

SRI LANKA STANDARD 422 : 1992

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SPECIFICATION FOR
**GLOSSARY OF TERMS FOR
PALLETS FOR MATERIALS HANDLING**
(FIRST REVISION)

GLOSSARY OF TERMS FOR PALLETS FOR MATERIALS HANDLING
(FIRST REVISION)

SLS 422 : 1992
ISO 445 : 1984

Gr. 11

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SRI LANKA STANDARDS INSTITUTION
53, Dharmapala Mawatha,
Colombo 3,
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SRI LANKA STANDARDS INSTITUTION

23, Galle Road, Colombo 3

Colombo 3

Sri Lanka

SRI LANKA STANDARD
GLOSSARY OF TERMS FOR PALLETS FOR MATERIALS HANDLING
(FIRST REVISION)

NATIONAL FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1992-07-29.

This standard is identical with ISO 445 : 1984 Pallets for materials handling - Vocabulary, published by the International Organization for Standardization. This standard was first issued in 1977 as Sri Lanka Standard on vocabulary of terms relating to pallets which was technically identical to ISO Recommendation R 445 : 1965.

In this revision the English text of the International standard has been accepted as suitable for publication, without deviation, as a Sri Lanka Standard. However, wherever the words "International Standard" appear referring to this standard, they should be interpreted as "Sri Lanka Standard".

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75% approval by the member bodies voting.

International Standard ISO 445 was prepared by Technical Committee ISO/TC 51, Pallets for unit load method of materials handling.

It cancels and replaces ISO Recommendation R 445-1965, of which it constitutes a technical revision.

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PALLETS FOR MATERIALS HANDLING - VOCABULARY

1 Scope and field of application

This International Standard defines terms relating to pallets for unit load methods of materials handling.

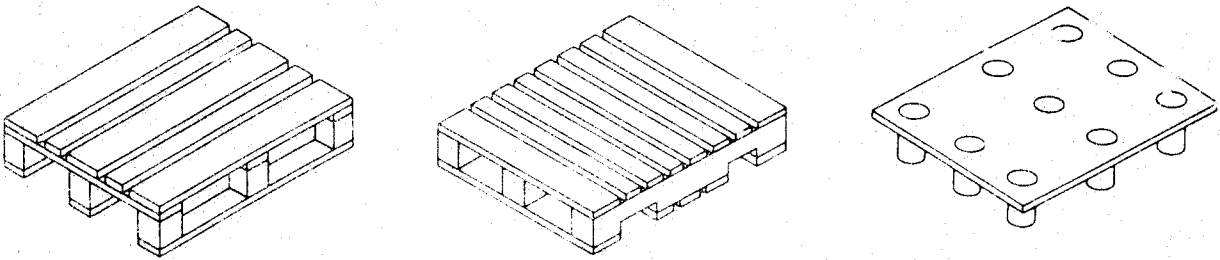
2 General

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

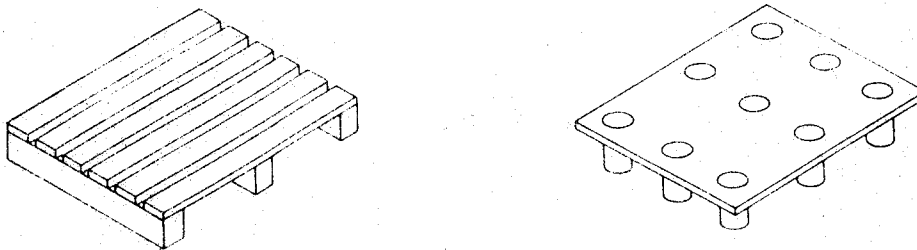
It may be constructed with, or fitted with, a superstructure.

