INTERNATIONAL STANDARD

ISO 3394

Third edition
2012-11-01

Packaging — Complete, filled transport packages and unit loads — Dimensions of rigid rectangular packages

Emballages — Emballages d'expédition complets et pleins et charges unitaires — Dimensions des emballages rectangulaires rigides

Reference number
ISO 3394:2012(E)

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 3394 was prepared by Technical Committee ISO/TC 122, *Packaging*

This third edition cancels and replaces the second edition (ISO 3394:1984), which has been technically revised.

Packaging — Complete, filled transport packages and unit loads — Dimensions of rigid rectangular packages

1 Scope

This International Standard sets forth a series of dimensions for rigid rectangular transport packages, based on the standard plan dimension (module) of 600 mm × 400 mm, 600 mm × 500 mm and 550 mm × 366 mm, as outlined in ISO 3676, which defines the plan dimensions of four series (1 219 mm × 1 016 mm, 1 200 mm × 1 000 mm, 1 200 mm × 800 mm, 1 100 mm × 1 100 mm).

2 Normative references

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

ISO 21067, *Packaging — Vocabulary*

ISO 6780:2003, *Flat pallets for intercontinental materials handling — Principal dimensions and tolerances*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21067 and the following apply.

3.1
plan dimensions
dimensions of the rectangle defined on a horizontal surface by the four vertical planes intersecting at right angles which enclose a transport package freestanding on that surface

NOTE See Figure 1.

3.2
load bulge
swelling of the freight which is caused by filling, both static and dynamic compression, deterioration and rough stacking, and is affected by transport packaging materials, characteristics of contents, method of filling/stuffing, duration of storage, humidity and temperature conditions, and condition of transportation, etc.

4 Principle

The effective outside dimensions (length and width) of transport packages shall be obtained by multiplying or dividing the standard plan dimension by an integer.

5 Plan dimensions

Examples of plan dimensions calculated following the principles of Clause 4 are set forth in Table 1 and in Figures 2 and 3.Pallet dimensions shall conform to 4.1.1 and 4.1.2 of ISO 6780:2003.

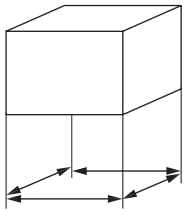


Figure 1 — Plan dimensions

Table 1 — Dimension of transport packages

Dimensions in millimetres

Module				
600 × 400		600 × 500		550 × 366
Recommended pallet sizes for each module				
1 200 × 800	1 219 × 1 016	1 219 × 1 016	1100 × 1100	1 100 × 1 100
	1 200 × 1 000	1 200 × 1 000		
Multiples				
1 200 × 800	1 200 × 1 000	1 200 × 1 000	1 100 × 1 100	1 100 × 1 100
1 200 × 400		1 200 × 500		1 100 × 550
800 × 600		1 000 × 600		1 100 × 366
Submultiples				
600×400		600×500		550×366
300×400		300×500		275×366
200×400		200×500		183×366
150×400		150×500		137×366
120×400		600×250		110×366
600×200		300×250		550×183
300×200		200×250		275×183
200×200		150×250		183×183
150×200		600×166		137×183
120×200		300×166		110×183
600×133		200×166		550×122
300×133		150×166		275×122
200×133		600×125		183×122
150×133		300×125		137×122
120×133		200×125		110×122
600×100		150×125		#
300×100		#		#
200×100		#		#

NOTE 1 The multiples and submultiples are examples calculated from the module 600 mm × 400 mm, 600 mm × 500 mm and 550 mm × 366 mm.

NOTE 2 Sizes below 110 mm x 122 mm are not recommended, as they are too small and of little practical use.

NOTE 3 Transport unit configurations shown in this table, Figure 2, Figure 3 and Figure 4 are illustrative only. Other transport unit configurations which are approved as rigid rectangular packages are available.

