

LMSSC PACKAGING STANDARD

P-57

Revision 2
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09-02-2008

METALLIC SHEET AND PLATE ON SKID OR SANDWICHED BETWEEN CORRUGATIONS

1.0 SCOPE

This standard provides for the preservation/protection and packaging of metallic sheets, plates and other items of relatively flat configuration up to and including 72 inches in width by 240 inches in length, gross weight not to exceed 2000 pounds.

2.0 REFERENCES

2.1 Lockheed General Packaging Standard LPS 40-001 (General Requirements Specification)

3.0 REQUIREMENTS

3.1 GENERAL

- 3.1.1 Unit packaging, preservation and/or protective requirements shall be limited to those methods described herein. Requirements for a specific method shall be noted on the procurement document.
- 3.1.2 Prior to packaging, preserve/protect the material in accordance with the requirements specified in Table 1. The preservation/protection method to be used is a part of the Lockheed Packaging Standard (LPS) callout on the procurement document. The suffix letter following the basic callout (P57) refers to a specific method in Table 1, e.g., P-57/A; when applicable, more than one method in Table 1 may be specified, e.g., P-57/AC.

NOTE: Preservation methods in Table 1 to be used on raw stored material and not to be used on any flight hardware.

LPS Suffix	Preservation/Protection Requirements
A	Material shall be interleaved with a suitable antitarnish, noncorrosive paper, e.g., wrapping conforming to commercial packaging requirements in ASTM B660.
B	Both sides of each piece of material shall be covered with transparent protective tape.
C	Material shall be oiled with an oil conforming to the requirements of Aluminum Association Standard, Protective Oil for Aluminum, e.g., oil conforming to MIL-L-3150, MIL-PRF-32033 or MIL-L-7870.
D	Material less than 1/2 inch thick shall be acetic nitrate pickled, oiled with an oil conforming to the requirements of Magnesium Association Standard, protective oil for Magnesium, e.g., MIL-L-3150. Material 1/2 inch thick and over shall be protected with an oil finish and interleaved in accordance with Suffix A.
E	No longer in use
F	No oiling or interleaving requirement.

- 3.1.3 Any conflict between the requirements established herein and other specifications invoked by the procurement document shall be referred to the cognizant LMSSC Buyer for resolution with Operations Design Engineering.

3.2 UNIT PACKAGING

- 3.2.1 Unless otherwise specified, the quantity per unit package shall be as specified by the procurement document.

3.2.2 Sheet/Plate not exceeding 48 inches x 50 inches and gross weight not exceeding 100 pounds – Stack identical sheets/plates between two sheets of domestic corrugated fiberboard (double wall, 275 pound test minimum). All edges of the fiberboard shall extend beyond the sides of the sheet/plate to protect the edges from damage. Close the package with reinforced tape (Reference Figure 1).

3.2.3 Sheet/Plate exceeding 48 inches by 50 inches and/or the gross weight exceeds 100 pounds – Stack individual sheets/plates between two sheets of domestic corrugated fiberboard (single wall, 275 pound test minimum). Collectively load the sheets/plates on a skid (Reference Figure 2). Secure the sheets/plates with appropriate size strapping (Reference ASTM B660).

NOTE: The gross weight of palletized sheets/plates shall not exceed 2000 pounds per individual pallet.

3.3 INTERMEDIATE PACKAGING

Not applicable.

3.4 PACKING

3.4.1 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.

3.4.2 Unit containers which meet the requirements of Paragraph 3.4.1 may be used as shipping containers.

3.4.3 Enclose or attach a copy of the Packing Slip to the shipping container.

3.5 MARKING (Unless otherwise specified in the contract or P.O. use the following criteria)

3.5.1 Unit Package Marking – Label or mark each package to show at least material identity, quantity and supplier identity. Additional markings may be specified in the procurement document, e.g., “HAZARDOUS MATERIAL, HANDLE WITH CARE,” etc. Marking should be limited to that required by the PO or material specification.

3.5.2 Shipping Container Marking – Label or mark each container to show part number per procurement document, the LMSSC contracting document number, supplier, destination and quantity of parts. Marking should be limited to that required by the PO or material specification.

3.5.3 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 as a guide in the selection of materials:

<u>Commodity</u>	<u>Military/Commercial Specifications</u>
Tape, Reinforced	ASTM D5330, Type 4, Color Black
Fiberboard, Corrugated and Solid	ASTM D4727, Type CF, Class Domestic, SW, Grade 200
Lubricating Oil	MIL-L-3150 (Must be approved by PMP Engineering prior to application)
Lubricating Oil	MIL-L-7870 (Must be approved by PMP Engineering prior to application)
Lubricating Oil	MIL-PRF-32033 (Must be approved by PMP Engineering prior to application)
Practices for Packaging Aluminum	ASTM B660 Magnesium Products
Lumber and Allied Products	MIL-HDBK-7
Transparent Protective Tape	Commercially Available (Suggestion: Minnesota Mining & Manufacturing Co.)

