

MIL-C-4470C
6 Dec 1968
SUPERSEDING
MIL-C-4470B
18 April 1960

MILITARY SPECIFICATION

CANS, HERMETIC SEALING, RECTANGULAR

This specification is mandatory for use by all
Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification establishes the requirements for light gage metal air-tight, interior cans for use in shipment and storage of materials and equipment of moderate weight.

* 1.2 Classification. Cans shall be of the following types and sizes:

Type I - Double-seam lid.

Type II - Can body stiffened at top edge to accommodate tear-strip replaceable lid. (See 3.4 and 5.2)

Size A: Top dimensions, 17 by 11 inches. Bottom dimensions 16 by 10 inches. Height, 17 inches.

Size B: Top dimensions, 17 by 11 inches. Bottom dimensions, 16 by 10 inches. Height, 26 inches.

Size C: Top dimensions, 17 by 11 inches. Bottom dimensions 16 by 10 inches. Height, 5 inches.

Size D: Top and bottom dimensions, 17 by 11 inches. Height, 5 inches.

Size G: Top dimensions, 27 3/4 by 14 1/4 inches. Bottom dimensions, 26 1/4 by 12 3/4 inches. Height, 34 1/4 inches.

Size H: Top dimensions, 17 by 11 inches. Bottom dimensions, 16 by 10 inches. Height, 12 inches.

2. APPLICABLE DOCUMENTS

* 2.1 The following documents, of the issue in effect on date of invitation for bids, shall form a part of this specification:

SPECIFICATIONS

Federal

QQ-T-191	Terne Sheets (Long and Short Ternes).
QQ-T-425	Tinplate (Hot Dip and Electrolytic)
TT-E-485	Enamel, Semi-Gloss, Rust-Inhibiting
PPP-B-576	Boxes, Wood, Cleated Veneer, Paper Overlaid
PPP-B-591	Boxes, Fiberboard, Wood-Cleated
PPP-B-601	Boxes, Wood, Cleated-Plywood
PPP-B-621	Boxes, Wood, Nailed and Lock Corner
PPP-B-636	Boxes, Fiberboard

Military

MIL-L-10287	Lacquer, Cellulose Nitrate for Identification of Small Arms Ammunition.
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STANDARDFederal

Fed. Test Method Std 101

Preservation, Packaging
and Packing Materials;
Test Procedures.Military

MIL-STD-105

Sampling Procedures and Tables for
Inspection by Attributes.

MIL-STD-129

Marking for Shipment and Storage.

(Copies of documents 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 Materials. Materials shall conform to applicable specifications as specified herein. Materials that are not covered by applicable specifications nor specifically described herein shall be of the best quality, of the lightest practicable weight, and suitable for the purpose intended.

3.1.1 Metal. Tinplate shall be in accordance with QQ-T-425. Terneplate shall conform to QQ-T-191.

3.1.2 Seaming compound. The seaming compound shall be of standard commercial quality.

3.2 Design and construction.

3.2.1 Type I. Unless otherwise specified, type I cans shall be of rectangular cross section with sizes A, B, C, G and H having tapered sides, and size D having straight sides. The body and bottom of the can shall be fabricated of tinplate of a minimum base weight of 135 pounds per base box. Alternatively, size G may be fabricated from 26 gage or heavier terneplate. The body shall be made of one or two pieces joined with soldered lock seams or welded seams. The bottom shall be compound lined and double seamed to the body. The top shall be fabricated of tinplate of a minimum weight of 100 pounds per base box. The weight of tinplate may be increased to 107 pounds per base box for size G. The top shall be compound lined and formed for crimping to the body and shall be furnished with the finished can. Corners in the body shall be formed to a radius of not less than 1 1/2 inches. The depth of the top and bottom when seamed shall be not less than 1/8 inch. Sizes A, B, G and H on the two opposite sides of the greatest dimensions shall have an X-shaped stiffening boss, approximately 1/8 inch deep, 1 inch wide in each leg, with rounded outline at ends of legs and at inside corners, and extending to within approximately 2 inches of the outside corners of the can. Sizes C and D shall not require a stiffening boss.

