## (PREVIEW)

# Indian Standard

# STRUCTURAL DESIGN USING BAMBOO — CODE OF PRACTICE

#### 1. SCOPE

- 1.1. This Code covers the general principles involved in the design of structural bamboo in buildings with regard to mechanical resistance and durability of structures. It covers minimum strength data, dimensional stability, grading requirements and traditional bamboo joints for quality assurance. Work on site, fabrication of components off-site and their erection on site is covered to the extent necessary to indicate and ensure the quality of material and standard of workmanship to comply with the assumptions of the design rules and the limitations.
- 1.2. The following aspects are not covered in this standard:
- a) Bamboo foundations;
- b) Limit state design and performance of structures;
- c) Scientific designing of bamboo joints and their fastenings; and
- d) Bamboo reinforced cement concrete/mud structures.

#### 2. REFERENCES

The standards listed in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

#### **ANNEX A**

(Clause 2)

### LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
875	Design loads for building and structures:	(Part 17): 1983	Long time loading test of plywood strips (second revision)
(Part 1): 1987	Unit weights of building material and stored materials ( <i>second revision</i> )	(Part 18): 1983	Impact resistance test on the surface of plywood ( <i>second revision</i> )
(Part 2): 1987	Imposed loads (second revision)	1902:2006	Preservation of bamboo and cane for
, ,	Wind loads (second revision)		non-structural purposes (second
(Part 4): 1987	Snow loads (second revision)		revision)
(Part 5): 1987	Special loads and load combinations (second revision)	2366 : 1983	Code of practice for nail-jointed timber construction ( <i>first revision</i> )

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	Methods of test for plywood:	2380	Methods of test for wood particle
(Part 4): 1983	Determination of glue shear strength		boards and boards from other
	(second revision)		lignocellulosic materials:
(Part 5): 1983	Test for adhesion of plies (second	(Part 4): 1977	Determination of static bending
	revision)	(1 art 4) . 1977	strength (first revision)
(Part 9): 1983	Determination of tensile strength	(D	
	(second revision)	(Part 5): 1977	Determination of tensile strength
(Part 10): 1983	Determination of compressive		perpendicular to surface (first
( ,	strength (second revision)		revision)
(Part 11): 1983	Determination of static bending	(Part 6): 1977	Determination of tensile strength
(1 410 11) . 1900	strength (second revision)		parallel to surface (first revision)
(Part 12) · 1983	Determination of scarf joint strength	4407:1967	Code of practice for reed walling
(1 art 12) : 1703	(second revision)	4924	Method of test for nail jointed timber
(Part 13) · 1083	Determination of panel shear strength		trusses:
(1 ait 13) . 1903	(second revision)	(Part 1): 1968	Destructive test
(Dout 14) , 1002	,	(Part 2): 1968	Proof test
(Part 14): 1983	Determination of plate shear strength	, ,	
(D + 1.5) 1002	(second revision)	6874 : 2008	Method of test for round bamboo
(Part 15): 1983	Central loading of plate test (second		(first revision)
	revision)	9096 : 2006	Code of practice for preservation of
(Part 16): 1983	Vibration of plywood plate test		bamboo for structural purposes (first
	(second revision)		revision)