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

GB/T 31747-2026

Replacing GB/T 33040-2016, GB/T 31747-2015

**Thermally modified wood
(English Translation)**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document supersedes GB/T 31747-2015 "Carbonized Wood" and GB/T 33040-2016 "Identification Methods for Heat-Treated Wood".

Compared with GB/T 31747-2015, apart from structural adjustments and editorial changes, the main technical changes are as follows.

---The definition of "thermally modified wood" has been changed (see 3.1, 2015 edition of 3.1);

---Added classification by tree species (see 4.1);

---The categorization by usage function has been changed (see 4.3, 4.2 in the 2015 version);

---The appearance quality requirements have been changed (see 5.1, 2015 version 5.1);

---Specifications and tolerances have been changed (see 5.2, 2015 version 5.2);

---Added requirements and corresponding measures for heat resistance dimensional stability, moisture resistance dimensional stability, width shrinkage, width expansion, and volume expansion.

The testing methods are described in sections 5.3.2, 5.3.3, and 6.4.4-6.4.6.

---The requirement for "carbonized wood material indicators for load-bearing structures" has been removed (see section 5.4 of the 2015 edition);

---The method for determining the hygroscopic equilibrium moisture content has been modified (see 6.4.3, 2015 version of 6.4.3);

---The sampling scheme and decision rules have been changed (see 8.2 and 8.3, 7.3 in the 2015 edition).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the National Forestry and Grassland Administration.

This document is under the jurisdiction of the National Technical Committee on Timber Standardization (SAC/TC41).

1 Scope

This document specifies the classification, requirements, volume calculation and inspection rules for heat-modified timber, as well as its marking, packaging, transportation and storage.

The corresponding testing methods.

This document applies to the production, inspection, and trade of heat-modified timber for non-load-bearing structures.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 153 Coniferous Sawn Timber GB/T 449 Sawn Timber Volume Table GB/T 1927.4 Test methods for physical and mechanical properties of wood from small, flawless specimens - Part 4: Determination of moisture content GB/T 1927.6 Test methods for physical and mechanical properties of wood from small, flawless specimens - Part 6: Determination of shrinkage GB/T 1927.8 Test methods for physical and mechanical properties of wood from small, flawless specimens - Part 8: Determination of moisture swelling GB/T 2828.1-2012 Sampling Procedures for Inspection by Attributes - Part 1: Lot-by-lot Inspection Sampling Indexed by Acceptable Quality Limit (AQL) plan GB/T 4822 Inspection of Sawn Timber GB/T 4823 Defects in Sawn Timber GB/T 13942.1-2009 Durability of wood - Part 1: Laboratory test methods for natural resistance to decay GB/T 15036.2 Solid wood flooring - Part 2: Test methods GB/T 19367 Determination of dimensions of wood-based panels GB/T 28992-2012 Heat-treated solid wood flooring GB/T 35913-2018 Technical Requirements for Solid Wood Flooring for Underfloor Heating GB/T 38467 Technical requirements for modified wood for furniture LY/T 1788-2023 Terminology for Wood Properties LY/T 2058-2022 Solid Wood Flooring Blanks

3 Terms and Definitions

The terms and definitions defined in LY/T 1788-2023, as well as the following terms and definitions, apply to this document.

Thermally Modified Wood Heat-treated wood Wood is treated for a certain period of time in a high-temperature oxygen-free or low-oxygen medium at 120°C~250°C, resulting in wood with improved dimensional stability and durability.

Solid wood whose properties, such as decay, have been permanently improved.