

INCH-POUND

MIL-C-44192A
18 July 1990
SUPERSEDING
MIL-C-44192(GL)
2 July 1985

MILITARY SPECIFICATION

CONTAINER, SHIPPING AND STORAGE, COAT (HANGER PACK)

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

1. SCOPE

1.1 Scope. This specification covers dress coat shipping and storage containers, plastic garment bags, hanger bars, and hangers.

1.2 Classification. Containers shall be of the following types as specified (see 6.2).

Type I - 12 coats
Type II - 6 coats
Type III - 3 coats
Type IV - 1 coat

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5014 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8115

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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SPECIFICATIONS

FEDERAL

- A-A-1696 - Bag, Plastic (Garment)
- PPP-B-636 - Boxes, Shipping, Fiberboard

STANDARDS

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
- MIL-STD-129 - Marking for Shipment and Storage
- MIL-STD-147 - Palletized Unit Loads

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 Non-Government publications. The following document forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 3951 - Standard Practice for Commercial Packaging

(Applications for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1187.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.3.

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3.2 Material, design, and construction.3.2.1 Containers.

3.2.1.1 Types I, II, and III. Types I, II, and III containers shall be in accordance with figure 1. Each container shall consist of a half slotted container (HSC) box body with a door for loading or dispensing and a partial telescoping lid. The box body shall be made of fiberboard conforming to class domestic, variety DW, grade 275, B and C flute, fabricated in accordance with PPP-B-636. The box body shall be scored, slotted, and stitched or glued to form a tube having four flaps of equal length with the outer flaps meeting on the bottom, and four 3 to 3-1/4 inch flaps folded to the inside on the top. If required to accomodate the hanger bar (see 3.2.2), a surcut notch shall be utilized at the center of each lengthwise top edge. The door shall be on the widthwise panel opposite the manufacturers joint and be produced by cutting two 18-inch vertical slits down each corner, joined by a horizontal score. The lid shall be a snug-fitting partial telescope, 20 inches in depth, fabricated in accordance with PPP-B-636 made of fiberboard conforming to class domestic, variety SW, grade 200 of PPP-B-636. When type I is closed, the outer flaps shall meet in the middle of the top with a gap not to exceed 1/4 inch. The inner flaps shall be the same length as the outer and shall overlap on the inside on type I only. When type II and III containers are closed, the outer flaps shall overlap across the width of the lid.

3.2.1.2 Type IV. The type IV container shall conform to figure 2 and to style OPF, variety SW, grade 200 of PPP-B-636. The inside dimensions of the container shall be 40 inches in length, 21 inches in width, and 2 inches in depth. Inner flaps shall be 3 to 3-1/4 inches in depth. One inner flap shall be provided with a hole as specified on figure 2 so that the hook of the hanger can pass through and be held within the container.

3.2.2 Hanger bars. The length of the hanger bars (for type I, II, and III containers) shall be as specified in table I. The style of the hanger bars shall be as specified in 3.2.2.1 or 3.2.2.2 (see 6.2). The hanger bars shall be fabricated from minimum 22 gauge sheet steel.

TABLE I. Hanger bar length

Container type	Bar length between end clips (inches \pm 1/8)
I	14
II	8
III	4

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3.2.2.1 Style A. Style A hanger bar shall be attached to the interior side of the end clip.

3.2.2.2 Style B. Style B hanger bar shall extend through the interior side of the end clip and shall be attached to the exterior end clip. This bar shall require a surcut notch to be cut in the upper edge of each lengthwise side of the container to accomodate the bar (see figure 1).

3.2.3 Hanger. The hanger shall be a molded one piece body made of high impact polypropylene material. The polypropylene body shall have nominal dimensions of 14, 16, or 17 inches in length, 1/2 inch in width, and a maximum of 6 inches in height. The contour of the body shall be flat or slightly concave, which includes a supporting cross bar. The hanger body and hook shall not exceed 9 inches in height. The swivel type hook shall be a formed square hook, made of either a noncorrosive metal or a plated steel, of a minimum 8-gauge wire. The hook shall be firmly secured into the body of the hanger. The end of the hook shall be bent back on itself $3/8 \pm 1/8$ inches and shall have no sharp edges exposed.

3.2.3.1 Fit of hanger hook on hanger bar. The hook shall fit securely over the hanger bar without being able to be removed without first moving the hanger up 3/4 of an inch.

3.2.4 Plastic garment bag. The plastic garment bag shall conform to type II of A-A-1696.

3.3 Markings.

3.3.1 Compliance and certificate markings. Containers made to comply with this specification shall be imprinted with compliance and certificate markings in accordance with PPP-B-636.