3 Pallet types

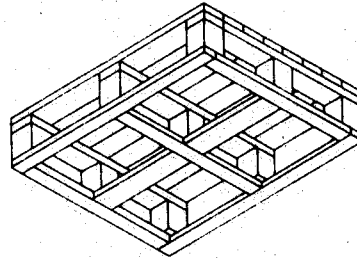
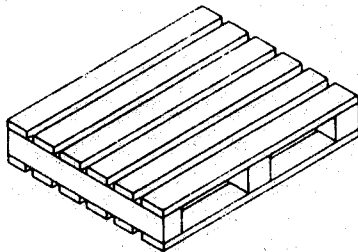
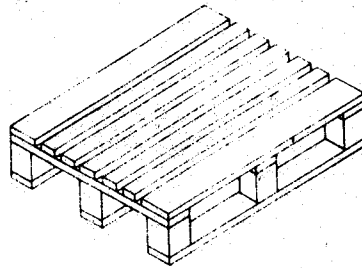
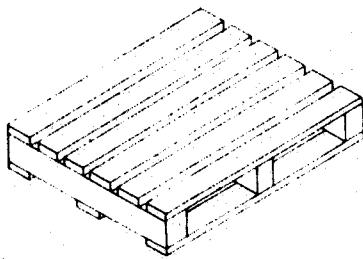
3.1 **flat pallet** : Pallet without super-structure.



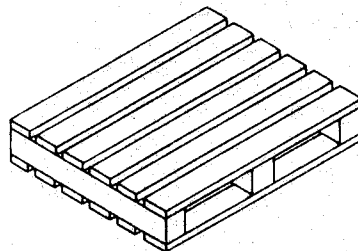
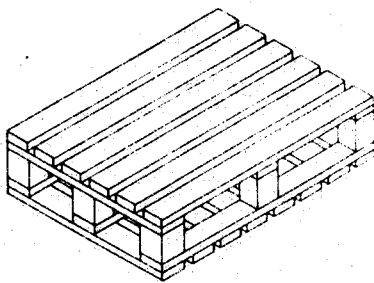
3.1.1 **single-deck pallet** : Flat pallet with only one deck.



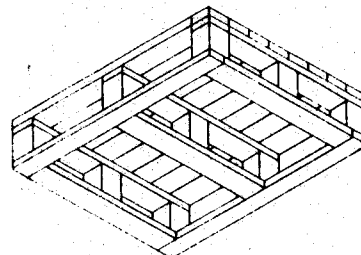
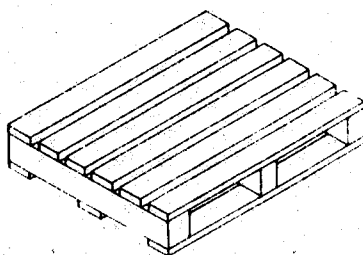
3.1.2 *double-deck pallet* : Flat pallet with a top and a bottom deck.



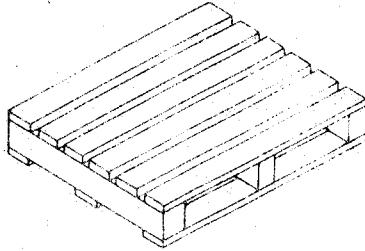
3.1.2.1 *reversible pallet* : Double-deck flat pallet with similar top and bottom decks, either of which can take the same load.



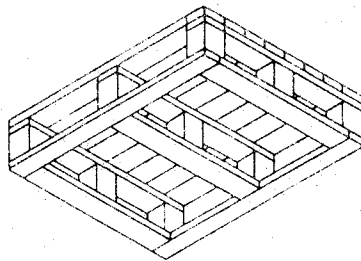
3.1.2.2 *non-reversible pallet* : Double-deck flat pallet with only one load-carrying surface.



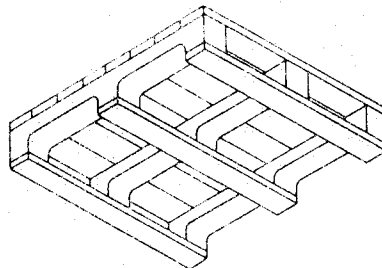
3.2 **two-way pallet** : Pallet permitting the entry of fork lift forks or pallet truck fingers from two opposite directions only.



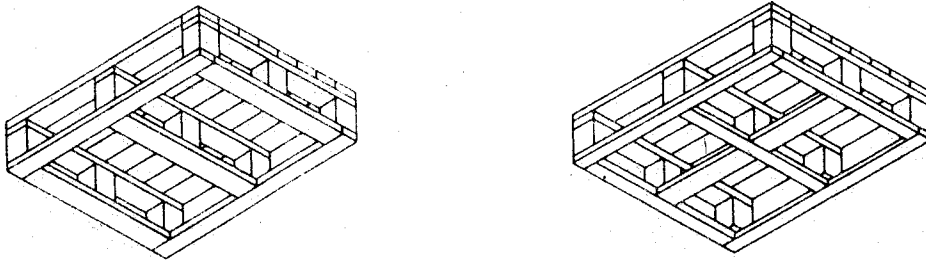
3.3 **four-way pallet** : Pallet permitting the entry of fork lift forks or pallet truck fingers from all four directions.



