

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 198

DOUBLE-DECK FLAT PALLETS
FOR THROUGH TRANSIT OF GOODS
(standards.iteh.ai)

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1st EDITION
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BRIEF HISTORY

The ISO Recommendation R 198, *Double-Deck Flat Pallets for through Transit of Goods*, was drawn up by Technical Committee ISO/TC 51, *Pallets for Unit Load Method of Materials Handling*, the Secretariat of which is held by the British Standards Institution (B.S.I.).

Work on this question by the Technical Committee began in 1952 and led, in 1954, to the adoption of a first Draft ISO Recommendation, dealing with two pallet sizes. This first Draft ISO Recommendation (No. 42) was circulated, in May 1954, to all the ISO Member Bodies for enquiry.

However, during its third meeting, held in Stockholm in June 1955, the Technical Committee decided to complete the Draft so as to include a third pallet size, as well as the specifications concerning the construction details of the pallets in question. In November 1959, the Draft thus completed was circulated to all the ISO Member Bodies as a Second Draft ISO Recommendation (No. 42) and was approved, subject to some editorial amendments, by the following Member Bodies:

ISO/R 198:1961		
Austria	Ireland	Romania
Belgium	Italy	Spain
Chile	Netherlands	Sweden
Czechoslovakia	New Zealand	Switzerland
Denmark	Norway	United Kingdom
France	Poland	U.S.S.R.
Greece	Portugal	

One Member Body opposed the approval of the Draft: Germany.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in May 1961, to accept it as an ISO RECOMMENDATION.

DOUBLE-DECK FLAT PALLETS FOR THROUGH TRANSIT OF GOODS

Throughout this ISO Recommendation, dimensions are given both in inches and in millimetres. The dimensions in millimetres and in inches are considered to be "corresponding values", although some of these are not exactly equivalent.

- The nominal sizes of flat pallets for general purposes are as follows:

TABLE I.—Nominal sizes

Inches	Millimetres
32 × 48	800 × 1200
40 × 48	1000 × 1200
32 × 40	800 × 1000

- The actual overall sizes of the decks of these pallets, which are equal to the nominal sizes given under clause 1, and their tolerances are indicated in Table II below:

TABLE II.—Actual overall sizes

Nominal dimensions of the pallets		Actual length <i>L</i>		Actual width <i>B</i>	
in	mm	in	mm	in	mm
32 × 48	800 × 1200	48 ⁰ _{−3/4}	1200 ⁺²⁰ ₀	32 ⁰ _{−1/2}	800 ⁺¹⁵ ₀
40 × 48	1000 × 1200	48 ⁺²⁰ _{−3/4}	1200 ⁺²⁰ ₀	40 ⁰ _{−5/8}	1000 ⁺¹⁶ ₀
32 × 40	800 × 1000	40 ⁰ _{−5/8}	1000 ⁺¹⁶ ₀	32 ⁰ _{−1/2}	800 ⁺¹⁵ ₀

These tolerances should be regarded as extreme limits within which the manufacturing tolerances of the national standards should be specified.

- The pallets specified are all double-decked and are constructed so as to permit the entry of forks or fingers of fork lift trucks or pallet trucks, preferably from any side, but at least from two opposite sides.
- The distance from the underside of the top deck to the ground is 5 in (127 mm) maximum, and the free height for the entry of forks or fingers, from any side, is 3⁷/₈ in (99 mm) minimum.
- The bearing surface of the bottom deck should be equal to or greater than 40 per cent of the overall surface of the top deck.
- The arrangement and the minimum entry dimensions which are provided to allow the entry of the forks of fork lift trucks and pallet trucks, and also the arrangement and minimum dimensions of the openings, should conform with Figure 1 and Table III. However, for the pallets of

32 in × 48 in 800 mm × 1200 mm
40 in × 48 in 1000 mm × 1200 mm

and if the construction will permit, it is recommended that the minimum openings should be those given in Figure 2 and Table IV.

FIG. 1
Diagrammatic arrangement
of openings and entry widths
applicable to the three sizes of pallets
(see Table III)

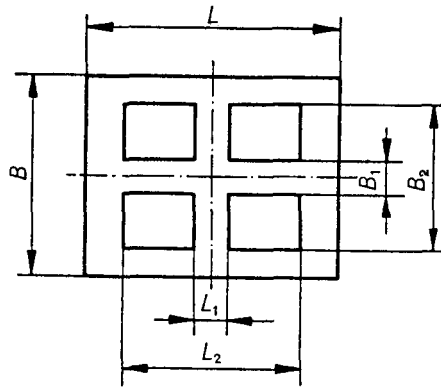


TABLE III.—Minimum dimensions of the openings according to Fig. 1

Nominal dimensions of the pallets		Dimensions of the openings							
		L_1 max		L_2 min		B_1 max		B_2 min	
in	mm	in	mm	in	mm	in	mm	in	mm
32 × 48	800 × 1200	6	150	30	760	6	150	23 1/4	590
40 × 48	1000 × 1200	6	150	30	760	6	150	28	710
32 × 40	800 × 1000	6	150	28	710	6	150	23 1/4	590

FIG. 2
Recommended diagrammatic arrangement
of openings and entry widths
for the sizes

32 in × 48 in 800 mm × 1200 mm
40 in × 48 in 1000 mm × 1200 mm

(see Table IV)

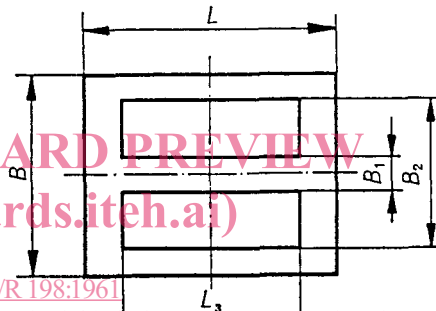


TABLE IV.—Minimum dimensions of the openings according to Fig. 2

Nominal dimensions of the pallets		Dimensions of the openings					
		L_3 min		B_1 max		B_2 min	
in	mm	in	mm	in	mm	in	mm
32 × 48	800 × 1200	32	800	6	150	23 1/4	590
40 × 48	1000 × 1200	32	800	6	150	28	710

7. The width of wing for lifting wing pallets of the dimensions given in clause 1 should be 2 1/2 in (65 mm) minimum.
8. Non-expendable pallets should be capable throughout their working life of supporting a uniformly distributed load of 1 ton (U.K.) (1000 kg) whilst being handled, and a uniformly distributed load of 4 tons (U.K.) (4000 kg) when stacked.
9. The edges of the top surface of members of the bottom deck of non-reversible pallets should be chamfered on each side of the top face in the following way:
 - (a) the angle between the chamfered surface and the horizontal should be $40^\circ \pm 5^\circ$;
 - (b) the height of the vertical face of the member should be

if of wood: $\frac{1}{2} \pm \frac{1}{8}$ in ($10 \begin{smallmatrix} +5 \\ 0 \end{smallmatrix}$ mm);

if of metal: not more than $\frac{3}{8}$ in (10 mm).

This requirement applies to a pallet of any material when the thickness of the member concerned exceeds $\frac{3}{8}$ in (10 mm).