SECTION 10 51 13

METAL LOCKERS

05/11

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NOTE: This guide specification covers the requirements for permanently installed metal lockers; single and double tier, used for temporary storage and security of personal belongings.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information. Remove information and requirements not in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

NOTE: Show the following information on the drawings:

1. Location, type and size, quantity, and color of lockers

2. Mounting details and whether legs, base panels, or pre-built bases are required.

PART 1 GENERAL

1.1 REFERENCES

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in

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this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

**************************************************************************

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A1008/A1008M (2013) Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardened


ASTM A653/A653M (2013) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process


U.S. DEPARTMENT OF DEFENSE (DOD)

MIL-PRF-22750 (2011; Rev G) Coating, Epoxy, High Solids

MIL-PRF-23377 (2012; Rev K) Primer Coatings: Epoxy, High Solids
1.2 SUBMITTALS

NOTE: Review Submittal Description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project.

The Guide Specification technical editors have designated those items that require Government approval, due to their complexity or criticality, with a "G". Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item, if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

An "S" following a submittal item indicates that the submittal is required for the Sustainability Notebook to fulfill federally mandated sustainable requirements in accordance with Section 01 33 29 SUSTAINABILITY REPORTING.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.][for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability Notebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Types; G[, [_____]]

Location; G[, [_____]]
Installation

[Numbering system]

SD-03 Product Data

Material

Locking Devices

**************************************************************************
NOTE: Delete the following paragraph if built-in combination locks or built-in key locks are not required.
**************************************************************************

[Lock Control Chart]

Handles

Finish

Locker components

Assembly instructions

SD-04 Samples

Color chips; G[, [____]]

1.3 DELIVERY, HANDLING, AND STORAGE

Deliver lockers and associated materials in their original packages, containers, or bundles bearing the manufacturer's name and the name of the material. Protect from weather, soil, and damage during delivery, storage, and construction.

1.4 FIELD MEASUREMENTS

To ensure proper fits, make field measurements prior to the preparation of drawings and fabrication. Verify correct location

1.5 QUALITY ASSURANCE

1.5.1 Color Chips

Provide a minimum of three color chips, not less than 75 mm 3 inches square, of each color [scheduled] [indicated].

Government may request performance-characteristic tests on assembled lockers. Tests and results must conform to FS AA-L-00486. Lockers not conforming will be rejected.

PART 2 PRODUCTS

2.1 TYPES

**************************************************************************
NOTE: Locker type and quantities must be indicated.
**************************************************************************

Lockers must have the following type and size in the location and quantities indicated. Locker finish colors will be as scheduled.

2.1.1 Single-tier Lockers

Single-tier lockers must be as follows:

**************************************************************************

NOTE: Delete the paragraph heading and the following paragraphs if single-tier lockers are not required.

Select from the following for single-tier lockers with legs to suit the project. Delete inapplicable paragraphs.
**************************************************************************

[ Type STL-1: Single-tier locker 380 millimeter wide, 380 millimeter deep, and 1830 millimeter high 15 inches wide, 15 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high legs]  
[ Type STL-2: Single-tier locker 380 millimeter wide, 457 millimeter deep, and 1830 millimeter high 15 inches wide, 18 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high legs]  
[ Type STL-3: Single-tier locker 457 millimeter wide, 533 millimeter deep, and 1830 millimeter high 18 inches wide, 21 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high legs]  
[ Type STL-4: Single-tier locker 457 millimeter wide, 610 millimeter deep, and 1830 millimeter high 18 inches wide, 24 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high legs]  

**************************************************************************

NOTE: Select from the following for single-tier lockers with a closed base to suit the project. Delete inapplicable paragraphs.
**************************************************************************

[ Type STC-1: Single-tier locker 380 millimeter wide, 380 millimeter deep, and 1830 millimeter high 15 inches wide, 15 inches deep, and 72 inches high, attached to 150 millimeter 6-inch closed base]  
[ Type STC-2: Single-tier locker 380 millimeter wide, 457 millimeter deep, and 1830 millimeter high 15 inches wide, 18 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high closed base]  
[ Type STC-3: Single-tier locker 457 millimeter wide, 533 millimeter deep, and 1830 millimeter high 18 inches wide, 21 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high closed base]  
[ Type STC-4: Single-tier locker 457 millimeter wide, 610 millimeter deep, and 1830 millimeter high 18 inches wide, 24 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high closed base]  

**************************************************************************
NOTE: Select from the following for single-tier lockers without a base to be installed on a prebuilt base. Base must be detailed on the drawings.