3.3.2 Special markings. Arrow markings, as specified in MIL-STD-129, shall appear on all type I, II, and III containers.

3.4 Workmanship.

3.4.1 Container workmanship. The completed container shall conform to the quality of product established by this specification and shall be clean and free of frayed or torn edges, improperly aligned panels, improper scores and slots, and the marking shall be clear and legible. All dimensions of the container makers blank shall be accurately cut, scored, and slotted so that the assembled container parts fit closely without undue binding. No flap shall project beyond an edge of the container by more than 1/8 inch when the container is set up and closed. All metal fasteners, staples, or stitching wire shall be well clinched, flush with or below the interior and exterior surfaces of the corrugated fiberboard. The occurrence of defects shall not exceed the applicable acceptable quality levels.

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3.4.2 Hanger and hanger bar workmanship. The finished hangers and hanger bars shall conform to the quality of product established by this specification and the occurrence of defects shall not exceed the applicable acceptable quality levels.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor 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 this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.1.2 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for ensuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point, or at all points in the manufacturing process necessary to ensure compliance with all dimensional requirements.

4.1.3 Certificates of compliance. When certificates of compliance are submitted, the Government reserves the right to inspect such items to determine the validity of the certification.

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

- a. First article inspection (see 4.3).
- b. Quality conformance inspection (see 4.4).

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4.3 First article inspection. When a first article is required (see 3.1 and 6.2), it shall be examined for the defects specified in 4.4.2, 4.4.3 and 4.4.4.

4.4 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

4.4.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.4.2 Container visual examination. The hanger pack containers shall be examined in accordance with PPP-B-636, except the following defects shall be included in the PPP-B-636 list of overall type defects.

<u>Examine</u>	<u>Defect</u>
Type I, II and III containers	Surcut notches (when required) not as specified or not located as specified Door not located as specified Base of door not scored as specified Base (scoring) of door not horizontal to the degree it does not serve its intended purpose Door corner vertical slits less than 17-3/4 or more than 18-1/4 inches in length Variation in length between two door corner vertical slits of more than 1/8 inch Score at base of door located below bottom of vertical slits Container bodies not fabricated with B&C flutes
Type IV containers	Hanger hole missing or not located as specified \pm 1/4 inch
All containers	Length of inner flaps on container body greater or less than specified

4.4.3 End item visual examination of hanger bars. The hanger bars shall be examined for the defects listed below. The lot size shall be expressed in units of hanger bar assemblies. The sample unit shall be one hanger bar assembly. The inspection level shall be S-4 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0.

<u>Examine</u>	<u>Defect</u>
Hanger bar assembly	Material other than as specified Width of any side of bar less than 3/4 inch or more than 1-1/4 inch (measured with locking device removed)

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<u>Examine</u>	<u>Defect</u>
Hanger bar assembly (cont'd)	Bar length from inside top of end clip to inside of end clip not as specified, including tolerance Bar not fabricated with a minimum of three complete sides Any end clip less than 4 inches long Any end clip overhang less than 1-1/2 inches Any part of assembly fabricated from sheet steel less than the minimum gage specified Top of locking device more than 1/8 inch above tops of end clips (when assembled without hangers) Any burr or rough edge on any component Any part of assembly missing

4.4.4 End item visual examination of hangers. The hangers shall be examined for the defects listed below. The lot size shall be expressed in units of hangers. The sample unit shall be one hanger. The inspection level shall be S-4 and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

<u>Examine</u>	<u>Defect</u>
Hanger	Material not as specified (hook or body) Hook configuration is not formed square Hook does not swivel End of hook not bent back as specified Hook not formed to require a minimum 3/4 inch lift from hanger bar Hook not formed from a minimum 8 gage wire Any flash or sharp edge on hanger body or hook Any hanger body more than 6 inches in height Any hanger exceeding 9 inches in height, including the hook

4.4.5 Palletization examination. The fully packaged and palletized end items shall be examined for the defects listed below. The lot size shall be expressed in units of palletized unit loads. The sample unit shall be one palletized unit load, fully packaged. The inspection level shall be S-1 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

<u>Examine</u>	<u>Defect</u>
Finished dimensions	Length, width or height exceeds specified maximum requirement
Palletization	Pallet pattern not as specified Load not bonded as specified
Weight	Exceeds maximum load limits

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<u>Examine</u>	<u>Defect</u>
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

5. PACKAGING

5.1 Packing. Packing shall be Commercial.

5.1.1 Commercial.

5.1.1.1 Complete container assemblies. Complete container assemblies shall be packed in accordance with ASTM D 3951.

5.1.1.2 Components when procured separately. When components are procured separately (see 6.2) they shall be packed in accordance with ASTM D 3951.

