

INCH POUND

MIL-P-4861C
12 July 1991SUPERSEDING
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MILITARY SPECIFICATION

PACKING, PREFORMED, RUBBER:
PACKAGING OF

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

1. SCOPE

1.1 Scope. This specification covers requirements for preservation, packaging and marking of preformed packing.

* 2. APPLICABLE DOCUMENTS

* 2.1 Government documents.

* 2.1.1 Specification, 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

PPP-B-566	Box, Folding, Paperboard
PPP-B-576	Box, Wood, Cleated, Veneer, Paper Overlaid
PPP-B-585	Box, Wood, Wirebound
PPP-B-601	Boxes, Wood, Cleated, Plywood
PPP-B-621	Box, Wood, Nailed and Lock-Corner
PPP-B-636	Box, Shipping, Fiberboard
PPP-B-640	Box, Fiberboard, Corrugated, Triple-Wall

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: the Technology and Industrial Services Division, SA-ALC/TIRDM, Kelly AFB, TX. 78241-5609 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

* AMSC/NA

FSC PACK

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

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PPP-B-665	Boxes, Paperboard, Metal Edged and Components
PPP-B-676	Boxes Set-Up
PPP-B-320	Fiberboard, Corrugated and Solid, Sheet Stock (Container Grade) and Cut Shapes

MILITARY

MIL-P-116	Preservation, Methods of
MIL-L-10547	Liner, Case, and Sheet, Overwrap, Water Vaporproof or Waterproof, Flexible

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 Loads
MIL-STD-2073-1	DOD Materiel Procedures for Development and Application of Packaging Requirements

* (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)

ASTM D3951 PACKAGING, COMMERCIAL

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1137.)

(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 Packaging. All packings shall be thoroughly clean before packaging. Packaging shall be accomplished under conditions which will assure freedom from

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contamination by dust, oil, grease, or other foreign materials. Cleaning and drying shall be in accordance with requirements of MIL-P-116. No packing shall be tied or tagged.

3.2 Preservation. Preservation and packaging shall be level A, C, or commercial as specified (see 6.2).

3.2.1 Level A. Unless otherwise specified packings shall be packed one (1) each in accordance with method 1C-1, MIL-P-116. The envelope (bag) shall be constructed of opaque material only. No preservation shall be applied to the packing.

3.2.1.1 Level C. Packings shall be preserved to the MIL-STD-2073 requirements for this level.

TABLE 1. Multiple Unit Package Quantities

SIZE	UNIT QUANTITY
OD 1/2 inch or less	100 each
OD over 1/2 inch but not over 2 inches	50 each
OD over 2 inches but not over 4 inches	10 each
OD over 4 inches	1 each

3.2.1.2 Commercial. Packings shall be preserved in accordance with the applicable requirements of ASTM D3951.

* 3.2.2 Size. Outside diameter.

* 3.2.2.1 Thirteen inches and under. Packings 13 inches and under shall not be coiled.

* 3.2.2.2 Over thirteen inches. Packings over 13 inches shall be coiled as shown in Figure 1 in order to utilize sizes of envelopes (see 3.2.3). Packings shall not cross or lap over themselves. Care shall be exercised in coiling the packing to avoid possible cold-crease effects. After coiling, the packing shall be sandwiched between two stiffeners of material conforming to PPP-F-320 to prevent movement of the packing. The stiffeners shall be fastened by taping with pressure tape on the four edges. The fiberboard shall not be compressed in such a manner which would deform the packing; however, the packing shall not be permitted to uncoil nor come in contact with the pressure sensitive tape.

* 3.2.3 Envelopes. Envelopes of the same size may be joined end-to-end in a strip-type package or may be arranged to form a perforated sheet type package (see Figure 2). The smallest practical size of envelope shall be used consistent with the size of the packing to be packaged. Envelopes shall be one of the following sizes:

- a. 2 by 2 inches, +1/4 inch.
- b. 3 by 3 inches, +3/8 inch.
- c. 4 by 4 inches, +1/2 inch.