**************************************************************************

Type STW-2: Single-tier locker 380 millimeter wide, 457 millimeter deep, and 1830 millimeter 15 inches wide, 18 inches deep, and 72 inches high, without base

Type STW-3: Single-tier locker 457 millimeter wide, 533 millimeter deep, and 1830 millimeter 18 inches wide, 21 inches deep, and 72 inches high, without base

Type STW-4: Single-tier locker 457 millimeter wide, 610 millimeter deep and 1830 millimeter 18 inches wide, 24 inches deep, and 72 inches high, without base

2.1.2 Double-Tier

Double-tier lockers must be as follows:

**************************************************************************

NOTE: Delete the paragraph heading and the following paragraphs if double-tier lockers are not required.

Select from the following for double-tier lockers with legs to suit the project. Delete inapplicable paragraphs.

**************************************************************************

Type DTL-1: Double-tier locker 380 millimeter wide, 380 millimeter deep, and 1830 millimeter 15 inches wide, 15 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high legs

Type DTL-2: Double-tier locker 380 millimeter wide, 457 millimeter deep, and 1830 millimeter 15 inches wide, 18 inches deep, and 72 inches high, attached to 150 millimeter 6-inch high legs

**************************************************************************

NOTE: Select from the following for double-tier lockers with a closed base to suit the project. Delete inapplicable paragraphs.

**************************************************************************

Type DTC-1: Double-tier locker 380 millimeter wide, 380 millimeter deep, and 1830 millimeter 15 inches wide, 15 inches deep, and 72 inches high, attached to a 150 millimeter 6-inch high closed base

Type DTC-2: Double-tier locker 380 millimeter wide, 457 millimeter deep, and 1830 millimeter 15 inches wide, 18 inches deep, and 72 inches high, attached to a 150 millimeter 6-inch high closed base

**************************************************************************

NOTE: Select from the following for double-tier lockers without a base to be installed on a prebuilt base. Base details must be detailed.

**************************************************************************
Type DTW-1: Double-tier locker 380 millimeter wide, 380 millimeter deep, and 1830 millimeter 15 inches wide, 15 inches deep, and 72 inches high, without base

Type DTW-2: Double-tier locker 380 millimeter wide, 457 millimeter deep, and 1830 millimeter 15 inches wide, 18 inches deep, and 72 inches high, without base

2.2 MATERIAL

2.2.1 [Galvanized] Steel Sheet

******************************************************************************
NOTE: Choose one of the following options.
******************************************************************************
******************************************************************************
NOTE: Delete the word "Galvanized" in paragraph title and choose the first optional paragraph for normal applications where moisture is not a problem.
******************************************************************************

[[ASTM A1008/A1008M] [ASTM A568/A568M], commercial quality, minimized spangle material. Prepare material surfaces for [baked enamel] [_____] finishing in accordance with FS AA-L-00486.[ Fabricate locker bodies from not less than 0.607 millimeter 0.0239-inch thick steel sheet.][ Minimum uncoated sheet thickness [as specified] [______].]]

******************************************************************************
NOTE: Include the word "Galvanized" in the paragraph title and choose this option for lockers located in high moisture areas such as shower rooms.
******************************************************************************

[[ASTM A653/A653M and ASTM A924/A924M, commercial quality, minimized spangle, galvanized steel sheet with not less than Z275 G60 zinc coating. Prepare surface of sheet for painting in accordance with ASTM D6386, Method A. Minimum uncoated sheet thickness [as specified] [______].]]

2.2.2 Chromium Coating

Nickel and chromium electrodeposited on the specified base metal. Conform to ASTM B456, SC-3, as applicable to the base metal.

2.2.3 Finish

******************************************************************************
NOTE: Standard finish in FS AA-L-00486 is gray, baked enamel. Use the first paragraph when baked enamel finish is required. Use the second paragraph for epoxy-based primer and topcoat coatings.
******************************************************************************

[FS AA-L-00486.]

2.2.3.1 Color
As selected.

2.3 COMPONENTS

**************************************************************************
NOTE: Delete items from the following paragraphs that are not required on the project.
**************************************************************************

2.3.1 Built-In Locks

**************************************************************************
NOTE: FS AA-L-00486 includes built-in locks as standard items. It includes built-in key locks and built-in combination locks. It also includes a padlock eye in the door latching mechanism. If built-in locks are required, use the first paragraph and delete the second.
**************************************************************************

[FS AA-L-00486. Provide locking devices as [built-in key locks] [built-in combination locks] [and] [a padlock eye in the door latching mechanism].][Submit Lock Control Chart showing each lock required for the project, the locker identification plate number, and the lock combination.]

