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IS 11679 (1986): wooden tables for office use [CED 35: Furniture]



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“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
SPECIFICATION FOR
WOODEN TABLES FOR OFFICE USE

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Indian Standard

SPECIFICATION FOR WOODEN TABLES FOR OFFICE USE

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Indian Standard

SPECIFICATION FOR WOODEN TABLES FOR OFFICE USE

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 30 May 1986, after the draft finalized by the Furniture Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 In view of the fast expanding furniture industry in the country and the trend of manufacturers to industrialize and mechanize processes, it has become possible to produce office furniture to strict standards of accuracy and strength and also in view of the general quality consciousness among the average purchaser of furniture, this standard has been prepared to lay down minimum requirements for tables for office use.

0.3 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 for 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 lays down requirements for materials, construction, finish and test for wooden tables for office use.

2. MATERIALS

2.1 Timber — Any timber species recommended for furniture and cabinet making (IS : 399-1963†) shall be used. The timber used shall be straight grained, free from defects and well seasoned. The moisture content shall be in accordance with IS : 287-1973‡. Sap wood of all durable species and timber of non-durable species shall be given a preservative treatment as specified in IS : 401-1982§.

*Rules for rounding off numerical values (*revised*).

†Classification of commercial timbers and their zonal distribution (*revised*).

‡Recommendations for maximum permissible moisture content for timber used for different purposes (*second revision*).

§Code of practice for preservation of timber (*third revision*).

2.2 Blockboards — Blockboards used shall conform to IS : 1659-1979* and shall be of Grade I if air-drying finishes are adopted, and Grade II if suitable oven drying finishing are adopted.

2.3 Decorative Laminates — Decorative laminates used shall conform to IS : 2046-1969† and shall be of the colour, design and finish as prescribed by the purchaser.

2.4 Table Tops — The table tops shall conform to IS : 4414-1977‡.

2.5 Adhesives — Adhesives used for joinery work shall conform to IS : 4835-1979§ and IS : 849-1957||.

2.6 The paints, varnish and French polish shall conform to the schedules given in IS : 2338 (Part 2)-1967¶. Clear lacquer, melamine resin based paint or polyurethane paint may also be used.

3. DIMENSIONS

3.1 The height and minimum knee space shall conform to IS : 3663-1981**.

4. ASSEMBLY

4.1 The various components shall be assembled by means of fittings, bolts and nuts or screws fixed under pressure. Before driving screws, pilot holes should be driven into the wood panels and the screws shall be dipped in glue before driving in the holes. The joinery details at various locations of tables shall conform to IS : 3845-1966††.

5. FINISH

5.1 For finishing, the surface shall be waxed, French polished, varnished or painted. The method of application finish shall conform to IS : 2338 (Part 1)-1967‡‡. Clear lacquer, melamine resin based paint or polyurethane paint, when used, shall be applied as per manufacturer's instructions.

*Specification for blockboards (*second revision*).

†Specification for decorative thermosetting synthetic resin bonded laminated sheets (*first revision*).

‡Specification for wooden table tops (*first revision*).

§Specification for polyvinyl acetate dispersion-based adhesives for wood (*first revision*).

||Specification for cold setting casein glue for wood.

¶Code of practice for finishing of wood and wood-based materials : Part 2 Schedules.

**Dimensions of tables and chairs for general office purposes (*first revision*).

††Code of practice for joints used in wooden furniture.

‡‡Code of practice for finishing of wood and wood-based materials : Part 1 Operations and workmanship.

6. SAMPLING

6.1 Sampling and testing of tables shall be in accordance with IS : 5967-1969*.

7. REQUIREMENTS

7.1 Wooden tables shall conform to the requirements specified in Table 1.

8. TESTS

8.1 The tests shall be of three categories.

8.1.1 *Type Tests* — Test carried out to prove conformity to the requirements of this specification.

8.1.2 *Acceptance Tests* — Tests carried out on sample selected from a lot for the purpose of acceptance of lot.

8.1.3 *Routine Tests* — Tests carried out on each and every table to check the requirements which are likely to vary during manufacture.

8.2 Categories of Tests

8.2.1 *Type Tests* — The following shall comprise the type tests (see 8.1.1):

- a) Workmanship,
- b) Dimensions and tolerances,
- c) Glue adhesion test,
- d) Physical tests,
- e) Mechanical tests, and
- f) Tests for surface finish.