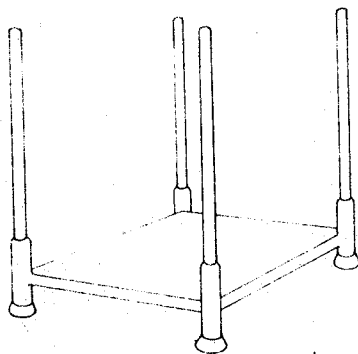
3.3.1 **partial four-way pallet** : Pallet permitting four-way entry of fork lift forks and two-way entry of pallet truck fingers.



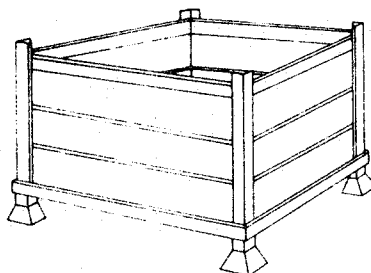
3.4 full perimeter base pallet : Pallet which has the outer bottom deckboards arranged as a complete frame and with one or two centre boards. All boards are in the same plane.



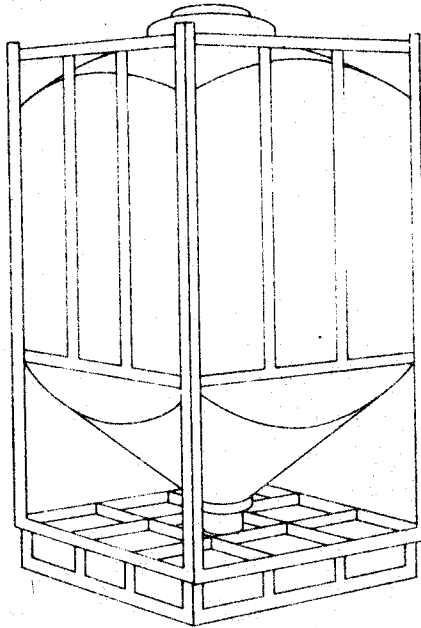
3.5 post pallet : Pallet having a fixed or detachable superstructure of posts to permit stacking, either with or without rails or sides.



3.6 box pallet : Pallet, with or without a lid, having a superstructure of at least three fixed, removable or collapsible vertical sides, solid, slatted or mesh, which generally permits stacking.

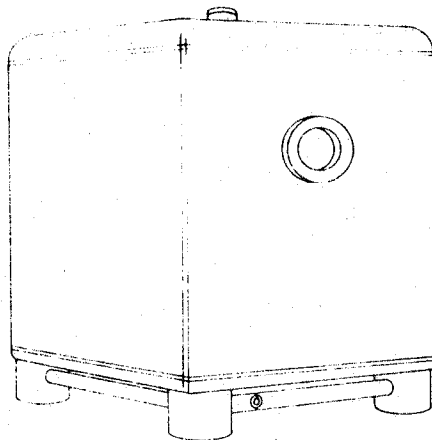


3.6.1 *silopallet 1)* : Sealed four-sided box pallet fitted with a sealable lid and an emptying device in the base. Commonly used for carrying dry powders or granules,



1) This type may also be called "intermediate bulk container".

3.6.2 *tank pallet 1)* : Sealed four-sided box pallet, fitted with a sealable lid, which can be emptied by a tap fitted to the base or by aspiration through the top opening. Commonly used for carrying liquids and gases.



1) This type may also be called "inter-mediate bulk container".

4 Pallet usage

4.1 **disposable pallet** : Pallet intended to be discarded after a single cycle of use.