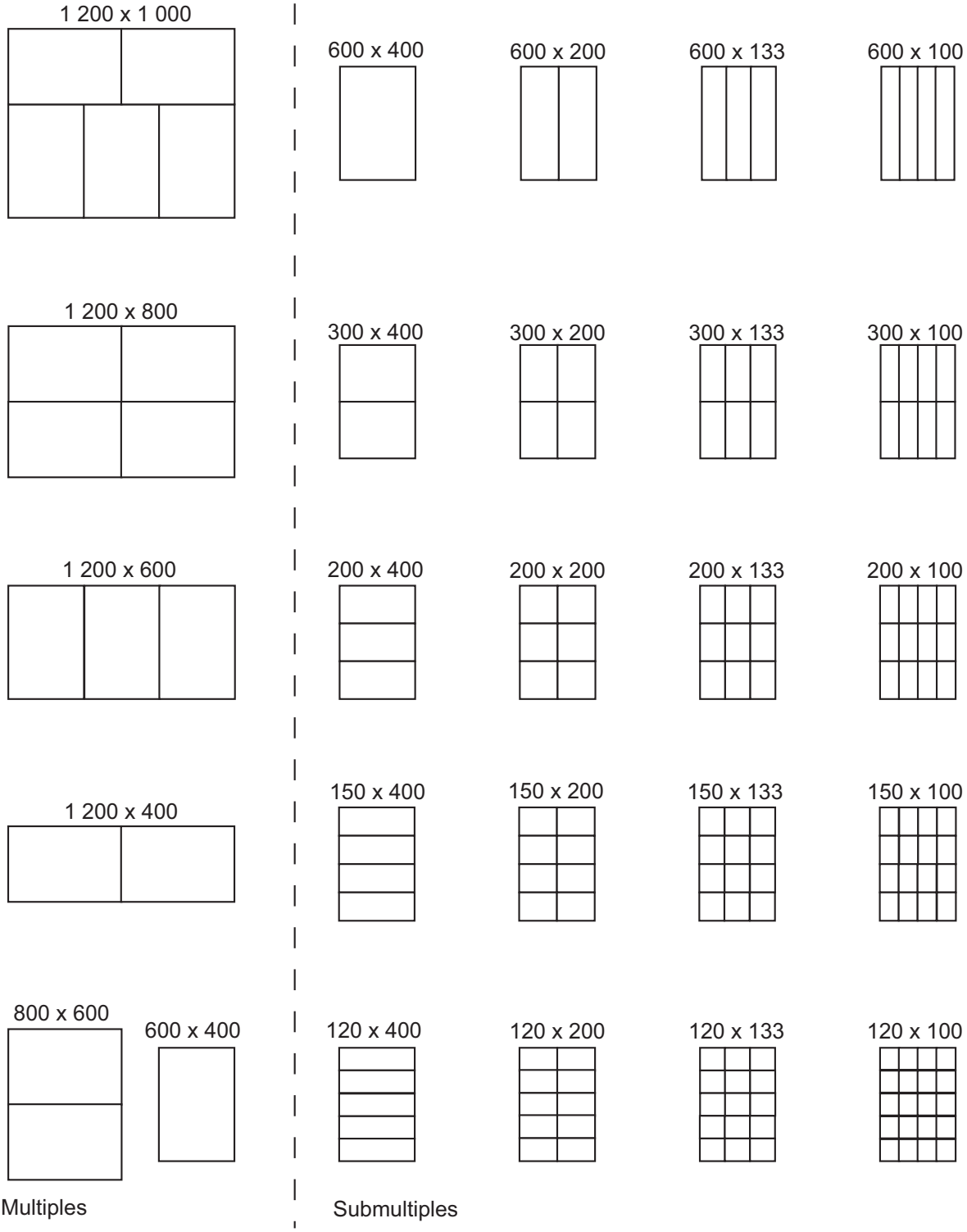
Table 1 *(continued)*

Module		
150×100	#	#
120×100	#	#

NOTE 1 The multiples and submultiples are examples calculated from the module 600 mm × 400 mm, 600 mm × 500 mm and 550 mm × 366 mm.

NOTE 2 Sizes below 110 mm x 122 mm are not recommended, as they are too small and of little practical use.

