

molex	GENERAL STANDARD FOR PALLETS	Number: 2156860019	Doc Part EN	Doc Type QMD
		EC Number:		

GENERAL STANDARD FOR PALLETS

Purpose	The purpose of this Standard is to define materials, sizes, and types, marking requirements for new and updating existing pallets. Packaged product-stacking arrangements are documented to ensure damage free transport within the global supply chain.
Scope	This standard covers the general requirements for pallets. Pallets are horizontal platforms compatible with material handling equipment. Pallets provide a base for assembling, stacking, storage conditions, handling, and transporting packaged product in a cost-effective manner. Pallet sizes are specific to worldwide and industry standards to accommodate modular shipping cartons.
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1.PROCESS OVERVIEW

This standard covers the general requirements for pallets. Pallets are horizontal platforms compatible with material handling equipment. Pallets provide a base for assembling, stacking, storing, handling and transporting packaged product in a cost-effective manner. Pallet sizes are specific to worldwide and industry standards to accommodate modular shipping cartons.

2.PROCESS DETAIL

2.1 REQUIREMENTS:

2.1.1 GENERAL

Molex Worldwide Standard pallet footprints, length, and width **shall** be used where industry specific or customer specified requirements are not mandatory.

The maximum palletized load **shall** be 1000 kg (2200 pounds)

Pallets **Shall**:

A: Have the following construction:

- Class: Block or Stringer
- Style: Double Deck (Face), Flush, Non-reversible
- Type: Partial 4-way or Full 4-way entry (if structural integrity can be maintained)
- Top Deck Coverage: 60% Minimum
- Bottom Deck Coverage: 35% Minimum

B: Be manufactured, using suitable fastening methods, from a single packaging material:

- Manufactured Wood Packaging Material (MWPM) or
- Non-manufactured Wood Packaging Material (NWPM) or
- Thermoplastic material

C: Not be manufactured from materials containing heavy metals, such as hexavalent chrome, lead, mercury and cadmium, or other noxious substances due to the potential environmental impact.

D: Have separate material numbers assigned to distinguish pallet size dimensions (length and width), material, style, performance, etc.

E: Have material numbers assigned and Engineering drawings created by the design Control Center supporting the Molex plant using the pallets for all Molex, industry specific, and customer specified pallets.

F: Have pallet data loaded in the global Product Data Management (PDM) system.

G: Have pallet data loaded in SAP under material group 301 using the specified SAP packaging material types per **2156860037 General Standard for SAP Packaging Material Types**.

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2.1.2 MATERIALS

2.1.2.1 GENERAL PROPERTIES

All materials and material combinations, used in the construction of pallets, **may** contain virgin and/or recycled materials. All pallets **shall** meet the performance requirements of this standard.

2.1.2.1.1 MANUFACTURED WOOD PACKAGING MATERIAL (MWPM) PALLETS

Shall be wood based material, such as: plywood, oriented strand board (OSB), particleboard, veneer, etc. not subject to pest infestation, **ISPM No. 15 International Standards for Phytosanitary measures**, and other government regulations.

2.1.2.1.2 NON-MANUFACTURED WOOD PACKAGING MATERIAL (NWPM) PALLETS

- **Be** bark free.
- Meet officially prescribed methods for implementing regulations of **ISPM No. 15 International Standards for Phytosanitary Measures**.
- **Be** heated to a core temperature of 56°C (133°F) for a minimum of 30 minutes.
- **Not** use fumigation as a means of treatment due to the secondary environmental concerns (toxicity and ozone depletion). Fumigation is valid for only twenty days after treatment date. Pallets may be fumigated and marked Methyl Bromide (MB) It is listed here for reference and awareness, since it is likely that some material will enter Molex treated and marked in this manner.
- **Not** require treatment if it has been cut to 6 mm (.025 inch) or less in thickness because it is not considered a major risk or pathway for pests and therefore is not subject to the treatment requirements.
- **Not** use pressure treated NWPM typically using Copper Chromate Arsenate.
- **Be** recertified and remarked per **ISPM No. 15 International Standards for Phytosanitary Measures** requirements whenever MWPM pallets are remanufactured and/or repaired.

NOTE: For solid wood – Below 19% allowable.

2.1.2.1.3 THERMOPLASTIC PALLETS

Shall:

- Have features to prevent load movement and to increase load stability during the material handling process.
- Not contain halogenated flame-retardants or require unusual facility requirements, i.e., special storage for fire safety.

