

# AEROSPACE STANDARD

AS1492™

REV. C

Issued Reaffirmed Revised 1982-03 2012-09 2023-01

Superseding AS1492B

(R) Interline Air Cargo Pallet Nets

#### **RATIONALE**

AS1492C has been revised from AS1492B in both format and wording to be harmonized with ISO 4170( ). Reference to AS36100 in addition to NAS3610 has been added.

Pallet nets designated in the prior revision of this specification as Type III pallet nets were not covered by NAS3610 but are now covered by AS36100 as Type 2 pallet nets. The performance and test requirements for the pallet nets contained in AS36100 are more comprehensive than those specified in the prior revision of this specification and thus the need for inclusion of Type III pallet nets in this specification has been removed.

#### 1. SCOPE

This document establishes dimensional, structural, and environmental requirements for Type II/2 interline pallet nets. Type II/2 covers NAS3610/AS36100 code sizes.

## 1.1 Purpose

This aerospace standard establishes minimum requirements for pallet nets used to transport cargo in an approved aircraft cargo compartment with a restraint system that conforms to the flight cargo restraint requirements of Title 14 CFR Part 25, except for the 9.0 g forward ultimate inertia force of § 25.561 (b)(3)(ii) and using pallets that meet the requirements of AS1491. The minimum essential criteria are identified by the use of the key word "shall." Recommended criteria are identified by the key word "should" and while not mandatory, are considered to be of primary importance in providing safe air transport of palletized cargo. Deviation from the recommended criteria should occur only after careful consideration, extensive testing, and thorough service evaluation have shown alternate methods to be satisfactory.

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For more information on this standard, visit https://www.sae.org/standards/content/AS1492C/

### 1.2 Nominal Sizes (see Table 1)

Table 1 - Type II/2 pallet net sizes

Code Size	Pallet Size
Α	2235 x 3175 mm (88 x 125 inches)
В	2235 x 2743 mm (88 x 108 inches)
G	2438 x 6058 mm (96 x 238.5 inches)
K	1534 x 1562 mm (60.4 x 61.5 inches)
L	1534 x 3175 mm (60.4 x 125 inches)
M	2438 x 3175 mm (96 x 125 inches)
N	1562 x 2438 mm (61.5 x 96 inches)
Q	1534 x 2438 mm (60.4 x 96 inches)
R	2438 x 4978 mm (96 x 196 inches)
S	1562 x 2235 mm (61.5 x 88 inches)
T	3175 x 4978 mm (125 x 196 inches)
U	1397 x 2438 mm (55 x 96 inches)

## 1.3 Basic Pallet Net Configuration

#### 1.3.1 Contours

The pallet net mesh and hardware shall not exceed the vertical planes located 50 mm (2 inches) inside the pallet edges or maximum contour vertical sides as defined in IATA Specification 50/0.

## 1.3.2 Adjustment

Pallet nets used over bulk cargo shall be adjustable for variable heights from 610 mm (24 inches) to maximum contour height as defined in IATA Specification 50/2.

#### 1.3.3 Pallet Nets Used Over Containers or load Formers (Igloos)

Pallet nets used over containers or load formers shall maintain all hardware within the maximum ULD contour as defined in IATA Specification 50/0. Pallet nets used over load formers shall have hardware which allows a minimum adjustment range of 150 mm (6 inches) (IATA Specification 50/2).

#### 2. REFERENCES

### 2.1 Applicable Publications

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply (except where specified by Technical Standard Order). The applicable issue of other publications shall be the issue in effect on the date of the purchase order (design acceptance). In the event of conflict between the text of this document and 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.

#### 2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), <a href="www.sae.org">www.sae.org</a>.

AIR1490	Environmental Degradation of Textiles
ARP1334	Ground Equipment Requirements for Compatibility with Aircraft Unit Load Devices
ARP36103	Air Cargo Unit Load Devices - Center of Gravity Control Methods
AS1491	Interline Air Cargo Pallets.

AS [and EN/JIS-Q] 9100 Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations

AS [and EN/JIS-Q] 9102 Aerospace First Article Inspection Requirement

AS33601 Track and Stud Fitting for Cargo Transport Aircraft, Standard Dimensions for

AS36100 Air Cargo Unit Load Devices - Performance Requirements and Test Parameters

AS36101 Air Cargo Unit Load Devices - Load Distribution Model

AS36102 Air Cargo Unit Load Devices - Testing Methods

#### 2.1.2 AIA Publications

Available from Aerospace Industries Association, 1000 Wilson Boulevard, Suite 1700, Arlington, VA 22209-3928, Tel: 703-358-1000, <a href="https://www.aia-aerospace.org">www.aia-aerospace.org</a>.

NAS3610 Cargo Unit Load Devices, Specification for

#### 2.1.3 ISO Publications

Copies of these documents are available online at <a href="https://webstore.ansi.org/">https://webstore.ansi.org/</a> or International Organization for Standardization, ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland, Tel: +41 22 749 01 11, <a href="https://webstore.ansi.org/">www.iso.org</a>.

ISO 4116	Air cargo equipment - Ground equipment requirements for compatibility with aircraft unit load devices

ISO 4170 Air cargo equipment - Interline pallet nets

ISO 4171 Air cargo equipment - Interline pallets

ISO 7166 Aircraft - Rail and stud configuration for passenger equipment and cargo restraint

ISO 8097 Aircraft - Minimum airworthiness requirements and test conditions for certified air cargo unit load devices

ISO 21100 Air cargo unit load devices - Performance requirements and test parameters

ISO/TR 8647 Environmental degradation of textiles used in air cargo restraint equipment

#### 2.1.4 IATA Publications

Available from International Air Transport Association, Publications Assistant, 800 Place Victoria, P.O. Box 113, Montreal, Quebec H4Z 1M1, Canada, Tel: 1-514-874-0202, <a href="https://www.iata.org">www.iata.org</a>.

IATA ULDR Standard Specification Number 50/0 ULD General Technical Requirements

IATA ULDR Standard Specification Number 50/1 Aircraft Pallet

IATA ULDR Standard Specification Number 50/2 Aircraft Pallet Net