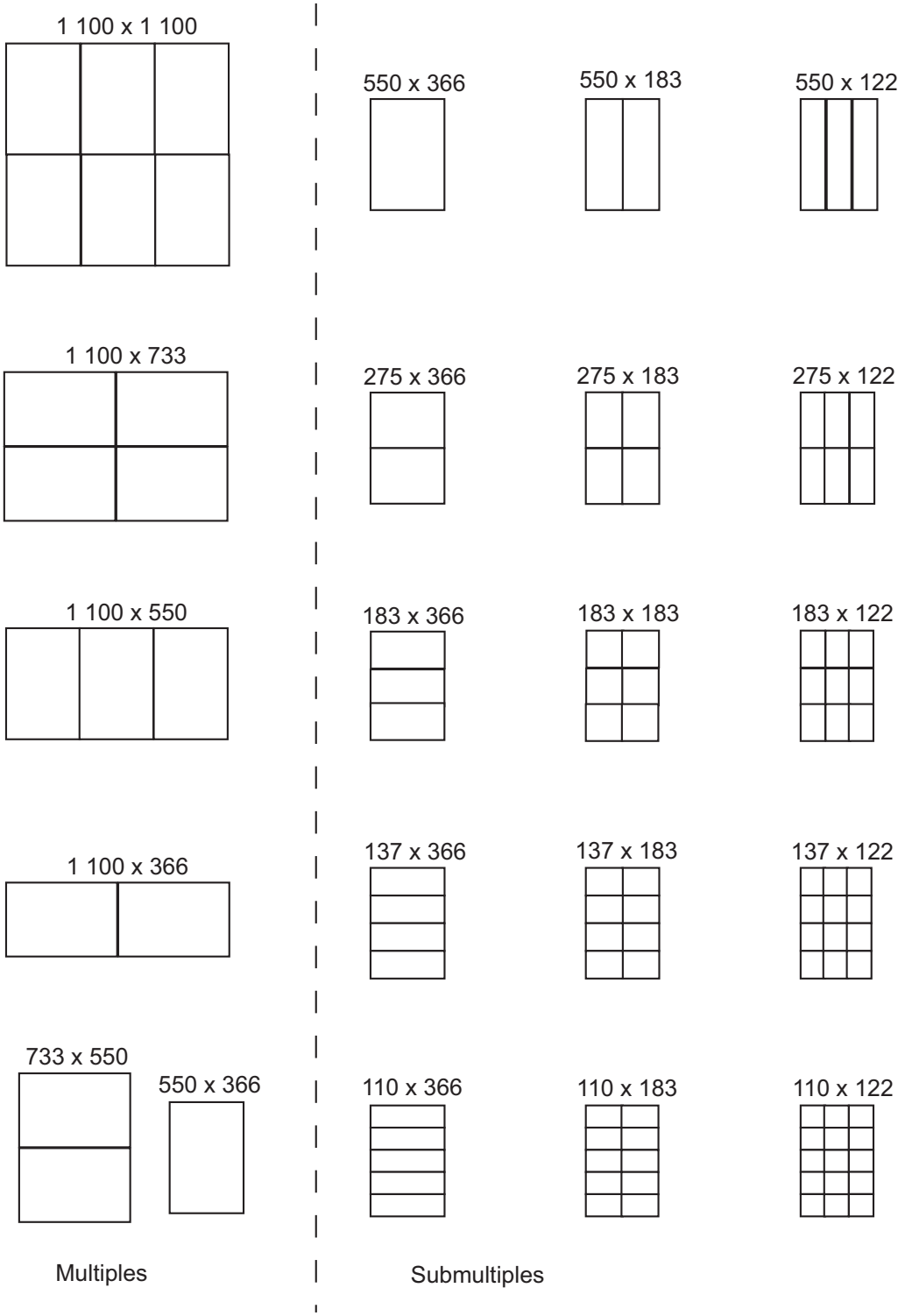
NOTE 3 Transport unit configurations shown in this table, Figure 2, Figure 3 and Figure 4 are illustrative only. Other transport unit configurations which are approved as rigid rectangular packages are available.



NOTE 1 Pallets with the dimensions of 1 219 × 1 016 mm will support the same pallet patterns.

