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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 4995-2025

Replacing GB/T 4995-2014

Flat pallets - Performance requirements and selection of tests

平托盘 性能要求和试验选择

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 4995-2014 "Performance requirements and test selection for intermodal general-purpose flat pallets" and is in line with GB/T 4995-2014 in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed the scope of this document (see Chapter 1, Chapter 1 of the 2014 edition);
- Added "Flat Pallet", "Rated Load", "Ultimate Load", "Test Load", "Effective Load", "Maximum Working Load", "Stiffness", and "Fork Lift" the terms and definitions of "stacking" and "racking" (see Chapter 3);
- Changed the test load level and performance limit of the fork lift test, the handling operation or test purpose of the bottom deck bending test (see Table 1, Table 1 of the 2014 edition);
- Changed the particleboard spacer test conditions (see 5.6.3, 5.6.3 of the 2014 edition);
- Changed the test items of flat pallets loaded with goods for racking and stacking, and flat pallets loaded with goods for neither racking nor stacking (see Table 2, 2014 edition Table 2);
- Changed the test items required for flat pallets for conveyors and flat pallets for small-depth beam racks (see 7.5.1, 2014 Version 7.5.1);
- Added a chapter on "Test Report" (see Chapter 11).

This document is modified to adopt ISO 8611-2:2025 "Material handling pallets - Flat pallets - Part 2: Performance requirements and selection of tests".

Compared with ISO 8611-2:2025, this document has many structural adjustments. The structural number changes between the two documents are shown in the table below.

See Appendix A.

The technical differences between this document and ISO 8611-2:2025 and their reasons are as follows.

- Deleted the inapplicable statement in the scope, because the container has an upper structure or a rigid self-supporting container installed on the pallet by mechanical connection Pallets that are used to enhance the strength of the pallet are not flat pallets;
- Replaced ISO 445:2013 (see Chapter 3), GB/T 4996-2025 with the normative reference GB/T 3716-2023 Replaced ISO 8611-1:2025 (see Chapter 3), GB/T 34394 replaced ISO

8611-3 (see Chapter 4), and increased normative the referenced GB/T 18354 (see Chapter 3) and GB/T 31148 (see 5.6.3) are adapted to the technical conditions of my country;

--- Deleted the terms "member rupture" and "concentrated load" (see 3.1 and 3.2 of ISO 8611-1:2025), which are not used in this document; added the terms "flat pallet" and "fork lift" (see 3.1 and 3.9) have been added to facilitate understanding;

--- Deleted the description of creep model (see Chapter 9 of ISO 8611-2:2025) to comply with the national standard of my country Require.

The following editorial changes have been made to this document.

--- To coordinate with the existing standards, the document name was changed to "Flat Pallet Performance Requirements and Test Selection";

--- Change the reminder requirements of some test performance requirements in Chapter 4 that are not listed in the table to notes;

--- Added the symbols of the test load level performance requirement values in 1b~6b in Table 1;

--- Changed the foot number of the limit load (U) in test 7b in Table 1;

--- Added notes to Table 1 and changed the order of footnotes in Table 1 according to the order of appearance;

--- Deleted the note of 5.2;

--- Changed the footnote of Table 2;

--- Changed the test examples given in different scenarios in 7.1.3;

--- Change the reminder requirement in 7.1.3 regarding the need to add other test contents to a note;

--- Changed the note of 7.2;

--- Added notes to Table 4.

1 Scope

This document specifies the performance requirements, test conditions, number of test samples, test selection, test load, duration of static stiffness test for flat pallets.

Duration, number of impacts for dynamic tests and test report.

This document applies to the design, production, inspection and use of flat pallets.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 3716 Pallet Terminology (GB/T 3716-2023, ISO 445:2013, IDT) GB/T 4996-2025 Flat Pallet Test Methods (ISO 8611-1:2025, MOD) Note. There is no technical difference between the referenced content of GB/T 4996-2025 and the referenced content of ISO 8611-1:2025.

GB/T 18354 Logistics Terminology GB/T 31148 General technical requirements for wooden flat pallets GB/T 34394 Maximum Working Loads for Flat Pallets (GB/T 34394-2017, ISO 8611-3:2011, MOD) Note. There is no technical difference between the referenced content of GB/T 34394-2017 and the referenced content of ISO 8611-3:2011.

3 Terms and Definitions

For the purposes of this document, the terms and definitions defined in GB/T 3716, GB/T 4996-2025 and GB/T 18354 and the following terms and definitions apply.

flat pallet

A pallet with a top deck but no upper structure.

[Source. GB/T 3716-2023, 4.1] 3.2 Safety factor the ratio of ultimate load to rated load.

[Source. GB/T 3716-2023, 3.9] 3.3 Rated load nominal load the minimum safe load value under specific support conditions, regardless of the type of load (excluding concentrated loads).

Note 1: "Specific support conditions" refer to the range of operating conditions specified in 7.1.

Note 2: Rated load is used to compare the performance of different pallets and does not represent the effective load of the pallet in use.

[Source. GB/T 3716-2023, 3.2, modified]