2.1.2.1.4 CORRUGATED PALLETS

Should not be used because of durability, performance deterioration when wet, and unusual facility requirements, i.e., special racking systems.

2.1.2.2 PERFORMANCE

All pallets supplied to Molex **shall** be certified and be tested per ISO 8611 General Purpose flat pallets for through transit of goods – Test Methods.

2.1.2.2.1 BOTTOM DECK TEST (STACKING)

All pallets **shall** safely support stacked pallets four high with 454 kg (1000 pounds) per pallets or a total load of 1800 kilograms (~4000 pounds) with a maximum deck deflection of 6 mm (~.25 inch).

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2.1.2.2.2 BENDING TEST (RACKING)

All pallets **shall** safely support 454 kg (1000 pounds) per pallets with a maximum deck deflection of 13 mm (~.5 inch).

2.1.3 DIMENSIONS AND TOLERANCES

2.1.3.1 PALLET DIMENSIONS

2.1.3.1.1 MOLEX STANDARD PALLET

Shall meet the overall dimensional requirements:

Trade Name	Length		Width	
	mm	inch	mm	inch
	+ 3 / - 6 mm	+.13 / - .25 inch	+ 3 / - 6 mm	+.13 / - .25 inch
Euro	1200	47.2	800	31.5
Euro	800	31.5	800	31.5
Industrial	1200	47.2	1000	39.4
GMA	1219	48.0	1016	40.0

Nonstandard pallets sizes **shall not** be used because of increased costs, inventory, documentation, testing, etc.

2.1.3.1.2 INDUSTRY SPECIFIED PALLET

Shall meet the overall dimensional requirements:

Industry or Association Name	Length		Width	
	mm	inch	mm	inch
	+ 6 / - 13 mm	+.25 / - .75 inch	+ 6 / - 13 mm	+.25 / - .75 inch
AIAG	1143	45.0	1219	48.0

2.1.3.1.3 CUSTOMER SPECIFIC PALLETS

Design Control Center **shall** obtain customer specifications, material and performance testing requirements, marking, etc. prior to purchase and/or manufacture of pallets.

2.1.3.2 FLATNESS

Vertical deviation from the horizontal plane **shall not** exceed 7 mm (~.28 inch).

2.1.3.3 SQUARENESS

The difference in the length between two diagonals **shall not** exceed 25 mm (~1 inch).

2.1.3.4 PALLET OPENING

The pallet opening under the top deck for fork arm entry shall be 89 mm (3.5 inches) minimum for use with pallet trucks; forklifts and automated handling systems. The maximum distance from the top of the Pallet opening to the bottom surface of the pallet shall be 156 mm (~6.13 inches).

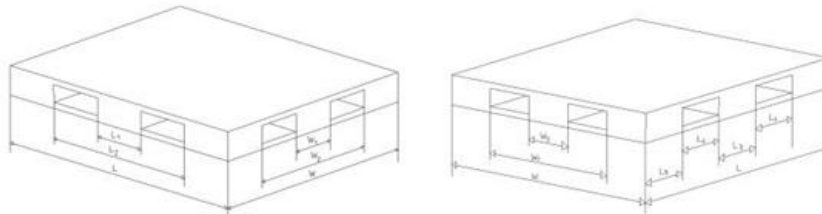
2.1.3.5 BOTTOM DECKBOARD CHAMFERS

For ease of handling with pallet trucks, pallets shall have the bottom deck boards:

- Chamfered 40° ± 5° form horizontal.
- Maximum height of the vertical face of the chamfered member of 16 mm (~.62 inch)
- Maximum distance of 65 mm (~2.5 inch) from the end of the chamfer to blocks or stringers.