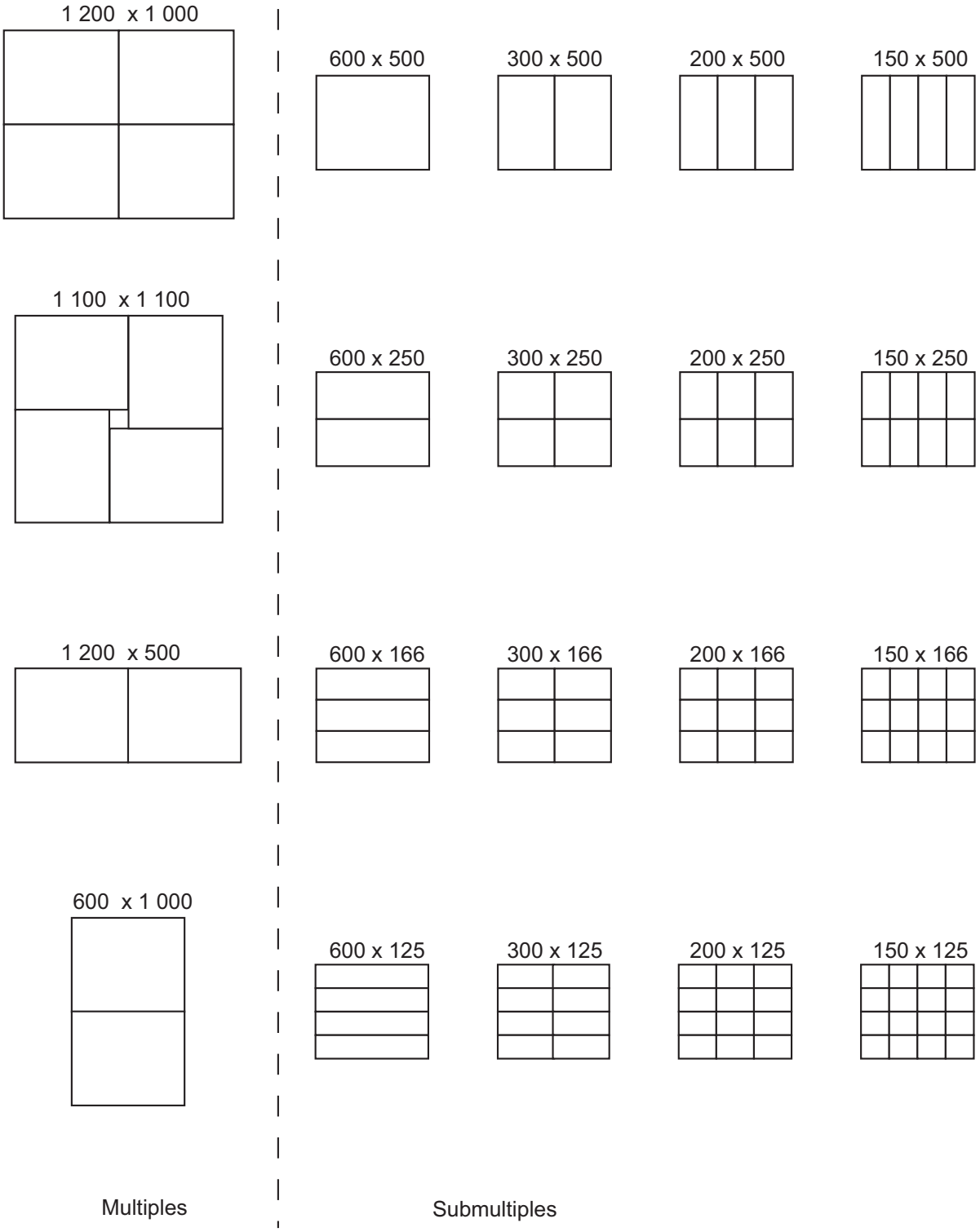
NOTE 2 Dimensions in millimetres.

Figure 2 — Example of combination multiples and submultiples for 1 200 mm × 1 000 mm



NOTE Dimensions in millimetres.

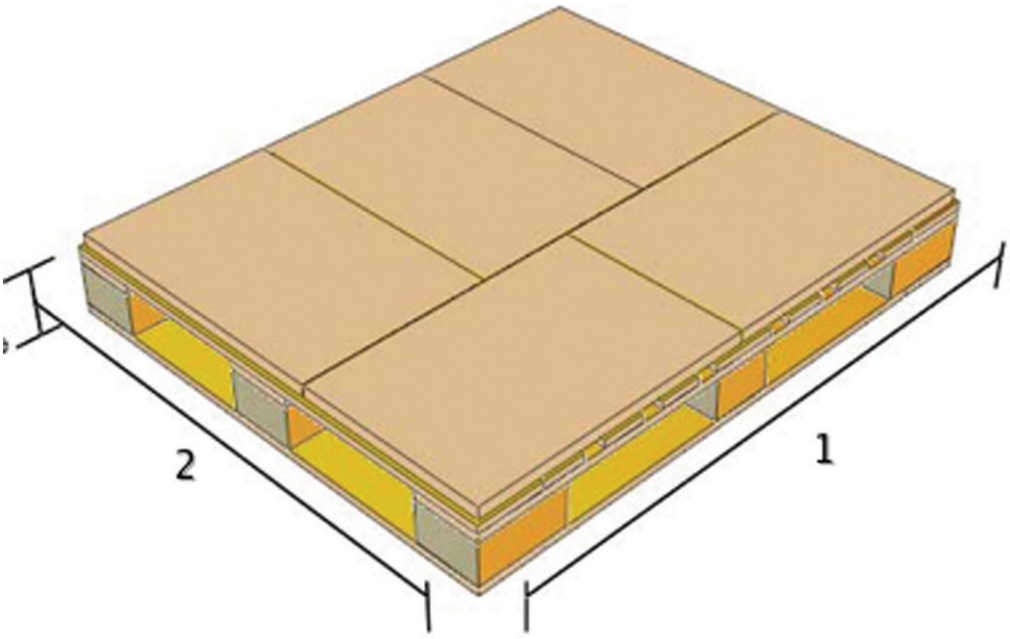
Figure 3 — Example of combination multiples and submultiples for 1 100 mm × 1 100 mm



