

# इंटरनेट

# मानक

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IS 5966 (1993): Non-coniferous timber in converted form for general purposes- [CED 9: Timber and Timber Stores]



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“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक  
सामान्य प्रयोजनों के लिए रूपान्तरित  
गैर-शंकुधारी लकड़ी -- विशिष्ट  
( पहला पुनरीक्षण )

*Indian Standard*

NON-CONIFEROUS TIMBER IN CONVERTED  
FORM FOR GENERAL PURPOSES —  
SPECIFICATION  
( *First Revision* )

UDC 674.038.3

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BUREAU OF INDIAN STANDARDS  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

**AMENDMENT NO. 1 MARCH 2002  
TO  
IS 5966 : 1993 NON-CONIFEROUS TIMBER IN  
CONVERTED FORM FOR GENERAL PURPOSES —  
SPECIFICATION**

**( *First Revision* )**

**( Page 1, clause 4 ) — Substitute the following for the existing matter:**

**'The timber for general purposes shall be of species listed in IS 1326 : 1992.'**

**( CED 9 )**

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**Reprography Unit, BIS, New Delhi, India**

## FOREWORD

This Indian Standard ( First Revision ) was adopted by the Bureau of Indian Standards, after the draft finalized by Timber Sectional Committee had been approved by the Civil Engineering Division Council.

Specification for non-coniferous sawn timber for various purposes is covered in IS 1326 : 1992 'Specification for non-coniferous sawn timber ( baulks and scantling ) ( *second revision* )'. Timber suitable for general purposes has to be converted from such sawn timber. In order to give guidance for selection of species of non-coniferous timber, to be used in converted form for general purposes, this Indian Standard was published in 1970. In this first revision, among other changes, the table on permissible defects, giving requirements for Grade I and Grade II timber has been modified, wherein the requirements for 'checks' have now been specified for different thicknesses of converted timber and requirements for 'Borer holes ( dead infestations )' have been added.

For the purposes of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values ( *revised* )'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## Indian Standard

# NON-CONIFEROUS TIMBER IN CONVERTED FORM FOR GENERAL PURPOSES — SPECIFICATION

( First Revision )

### 1 SCOPE

This standard covers the requirements of non-coniferous timber in converted form, intended for use for general purposes, like the manufacture of chests, boxes, cases, crates light furniture and similar works.

### 2 REFERENCES

The following Indian standards are necessary adjuncts to this standard:

IS No.	Title
401 : 1982	Code of practice for preservation of timber ( <i>third revision</i> )
707 : 1976	Glossary of terms applicable to timber technology and utilization ( <i>second revision</i> )
1141 : 1973	Code of practice for seasoning of timber ( <i>first revision</i> )
1326 : 1992	Specification for non-coniferous sawn timber (baulks and scantlings) ( <i>second revision</i> )
1331 : 1971	Specification for cut sizes of timber ( <i>second revision</i> )
3364 ( Part 2 ) : 1976	Methods of measurement and evaluation of defects in timber : Part 2 Converted timber ( <i>first revision</i> )
11215 : 1991	Methods for determination of moisture content of timber and timber products ( <i>first revision</i> )

### 3 TERMINOLOGY

For the purpose of this standard, the definitions given in IS 707 : 1976 shall apply.

### 4 SPECIES

The timber for general purposes shall be of species listed in Annex B of IS 1326 : 1992.

### 5 DIMENSIONS AND TOLERANCES

#### 5.1 Dimensions

The dimensions of the converted timber ( planks and scantlings ) shall be as ordered conforming to IS 1331 : 1971.

#### 5.2 Tolerances

The tolerances in sizes of cut timber shall be permissible as follows:

a) Width and thickness up to and including 100 mm	+ 3 mm — 0
b) Width and thickness above 100 mm	+ 6 mm — 3 mm

#### NOTES

1 The minus tolerances in width given above in 5.2 ( b ) shall not be permitted in more than 10 per cent of the supplies accepted at any one time.

2 When pieces of definite width range, that is, 150 to 250 mm are demanded, the minus tolerance on the minimum width, that is, 150 mm and plus tolerance on 250 mm shall not be permitted.

### 6 REQUIREMENTS FOR GRADING

6.1 The non-coniferous converted timber ( planks and scantlings ) shall be sawn straight and square trimmed at the ends. They shall be free from brashness, shakes, insect attack, any kind of decay ( rot ) and any other defect ( except those permitted ) ( *see 8* ), which is likely to reduce their strength or durability. Based on permissible defects, the converted timber shall be of Grade I and Grade II ( *see 8* ).