2.1.3.6 END AND SIDE ENTRY OPENINGS

Shall be



Nominal Dimension		Entries and Openings									
		W1 and L1 Maximum		W2 and L2 Minimum		L3 Minimum/Maximum		L4 Minimum/Maximum		L5 Minimum/Maximum	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
800	31.5	160	6.3	580	22.8	100/220	3.9/8.7	200/210	7.9/8.3	90/140	3.5/5.5
1000	39.4	160	6.3	710	28.0	180/420	7.1/16.5	200/255	7.9/10.0	90/155	3.5/6.1
1016	40.0	160	6.3	710	28.0	196/436	7.7/17.2	200/255	7.9/10.0	90/155	3.5/6.1
1140	44.9	160	6.3	710	28.0	320/560	12.6/22.0	200/255	7.9/10.0	90/155	3.5/6.1
1200	47.2	160	6.3	710	28.0	380/620	15.0/24.4	200/255	7.9/10.0	90/155	3.5/6.1
1219	48.0	160	6.3	710	28.0	399/639	15.7/25.2	200/255	7.9/10.0	90/155	3.5/6.1

2.1.4 MARKING

2.1.4.1 PALLETS

Each non-fastener component, subassembly or pallet assembly shall:

- Be legible, permanently, and indelibly marked at least once on an exposed surface per the following requirements:
- Manufacturer’s name or trademark and manufacturing location
- Country of manufacture using either a two-character country code per ISO 3166 or the full country of origin
- Not be marked using Red or Orange

All pallets should:

- Have all required text marked using Helvetica Bold 48-point minimum font.
- Have the 10-digit Molex SAP material number with leading zeros and no dashes.

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All pallets may have the manufacturer's part number and date of manufacture.

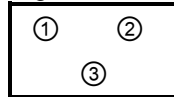
2.1.4.1.1 MANUFACTURED WOOD PACKAGING MATERIAL (MWPM) PALLETS

Shall:

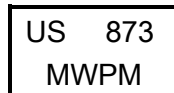
- Have markings printed, branded, stamped, embossed, etc. black, in color or a contrasting color on dark material.

Should:

- Have marking in the following format:
 - ① Two-digit code per ISO 3166 or full country or origin
 - ② Supplier/Manufacturer facility NPPO registration number, manufacturer's name or recognized trademark responsible for ensuring appropriate wood is used and properly marked
 - ③ MWPM material designation:



Example: MWPM Pallet

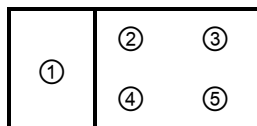


2.1.4.1.2 NON-MANUFACTURED WOOD PACKAGING MATERIAL (NWPM) PALLETS

Shall:



- Have markings printed, branded, stamped, embossed, etc. black, in color or contrasting color on dark material.
- Have phytosanitary marking per the IPPC, ISPM No. 15 in the following data and format and:

- ① IPPC Phytosanitary Mark shall only be used when provided as an official stamp by the Government authorized agent or lumber grading agency
- ② Two-digit code per ISO 3166 or full country of origin
- ③ Supplier/Manufacturer facility NPPO registration number, manufacturer's name or recognized trademark responsible for ensuring appropriate
- ④ Abbreviation for phytosanitary treatment "HT" or "TT" for Heat Treatment or "MB" for Methyl Bromide Fumigation
- ⑤ Identification code for the Audit inspection registration number, agency name or recognized trademark




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Examples: NWPM Pallet: Heat Treatment Phytosanitary procedure

	US 873	or		US 873
	HT PTS			TT PTS

Fumigation with Methyl Bromide phytosanitary procedure

	US 873
	MB PTS

2.1.4.1.3 THERMOPLASTIC PALLETS

Shall:

- Have markings printed, branded, stamped, embossed, etc.
- Have material designation and/or internationally recognized material recycling symbol per 2156860009 General Standard for Recycling Packaging Material

Should:

- Have markings black, in color or a contrasting color on dark materials.

2.1.4.2 INDUSTRY SPECIFIC AND CUSTOMER SPECIFIED PALLETS

Pallets, regardless of material composition, shall be marked according to their specifications.

Molex Design Control **should** obtain:

- Color and graphic specifications or requirements including clear space, size, spacing between graphic elements, font type and size, graphic elements, positioning, etc.
- Written approval from the customer, prior to fabrication of the tooling and manufacture of the pallets

2.1.5 DRAWINGS

All pallet drawings **shall** have packaging material type per **2156860037 General Standard for SAP Packaging Material Types**, in the Drawing Title Block. Customer or project names should not be included in the title.