* 3.2.2 Type II. The type II can shall be designed and constructed in accordance with 3.2.1 and the additional requirements specified herein. A bright basic steel wire shall be formed in the top edge of the body. The wire shall be wholly enclosed by body material along the straight surfaces of sides and ends, but up to one-fourth the circumference of the wire may be exposed at radii of corners. The diameter of the wire shall be as follows: 3/16 inch for sizes A, B, C, D, and H; 1/4 inch for size G. The finished edge shall be smooth and free of bends, dents, or other irregularities that would affect a tight closure. A recessed channel shall be formed in the top to match the dimensions of the

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reinforced edge of the body. The channel shall be not less than 1/4 inch in depth except that, in addition, the outer edge or skirt shall be of such width as to provide a full crimp when the top is fastened to the body. (Note: A projection of 3/16 inch below the lower edge of the reinforced bead when the top is in place on the body will usually suffice.) A 2 inch wide tear strip shall be formed through the center of the top in the longer direction consisting of two scores on the inside of the top of approximately 40 percent of the thickness of the material. At each end of the score, a tab approximately 1 inch long shall be formed of a continuous extension of the top material.

3.2.2.1 Sealing compound. The inner surface of the recessed channel of the top, which will be in contact with the edge of the can body when in place, shall be uniformly and continuously coated with a synthetic-rubber type sealing compound known commercially as flowed-in-gasket material.

3.2.3 Exceptions. Variations or alternates in body seams and reinforcing may be used when specifically approved by the procuring activity.

3.3 Interchangeability. Tops for sizes A, B, C, D, and H cans shall be so designed and constructed that they are interchangeable. Tops for cans of other sizes shall be interchangeable within their own size classification.

3.4 Dimensions. Unless otherwise specified, the can shall be of the size specified in 1.2, which dimensions shall be the outside dimensions of the finished, closed can with tolerances of plus or minus 1/8 inch in height and plus or minus 1/16 inch top and bottom dimensions. For the type II can, the outside dimensions of the top will be increased by the dimension of the wire plus the gage of the body material.

3.5 Finish. Prior to the application of the finish, the outside of the can, including the top, shall be thoroughly cleaned of all deposits that are foreign to the composition of the can. Unless otherwise specified, for sizes A, B, C, D, and H, the outside surfaces of the can shall be precoated with an olive drab enamel conforming to TT-E-485 (see 6.2). In the coating operation a solder or weld margin will be left. After fabrication, this seam margin shall be sprayed with a lacquer conforming to MIL-L-10287. The size G can need not be precoated; however, after fabrication it shall be sprayed on the exterior with at least two coats of lacquer conforming to MIL-L-10287.

3.6 Leakage. The finished can, assembled with bottom double seamed in place and top crimped in place, shall not leak when tested in accordance with 4.5.

3.7 Marking. The top of type II can shall be permanently and durably marked on the outer face in approximately 1/2 inch letters as follows: PULL-TAB-TO-OPEN.

3.8 Workmanship. The finished can shall be clean, well made and free from any defects which will affect appearance or serviceability.

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 in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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 supplies and services conform to prescribed requirements.

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- * 4.2 Classification of tests. The inspection and testing of cans shall be classified as acceptance tests.
- * 4.3 Test conditions. The test conditions are described under the tests to which they apply.
- * 4.4 Acceptance tests. Acceptance tests shall consist of sampling tests.
 - * 4.4.1 Sampling tests. Unless otherwise specified by the procuring activity, cans shall be sampled in accordance with the provisions of MIL-STD-105 to determine conformance to this specification with respect to material, workmanship and dimensions. The acceptable quality level (AQL's) to be employed shall be 2.5 percent defective.
 - 4.4.2 Rejection and retest. Cans that have been rejected may be reworked or replaced, or defects corrected and cans resubmitted for acceptance. Before resubmitting, full particulars concerning previous rejection and the action taken to correct the defects found in the original shall be furnished the inspector in writing, or in his absence forwarded to the procuring activity. Cans rejected after retest shall not be resubmitted without the specific approval of the procuring activity.
- * 4.5 Testing. The finished can, assembled with bottom double seamed in place and top crimped in place, shall be tested in accordance with Fed Test Method STD, 101, Method 5009. During this test, the can shall be supported externally by a jacket or some other means so designed as to prevent any distortion of top, bottom or sides of can.
- 4.6 Inspection of preparation for delivery.
 - 4.6.1 Examination. The packing and marking of the cans shall be examined and tested to determine conformance with the requirements of Section 5 of this specification. Examination of packing and marking requirements not covered by referenced specifications shall be in accordance with MIL-STD-105, using an AQL of 4.0 percent defective.
 - * 4.6.2 Classification of defects. (For packing and marking requirements not covered by referenced specifications.)

