
PACKAGING DESIGN COORDINATION DOCUMENT

NOTICE

THIS STANDARD IS FOR COORDINATION PURPOSES ONLY BETWEEN SUPPLIERS/SUBCONTRACTORS AND LMSC. NO SHIPMENTS ARE AUTHORIZED – SEE PARAGRAPH 3.0 “REQUIREMENTS.”

1.0 SCOPE

This standard provides for the coordination and development of preservation/packaging criteria between suppliers and LMSC, involving specific protection of deliverable parts/equipment in response to proposals, work statements, or contracts, wherein criteria essential to the protection of the item(s) may not be defined or immediately available.

2.0 REFERENCES (LATEST ISSUE)

- 2.1 Lockheed Packaging Standard LPS 40-001
- 2.2 Lockheed Packaging Standard P-201, “Thermal Control” Labels
- 2.3 Lockheed Packaging Standard P-116, “Packaging of ESD Sensitive Devices”
- 2.4 LAC 3250 “Protection of Electrostatic Sensitive Parts and Assemblies”
- 2.5 Code of Federal Regulations Transportation of Hazardous Materials (CFR Title 49)
- 2.6 Applicable State P.U.C. Code
- 2.7 Uniform Freight Classification
- 2.8 Applicable State Vehicle Codes
- 2.9 National Motor Freight Classification
- 2.10 Applicable Postal Regulations
- 2.11 ICAO. Technical Instructions for the Safe Transport of Dangerous Goods by Air
- 2.12 IATA. Dangerous Goods Regulations
- 2.13 Other Applicable Carrier Regulations
- 2.14 LAC 3901A. “Dissimilar Metals, Protection of”
- 2.15 MIL-STD-1186, “Cushioning, Anchoring, Bracing, Blocking and Waterproofing”
- 2.16 MIL-HDBK-304. “Military Standardization Handbook, Package Cushioning Design”

3.0 REQUIREMENTS

- 3.1 Invokement of this standard in a procurement document requires a written response from the supplier documenting preservation, packaging and packing specifications proposed for the protection of the item(s) specified in the procurement document. Packaging design criteria developed shall meet all requirements specified by the item design specification/drawing, shock/vibration/environmental protection, transportation/storage conditions and special precautionary markings as applicable.
 - 3.1.1 Supplier coordination shall include providing LMSC (Operations Product Protection Engineering) with all pertinent item drawing/sketches, design performance specifications, etc., for review and determination by LMSC that the suppliers proposed packaging design is adequate and conforms to requirements.
 - 3.1.2 Upon approval of supplier’s packaging design, no changes to the packaging design/drawing shall be made without prior approval of LMSC (Operations Product Protection Engineering).

- 3.2 Supplier(s) shall furnish necessary data to LMSC (Operations Packaging Engineering) via the cognizant LMSC buyer. Supplier(s) shall not package or ship any item until notified by the cognizant LMSC buyer that Operations Packaging Engineering has approved the supplier's packaging criteria.
- 3.3 Suppliers shall coordinate, plan, and provide necessary data sufficiently in advance of delivery schedule(s) to permit adequate time to review supplier(s) recommended packaging design(s), method(s), etc., without delaying delivery.
- 3.4 When supplier does not have packaging design engineering capability or an acceptable design, Operations Packaging Engineering may originate package designs or supplement a supplier's proposed packaging method and implement such changes as necessary to meet LMSC requirements.
- 3.5 The General Packaging Requirements of LMSC LPS 40-001 shall be observed by suppliers in meeting the requirements of this standard.
- 3.6 Shipments of items/materials classified by the Department of Transportation (DOT) Regulations as hazardous, e.g., flammable, explosives, toxic, combustible, corrosive, compressed gas, magnetic, radioactive, poisons, oxidizing materials, etc., shall be properly identified, packaged and marked in compliance with applicable Carrier/State/Federal Regulations. (See Paragraphs 3.10.1 and 3.10.2 for special label requirements.) When requested, a Material Safety Data Sheet (OSHA Form 20 or equivalent) shall be furnished to LMSC.
- 3.7 Explosive devices sensitive to detonation by electrostatic discharge shall be individually wrapped in conductive material (see Paragraph 5.1.1). Special precautionary markings shall be applied to each unit package (Ref Paragraph 3.10.1).
 - 3.7.1 All shipments of explosive devices shall comply with Department of Transportation (DOT) Regulations, (latest revision), and the applicable carrier restrictions. Documentation, packaging/packing and marking shall be in compliance with the applicable DOT paragraph description for the device as expressly authorized by DOT.
 - 3.7.2 A copy of the DOT correspondence certifying proper classification of each explosive device shall be furnished to LMSC (Operations Packaging Engineering) through the cognizant LMSC Procurement representative prior to the initial shipment.
- 3.8 Preservation/packaging methods and designs shall be of minimum cost consistent with reliable performance of the package design, assuring safe delivery at destination. The preservation/packaging methods selected shall ensure protection of the item(s) against natural and induced environments during handling/shipment.
- 3.9 When authorized by LMSC (Operations Packaging Engineering) shipments of large, heavy equipment, or delicate electronic consoles, test equipment, etc., without crating or individualized packaging may be routed via special carrier equipment, e.g., padded or shock mitigated van, air cargo service, etc. Such action shall be predicated on individual circumstances and considerations such as:
 - 3.9.1 The item(s) is capable of withstanding shipment in an uncrated/packaged condition.
 - 3.9.2 The destination is capable of accepting such shipments without incurring unloading difficulties, or subjecting the item(s) or personnel to potential hazards, injury, damages, etc.
 - 3.9.3 Item(s) is readily identified by proper markings to facilitate Receiving inspection at destination.
 - 3.9.4 Shipments of unpackaged item(s) result in direct dollar savings to LMSC.
- 3.10 Marking – Unless otherwise specified, label or mark each package to show at least the part number per contracting document and supplier's identity. Apply Thermal Control (P-201) labels and other special marking requirements when specified.
 - 3.10.1 Marking – Explosive Device – When applicable, label or mark each unit package to show:
 - a. Part Number per Contracting Document
 - b. Supplier Identity
 - c. Proper DOT Shipping Name/Class of Explosive