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- d. 6 by 6 inches, +1/2 inch.
- e. 8 by 8 inches, +1/2 inch.
- f. 12 by 12 inches, +1/2 inch.
- g. 16 by 16 inches, +1/2 inch.
- h. Other sizes, as specified by the procuring activity.

* **3.3 Intermediate packaging.** Unit packages not exceeding 16 by 16 inches shall be further intermediate packaged in quantities not exceeding 100 items or 10 pounds in weight whichever maximum is reached first. Intermediate containers shall conform to PPP-B-566, PPP-B-665, PPP-B-676 or PPP-B-636, class weather-resistant. Closure shall be in accordance with the applicable container specification. Intermediate packages shall contain only like items of the same Federal Stock Number and cure date.

3.4 Packing. Packing shall be level A, B, C or commercial as specified (see 6.2).

3.4.1 Level A. Packings, packaged as specified, shall be packed in containers conforming to Specifications, PPP-B-585, class 3, PPP-B-601, overseas type, PPP-B-621, overseas. Shipping containers shall be closed, strapped or banded in accordance with the applicable box specification. Gross weight of wood and wood-cleated boxes shall not exceed 200 pounds. Containers shall be provided with a case liner conforming to Specification MIL-L-10547 and shall be sealed in accordance with the appendix thereto.

3.4.2 Level B. Unless otherwise specified, intermediate containers shall be packed in exterior containers conforming to Specifications PPP-B-576, class 2, PPP-B-585, class 2 or 3, PPP-B-601, domestic type, PPP-B-521, domestic type, PPP-B-636, weather resistant or PPP-B-640, weather resistant. Exterior containers shall be of minimum weight and cube consistent with the protection required. As far as practical, exterior containers shall be of uniform shape and size and contain identical quantities. The gross weight of wood and wood-cleated boxes shall not exceed 200 pounds. Fiberboard boxes shall not exceed the weight limitations of the box specification. Closure shall be in accordance with the appendix of the applicable container specification.

3.4.3 Level C. Packings that have been preserved and packaged as specified in 3.2 shall be packed in accordance with the requirements of MIL-STD-2073-1.

3.4.4 Commercial. Packings that have been preserved and packaged as specified in 3.2 shall be packed in accordance with the requirements of ASTM D3951.

3.5 Marking.

3.5.1 Level A, B and C. Shelf life markings and marking of interior packages and exterior shipping container shall be in accordance with MIL-STD-129 and the requirement herein. The cure data shall be indicated by the quarter of the year and the year. They shall be separated by the letter "Q". Example: "2063" indicates a cure date in the second quarter of the calendar year 1963. The following items shall be included in the marking:

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NSN
 Nomenclature
 Military Part Number
 Material Specification
 Manufacturer's Name
 Manufacturer's Compound Number
 Manufacturer's Batch Number
 Contract Number
 Cure Date

3.5.2 Commercial. Packings shall be marked in accordance with the applicable requirements of ASTM D3951.

3.6 Palletization. Unitized loads, commensurate with the level of packing specified in the contract or order shall be palletized in accordance with MIL-STD-147. Palletized loads shall be uniform in size and quantities to the greatest extent possible. If the container is of a size which does not conform to any of the pallet patterns specified in MIL-STD-147, the pallet pattern shall first be approved by the contracting officer.

* 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 materials, either indicated or actual, nor does it commit the Government to accept defective material.

4.2 Sampling for lot acceptance.

4.2.1 Lot. An inspection lot shall consist of all packages of the same item produced by a manufacturer under one contract with no change in process and offered for delivery at one time.

4.2.2 Sampling for examination. A random sample of packages shall be selected from each lot offered to the Government in accordance with Standard MIL-STD-105 at inspection Level 11. The Acceptance Quality Level shall be 6 percent defective.

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4.2.3 Examination. Each sample selected in accordance with 4.2.2 shall be visually and dimensionally examined to assure conformance with the requirements of this specifications.

4.3 Test. A random sample of packages shall be selected from each lot offered to the Government and tested in accordance with the requirements of applicable specifications. The Acceptable Quality Level and inspection level shall be as specified in referenced specifications.