2.1.5.1 INFORMATION

Pallet drawings **shall** be specified in both mm and inch-based units and include the following information:

- General Description:
 - Pallet Class: (Block or Stringer)
 - Type: (Full Four Way or Partial Four Way)
 - Style: Double Deck (Face) Flush Nonreversible
 - Bottom Deck: Unidirectional
 - Top Deck Coverage: 60% Minimum

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- Bottom Deck Coverage: 35% Minimum
- Pallet Opening Height:

- Material (MWPM, NWPM, Thermoplastic)
- Overall dimensions (Length, Width and Height)
- Marking (Graphic elements size and placement, ink, etc.)
- Reference Documents:
 - 2156860019 General Standard for Pallets
 - ISO 6780 General-purpose flat pallets for through transit of goods- Principal dimensions and tolerances
 - ISO 3166 Codes for representation of names of countries and their subdivisions Part 1 Country codes
 - ISO 8611 General-purpose flat pallets for through transit of goods – Test methods
 - ISO 6780 Flat pallets for intercontinental materials handling – Principal dimensions and tolerances
 - ISO 18333 Pallets for materials handling – Quality of new wooden components for flat pallets
 - ISO 18334 Pallets for materials handling – Quality of assembly of new, wooden, flat pallets
 - ISO 15629 Pallets for materials handling – Quality of fasteners for assembly of new and repair of used, flat, wooden pallets.

2.1.5.1.1 NMWP PALLETS

In addition to the Molex Standard drawing requirements, NMWP Pallets **shall** have a reference to **ISPM No. 15 International Standard for Phytosanitary Measures**.

2.1.5.1.2 INDUSTRY SPECIFIC AND CUSTOMER SPECIFIED PALLETS

In addition to the Molex Standard drawing information, Industry specific and Customer specified pallet drawings shall also have the appropriate Industry or Customer Specifications.

Example: Industry Specific: AIAG References
AIAG References:

- AIAG RC-8 Single and Multi-Use Container Systems Guidelines
- NWPCA Uniform Standard for Wood Pallets

2.1.5.2 NOTE SEQUENCE

The Pallet drawings should utilize the following note sequence:

- General Description:
 - Pallet Class: (Block or Stringer)
 - Type: (Full Four Way or Partial Four Way)
 - Style: Double Deck (Face) Flush Non-reversible
 - Bottom Deck: Unidirectional
 - Top Deck Coverage: 60% Minimum
 - Bottom Deck Coverage: 35% Minimum
 - Pallet Opening Height:

- Material (MWPM, NWPM, Thermoplastic)
- Dimensions (Length x Width x Height)
- Marking (Graphic elements size and placement, ink, etc.)

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- Reference Documents:
 - 2156860019 General Standards for Pallets
 - ISO 6780 General-purpose flat pallets for through transit of goods – Principal dimensions and tolerances
 - ISO 3166 Codes for Representation of Names of Countries
 - ISO 8611 General-Purpose Flat Pallets for through transit of goods – Test Methods
 - ISO 6780 Flat Pallets for Intercontinental materials handling – Principal dimensions and tolerances
 - ISO 18333 Pallets for materials handling – Quality of new wooden components for flat pallets
 - ISO 18334 Pallets for materials handling – Quality of assembly of new, wooden, flat pallets
 - ISO 15629 Pallets for materials handling – Quality of fasteners for assembly of new and repair of used, flat, wooden pallets.

2.1.6 SHIPPING REQUIREMENTS

2.1.6.1 PALLETS WITHOUT PRODUCT (RECEIVED FROM SUPPLIER)

Pallet supplier **shall**:

- Ship pallets secured (tied, banded, strapped, etc.) and aligned in stacks less than 1.1 meters (approximately 3.6 feet) in height.
- Label each pallet stack per **2156860026 General Standard for Labeling**
- Assure pallets are received clean, dry, and free from contaminants.
- Certify and provide a letter of compliance that verifies that all pallets containing any NWPM have been heat treated per this Standard.
- Certify and provide a letter of compliance, upon request that verifies that all pallets have not been manufactured with materials as defined by government regulations as harmful to the environment.

2.1.6.2 PALLETIZED LOADS (INBOUND AND OUTBOUND)

The Molex shipping warehouse **shall** provide, and the Molex receiving warehouse **shall** obtain the pallet material compliance certificates to/from the freight forwarders.

Pallets, used by Molex to meet Phytosanitary or other material specific requirements, **should** be labeled “DO NOT REPACK OR REPALLETIZE” or other similar statement.