#### 6.2 Moisture Content

Unless otherwise specified, the moisture content of the non-coniferous converted timber ( planks and scantlings ), at the time of inspection at any time in the year and at any place in India, shall not exceed the following limits when determined in accordance with the method given in IS 11215 : 1991.

a) Timber up to 50 mm in thickness	18 percent
b) Timber over 50 mm in thickness	18 percent within depth of 10 mm from the surface
c) For seasoned timber when specifically demanded	At specified moisture content

### 7 MEASUREMENT

The measurements of length, width, thickness made at mid line and computation of volume

shall be made as follows:

- a) *Length* — The length shall be measured in metres. The fractions of a metre shall be taken in multiples of 0.01 m and to the nearest lower 0.05 m.
- b) *Width* — The width shall be measured in millimeter to the nearest lower 10 mm.
- c) *Thickness* — The thickness shall be measured in millimeter to the nearest lower 5 mm.
- d) *Volume* — The volume shall be computed in cubic metres correct to three places of

decimal on the basis of accepted sizes.

## 8 PERMISSIBLE DEFECTS

Plugging of defects shall not be permissible. Permissible defects shall be considered collectively and not singly. The permissible defects for the two grades shall be as given in Table 1. The measurement of defects shall be done as in IS 3364 ( Part 2 ) : 1976.

## 9 MARKING

Each piece of converted timber shall be legibly and indelibly branded on one of the broad faces

**Table 1 Permissible Defects for Converted Timber for General Purposes**  
( Clause 8.1 )

Sl No.	Defect	Grade I	Grade II
i)	Slope of grain	1 in 15	1 in 12
ii)	a) Live knots ( see Note ) :		
	1) Size, maximum	Up to 13 mm	Up to 25 mm
	2) Number per metre	1	2
	b) Decayed knots, dead knots, knot holes	—	Permitted provided these are completely bored or cut out and tightly plugged with a crossgrain seasoned timber of the same species and properly glued so that its grains run in the direction of the grains of the main piece.
iii)	Checks ( maximum depth )	1 mm for up to 50 mm thickness 2 mm for more than 50 mm to 100 mm thickness 4 mm for more than 100 mm thickness	2 mm for up to 50 mm thickness 3 mm for more than 50 mm to 100 mm thickness 6 mm for more than 100 mm thickness
iv)	End split ( largest at the end and added together )	3 percent of length	5 percent of length
v)	Pitch pockets	—	Permitted except on the exposed edges, provided they are clean and filled up in putty or filler. When these are located on the exposed edges of the core, they shall be cut out and fitted and glued in with plug of similar species of timber with grains running in the same direction as that of the pieces.
vi)	Cup	2 mm per 300 mm	4 mm per 300 mm
vii)	Spring	4 mm per 3 m	8 mm per 3 m
viii)	Twist	4 mm per 3 m of length	6 mm per 3 m of length
ix)	Bow	4 mm per 3 m of length	8 mm per 3 m of length
x)	Centre heart	Permitted in pieces over 250 sq cm of cross section provided it is sound and well boxed	Permitted
xi)	Wane	Not more than 4 percent in the surface on which appears	Not more than 8 percent on the surface on which it appears
xii)	Borer holes ( dead infestation )	Borer holes of not more than 3 mm diameter and not more than 5 per metre shall be permissible on one face only provided such holes are not deeper than 5 mm and well scattered	Borer holes not more than 3 mm diameter and not more than 10 per metre shall be permissible on both face provided such holes are not deeper than 5 mm; on one face only provided they are not deeper than 10 mm and well scattered

**NOTE** — Live knots shall however not be permitted if they are within 1.5 times the smallest thickness of the members in the joint.



at a convenient place with the indication of the source of manufacture, the year of supply using at least 20 mm size letters for this purpose.

**9.2** The piece of converted timber may also be marked with Standard Mark.

#### **10 PRESERVATION**

All timbers, containing sapwood shall be given a preservative treatment as specified in IS 401 : 1982.

#### **11 END COATING**

To prevent and to minimize end cracking, splitting, etc, the ends of each converted timber ( planks and scantlings ), to a distance of at least 25 mm more than the length of the longest split, are recommended to be treated with any of the materials mentioned in IS 1141 : 1973. Application of end coating on the timber shall be done soon after the inspection of the timbers.

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#### Amendments Issued Since Publication

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