5. PREPARATION FOR DELIVERY

5.1 This section is not applicable to this specification.

6. NOTES

6.1 Intended use. The individual packaging methods for preformed packings specified in this specification are intended to accomplish the following:

a. Assure positive identification of each preformed packing by part number until it is installed in the component.

b. Provide protection of preformed packings for contamination by foreign materials prior to installation.

6.1.1 The intermediate containers specified will afford sufficient additional protection from the effects of prolonged exposure to harmful rays in sunlight. Special sealing against light will not be necessary.

6.2 Ordering data. Procurement documents should specify the following:

a. Title, number, and date of this specification.

b. Selection of applicable levels of packaging and packing (see 3.2, 3.3 and 3.4).

c. When palletization is required (see 3.6).

* 6.3 Subject term (key word) listing.

Container
Envelope
Fiberboard
Stiffner
Liner
Wood
Wood-cleated
Boxes

* 6.4 Changes from previous issue. The margins of this specification are marked with asterisks (or vertical lines) to indicate where changes (additions, modifications, corrections, deletions) from the previous issues were made. This was done as a convenience only and the Government assumes no liability whatsoever

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for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Air Force - 99
Navy - AS

Preparing activity:
Air Force - 82

(Project No. PACK-0947)

Review activities:

Army - AV, MI, AR
Navy - SH
DISC - ESA

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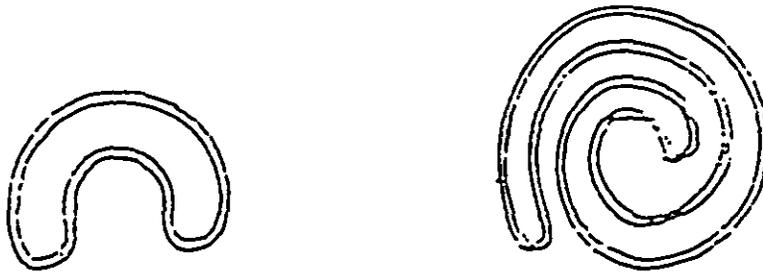
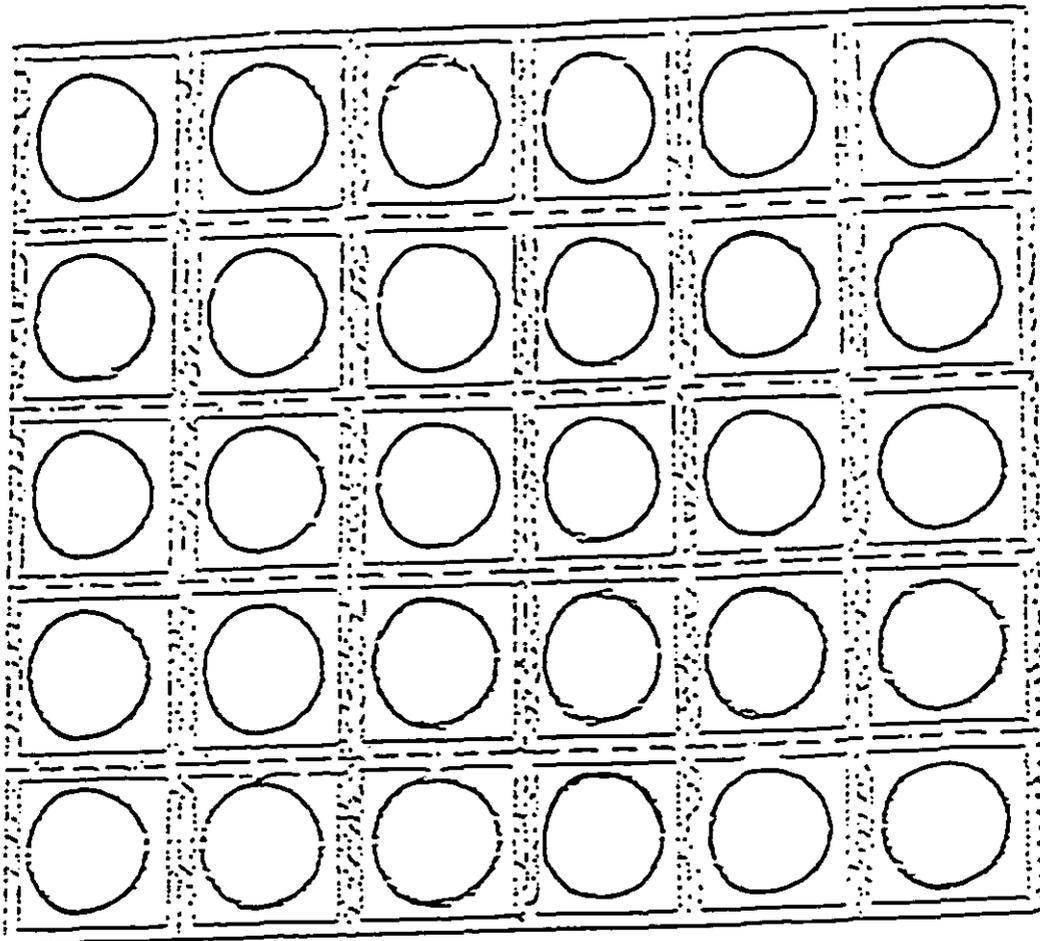


