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CCS B 60



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

GB/T 1936.1-2009

Replacing GB/T 1936.1-1991

**Method of testing in bending strength of wood
(English Translation)**

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Foreword

GB/T 1936 is divided into two parts as follows.

- GB/T 1936.1 Wood bending strength test method;
- GB/T 1936.2 Wood bending modulus of elasticity measurement method.

This section GB 1936.1 "Wood bending strength test method." the partial modification of international standards ISO 3133. 1975 "Wood bending static ultimate strength determination." this portion of the ISO 3133. 1975 compared to the main technical content differences are as follows.

- The length of the sample is 300mm ~ 380mm to 300mm;
- Height than the distance between the centers of two seats and the sample will annex is 12-16 times tested, it should be changed to the distance between two seats 240mm.

GB/T 1936.1-1991 "Wood bending strength test" in this section instead.

This section compared with the GB/T 1936.1-1991 main changes are as follows.

- Original standard 4.1 "load measurement accuracy should be consistent with GB/T 1928-1991 Chapter 6 requirements," the words "can be measured Load accuracy of 1% ";
- Original standard "test equipment GB/T 1931 provisions of Chapter 3," 4.3, to "GB/T 1931-2009 Chapter 3 Regulation Determination of test equipment given moisture content ";
- The 6.2 "ring along the tangential direction (tangential) to a uniform rate of loading", the words "between the bearing surface of the sample in the middle of a uniform diameter speed Degree of loading, "increased" or loading rate as 5mm/min ~ 10mm/min ";
- All the original standard "to accurately" to "accurate to";
- The test records the table, "bending strength" and "moisture" two items removed.

Appendix A of this part is a normative appendix.

This part by the State Forestry Administration.

This part of the National Standardization Technical Committee centralized timber.

This section drafted by. China Forestry Science Institute of Wood Industry.

1 Scope

This section GB/T 1936 specifies the determination of wood bending strength test equipment, samples, test procedures, and test results of the calculation report.

This section applies to a small wood unblemished specimens flexural strength test.

2 Normative references

The following documents contain provisions which, through reference to GB/T 1936 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 1928-2009 General physical and mechanical test methods (ISO 3129. 1975, Wood-Sampling methods and general requirements for physical and mechanical tests, NEQ)
GB/T 1929-2009 physical and mechanical test materials and test specimens sawing method (ISO 3129. 1975, Wood-Sampling methods and general requirements for physical and mechanical tests, MOD)
GB/T 1931-2009 Method for determination of moisture content of wood (ISO 3130. 1975, Wood-Determination of moisture content for physical and mechanical tests, MOD)
Principle 3 in the center of the length of the sample at a uniform rate of loading to destruction, in order that the bending strength of wood.

4 Test Equipment

4.1

Function Test load measurement accuracy of 1%, and the radius of curvature of the indenter holder end portion of the test apparatus is 30mm, two seat pitch Off should be 240mm.

Testing should be accurate measuring 4.2 to 0.1mm.

4.3

GB/T 1931-2009 the provisions of Chapter 3 of the test device was measured moisture content.

5 Sample

5.1

test material sawing and test specimens according to GB/T 1929-2009 the provisions of Chapter 3.

5.2

Sample size is 300mm x 20mm x 20mm, a length along the grain direction. Sample preparation requirements and inspection, the sample moisture content Adjustment respectively GB/T 1928-2009 Chapter 3 and Chapter 4 requirements. Allow the measuring flexural modulus of elasticity using the same sample, the first measurement Elastic modulus after testing in bending strength.

6 Test procedure

6.1

flexural strength only string to test, sample length central measuring radial dimension of width, height tangential to the nearest 0.1mm.

6.2

use a central loading, the sample was placed in two seat test device, specimen holder in the middle between the radial surface at a uniform rate of loading, in 1min ~ 2min within the sample destroyed (or the loading speed is set at 5mm/min ~ 10mm/min), the failure load into the fill Appendix A records in the table, precisely to 10N.

6.3

test immediately after the interception of about 20mm long in a wood near the sample destroyed, press GB/T 1931-2009 measurement sample containing