**************************************************************************
NOTE: If built-in locks are not required, use the following and delete the above.
**************************************************************************

[Built-in locks are not required.]

2.3.2 Coat Hooks
FS AA-L-00486, [chromium] [zinc] plated.

2.3.3 [Hanger Rods
FS AA-L-00486.

2.3.4 Door Handles

**************************************************************************
NOTE: FS AA-L-00486 allows aluminum alloy, zinc alloy or steel handles. Aluminum handles are required to have satin anodized finish. Zinc alloy and steel handles are required to have chromium or nickel plated finish.
**************************************************************************

[FS AA-L-00486. [Provide zinc alloy or steel handles with a chromium coating.]

2.3.5 Doors
FS AA-L-00486, not less than 1.5 mm 0.0598 inch thick steel sheet.
2.3.5.1 Hinges

In addition to the requirements of FS AA-L-00486, provide 5-knuckle hinges, minimum 50 mm 2 inches high. Fabricate knuckle hinges from not less than 2 mm 0.0787 inch thick steel sheet. [A full height piano hinge may be provided if standard with the manufacturer.] Weld or bolt hinges to the door frame. Weld, bolt, or rivet hinges to the door.

2.3.5.2 Latching Mechanisms

FS AA-L-00486.

2.3.6 Latch Strikes

FS AA-L-00486. Fabricate from not less than 2 mm 0.0787 inch thick steel sheet, except latch strike may be continuous from top to bottom and fabricated as part of the door framing.

2.3.7 Silencers

FS AA-L-00486.

2.3.8 Back and Side Panels, Tops, and Bottoms

FS AA-L-00486, not less than 1.2 mm 0.0474 inch thick steel sheet.

[2.3.9 Sloping Locker Tops

Provide sloping locker tops in addition to the locker-section flat tops. Sloping tops must be continuous in length. Provide fillers or closures at the exposed end of sloping tops. Fabricate sloping tops from not less than 1.214 millimeter 0.0478-inch thick steel sheet.

2.3.10 Shelves

FS AA-L-00486. Fabricate from not less than 1.5 mm 0.0598 inch thick steel sheet.

2.3.11 [Base Panels

******************************************************************************

NOTE: Base panels must be specified if required.
If none are required, delete this paragraph.
******************************************************************************

FS AA-L-00486.

2.3.12 Legs

******************************************************************************

NOTE: FS AA-L-00486 normally includes legs unless specified otherwise.
******************************************************************************

[FS AA-L-00486.] [Provide lockers without legs, as indicated.]

2.3.13 Number Plates

******************************************************************************
NOTE: Choose one of the following.
**************************************************************************
**************************************************************************
NOTE: Requirements for number plates are included in FS AA-L-00486. Select material requirement and range of numbers.
**************************************************************************

[FS AA-L-00486. [Aluminum] [Brass] [Zinc]. Provide consecutive numbers from [_____] to [_____.].] 
**************************************************************************
NOTE: If number plates are not required, use this paragraph and delete the above.
**************************************************************************

[Number plates are not required.]

2.3.14 [Label Holders]
**************************************************************************
NOTE: Include if label holders are required. Otherwise, delete.
**************************************************************************

FS AA-L-00486.

2.3.15 Fastening Devices

Provide bolts, nuts, and rivets as specified in FS AA-L-00486.

PART 3 EXECUTION

3.1 ASSEMBLY AND INSTALLATION

Assemble lockers according to the locker manufacturer's instructions. Align lockers horizontally and vertically. Secure lockers to wall [and base] with screws as indicated. Bolt adjacent lockers together. Adjust doors to operate freely without sticking or binding and to ensure they close tightly.

3.2 [NUMBERING SYSTEM]
**************************************************************************
NOTE: If lockers require number plates, identify the system of numbering. Otherwise, delete this paragraph.
**************************************************************************

Install number plates on lockers consecutively [with odd numbers on top and even numbers on bottom] [as indicated] [_____.].

3.3 FIELD QUALITY CONTROL

3.3.1 Testing

Government may request performance-characteristic tests on assembled lockers in accordance with FS AA-L-00486. Lockers not conforming will be
rejected.

3.3.2 Repairing

Remove and replace damaged and unacceptable portions of completed work with new.

3.3.3 Cleaning

Clean surfaces of the work, and adjacent surfaces soiled as a result of the work, in an approved manner. Remove equipment, surplus materials, and rubbish from the site.

-- End of Section --