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## PREFORMED RUBBER O-RING, PACKING, SEALS REQUIRING WATERPROOF PACKAGING

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### 1.0 SCOPE

This standard provides a method for the individual packaging of preformed rubber O-rings, packing, seals, and similar types of items requiring waterproof/opaque packaging.

### 2.0 REFERENCES

- 2.1 Lockheed Packaging Standard LPS 40-001 (General Requirements Specification)
- 2.2 NAS Packaging Standards 3406, 3415
- 2.3 MIL-P-4861

### 3.0 REQUIREMENTS

#### 3.1 GENERAL

- 3.1.1 The quantity per unit package shall be one (1) each.
- 3.1.2 Items shall be thoroughly clean before packaging.
- 3.1.3 Items eight (8) inches (outside diameter) and under shall not be coiled.
  - 3.1.3.1 . Items up to eight (8) inches (outside diameter) may be placed individually in a sealed bag without stiffeners, provided that, the item is not capable of doubling over itself causing a deformation.
- 3.1.4 Unless otherwise specified, items over eight (8) inches (outside diameter) shall be coiled. Carefully form the item to provide a smaller diameter (Figure 1) and to avoid possible cold-crease effects. After coiling, the item shall be sandwiched between two fiberboard stiffeners (Figure 2) and secured with tape. Avoid over-compression of the stiffeners to avoid deformation of the item. Assure that the item does not become uncoiled during packaging and that the tape does not contact the item.
- 3.1.5 Package size shall be commensurate with the size of the item.

#### 3.2 UNIT PACKAGING

- 3.2.1 Place item (coiled or uncoiled, see Paragraphs 3.1.3 and 3.1.4) in a heat sealable, waterproof, opaque bag, fabricated in accordance with MIL-B-117, Type II, Class C, Style 1.
- 3.2.2 Expel excess air from bag and close by heat sealing. Allow sufficient material to permit at least one additional reseal.

#### 3.3 INTERMEDIATE PACKAGING

- 3.3.1 Pack unit packages containing identical items uniformly into paperboard/fiberboard containers. Only those items having the same part number and cure date may be placed within an intermediate container. Gross weight/dimensions of each container shall not exceed its design specification.
- 3.3.2 Fill all voids with suitable dunnage, blocking or bracing as required.

#### 3.4 PACKING

- 3.4.1 Pack any number of intermediate containers uniformly into each shipping container.
- 3.4.2 Shipping containers as packed, shall protect each item and package during ordinary handling and shipping and shall meet the minimum requirements of the common carriers for acceptance for safe transportation at the lowest rate to the point of delivery.
- 3.4.3 Intermediate containers which meet the requirements of Paragraph 3.4.2 may be used as shipping containers.
- 3.4.4 Enclose or attach a copy of packing slip to the shipping container.

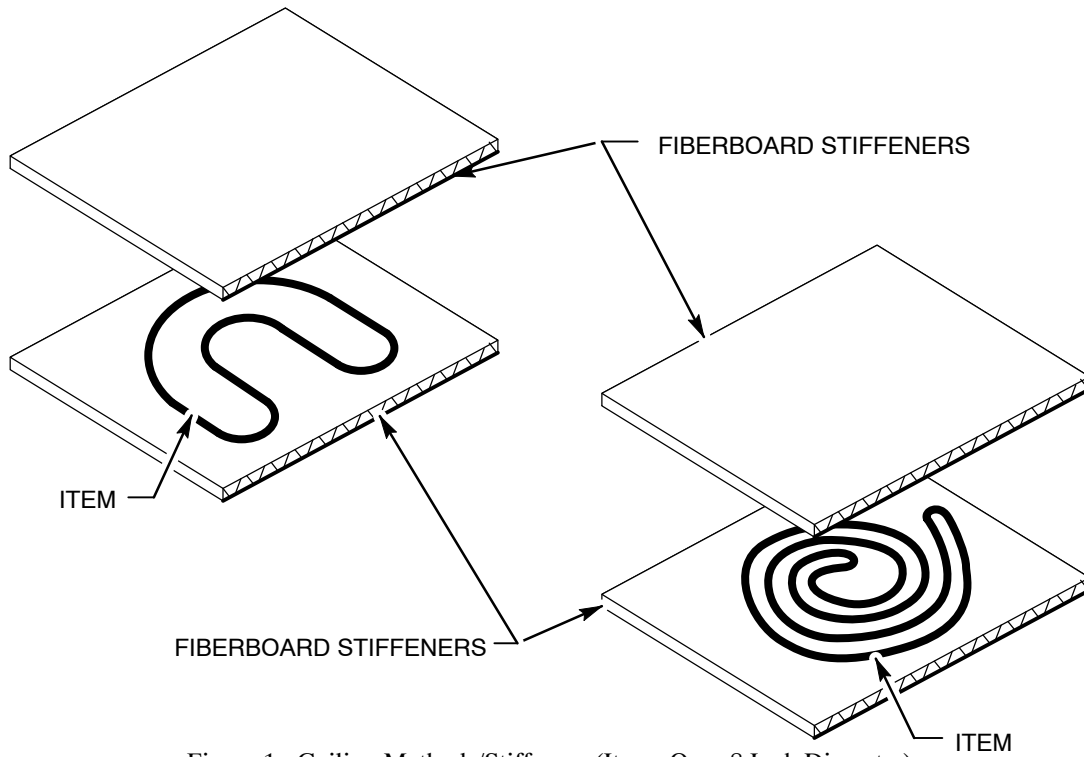


Figure 1. Coiling Methods/Stiffeners (Items Over 8 Inch Diameter)