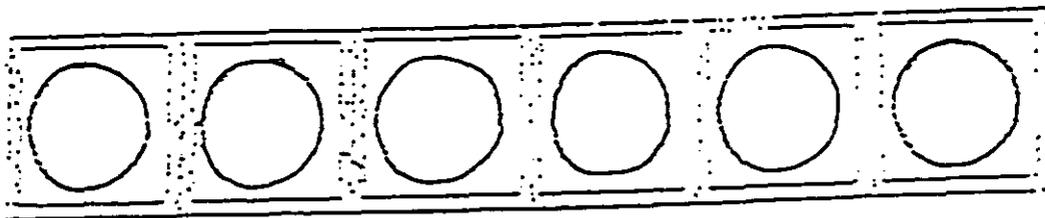
ILLUSTRATION OF LARGE COILED PACKING

FIGURE 1

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SHEET TYPE PACKAGE



STRIP TYPE PACKAGE

NOTES:

1. CROSS MATCHINGS INDICATE SEALED AREA OF ENVELOPE.
2. DASH LINES INDICATE PERFORATIONS FOR TEAR OFF.

ILLUSTRATION OF STRIP AND SHEET PACKAGING

FIGURE 2

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APPENDIX

PROCEDURE FOR SHIPMENT OF D-RINGS

10. SCOPE

10.1 This appendix covers, including unit packaging, the procedure when shipping preformed rubber packings to departments and agencies of the Department of Defense, its supply depots and other military installation. Shipment of D-Rings to DEM contractors may be packaged in bulk.

20. APPLICABLE DOCUMENTS

This section is not applicable to this appendix.

30. Shipping preformed rubber packings.

30.1 Preformed packaging. Preformed packings shall be put into polyethylene bag and then put into a larger cardboard or suitable container with the lid of flips closed.

30.2 Elastomeric items. Elastomeric items shall be protected from circulating air, sunlight, fuel, oil, water, dust and ozone (which may be generated by one electric arc, fluorescent lamps, and similar electrical equipment). The storage temperature shall not exceed 125°F.

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.
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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-P-4861C2. DOCUMENT DATE (YYMMDD)
12 Jul 91

3. DOCUMENT TITLE

PACKING, PREFORMED, RUBBER: PACKAGING OF

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 (Include Title, Dept, and Org)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)

e. DATE SUBMITTED (YYMMDD)

8. PREPARING ACTIVITY

a. NAME

Technology and Industrial Services Division
SA-ALC/TIRDM

b. TELEPHONE (Include Area Code)

(1) Commercial

(2) AUTOVON

c. ADDRESS (Include Zip Code)

Kelly AFB TX 78241-5609

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