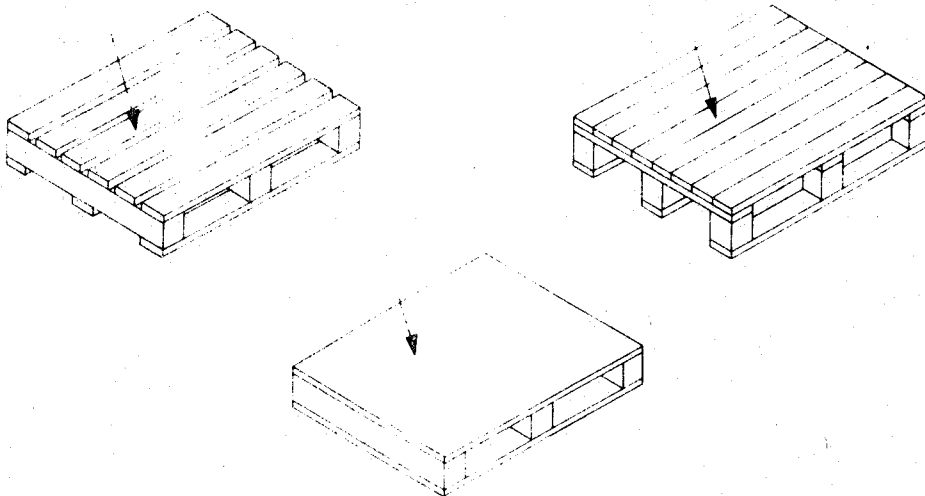
4.2 **reusable pallet** : Pallet intended for multiple cycles of use.

4.3 **captive pallet** : Pallet whose use cycle remains within a single firm or a closed distribution system.

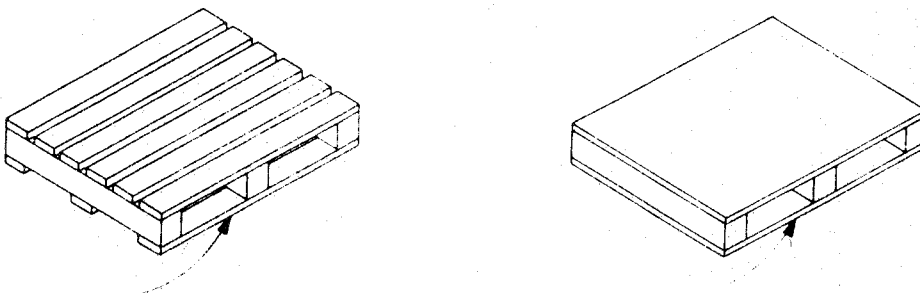
4.4 **exchange pallet** : Pallet which can be replaced by a like pallet on the basis of mutual agreement.

5 Pallet components and features

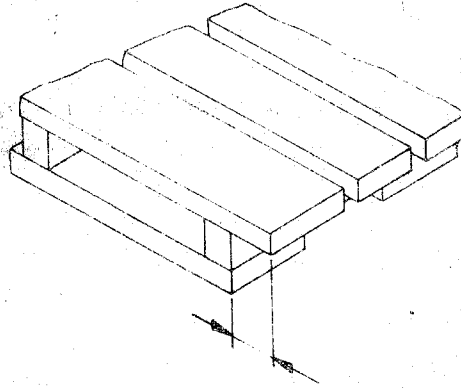
5.1 **top deck** : Flat, horizontal load-carrying surface, either slatted or solid.



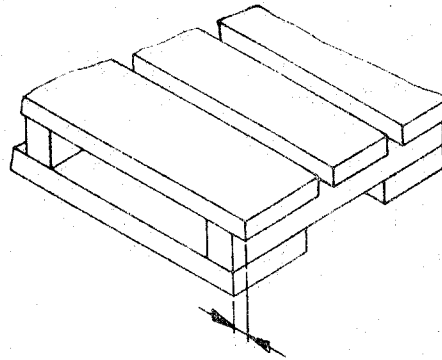
5.2 **bottom deck** : Flat, horizontal mass-distributing surface, either slatted or solid.



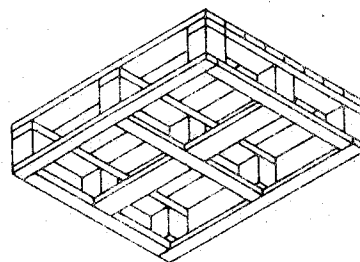
5.3 **wing** : Portion of a deck or decks, which projects beyond the stringers (bearers) or blocks, designed for lifting by crane attachment.



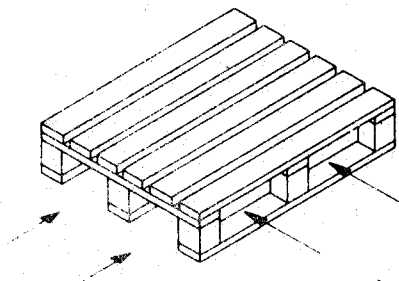
5.4 **lip** : Projection of the top deck intended for load retention purposes. Not intended to be used for lifting.