5.2 Palletization. When specified (see 6.2), complete container assemblies or components when procured separately (see 5.1.1.1 and 5.1.1.2) shall be palletized in accordance with MIL-STD-147.

5.3 Marking. In addition to any special marking required by the contract or purchase order, complete container assemblies, components when procured separately and palletized unit loads shall be marked in accordance with MIL-STD-129.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The containers are for the shipment and storage of dress coats.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. Type required (see 1.2).
- c. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1, 2.2, and 20.1.1).
- d. When a first article is required (see 3.1, 4.3, and 6.3).
- e. Hanger bar style required (see 3.2.2).
- f. When palletization is required (see 5.2).

6.3 First article. When a first article is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209. The first article should be a preproduction sample. The contracting officer should

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specify the appropriate type of first article and the number of units to be furnished. The contracting officer should also include specific instructions in acquisition documents regarding arrangements for selection, inspection, and approval of the first article.

6.4 Subject term (key word) listing.

Garment bag
Transport; dress coat

6.5 Changes from previous issue. Due to extensive changes from the previous issue, asterisks were not used to indicate changes made to this document.

Custodians:

Army - GL
Navy - SA
Air Force - 69

Preparing activity:

Army - GL
(Project 8115-0508)

Review activities:

Air Force - 84, 99
DLA - CT

Civil agency coordinating activity:

GSA - FSS

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APPENDIX

USE CRITERIA, ASSEMBLY AND CLOSURE REQUIREMENTS

10. SCOPE

10.1 Scope. This appendix covers the use, assembly, closure, contents, and palletization of filled containers.

10.2 Use. Containers are to be used for the shipment and storage of dress coats on coat hangers.

20. APPLICABLE DOCUMENTS

20.1 Government documents.

20.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

- | | |
|----------|--|
| A-A-1460 | - Label, Paper, Pressure Sensitive Adhesive (General Purpose with Marginal Slot Feed Perforations) |
| PPP-T-45 | - Tape, Gummed, Paper, Reinforced Plain, For Sealing and Securing |

STANDARDS

MILITARY

- | | |
|-------------|---|
| MIL-STD-105 | - Sampling Procedures and Tables for Inspection by Attributes |
| MIL-STD-129 | - Marking for Shipment and Storage |
| MIL-STD-147 | - Palletized Unit Loads |

30. REQUIREMENTS

30.1 Container assembly. The container shall be assembled in accordance with 3.2.1, and figures 1 and 2. When style A hanger bar is used, it shall be centered on the lengthwise panel \pm 1/8 inch.

30.2 Loading of containers. Each coat shall be placed on a hanger (see 3.2.3) of the longest specified appropriate length for the shoulder of the coat without protruding into the sleeve cap and then covered with a plastic

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garment bag (see 3.2.4). Container types I, II and III may be loaded via the loading and dispensing door, and the coats shall be suspended from the hanger bar and secured with the locking cap (see 3.2.2). Container type IV loading shall be by securing the hanger hook through the hole (see figure 2) located in the container. Each container shall hold garments, of one NSN only, in the following quantities:

Type I	-	12 coats
Type II	-	6 coats
Type III	-	3 coats
Type IV	-	1 coat

30.3 Bagged unit packs. Bagged unit packs shall have the required identification information legibly printed or stamped on a white paper label conforming to A-A-1460, located on the shoulder area of the bag so as to permit ready identification.

30.4 Container closure. The container shall be closed by the use of 3-inch wide tape conforming to type II, class 2 of PPP-T-45. The tape shall be centered over all exposed edges including the dispensing door, and extend a minimum of 2-inches over bottom and top edges. The manufacturers joint need not be taped.

30.5 Palletization of loaded containers. Coats, packed as specified in 30.2 shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Pallet type shall be type I (4-way entry), type IV, or type V in accordance with MIL-STD-147. Each prepared load shall be bonded with straps in accordance with bonding means C and D or film bonded by means F or G, as specified in MIL-STD-147. Pallet patterns shall be in accordance with the appendix of MIL-STD-147 as follows:

Type I	-	pallet pattern #95
Type II	-	pallet pattern #36
Type III	-	pallet pattern #76
Type IV	-	pallet pattern #89

30.6 Marking. In addition to any special markings required by the contract or purchase order, bagged unit packs, filled containers and palletized unit loads shall be marked in accordance with MIL-STD-129.