2.1.6.2.1 CARTONS CONTAINING PRODUCT ON PALLETS

Cartons placed directly on pallet **shall**:

- Be stacked vertically (columnar) to utilize structural integrity of the cartons and not interlocked, partial, pyramidal, or unevenly stacked.
- Be secured (tied, banded, strapped, etc.) and less than 1.1 meters (approximately 3.6 feet) in height including the pallet.
- Be labeled per **2156860026 General Standard for Labeling**
- Be received clean, dry, and free from contaminants.
- Be retained on and 13mm (.5 inch) minimum from the pallet edges to eliminate overhanging of cartons, and to minimize storage and transport damage.
- Be stacked having product identification labels visible to allow for easy identification by quality, warehouse, material handlers, shippers and customs

Cartons placed directly on pallet **should** utilize:

- Proper corner supports, reinforcements and/or pallet container structures, cardboard cap or equivalent placed over cartons to provide protection from damage due to banding or shipping rigors.

2.1.6.2.2 NON-CARTONED MATERIALS ON PALLETS

Materials placed directly on pallet **shall**:

- Be secured (tied, banded, strapped, etc.) and less than 1.1 meters (approximately 3.6 feet) in height.
- Be labeled per **2156860026 General Standard for Labeling**
- Be received clean, dry, and free from contaminants.
- Be retained on and 13mm (.5 inch) minimum from the pallet edges to eliminate overhanging and to minimize storage and transport damage

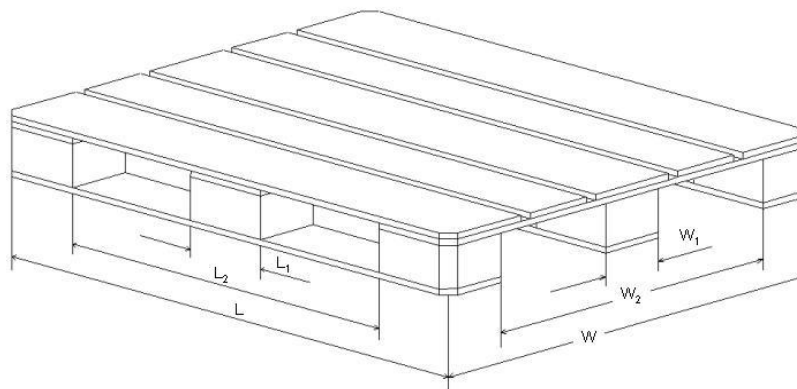
2.2 IMPLEMENTATION

All Molex pallets specified, purchased, or used **shall** conform to this Standard.

Nonstandard pallets should be replaced by Molex worldwide standard pallets and removed from Molex inventory.

2.3 PALLET ILLUSTRATION

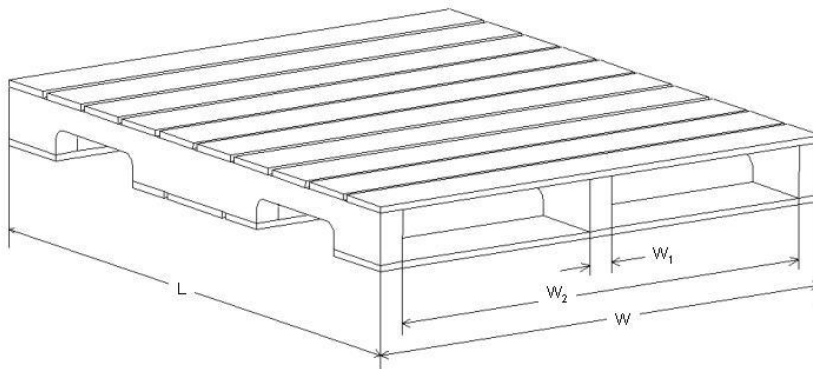
2.3.1 BLOCK STYLE; 4-WAY; NON-REVERSIBLE; UNIDIRECTIONAL BASE



NOTE:

The pallet industry specifies pallet size using a length by width sequence

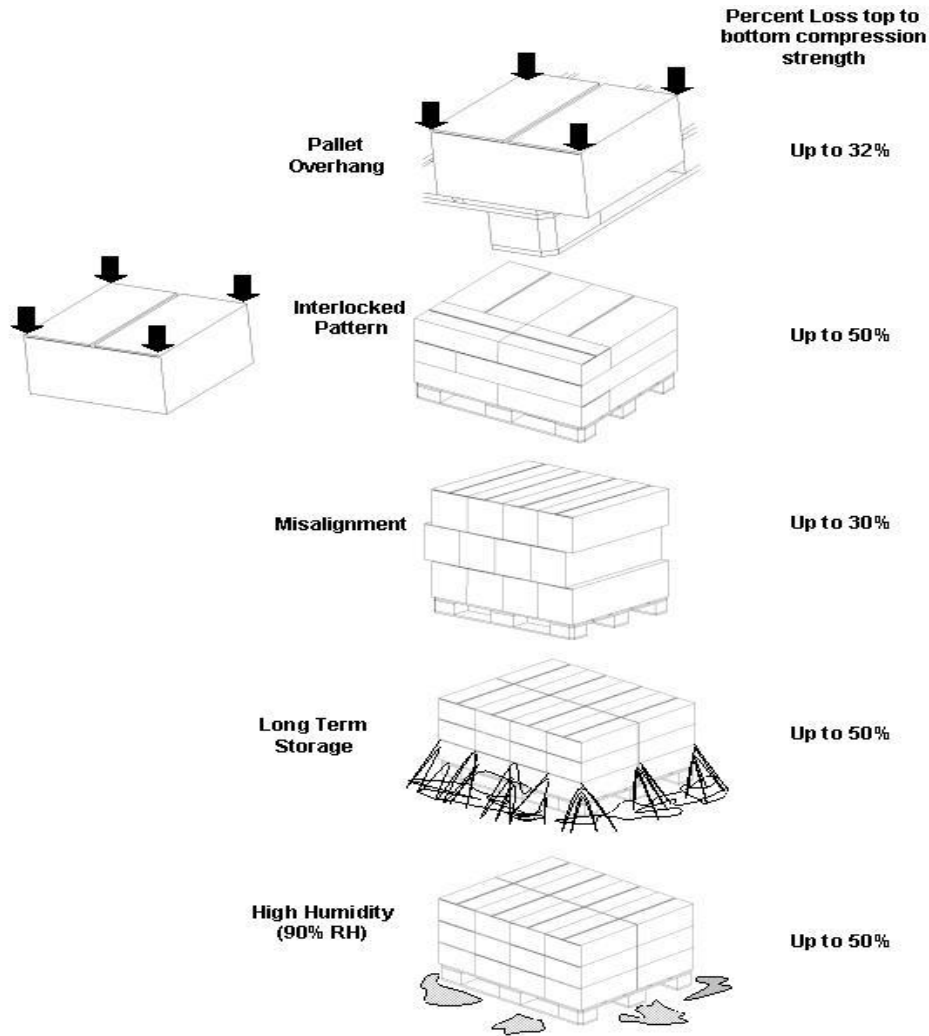
2.3.2 STRINGER STYLE; PARTIAL 4-WAY; NON-REVERSIBLE; UNIDIRECTIONAL BASE



NOTE:

The pallet industry specifies pallet size using a length by width.

2.3.3 PALLETIZED LOADS - LOSS OF TOP TO BOTTOM COMPRESSION STRENGTH



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3.REFERENCES

Document Number	Document Name
AIAG RC-8	Single and Multi-use Container System Guidelines
EIPS 2000	Electronic Industry Pallet Specification
2090580007-ES	Material Number Assignment & Description
2090580023-ES	PE Detail Models and Drawings
2156860002	General Tests for Shipping Units
2156860009	General Standard for Recycling Packaging Material
2156860026	General Standard for Labeling
2156860037	General Standard for SAP Packaging Material Types
ISPM No. 15	International Standards for Phytosanitary Measures
ISO 455	Pallets for material handling - Vocabulary
ISO 3166-1	Codes for representation of names of countries and their subdivisions Part 1: Country Codes
ISO 8611	General-purpose flat pallets for through transit of goods-Test methods
ISO 6780	Flat Pallets for intercontinental materials handling-Principal dimensions and tolerances
ISO 18333	Pallets for materials handling – Quality of new wooden components for flat pallets
ISO 18334	Pallets for materials handling – Quality of assembly of new, wooden, flat pallets
ISO 15629	Pallets for materials handling – Quality of fasteners for assembly of new and repair of used flat, wooden pallets
NWPCA	Uniform Standard for Wood Pallets

4.TERMS AND DEFFINITIONS

4.1 CONFORMANCE GLOSSARY

4.1.1 MAY

A keyword that indicates flexibility of choice with no implied preference. Equivalent to the phrase “is optional”.