NOTE 1 Pallets with the dimension s of 1 219 mm × 1 016 mm will support the same pallet patterns.

NOTE 2 Dimensions in millimetres.

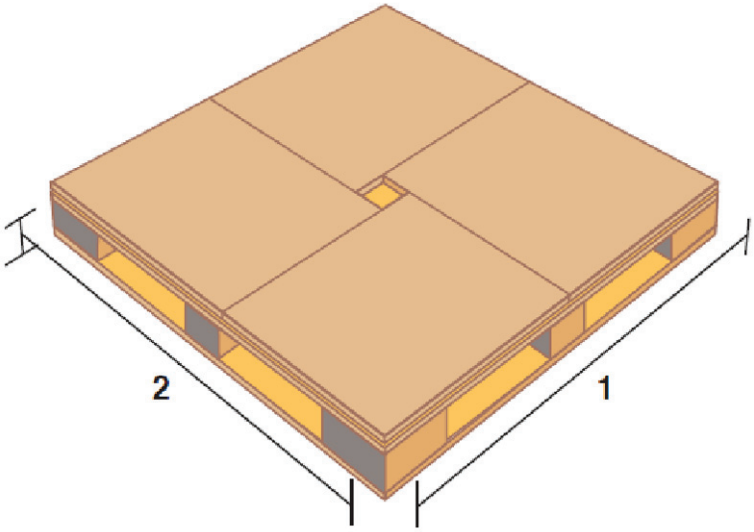
Figure 4 — Example of 600 mm × 500 mm multiples and submultiples for a 1 200mm × 1 000 mm pallet and 1 100 mm × 1 100 mm pallet



Key

1 1 200 mm or 1 219 mm
2 1 000 mm or 1 016 mm

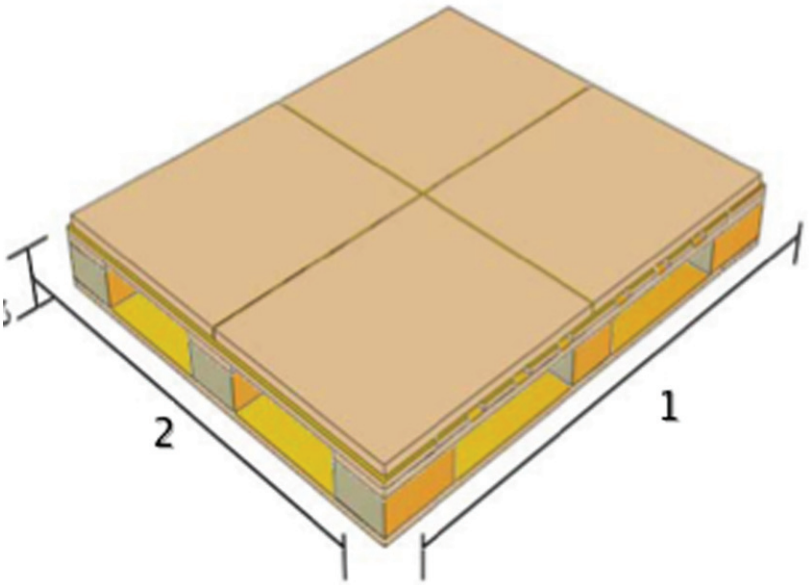
Figure 5 — Example of 600 mm × 400 mm multiple for a 1 200 mm × 1 000 mm or 1 219 mm × 1 016 mm pallet



Key

1 1 100 mm
2 1 100 mm

Figure 6 — Example of 600 mm × 500 mm multiple for a 1 100 mm × 1 100 mm pallet



Key

1 1 200 mm or 1 219 mm
2 1 000 mm or 1 016 mm

Figure 7 — Example of 600 mm × 500 mm multiple for a 1 200 mm × 1 000 mm or 1 219 mm × 1 016 mm pallet