40. INSPECTION

40.1 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

40.2 Packaging examination. The fully packaged end items shall be examined for the defects listed below. The lot size shall be expressed in units of hanger pack containers. The sample unit shall be one hanger pack container fully packaged. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

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<u>Examine</u>	<u>Defect</u>
Marking (exterior and interior)	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application
Materials	Any component missing, damaged, or not as specified
Workmanship	Inadequate application of components, such as: incomplete sealing or closure of flap, improper taping, loose strapping or inadequate stapling Hanger bar not centered on lengthwise panel as specified
Content	Number of coats per container is more or less than required Size shown on one or more coats not as specified on container

40.3 Palletization examination. The fully packaged and palletized end items shall be examined for the defects listed below. The lot size shall be expressed in units of palletized unit loads. The sample unit shall be one palletized unit load, fully packaged. The inspection level shall be S-1 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

<u>Examine</u>	<u>Defect</u>
Finished dimensions	Length, width or height exceeds specified maximum requirement
Palletization	Pallet pattern not as specified Load not bonded as specified
Weight	Exceeds maximum load limits
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

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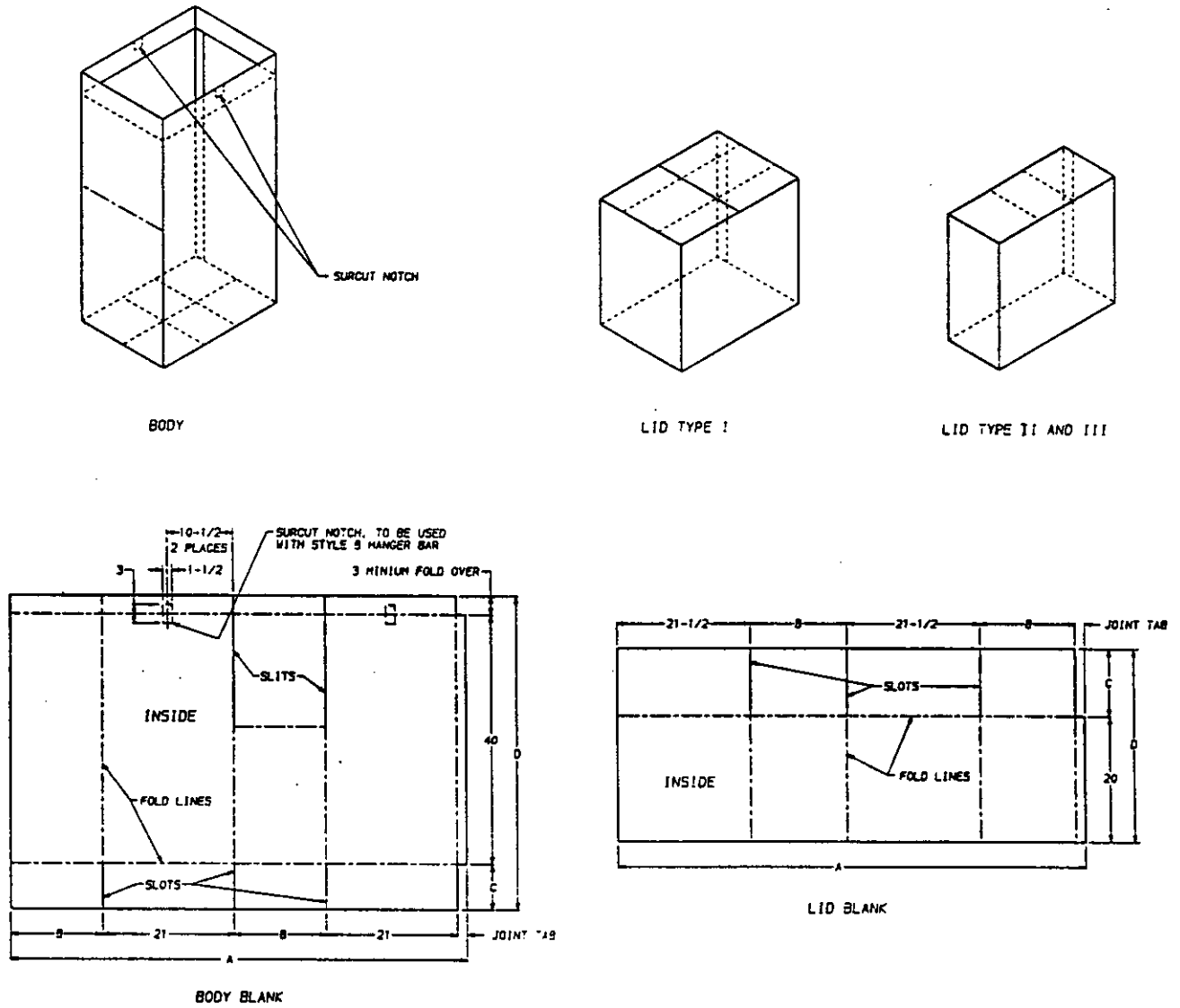
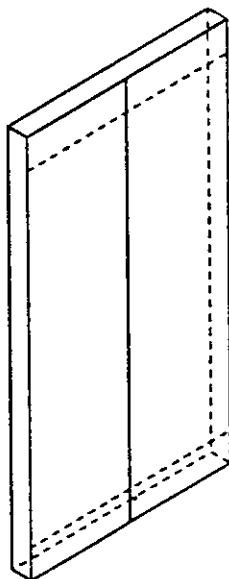