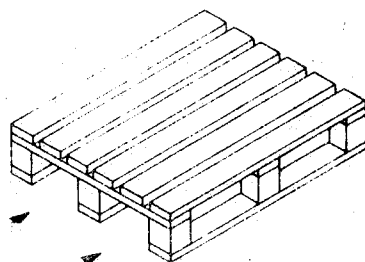
5.5 **opening** : Aperture provided in the bottom deck of a double-deck pallet to allow the finger-wheel(s) of a pallet truck to bear on the ground.



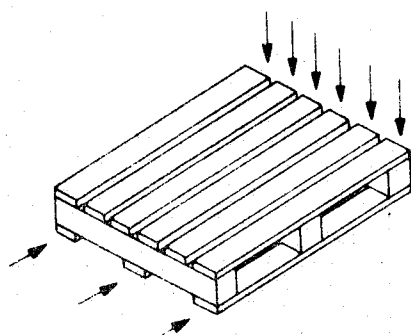
5.6 entry : Side aperture provided to permit the passage of the lifting devices of handling equipment.



5.6.1 free entry ; Entry through which the finger-wheels of a pallet truck can pass without leaving the ground.

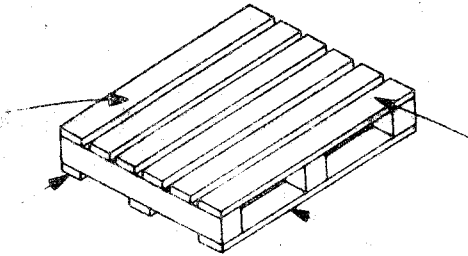


5.7 deckboard : Individual member of a top or bottom deck.



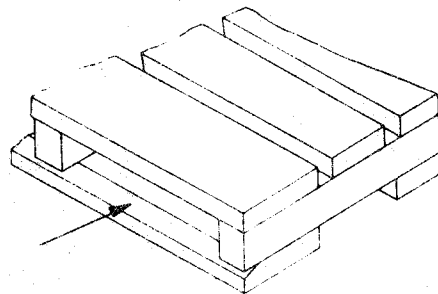
Bottom deckboards

5.7.1 *lead board* : Deckboard located at the edge of the pallet.

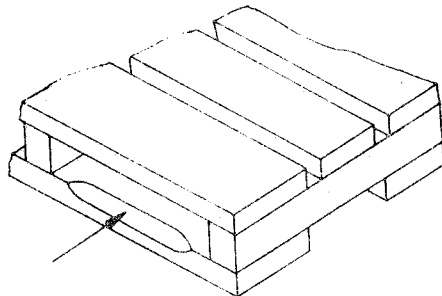


5.8 *chamfer* : Bevel on the top edges of the bottom deck or bottom boards to facilitate the passage of finger-wheels of a pallet truck. It may also be applied to the bottom edges of the top deck.

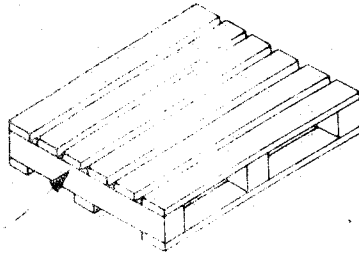
5.8.1 *continuous chamfer* : Bevel along the complete length of a board.



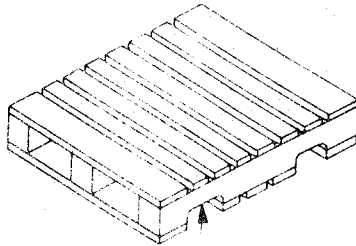
5.8.2 *stop chamfer* : Bevel of limited length.



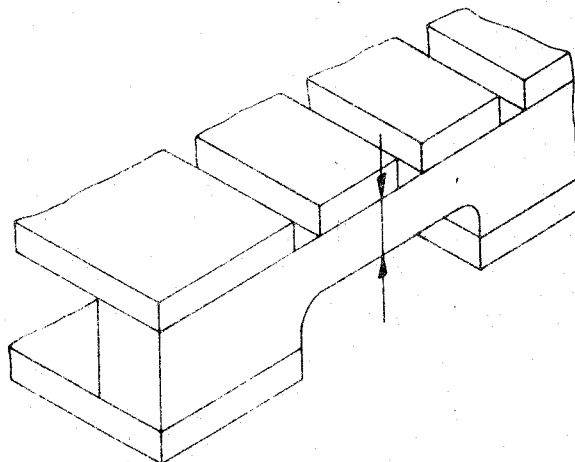
5.9 **stringer; bearer** : Continuous longitudinal member underneath the top deck or between the top and bottom decks, which provides space for the entry of fork lift forks and pallet truck fingers.



