

SINGAPORE STANDARD

Specification for timber flat pallets



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Agri-Food & Veterinary Authority of Singapore
Kim San Trading (Kilning) Pte Ltd
LHT Holdings Ltd
NTUC Fairprice Co-operative Ltd
PSA Corporation Ltd
Republic Polytechnic
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Contents

	Page
Foreword _____	4

CLAUSES

1	Scope _____	6
2	Normative references _____	6
3	Definitions _____	6
4	Designation _____	9
5	Requirements _____	10
6	Marking _____	16

ANNEX

A	Explanatory notes on minimum openings in bottom decks of pallets to permit the use of pallet trucks _____	19
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TABLES

1	Minimum acceptable component quality characteristics prior to pallet assembly _____	11
2	Pallet sizes _____	15
3	Performance requirements for tests _____	17

FIGURES

1	Dimensions of flat pallets _____	9
2	Grain slope in pallet stringer _____	11
3	Measurement of slope of grain _____	12
4	Knot in a pallet board _____	12
5	Measurement of bow, spring, twist and cup _____	14
6	Schematic diagram of a bottom deckboard chamfer _____	16
A.1	Minimum openings for pallet truck wheels in bottom deck of 2-way and 4-way 800 mm x 1200 mm pallets _____	19
A.2	Minimum openings for pallet truck wheels in bottom deck of 2-way and 4-way 1000 mm x 1200 mm pallets _____	20
A.3	Minimum openings for pallet truck wheels in bottom deck of 2-way and 4-way 1100 mm x 1100 mm pallets _____	20
A.4	Minimum openings for pallet truck wheels in bottom deck of 2-way and 4-way 1100 mm x 1400 mm pallets _____	21
A.5	Minimum openings for pallet truck wheels in bottom deck of 2-way and 4-way 1200 mm x 1200 mm pallets _____	22
A.6	Minimum openings for pallet truck wheels in bottom deck of 2-way and 4-way 1200 mm x 1800 mm pallets _____	23

Foreword

This Singapore Standard was prepared by a Working Group appointed by the Special Technical Committee for Supply Chain Management. It is a revision of SS 334 : 1998.

This revision brings the standard up-to-date and makes it more comprehensive by incorporating recommendations in the ISO Standards listed below. It is intended to guide industry and other users on pallet sizes and acceptable quality levels.

In preparing this standard, reference was made to the following publications:

- | | | |
|----|----------------------|---|
| 1. | ISO 445 : 2008 | Pallets for materials handling – Vocabulary |
| 2. | ISO 6780 : 2003 | Flat pallets for intercontinental materials handling – Principal dimensions and tolerances |
| 3. | ISO 8611-1 : 2004 | Pallets for material handling – Flat pallets – Part 1 : Test methods |
| 4. | ISO/TR 8611-2 : 2005 | Pallets for material handling – Flat pallets – Part 2 : Performance requirements and selection of tests |
| 5. | ISO/TR 8611-3 : 2005 | Pallets for material handling – Flat pallets – Part 3 : Maximum working loads |
| 6. | ISO TR 11444 : 1995 | Quality of sawn wood used for the construction of pallets |
| 7. | ISO 18333 : 2002 | Pallets for materials handling – Quality of new wooden components for flat pallets |
| 8. | ISO 18334 : 2003 | Pallets for materials handling – Quality of assembly of new, wooden, flat pallets |

Acknowledgement is made for the use of information from the above publications.

To improve the control of manufacture/repair and the visibility of the pallets in the supply chain in real time with clear authentication and to give users a valuable tool to manage flow, quality and ownership of the pallets, a radio-frequency identification (RFID) tag is used to uniquely identify each pallet. The RFID tag is based on ISO/IEC 18000-6C/GS1-EPCglobal standard air interface protocol and the GS1 key SSCC (Serialised Shipping Container Code) consisting of the country code, an electronic product code (EPC) manager number and a serial number (refer to Annex ZC2 of SS 362 : Part 2 : 2004).

ISO/IEC 18000-6C defines the communication protocol used in air interface for RFID devices operating in the 860 MHz to 960 MHz Industrial, Scientific and Medical (ISM) band used in item management applications. The EPC stored in the RFID tag is a unique number that identifies a specific item in the supply chain.

More information about EPC, EPCglobal Network and GSI EPCglobal Standards is available at the following websites:

<http://www.gs1.org.sg>,
<http://www.epcglobalinc.org> and
<http://www.gs1.org>.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.*
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Specification for timber flat pallets

1 Scope

This standard specifies the principal dimensions and tolerances of newly constructed flat timber pallets of single-deck, double-deck, reversible and non-reversible of all entry types, relating to their transportation, storage, and handling by appropriate equipment. It also specifies performance requirements and testing methods.

This standard also recommends the treatment required under the International Standards for Phytosanitary Measures (ISPM15) and storage thereafter.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 4978 : 2007, *Specification for visual strength grading of softwood*

EN 1310 : 1997, *Round and sawn timber – Methods of measurement of features*

International Standards for Phytosanitary Measures 15, 2002 – *Guidelines for regulating wood packaging materials in international trade*

ISO 445 : 2008, *Pallets for materials handling – Vocabulary*

ISO 18333 : 2002, *Pallets for materials handling – Quality of new wooden components for flat pallets*

SS CP 7 : 1997, *Structural use of timber*

SS 72 : 1988, *Treatment of timber and plywood with copper/chrome/arsenic wood preservatives*