

ICS 79.060.10
CCS B 70

LY

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

LY/T 1364-2006

Replacing LY/T 1364-2006

**Plywood for railway passenger coach
(English Translation)**

Issued on: March 30, 2020

Implemented on: October 1, 2020

Issued by: State Forestry and Grassland Administration

Table of Contents

Foreword	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Categories	
5 Requirements	
5.1 Material and structure	
5.2 Specifications and deviations	
5.3 Appearance quality	
5.4 Physical and chemical properties	
6 Inspection method	
6.1 Inspection of specifications	
6.2 Appearance quality inspection	
6.3 Sampling and size requirements of physical and chemical properties test pieces	
6.4 Water content	
6.5 Bonding strength	
6.6 Dipping and peeling	
6.7 Screw holding force	
6.8 Bending strength and elastic modulus	
6.9 Formaldehyde emission limit	
6.10 Total Volatile Organic Compounds (TVOC)	
6.11 Determination of oxygen index	
7 Inspection rules	
7.1 Inspection classification	
7.2 Sampling plan	
7.3 Judgment rules	
7.4 Comprehensive judgment	
8 Identification, packaging, transportation and storage	
8.1 Identification	
8.2 Packaging	
8.3 Transportation and storage	

Foreword

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

This standard is a revision of LY/T 1364-2006 "Plywood for Railway Passenger Cars". Compared with LY/T 1364-2006, this standard mainly the technical content changes are as follows.

- Added the terms and definitions of plywood for railway passenger cars;
- Deleted the classification requirements of plywood for railway passenger cars according to the processing method of the surface board;
- Increase the technical requirements for plywood materials and structure, panel splicing, and panel thickness for railway passenger cars;
- Increased the technical requirements for flatness of plywood for railway passenger cars, and cancelled the technical requirements for warpage;
- Modified the technical requirements for the thickness tolerance and nominal thickness deviation of the plywood for railway passenger cars;
- Modified the technical requirements for appearance defects of plywood for railway passenger cars;
- Increase the technical requirements and test methods for static bending strength, elastic modulus, immersion and peeling of plywood for railway passenger cars;
- Increase the technical requirements and test methods for the oxygen index, 45° angle combustion, and total volatile organic compounds of plywood for railway passenger cars;
- The technical requirements and test methods for the surface bonding strength of plywood for railway passenger cars have been cancelled;

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This standard was proposed and managed by the National Wood-based Panel Standardization Technical Committee (SAC/TC198).

Drafting organizations of this standard. CRRC Qingdao Sifang Rolling Stock Co., Ltd., CRRC Tangshan Rolling Stock Co., Ltd., Huzhou Hengding Product Testing Center, Dehua Rabbit Baby Decoration New Material Co., Ltd., Qingdao Sifang Xincheng Zhizhuo Bus Parts Co., Ltd., Jiangsu Aimei Sen Wood Industry Co., Ltd., Jiangxi Product Quality Supervision and Inspection Institute, Linyi Product Quality Supervision and Inspection Institute, Chinese Academy of Forestry Wood Industry Industry Research Institute, CRRC Changchun Rail Vehicle Co., Ltd., CRRC Nanjing Puzhen Rolling Stock Co., Ltd., CRRC Sifang Locomotive and Rolling Stock Co., Ltd.

Company, Qingdao Siji Ruihua Industry and Trade Co., Ltd., Qingdao Longyu Wood Co., Ltd., CRRC Chengdu Locomotive and Rolling Stock Co., Ltd., Xuzhou Huayu Wood Industry Co., Ltd.

1 Scope

This standard specifies the terms and definitions, classification, requirements, inspection methods, inspection rules, marking, packaging, and Transportation and storage.

This standard applies to the plywood used inside railway passenger cars, and other railway vehicles can refer to it for implementation.

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

GB/T 1933 Method for determination of wood density GB/T 2828.1-2012 Sampling Inspection Procedures by Attributes Part 1: Batch-by-batch Inspection Sampling Retrieved by Acceptance Order Limit (AQL) GB/T 9846-2015 ordinary plywood GB/T 17657-2013 Test method for physical and chemical properties of wood-based panels and facing wood-based panels GB/T 18259-2018 Artificial board and its surface decoration terms GB 18580 The limit of formaldehyde emission in wood-based panels and products of interior decoration materials GB/T 19367-2009 Determination of the size of wood-based panels HJ 571-2010 Technical Requirements for Environmental Labeling Products Artificial Panels and Products TB/T 3138 Technical requirements for flame retardant materials for rolling stock LY/T 2717-2016 General technical requirements for wood-based panel product packaging

3 Terms and definitions

The following terms and definitions defined in GB/T 18259-2018 apply to this document.

Plywood for railway passenger coach Veneer made of basswood, ash, oak, birch, eucalyptus, Liuan or broad-leaved trees with similar wood properties, assembled and glued Made of plywood used for the roof, wall, partition, floor and interior equipment parts of railway passenger cars.

4 Categories

4.1

According to water resistance.

a) Type I plywood, that is, weather-resistant plywood, can pass the boiling test;

b) Type II plywood, that is, moisture-resistant plywood, can pass the $63^{\circ}\text{C}\pm 3^{\circ}\text{C}$ hot water immersion test.

5.1 Material and structure

5.1.1

Generally, the wood grains of two adjacent layers of veneers should be perpendicular to each other.

5.1.2

The veneers of the symmetrical layers on both sides of the center layer should be the same thickness, the same tree species or the same tree species with similar physical properties, and the same production method (that is, both it is peeled or sliced), the wood grain arrangement direction should also be the same. Two adjacent layers of veneers with parallel wood grain directions are allowed to be combined into one layer. Test the strong bonding when the temperature is high, the two-layer veneer is regarded as one layer. The watch plate should face outwards.

5.1.3

There should be no inclusions in the plywood that affect the smoothness of the board and the quality of the glue.

5.1.4

The thickness of the surface board shall not be less than 0.55mm, and the thickness of the surface board of the plywood for floor shall not be less than 1mm.

5.1.5 Panel splicing

5.1.5.1

The top grade panel should be a whole panel or two veneers should be spliced roughly in the center of the panel, and the seams should be tight.

5.1.5.2

The first-class panels should be tight, with similar wood color and texture, and the number of spliced veneers should not exceed 7.

5.1.5.3

The number of spliced veneers for the panels of qualified products is not limited.

5.1.5.4

The seams of all grades should be parallel to the board edge.