- d. Net weight of explosive in each package
- e. Manufacturing or Loading Date
- f. Lot Number
- g. Manufacturing Serial Number (when applicable)
- h. Limited Calendar Life (when applicable)
- i. Apply Humidity Control Labels (when applicable)
- j. Special Marks: “WARNING (red letters) contents subject to ignition/detonation by electrostatic discharge. Ground inner conductive wrap before and during removal from this package.”

3.10.2 Marking – Hazardous Materials – All shipments of hazardous chemical/materials shall be promptly identified, labeled/marked in conformance with Department of Transportation Regulations (CFR Title 49) Military Regulations, etc., and the requirements of this standard, as applicable.

3.10.3 Marking – Electrostatic Sensitive Devices/Assemblies

- a. Comply with Paragraph 3.10.
- b. Electrostatic CAUTION Label – Apply CAUTION label(s), Figure 1 to each unit package/intermediate/shipping container(s) containing a static sensitive item.

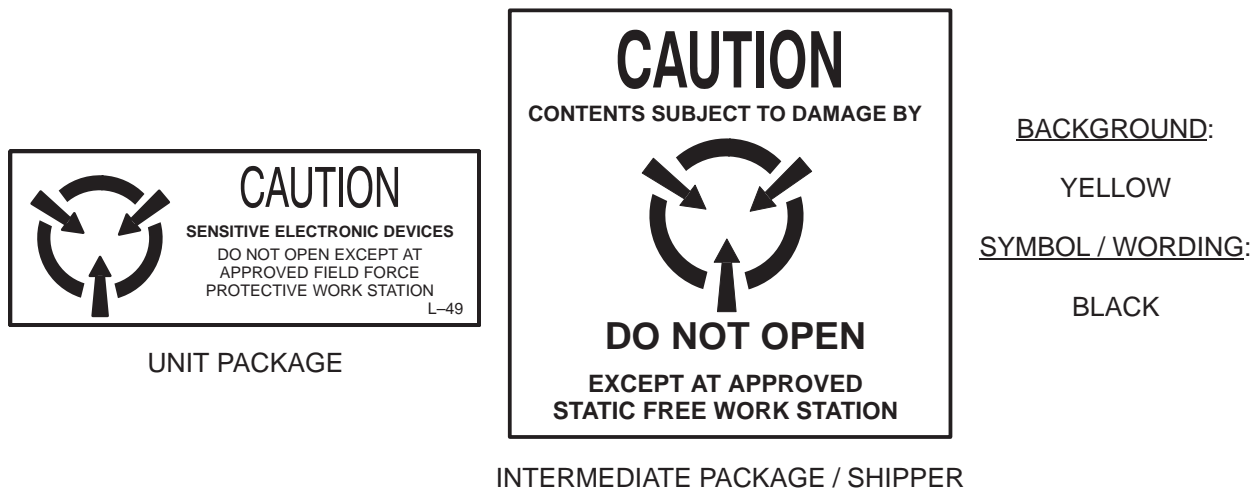


Figure 1. Electrostatic CAUTION Label

4.0 QUALITY ASSURANCE

- 4.1 Supplier(s) failure to comply with the requirements of this standard shall subject their shipment(s) to possible rejection and return to the supplier at his expense.

5.0 NOTES

5.1 The following information is intended as a guide or aid to suppliers in meeting the requirements of this standard.

5.1.1 MATERIAL SPECIFICATIONS

<u>Commodity</u>	<u>Military/Commercial Specification/Source</u>
Static Protective Plastic Bag	QPL MIL-B-81705 Colvin Packaging Products, Inc., Anaheim, CA
Barriers, Electrostatic Free, Type I	QPL MIL-B-81705, Type I
Barriers, Electrostatic Free, Type II	QPL MIL-B-81705, Type II
Labels, Hazardous Materials	Code of Federal Regulations, Title 49, Label Master, Chicago, IL
Label, Static CAUTION	Richmond Corp., Redlands, CA Colvin Packaging Products Inc., Anaheim, CA