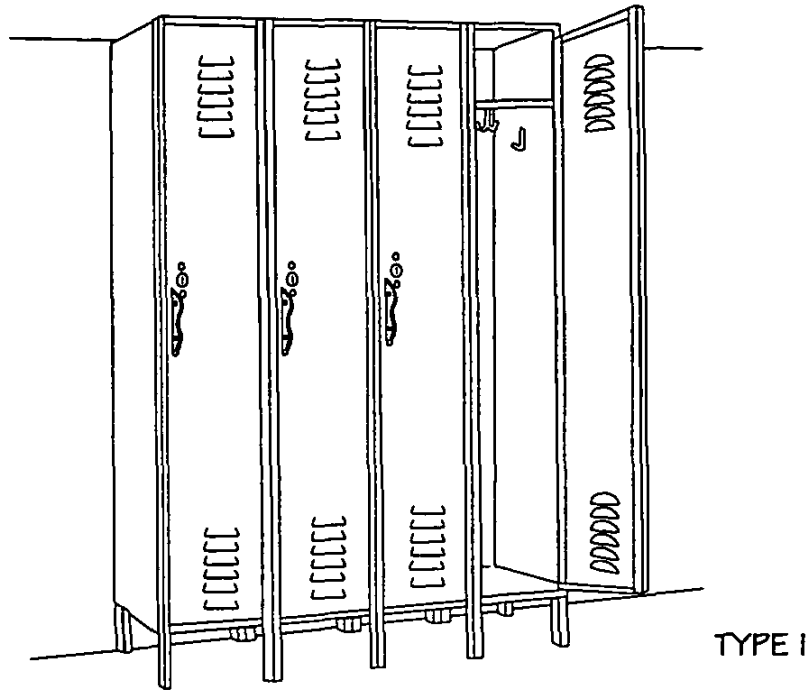


Figure I. Lockers, clothing, steel