Major

101	Packing level not as specified.
102	Exterior shipping container not as specified.
103	Exterior shipping containers not snug-fitting.
104	Cushioning and bracing not applied when required.
105	Strapping missing when required.
106	Gross weight exceeds limit specified.
107	Marking missing, illegible, or incorrect.
108	Closure of exterior shipping container incorrect.
109	Strapping incorrectly applied.

5. PREPARATION FOR DELIVERY

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* 5.1 Preservation and packaging.

5.2 Packing. Packing shall be Level A, B, or C as specified (See 6.2).

5.2.1 Level A. The cans with tops shall be packed in a snug-fitting box conforming to PPP-B-601 overseas type, style A or B. Contents shall be cushioned and braced so as to prevent movement or damage. The gross weight of the box and contents shall not exceed 200 pounds. Box closure and strapping shall be in accordance with the appendix to the box specification.

5.2.2 Level B. The cans with tops shall be packed in a snug-fitting box conforming to PPP-B-636, type CF, class domestic, variety DW or SW, grade as required. Contents shall be cushioned and braced to prevent movement or damage. The gross weight and size of the box shall conform with the special requirements of the specification. Closure shall be in accordance with the appendix to the specification.

5.2.3 Level C. The cans with tops shall be packed in a manner to insure carrier acceptance and safe delivery at destination. Exterior containers shall comply with Uniform Freight Classification Rules or other carrier rules and regulations as applicable to the mode of transportation.

5.3 Marking. Marking shall be in accordance with MIL-STD-J29.

6. NOTES

6.1 Intended use. The cans covered by this specification are intended for use as unit or intermediate containers for materials or supplies of moderate density, generally non-rigid in nature, so as to conform to and uniformly fill the can, such as parachutes, clothing, and bedding, for which a high level of protection against moisture is desired.

6.2 Ordering data. Procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Type and size (see 1.2).
- (c) If other precoating is desired (see 3.5).
- (d) Level of packing required (see 5.2).

6.3 Closure (type II). The top and body of the type II can may be satisfactorily joined with simple, hand-powered crimping tools. This tool is not a Government stock item. Inquiries should be directed to the source of the can body and top for information on the availability of suitable crimping tools.

6.4 Opening and reuse. Sealed containers comprised of the type II top and body may be opened at will by removal of the center tear-strip and the remaining two pieces of the top. Reclosure and reuse of the can may be accomplished by installing a replacement top properly crimped in place.

CUSTODIAN:

PREPARING ACTIVITY

AIR FORCE - 69

AIR FORCE - 69

NAVY - AS

REVIEWER:

AIR FORCE - 70

NAVY - AS

USER:

NAVY - SH, MC

FOLD

POSTAGE AND FEES PAID

OFFICIAL BUSINESS

HQ AFLC (SGTEC)
WRIGHT-PATTERSON AFB, OHIO 45433

FOLD

☆ U. S. GOVERNMENT PRINTING OFFICE: 1969-341-517/A-4749

Figure V-5, Example of Specification Analysis Sheet (back)

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No. 119-R004
<p align="center">INSTRUCTIONS</p> <p>This sheet is to be filled out by personnel either Government or contractor, involved in the use of the specification in procurement of products for ultimate use of the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity.</p>		
SPECIFICATION		
ORGANIZATION		CITY AND STATE
CONTRACT NO.	QUANTITY OF ITEMS PROCURED	DOLLAR AMOUNT \$
MATERIAL PROCURED UNDER A		
<input type="checkbox"/> Direct Government Contract <input type="checkbox"/> Subcontract		
1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE? A. GIVE PARAGRAPH NUMBER AND WORDING		
B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES		
2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID		
3. IS THE SPECIFICATION RESTRICTIVE? <input type="checkbox"/> YES <input type="checkbox"/> NO IF "YES" IN WHAT WAY?		
4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)		
SUBMITTED BY (Printed or typed name and activity)		DATE

DD Form 1426

Figure V-5. Example of Specification Analysis Sheet (front)