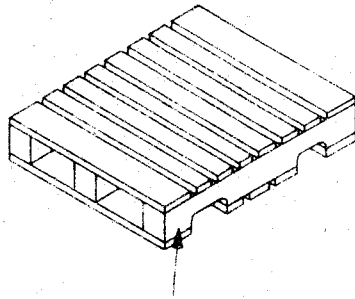
5.9.1 **notch** : Cut-out in the lower part of a stringer (bearer), providing fork entry at right angles to the stringer (bearer).



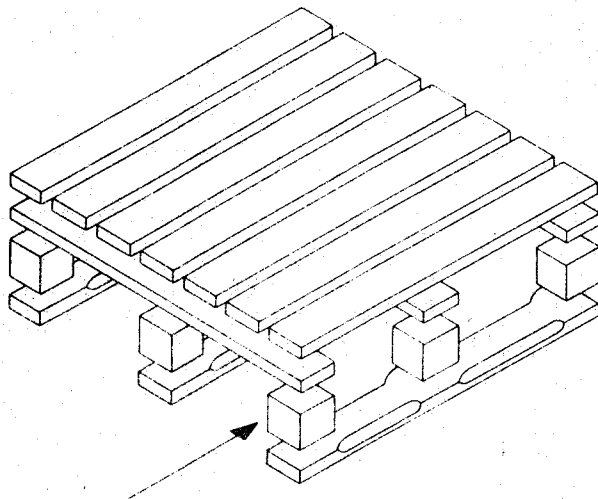
5.9.2 **stringer chord depth; bearer chord depth** : Distance between the uppermost point of the notch and the top of the stringer (bearer).



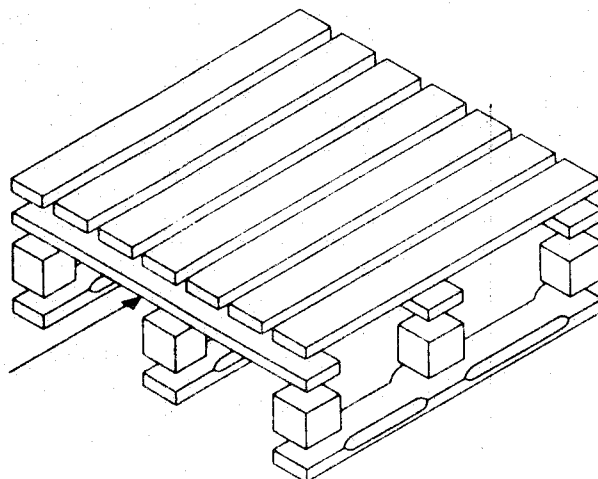
5.9.3 stringer foot; bearer foot : Short bottom part of notched stringer (bearer) between notches and stringer (bearer) ends.



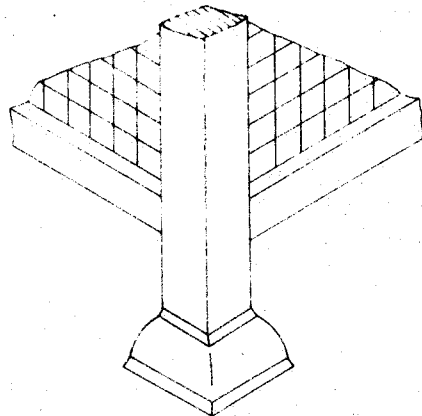
5.10 block : Short column (commonly rectangular or circular in section) underneath the top deck assembly or between the top and bottom deck assemblies which provides space for the entry of fork lift forks and pallet truck fingers.



5.11 stringerboard : Horizontal member linking the blocks and deck boards.

