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## Indian Standard

# SPECIFICATION FOR CARPENTER'S MALLETS

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

## Indian Standard

### SPECIFICATION FOR CARPENTER'S MALLETS

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## Indian Standard

# SPECIFICATION FOR CARPENTER'S MALLETS

#### O. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 25 April 1984, after the draft finalized by the Timber Stores Sectional Committee had been approved by the Civil Engineering Division Council.
- 0.2 A series of Indian standards is being formulated to cover various types of wooden mallets, largely used by Defence, Railways and other organizations. This standard has been prepared to provide guidance in manufacture of carpenter's mallets.
- **0.3** 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.
- 0.4 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.

#### 1. SCOPE

1.1 This standard covers the requirements of carpenter's mallet.

#### 2. TERMINOLOGY

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

<sup>\*</sup>Rules for rounding off numerical values ( revised ).
†Specification for bamboo tent poles.

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#### 3. MATERIALS

#### 3.1 Head

- a) The mallet head shall be manufactured from any of the species of timber given in Appendix A.
- b) The timber shall be well seasoned to a moisture content not exceeding 15 percent and the inclination of grain shall not exceed 1 in 15. The timber shall be free from sapwood, centre heart (pitch), any kind of decay (rot), insect attack, knots, cracks, splits and shakes.
- 3.2 Handle The mallet handle shall be manufactured from any of the species of timber specified for class V handles in accordance with IS: 620-1975\*. The requirements for the manufactured handle shall be as given in 3.1(b).

#### 4. MANUFACTURE

- 4.1 The mallet head and handle shall be manufactured to the shape and design as shown in Fig. 1.
- 4.2 The eye in the head shall be central, accurate, smooth and of uniform taper. The hole shall be bored across the grain of timber.
- 4.3 The handle shall be shaped in such a manner so as to enable the carpenter for easy fixing and removing, into and from the head respectively.

#### 5. DIMENSIONS AND TOLERANCES

**5.1 Dimensions** — The mallet shall conform to the dimensions as shown in Fig. 1.

#### 5.2 Tolerances

a) Handle — Where the head fits + 3 mm — 0 mm

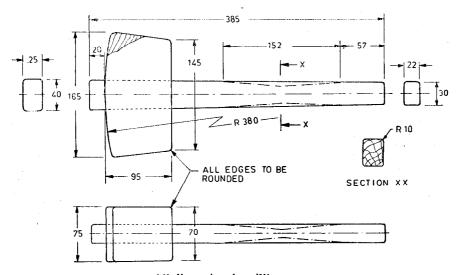
At other places ± 2 mm

b) Head - Normal manufacturing tolerance.

#### 6. WORKMANSHIP AND FINISH

- 6.1 The mallet shall be properly shaped and finished smooth all over.
- **6.2** It is recommended that, immediately after manufacture, the head and the handle be dipped in raw linseed oil at room temperature as this treatment retards changes in moisture contents.

<sup>\*</sup>Specification for general requirements for wooden tool handles (third revision).



All dimensions in millimetres.

Fig. 1 Carpenter's Mallet

#### 7. TEST

7.1 Each mallet shall be struck twelve times, as in normal use, against a block of salwood. At the end of this test, neither the head nor the handle shall show any sign of failure.

#### 8. PRESERVATION

**8.1** Unless otherwise specified, the heads and the handles shall be thoroughly soaked in hot (about 90°C) raw linseed oil for at least 30 minutes and allowed to dry. They shall then be wiped clean with a dry piece of cloth.

#### 9. PACKING

9.1 Unless otherwise specified, the mallet shall be securely tied and packed in gunny cloth, in convenient lots for easy handling in transit.

#### 10. SAMPLING

10.1 The method of drawing representative samples of carpenter's mallets and the criteria for conformity shall be as prescribed in Appendix G of IS: 620-1975\*.

<sup>\*</sup>Specification for general requirements for wooden tool handles (third revision).

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#### 11. MARKING

- 11.1 Each mallet shall be legibly and indelibly marked with the following information:
  - a) Manufacturer's name or recognized trade mark, if any; and
  - b) Year of manufacture.

#### 11.1.1 The mallet 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.

#### APPENDIX A

[ Clause 3.1(a) ]

#### LIST OF SPECIES OF TIMBER SUITABLE FOR MALLET HEAD

#### Standard Trade Name

Ash

Axlewood (bakli)

Amari Babul

Benteak

Bijasal Dhawan

Taman

Laurel

Mulberry

Sal

Sandan

Satin wood

Sissoo

Rosewood

Yon

#### Botanical Name

Fraxinus spp.

Anogeissus latifolia

Amoora spp.

Acacia arabica

Lagerstroemia lanceolata Pterocarpus marsupium

Grewia tiliifolia

Syzygium spp.

Terminalia alata Morus spp.

Shoerea robusta

Ougeinia oojeinensis

Chloroxylon sweitenia

Dalbergia sissoo Dalbergia latifolia

Anogeissus acuminata