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PEOPLE'S REPUBLIC OF CHINA**

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**Technical requirements for wood and bamboo products in
forest ecotourism destinations
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard was proposed by the State Forestry and Grassland Administration.

This standard is under the jurisdiction of the National Timber Standardization Technical Committee Structural Timber Sub-Technical Committee (SAC/TC41/SC4).

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Company, Beijing Forestry University, National Quality Supervision and Inspection Center for Wood-based Panels and Wood and Bamboo Products, Torch High-Tech Industry Development Center of the Ministry of Science and Technology, Hubei Jiuling Smart Home Co., Ltd., Qian'an Dashu Industry Co., Ltd., Dalian Fangyuan Wooden Villa Manufacturing Co., Ltd., Wuhan Dragon Zhu Wooden House Wood Structure Co., Ltd., Manzhouli Lianzhong Wood Industry Co., Ltd., Suzhou Fitwell Wood Structure House Co., Ltd., Tianjin Jia Yu Industry and Trade Co., Ltd., Beijing Hyde Log House Co., Ltd.

1 Scope

This standard specifies the basic requirements, specific requirements, test methods and qualification judgments for wood (bamboo) products used in forest eco-tourism areas.

This standard is applicable to wood (bamboo) products used for wood (bamboo) facilities in forest eco-tourism areas.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 144 Log Inspection GB/T 153 Sawn timber of conifers GB/T 4817 Hardwood sawn timber GB/T 6491 sawn timber dry quality GB/T 8625 Fire resistance test method for building materials GB/T 9758 Determination of soluble metal content in paints and varnishes GB/T 9846 Universal Plywood GB/T 13942.1 Wood Durability Part 1: Laboratory Test Method for Natural Corrosion Resistance GB/T 13942.2 Wood Durability Performance Part 2: Field Test Method for Wood Natural Corrosion Resistance GB/T 14074 Wood adhesive and resin inspection method GB 18580 The limit of formaldehyde emission in wood-based panels and products of interior decoration materials GB/T 23229 Analysis method of water-borne wood preservative GB/T 24508 Wood Plastic Floor GB/T 26899 Glulam for structure GB/T 27651 Classification and requirements for the use of preservative wood GB/T 30364 Restructuring bamboo flooring GB/T 33041 China's terrestrial wood decay and termite hazard classification GB 50005 Wood Structure Design Standard GB 50016 Code for fire protection of building design GB 50222 Code for fire protection of building interior decoration design LY/T 1861 Outdoor wooden floor LY/T 2381 Basic requirements for wooden materials used in structures ISO.20152-1 Basic requirements of bond performance of wood structural adhesives of timber structures)

3 Terms and definitions

The following terms and definitions apply to this document.

Forest ecotourism destinations Forest eco-tourism destinations are based on natural scenery resources and carry out sightseeing, leisure and vacation, fitness and health, cultural education, etc.

Place of tourist activity.

Wood/Bamboo Products Wood (bamboo) timber products refer to all kinds of products made with timber and bamboo as the main or partial components, including logs, raw

bamboo, sawn timber, Glulam, plywood, particle board, wood-plastic composite, recombined timber, etc.

Infrastructural Facilities from Wood/Bamboo Products in order to meet the needs of tourists in traveling and sightseeing, the general term for various facilities constructed using wood (bamboo) materials and products, including houses Buildings, gates, corridors, pavilions, plank roads, pedestrian landscape bridges, outdoor tables, chairs and stools, signs, etc.

4 Basic requirements

4.1

Wood (bamboo) products should be accompanied by product description materials, including manufacturer, product name, size, grade, and wood source Legality and other information.

4.2

The air-dry moisture content of wood (bamboo) products should meet the requirements of the product's use environment. For logs with a minimum section size of 0.3m or more, for square timber, the moisture content at a depth of 20mm on the surface should not be greater than 12%.

4.3

The grade of material shall be specified according to the following product categories.

- a) The material grade of log products should reach the second-class and above grade specified in GB/T 144;
- b) The material grade of sawn timber products of conifers should reach the second-class and above grade specified in GB/T 153, and the material grade of sawn timber products of hardwoods should reach the second-class and above level specified in GB/T 4817;
- c) The appearance quality grade of structural laminated timber products should reach the second-class and above grades specified in GB/T 26899.
- d) The appearance quality of plywood products should reach the qualified product and above level specified in GB/T 9846.

4.4

Wood (bamboo) products should be environmentally friendly antiseptic and insect repellents such as quaternary ammonium copper (ACQ) or copper azoles (CuAz), and should not be used Organic halides, coal tar, creosote, pentachlorophenol, organotin compounds, chromium and arsenic compounds and other antiseptics and insecticides.

5.1.1 Load-bearing components

5.1.1.1

The wood (bamboo) products used for load-bearing components shall be structural materials, which conform to the regulations of LY/T 2381. If the mechanical design of structural products refers to when there is no corresponding standard for the marked value, the product manual shall give the design value of each mechanical index. When the mechanical design indexes of wood (bamboo) products need to be adjusted, the adjustment factor should be determined based on experiments.

5.1.1.2

If wood (bamboo) products are glued products, the adhesive used should comply with ISO.20152-1.

5.1.1.3

For wood (bamboo) products used in outdoor load-bearing components, the anti-corrosion and insect-proof requirements shall meet the requirements of Table 1 and Table 2 respectively. Chinese terrestrial wood the division of timber decay and termite hazard levels is based on the provisions of GB/T 33041. Penetration and drug loading of different use categories are in accordance with GB/T 27651 carried out.

5.1.2.2 The combustion performance of wood (bamboo) products used in interior decoration should meet the requirements of GB 50222.

5.1.2.3 The combustion performance of wood (bamboo) products used in the exterior wall decoration layer should meet the requirements of GB 50016.

5.1.3 Environmental performance

For wood (bamboo) products used indoors, the formaldehyde emission limit shall meet the requirements in Table 3.

5.2.1 Load-bearing components

5.2.1.1

The wood (bamboo) products used for load-bearing components shall be structural materials, which conform to the regulations of LY/T 2381. If the mechanical design of structural products refers to when there is no corresponding standard for the marked value, the product manual shall give the design value of each mechanical index. When the mechanical design indexes of wood (bamboo) products need to be adjusted, the adjustment factor should be determined based on experiments.