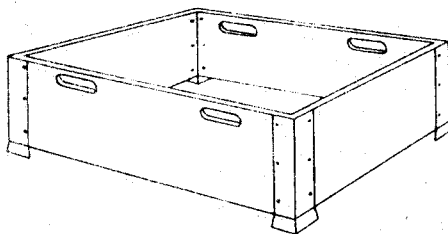


5.12 foot : Locating device fitted to the base of box or post pallets to facilitate stacking.

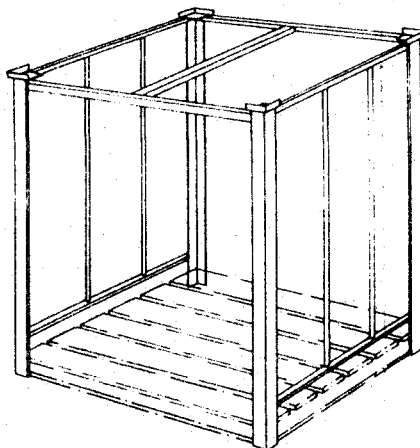


6 Pallet fittings

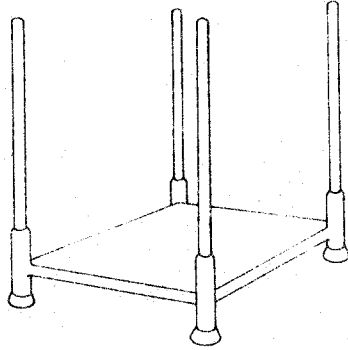
6.1 collar : Detachable frame with solid, slatted or mesh sides, which may be fitted to a pallet or to another collar to retain the load.



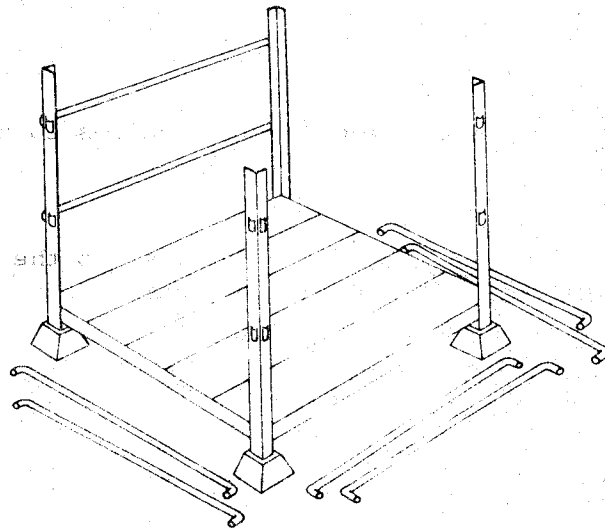
6.2 pallet convertor : Superstructure which can be applied to a pallet to convert it into either a box or post pallet.



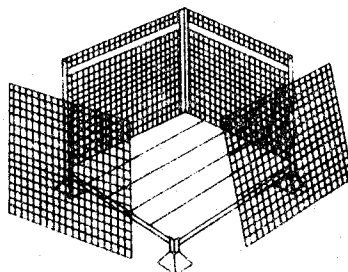
6.3 **post** : Member, either fixed or detachable, positioned vertically on a pallet to take the weight of superimposed pallets.



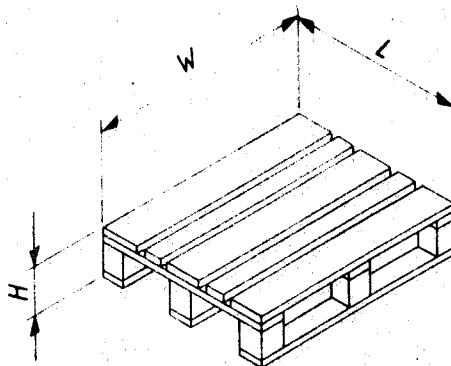
6.4 **rail** : Fixed or removable horizontal member of post pallet, connected to posts.



6.5 **removable wall** : Vertical side, slatted or mesh, placed on the pallet to secure the load on two or more sides.



7 Dimensions of flat pallets



7.1 length : Deck dimension in direction of stringers (bearers) or stringer-boards. If these members are not present, the length is the longer dimension. (See L in the figure.)

NOTE - The length dimension is quoted first when designating the pallet size.

7.2 width : Deck dimension at right angles to the length. (See W in the figure.)

7.3 height : Overall dimension vertical to the horizontal plane of the length/width axes. (See H in the figure.)

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Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.



SRI LANKA STANDARDS INSTITUTION

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The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.