4.1.2 SHALL

A keyword that indicates a mandatory requirement. Designers are required to implement all such mandatory requirements to ensure consistency with other products or related standards. Equivalent to the phrase “is required” or “must”.

4.1.3 SHOULD

A keyword that indicates flexibility of choice with a strong preference alternative. Equivalent to the phrase “is recommended”.

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4.2 TECHNICAL GLOSSARY

4.2.1 AUTOMOTIVE INDUSTRY ACTION GROUP (AIAG)

A recognized international trade association for the automotive industry.

4.2.2 BARK FREE WOOD

Wood from which all bark excluding the vascular cambium ingrown bark around knots and bark pockets between rings of annual growth have been removed.

4.2.3 BLOCK

A short column (rectangular, square, or cylindrical) underneath the top deck assembly or between the top and bottom deck assemblies that provides space for the entry of the fork arms of forklift trucks and pallet trucks. Blocks are often identified by their location within the pallet, i.e., corner, end, edge, inner, and center or middle block.

4.2.4 BLOCK PALLET

A type of pallet with blocks between the pallet decks or beneath the top deck.

4.2.5 BOTTOM DECK - UNIDIRECTIONAL

Flat horizontal mass disturbing surface having deck boards in only one direction either length or width.

4.2.6 COVERAGE

Ratio of deck area covered with material to the total deck area.

4.2.7 CHAMFER DECK BOARDS

Deck boards with edges or one or two faces beveled, either along the full or specified length of board or between the stringers or blocks, allowing easier entry by pallet jack wheels.

4.2.8 DECK

Top or bottom load bearing surfaces of a pallet.

4.2.9 DECK BOARD

Element or component of a pallet deck, oriented perpendicular to the stringer or stringboard.

4.2.10 DOUBLE DECK PALLET

Pallet with a top and bottom deck.

4.2.11 EURO PALLET

Block style pallets, 1200 mm x 800 mm length x width dimensions, produced and repaired to detailed specifications, size, materials, fasteners, etc. by licensed manufacturers and marked with the "EUR" logo.

4.2.12 FLUSH DECK

Flat, horizontal load-carrying surface either slatted or solid with deck boards flush with the stringers or blocks along the sides of the pallet.

4.2.13 4-WAY ENTRY PALLET

A stringer/block pallet with fork openings permitting entry of the fork arms of the forklift trucks and pallet trucks from all four directions.

4.2.14 FUMIGATION

A chemical treatment, primarily in a gaseous state, that completely penetrates the material or assembly. One chemical agent used to treat NMWP is Methyl Bromide.

4.2.15 GROCERY MANUFACTURERS OF AMERICA (GMA) PALLET

Pallet 48" x 48" length x width dimensions, commonly used in the United States based on specifications created for the food, beverage, and consumer product companies.

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4.2.16 HEAT TREATMENT

A thermal process where the material or an assembly is submitted to heat over a period until a minimum temperature is reached throughout the material.

4.2.17 INTERNATIONAL PLANT PROTECTION CONVENTION (IPPC)

United Nations Food and Agriculture Organizations providing standards and recommendations to achieve international harmonization of phytosanitary measures with the aim to facilitate trade and avoid the use of unjustifiable measures as a barrier to trade.

4.2.18 INTERNATIONAL STANDARD FOR PHYTOSANITARY MEASURES (ISPM)

Standards to reduce the introduction and or spread of quarantine pests associated with Non-manufactured Wood Packaging Material (NMWP) used in international trade.

4.2.19 IPPC PHYTOSANITARY MARK

An official stamp or brand, internally recognized, applied to a regulated article to certify that the Non-manufactured Wood Packaging Material (NMWP) has been subjected to an approved measure.



4.2.20 MANUFACTURED WOOD PACKAGING MATERIAL (MWPM)

Processed or manufactured wood such as plywood, oriented strand board (OSB), paper overlaid veneer (POV), Masonite and particle board are considered “manufactured wood” because it has been processed under extreme heat and pressure. It is irrelevant what wood species is used in the manufacture of these materials.

4.2.21 MASTER SHIPPING CARTON

A carton used to contain primary cartons or primary packages, often unitized, and shipped on pallets that protect the product from transport and shipping damage.

4.2.22 MOLEXNET

Molex Intranet Website.