6 Height

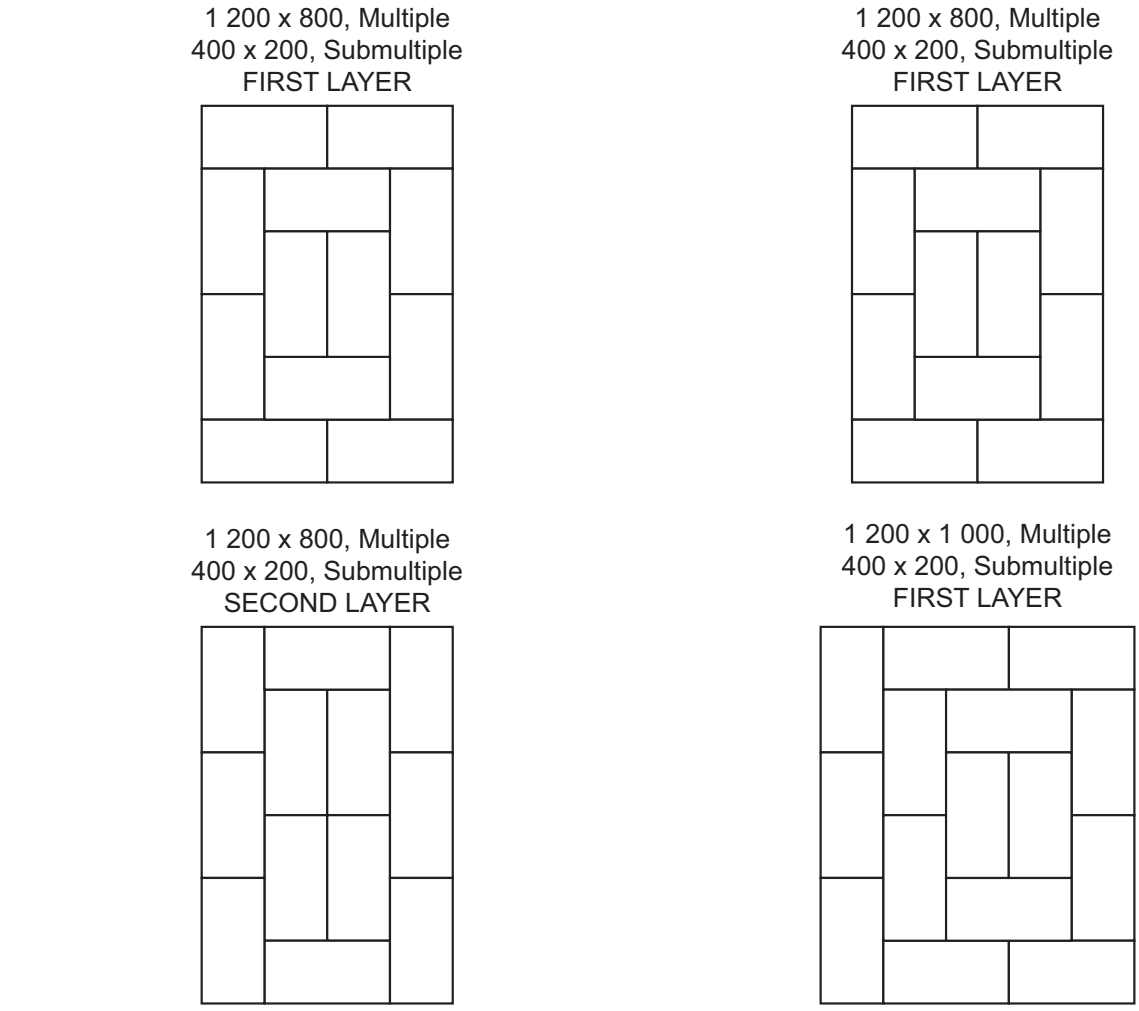
The height of the transport packages shall be left to the discretion of the user.

7 Tolerances

The plan dimensions and all the derived dimensions are maximum dimensions for filled transport packages.

Annex A
(informative)

Examples of combination multiples and submultiples, arranged to interlock



NOTE Dimensions in millimetres.

Figure A.1 — Examples of combination multiples and submultiples arranged to interlock

Bibliography

[1] ISO 3676, *Packaging — Complete, filled transport packages and unit loads — Unit load dimensions*

ICS 55.020

Price based on 10 pages