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# Indian Standard SPECIFICATION FOR WOODEN TENT PINS

(Second Revision)

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

### Indian Standard

#### SPECIFICATION FOR WOODEN TENT PINS

## (Second Revision)

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# Indian Standard SPECIFICATION FOR WOODEN TENT PINS ( Second Revision )

#### O. FOREWORD

- **0.1** This Indian Standard (Second Revision) was adopted by the Indian Standards Institution on 22 February 1983, after the draft finalized by the Timber Stores Sectional Committee had been approved by the Civil Engineering Division Council.
- **0.2** Large quantities of wooden tent pins of various sizes are used for tying ropes for pitching tents and the demand is on the increase. A variety of sizes and qualities are being manufactured, making it difficult for consumers to select the correct size and quality for their purpose. Moreover, in view of the acute shortage of timber in the country for constructional and other essential needs, economy in the use of timber for wooden tent pins is a very important consideration as these pins are required in millions. This standard has, therefore, been prepared with the object of standardizing the sizes to ease manufacture and effect economy in the use of timber without loss of efficiency.
- **0.3** This standard was first published in 1962 wherein only round tent pins were specified. Based on the comments of the users octagonal shaped tent pins were included in the standard in its first revision issued in 1978. In this revision, two types of tent pins have been covered; one with a metallic shoe and band and the other without them.
- **0.4** In the formulation of this standard due weightage has been given to international co-ordination among the standards and practices prevailing in different countries in addition to relating it to the practices in the field in this country.
- 0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS: 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

<sup>\*</sup>Rules for rounding off numerical values ( revised ).

#### 1. SCOPE

1.1 This standard covers the requirements of two types and three sizes of wooden tent pins, used for pitching various general types of tents.

#### 1. TERMINOLOGY

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

#### 3. TYPES

- 3.1 Wooden tent pins shall be of the following two types:
  - a) Type I These shall be without metallic band and shoe and shall be in accordance with the shapes and design as shown in Fig. 1, and
  - b) Type II These shall be fitted with metallic band and shoe and shall be in accordance with the shapes and design as shown in Fig. 2.

#### 4. MATERIAL

- **4.1** Tent pins shall be manufactured from any species of timber given in Appendix A.
- 4.2 The timber shall be seasoned to a moisture content not exceeding 20 percent and the inclination of grain shall not exceed 1 in 15. It shall be free from centre-heart (pith), any kind of decay (rot), shakes, live insect attack, knots (except live pin knots), splits (except hair cracks) and warp.

#### 5. MANUFACTURE

- 5.1 Unless otherwise specified, the pins may be manufactured either in round form or in octagonal shape and design as shown in Fig. 1 and 2.
- 5.1.1 In the case of octagonal shape of tent pins, all the eight sides shall, as far as possible, be of the same width.
- 5.2 The notch shall be accurately and cleanly cut.

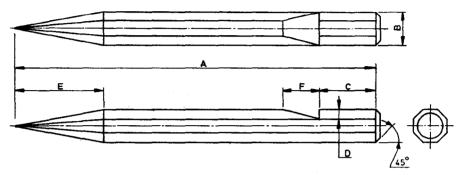
#### 6. DIMENSIONS AND TOLERANCES

**6.1 Dimensions** — The pins shall conform to the dimensions as shown in Fig. 1 and 2.

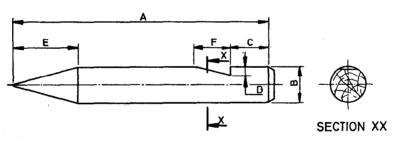
<sup>\*</sup>Glossary of terms applicable to timber technology and utilization ( second revision ).

#### IS: 2133 - 1983

- **6.2 Tolerances** The permissible tolerances on dimensions shall be as shown in Fig. 1 and 2.
- 6.2.1 Where tolerances on dimensions are not shown, normal manufacturing tolerances shall be permissible.



1A OCTAGONAL SHAPE

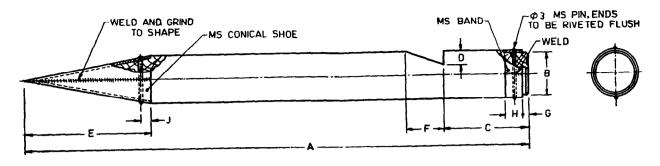


1B ROUND SHAPE

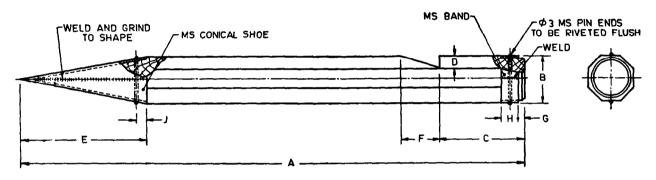
Size	A	В	C D		E	F
Large	600±15	55±3	100±5	15±2	150±5	45±5
Medium	450±10	45±3	75±5	10±2	110±5	45±5
Small	300±10	40±3	50±5	10±2	75±5	40±5

All dimensions in millimetres.