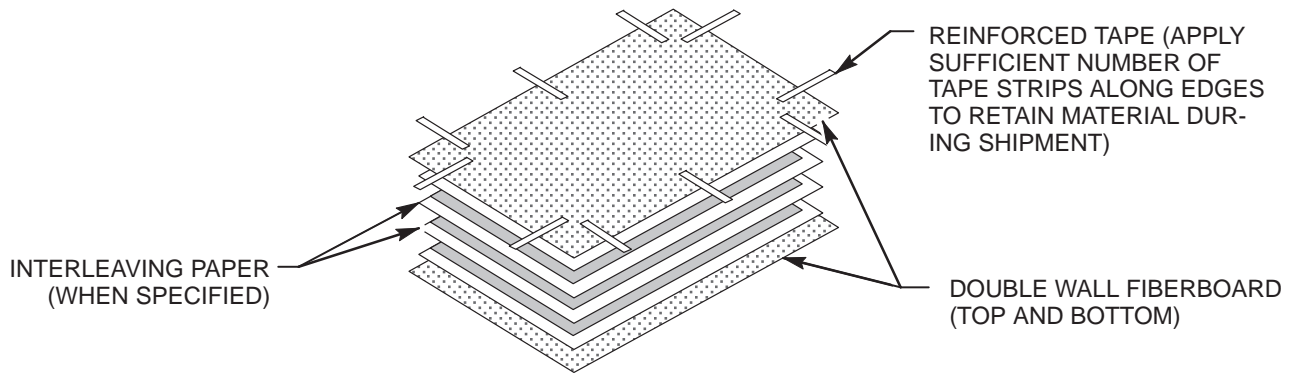


Figure 1. Ref Paragraph 3.2.2

30041-001

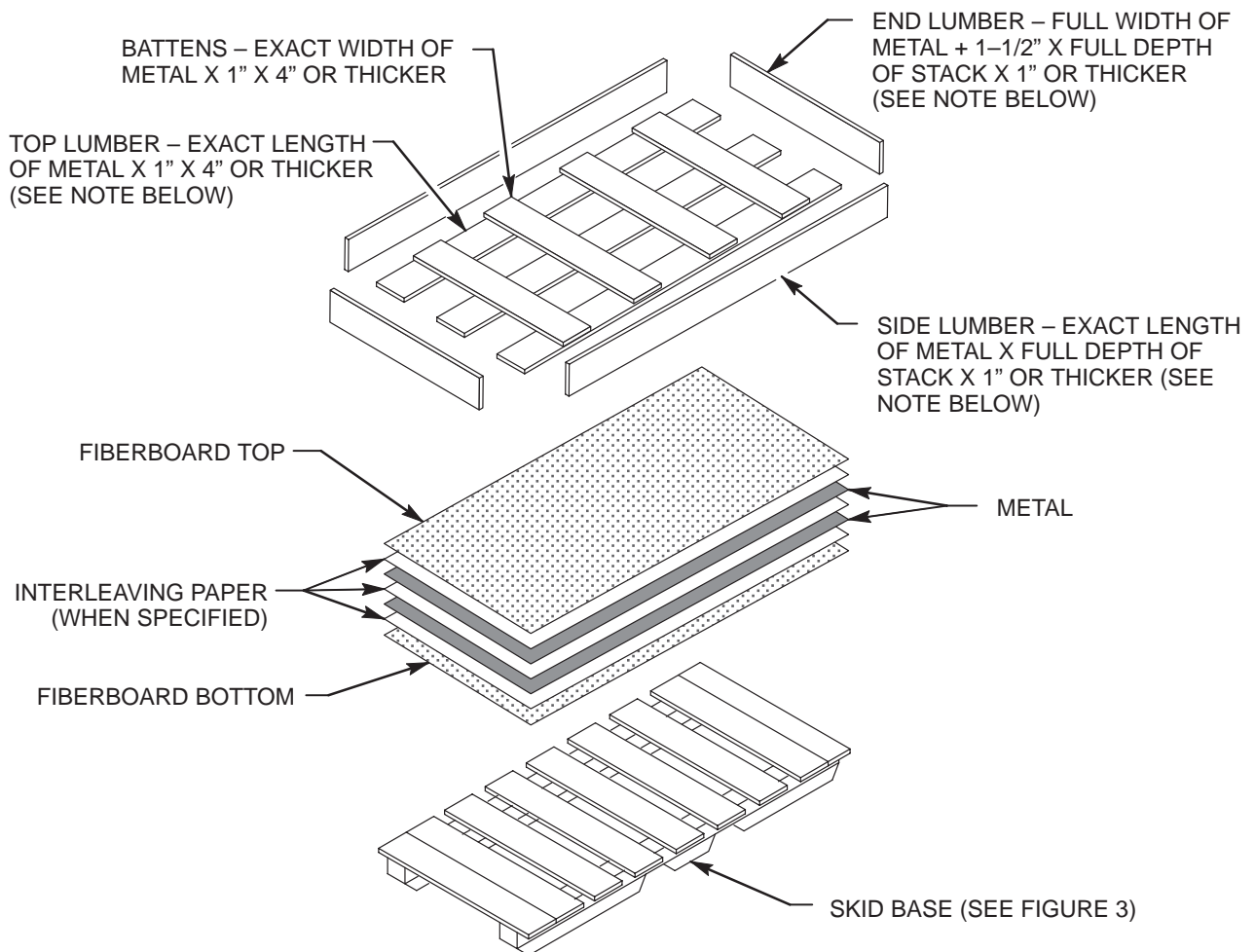


Figure 2. Skid Construction/Assembly

NOTE: Side, end and top lumber not required when total material depth is less than 1-1/2 inches. Protect sides and ends with fiberboard or equivalent. Rough or nominal lumber may be used.

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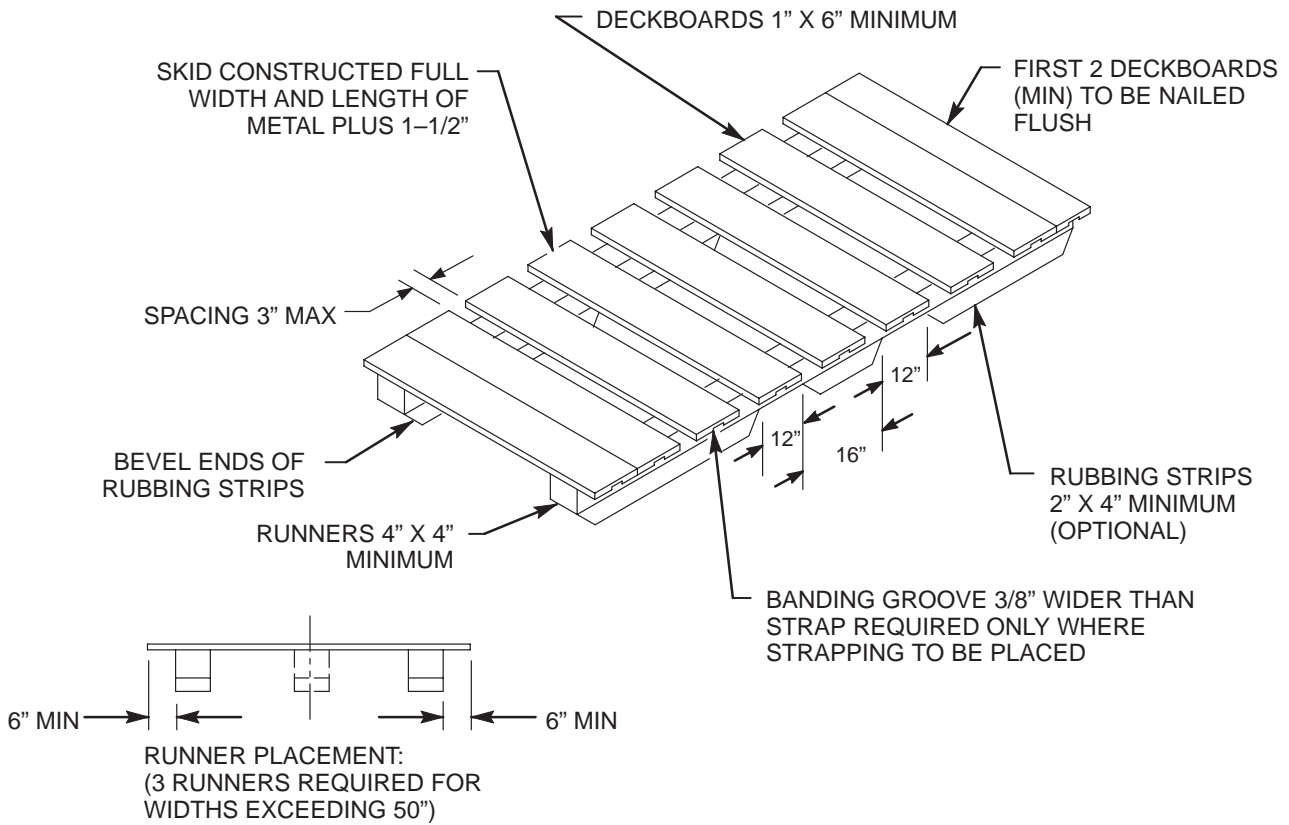


Figure 3. Skid Base Construction

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SKID CRITERIA: Lumber shall meet the minimum requirements of construction grade for Douglas Fir, West Coast Hemlock, Western Larch, Southern Yellow Pine, or Groups 3 or 4 species. No. 1 dimension hardwoods or better.
(Ref, MIL-HDBK-7.)



NOTE: Deviations of design or lumber requirements must be submitted to LMSSC for approval prior to shipment.