TABLE OF DIMENSIONS				
DIMENSION				
	A	B	C	D
TYPE I	72-1/2	14-1/2	7-1/4	50-1/4
TYPE II	60-1/2	8-1/2	4-1/4	47-1/4
TYPE III	52-1/2	4-1/2	2-1/2	45-1/4

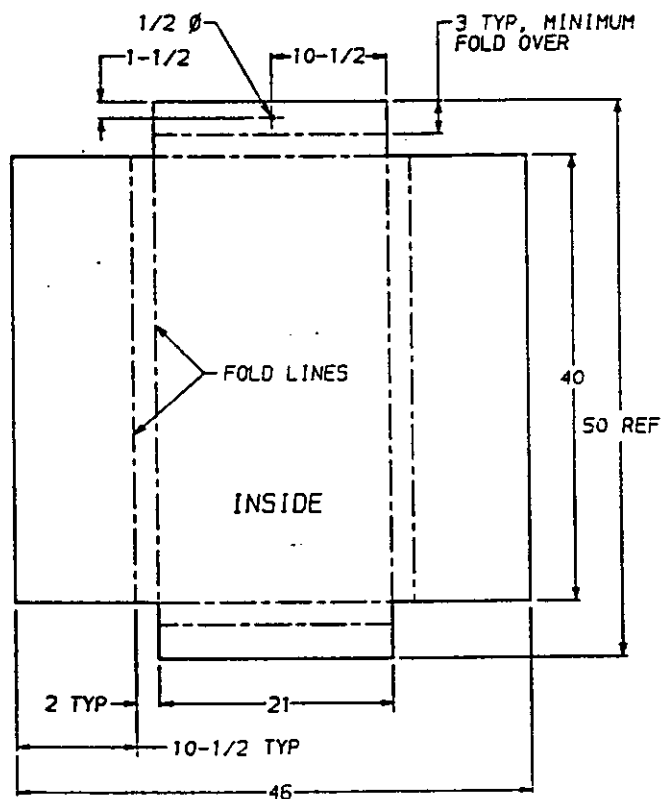
TABLE OF DIMENSIONS				
DIMENSION				
	A	B	C	D
TYPE I	75-1/2	15-1/2	10-3/4	30-3/4
TYPE II	60-1/2	9-1/2	9-1/2	29-1/2
TYPE III	55-1/2	5-1/2	5-1/2	25-1/2

FIGURE 1. CONTAINER, SHIPPING AND STORAGE COAT (HANGER PACK)

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BODY TYPE IV



BODY BLANK

FIGURE 2. CONTAINER, SHIPPING AND STORAGE COAT (HANGER PACK), TYPE IV

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-C-44192A	2. DOCUMENT DATE (YYMMDD) 1990 July 18
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3. DOCUMENT TITLE
CONTAINER, SHIPPING AND STORAGE, COAT (HANGER PACK)

4. NATURE OF CHANGE (*Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.*)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)	b. ORGANIZATION	
c. ADDRESS (Include Zip Code)	d. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (if applicable)	7. DATE SUBMITTED (YYMMDD)

8. PREPARING ACTIVITY

a. NAME U.S. Army Natick RD&E Center	b. TELEPHONE (Include Area Code) (1) Commercial 508-651-5221	(2) AUTOVON 256-5221
c. ADDRESS (Include Zip Code) Commander, U.S. Army Natick RD&E Center ATTN: STRNC-ES Natick, MA 01760-5014	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340	