FIG. 1 WOODEN TENT PINS - TYPE I



#### 2A Round Shape

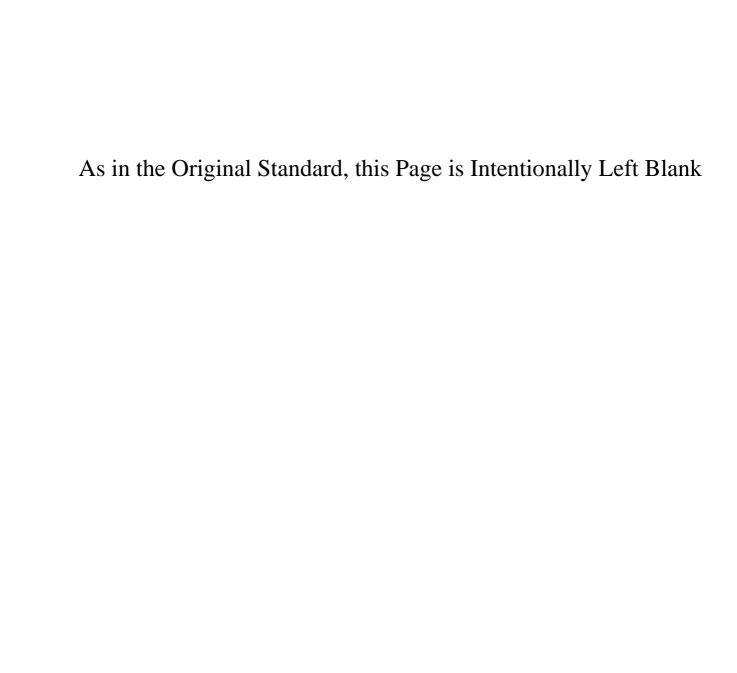


2B Octagonal Shape

Size	A	В	С	D	E	F	G	Н	J	THICKNESS OF SHEET FOR SHOE AND BAND
LARGE	600 ± 15	55 ± 5	100 ± 5	15 ± 2	150 ± 5	45 ± 5	6 ± 1	20 ± 2	25 ± 5	1*6-
MEDIUM	450 ± 10	45 ± 5	75 ± 5	10 ± 2	110 ± 5	<b>45</b> ± 5	6 ± 1	15 ± 2	20 ± 5	1.6
SMALL	300 ± 10	40 ± 5	50 ± 5	10 ± 2	75 ± 5	40 ± 5	5 ± 1	15 ± 2	15 ± 3	1.6
Note — Thickness of mild steel sheet for shoe as well as band shall be 1.6 mm.										

All dimensions in millimetres.

Fig. 2 Wooden Tent Pins - Type II



#### 7. WORKMANSHIP AND FINISH

7.1 Pins shall be reasonably smooth all over.

#### 8. PRESERVATION

- **8.1** Unless otherwise specified, the pins shall be preserved by complete immersion in 50 percent (v/v) mixture of creosote Type 1 (conforming to IS:218-1961\*) and fuel oil of grade L. V. (conforming to IS:1593-1971†) or any other oil of equivalent viscosity maintained at a temperarature of 95  $\pm$  5°C for a minimum period of 15 minutes immediately followed by complete immersion in the above mixture at room temperature for a minimum period of 30 minutes. Alternatively, the pins may be treated by complete immersion in the above mixture for a minimum period of 8 hours at room temperature.
- **8.2** Before fixing, the band and shoes (free from rust) shall be painted with ready mixed paint, air drying, red oxide-zinc chrome, priming, conforming to IS: 2074-1979‡.

#### 9. MARKING

- **9.1** Each pin shall be legibly and indelibly marked with the manufacturer's name or initials or recognized trade-mark and the year of manufacture.
  - 9.1.1 Each pin may also be marked with the ISI Certification Mark.

Note — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

<sup>\*</sup>Specification for creosote and anthracene oil for use as wood preservatives (revised). †Specification for fuel oils (first revision).

Specification for ready-mixed paint, air drying, red oxide-zinc chrome, priming (first revision).

#### APPENDIX A

( Clause 4.1 )

#### SPECIES OF TIMBER SUITABLE FOR WOODEN TENT PINS

#### TRADE NAME

#### BOTANICAL NAME

Amari Amoora spp.
Anjan Hardwickia binata
Arjun Terminalia arjuna
Axlewood (Bakli) Anogeissus latifolia

Babul ' Acacia nilotica (Syn. A. arabica)

Ballagi Poeciloneuron indicum
Bijasal Pterocarpus marsupium
Black chuglam Terminalia mannii
Bulletwood Manilkara spp.
Casuarina Casuarina equisetifolia
Dhaman Grewia tiliifolia

Hopea spp. (other than Hopea odorata)

ImliTamarindus indicaIndian oakQuercus spp.IrulXylia sylocarpaJamanSyzygium spp.JutiliAltingia excelsaKardhaiAnogeissus pendulaKindalTerminalia paniculata

Kumbi Careya arborea

Kusum Schleichera oleosa (Syn. S. trijuga)

Lal-khair Acacia chundra

Laurel Terminalia alata (Syn. T. coriacea., T. crenulata)

Mahua Madhuca longifolia
Mesua Mesua ferrea
Milla Vitex spp.

Ping Maniltoa polyandra (Syn. Cynometra Polyandra)

Rajbrikh Cassia fistula

Red-bombwe Planchonia valida (Syn. P. aandamanica)

Sal Shorea robusta

Sandan Ougeinia oojeinensis (Syn. O. dalbergioides)

Satinwood Chloroxylon swietenia
Sissoo Dalbergia sissoo
Sundri Heritiera spp.
Yon Anogeissus acuminata

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			^^

<sup>\*</sup>Sales Office in Calcutta is at 5 Chowringhee Approach, P. O. Princep 27 68 00 Street, Calcutta 700072

<sup>†</sup>Sales Office in Bombay is at Novelty Chambers, Grant Road, 89 65 28 Bombay 400007

<sup>‡</sup>Sales Office in Bangalore is at Unity Building, Narasimharaja Square, 22 36 71 Bangalore 560002