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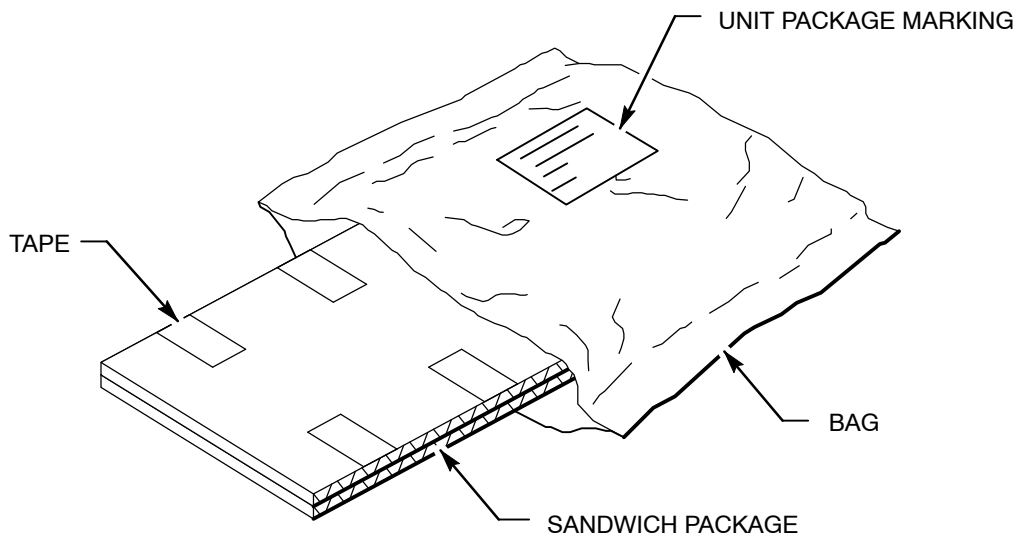


Figure 2. Sandwich Package/Waterproof Bag – Heat Sealable

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3.5 **MARKING** (Unless otherwise specified in the contract or Purchasing Document use the following criteria)

3.5.1 Unit Package Marking – Rubber preformed O-rings, packings/seals furnished in accordance with material specifications (see Paragraph 5.0) shall be labeled or marked as follows:

Federal Stock Number (when required by contract or order)

Nomenclature

Military/LMSSC Part Number (as applicable)

Material Specification

Manufacturer's Name

Manufacturer's Compound Number

Manufacturer's Batch Number

Contract Number (when applicable)

Cure Date

3.5.2 Unit Packaging Marking – Other Than Rubber Preformed O-Rings, etc., (see Paragraph 3.5.1). Label or mark each package to show at least the part number per contracting document, nomenclature, and supplier identity. Additional markings may be specified in the item detail specification or drawing.

3.5.3 Intermediate Package Marking

- a. Label or mark each container containing limited life items in accordance with Paragraph 3.5.1.
- b. Label or mark containers containing items other than limited life material to show at least part number per contracting document, supplier, destination and quantity of parts.

3.5.4 Shipping Container Marking – Label or mark each container to show part number per contracting document, the LMSSC contracting document number, supplier, destination and quantity of parts.

3.5.5 Special precautionary and handling markings shall be applied as required.

#### **4.0 QUALITY ASSURANCE**

4.1 Packaging shall be accomplished in such a manner as to prevent physical damage to, or degradation of, the packaged items, during delivery to the using activity. It shall be the prerogative of LMSSC to return damaged items, at supplier's expense when such damage is attributable to improper or inadequate protection.

#### **5.0 NOTES**

5.1 The following information is intended to assist suppliers in meeting the requirements of this specification.

5.1.1 Material/specifications (preformed rubber O-rings, packing, etc.) – not limited solely to the following:

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Revision 2

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Commodity

Bags, Sleeves, Tubing

Fiberboard, Corrugated/Solid

Preformed O-Rings

Preformed O-Rings

Preformed O-Rings

Preformed O-Rings

Preformed O-Rings

Preformed O-Rings

Preformed O-Rings

Military/Commercial Specification

MIL-B-117, Type 2

ASTM D4727, Type CF, Class Domestic, SW  
(optional), Grade 200 (optional)

AN6225

LS 8049

LS 8050

LS 42576

SAE AS 28778

SAE AS 29512

SAE AS 29513