4.2.23 NATIONAL PLANT PROTECTION ORGANIZATION (NPPO)

An agency affiliated with the IPPC that has jurisdiction within a given country.

4.2.24 NATIONAL WOOD PALLET AND CONTAINER ASSOCIATION (NWPCA)

United States based organization dedicated to creating cost-effective, environmentally responsible solutions to meet their customers’ changing unit load handling needs.

4.2.25 NON-MANUFACTURED WOOD PACKAGING MATERIAL (NMWP)

Raw lumber with processing limited to one of the following: dimensional cutting, debarking, heat treatments, chemical treatments, and kiln drying.

4.2.26 NON-REVERSABLE PALLET

A double deck flat with only one load carrying surface. The pallet bottom deck board configuration is different from the top deck and therefore should not be inverted for use.

4.2.27 PALLET

A rigid horizontal platform of minimal height compatible with handling by pallet trucks, fork lift trucks and/or other appropriate handling equipment, used as a base for assembling, stacking, storing, handling or transporting goods and loads.

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4.2.28 PALLET CONTAINER

A reusable or disposable carton attached to, or including a pallet, that can be used for consolidation or over packing multiple cartons for shipments to minimize damage.

4.2.29 PALLET HEIGHT

The vertical distance measured from the floor to the top of the pallet.

4.2.30 PALLET JACK

Hand or electric propelled, wheeled platform, equipped with a lifting device for moving palletized unit loads.

4.2.31 PALLET LENGTH

Deck dimensions in the direction of stringers or stringer boards. If these members are not present, the length is the longer dimension. The length is quoted first when designating a pallet size.

4.2.32 PALLET OPENING HEIGHT (FORK OPENING)

The vertical distance measured between decks, or from the floor to the underside of the top deck for pallets without bottom decks, or from the floor to the top of the stringer notch.

4.2.33 PARTIAL 4-WAY ENTRY PALLET

A stringer type pallet with fork openings in the stringers to permit entry of fork arms from two or more directions.

4.2.34 PALLET WIDTH

Pallet dimension perpendicular to the Pallet Length.

4.2.35 PALLETIZED LOAD

A pallet loaded, with packaged products or materials, tightly secured using cord, plastic strapping or stretch wrap.

4.2.36 PHYTOSANITARY MEASURE

Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests.

4.2.37 PHYTOSANITARY PROCEDURE

Any official prescribed method for implementing phytosanitary regulations including the performance of inspections, tests, surveillance, or treatments in connection with regulated pests or insects.

4.2.38 SAP MATERIAL TYPE (HIBE)

SAP material type designations used to classify common operating, plant and maintenance supplies. HIBE type packaging materials are general purpose type pallets.

4.2.39 SAP MATERIAL TYPE (LEER)

SAP material type designations used to classify returnable packaging materials. LEER type packaging materials are returnable customer or Molex supplied pallets.

4.2.40 SAP MATERIAL TYPE (MFPK)

SAP material type designations used to classify packaging materials. MFPK type packaging materials are custom fabricated pallets per customer or industry specifications.

4.2.41 SOLID WOOD PACKAGING MATERIAL (SWPM)

Same as Non-Manufactured Wood Packing (NMWP).

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4.2.42 STACKING HEIGHT

Number of pallets in a stack, including the one on the ground.

4.2.43 STRAP SLOT (BANDING NOTCH)

Recess or cutout on the lower edge of the stringer or the bottom of the top deck board to allow tie-down of a unit load to the pallet deck with strapping or banding.

4.2.44 STRINGER PALLET

A type of pallet with stringers between the pallet decks or beneath the top deck.

4.2.45 STRINGER (RUNNER)

Continuous longitudinal solid or notched beam component of the pallet used to link the blocks and deck boards.

5. QMS DOCUMENTS

5.1 Revision Control

- All controlled QMS documents, including approvals and revision level are stored in the SAP DMS and NetWeaver system.

5.2 Document Review Period

- All global and divisional QMS policies and procedures in SAP DMS should have an established periodic review as defined in SAP field Doc Review Date, as required.

5.3 Process Owner

- All QMS policies and procedures in SAP DMS should have an established process owner, as required.

6.SUMMARY OF CHANGES

Revision	Summary of Changes	Author	Approved	Release Date
A	Initial Release	Ganesh Rao B	Gurunandan GA	08/11/2023
B	Updated content	Aparna S	Gurunandan GA	22/04/2026