8.2.2 *Acceptance Tests* — The following comprise acceptance tests (see 8.1.2). Acceptance tests shall be made on the samples selected from each lot in accordance with the sampling procedure given in IS : 5967-1969*.

- a) Workmanship,
- b) Dimensions and tolerances, and
- c) Glue adhesion test.

8.2.3 *Routine Tests* — Each and every table shall be checked for good workmanship.

*Methods of test for general purposes wooden tables.

TABLE 1 REQUIREMENTS OF WOODEN TABLES

(Clause 7.1)

| SL No. | CHARACTERISTIC | REQUIREMENTS | METHOD OF TEST (REF TO RELEVANT INDIAN STANDARD) |
|--------|---|---|--|
| 1. | Dimensions | Height and minimum knee space (clear width and height) | IS : 3663-1981* |
| 2. | Glue adhesion | The glue line should offer appreciable resistance to forcible separation and the opened surface should show some adherent fibres. The laminate should be level on the blockboard and should not show any waviness indicating trapped air between the laminate and the blockboard. | IS : 1734 (Part 5)- 1983† |
| 3. | Physical tests | No distortions, loosening of material/ joints, oxidation and other effects of tests | 5.2 of IS : 5967- 1969‡ |
| 4. | Mechanical tests | Shall not show any damage listed in 6 of IS : 5967-1969‡ | 5.3 of IS : 5967- 1969‡ |
| 5. | Tests for surface finish : | | |
| | a) Resistance to dry heat | Minimum qualifying average rating shall conform to 7 of IS : 5807 (Part 1)-1975§ | IS : 5807 (Part 1)- 1975§ |
| | b) Resistance to wet heat | Minimum qualifying average rating shall conform to 7 of IS : 5807 (Part 2)-1975 | IS : 5807 (Part 2)- 1975 |
| | c) Resistance to marking by oils and fats | Test spots shall be indistinguishable from the surrounding area | IS : 5807 (Part 3)- 1971¶ |
| | d) Resistance to marking by liquids | Minimum qualifying average ratings shall conform to 8 of IS : 5807 (Part 4)-1975** | IS : 5807 (Part 4)- 1975** |
| | e) Resistance to mechanical damage | Results shall conform to 5.3 of IS : 5807 (Part 6)-1978†† | IS : 5807 (Part 6)- 1978†† |

*Dimensions of tables and chairs for general office purposes (first revision).

†Methods of test for plywood : Part 5 Test for adhesion of plies (second revision).

‡Methods of test for general purpose wooden tables.

Method of test for clear finishes for wooden furniture :

§Part 1 Resistance to dry heat (first revision).

||Part 2 Resistance to wet heat (first revision).

¶Part 3 Resistance to marking by oils and fats.

**Part 4 Resistance to marking by liquids.

††Part 6 Resistance to mechanical damage.

9. PACKING

9.1 All wooden tables shall be packed according to usual trade practice.

10. INFORMATION TO BE SUPPLIED BY THE PURCHASER

10.1 The purchaser shall supply the following information to the supplier along with the order:

- a) Type, shape and size of wooden table; and
- b) Colour and finish.

11. MARKING

11.1 All the wooden tables shall be marked with the name of the manufacturer or his recognised trade-mark.

11.1.1 The wooden tables 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.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

| <i>Quantity</i> | <i>Unit</i> | <i>Symbol</i> |
|---------------------------|-------------|---------------|
| Length | metre | m |
| Mass | kilogram | kg |
| Time | second | s |
| Electric current | ampere | A |
| Thermodynamic temperature | kelvin | K |
| Luminous Intensity | candela | cd |
| Amount of substance | mole | mol |

Supplementary Units

| <i>Quantity</i> | <i>Unit</i> | <i>Symbol</i> |
|-----------------|-------------|---------------|
| Plane angle | radian | rad |
| Solid angle | steradian | sr |

Derived Units

| <i>Quantity</i> | <i>Unit</i> | <i>Symbol</i> | <i>Definition</i> |
|----------------------|-------------|---------------|----------------------------------|
| Force | newton | N | 1 N = 1 kg. m/s ² |
| Energy | joule | J | 1 J = 1 N.m |
| Power | watt | W | 1 W = 1 J/s |
| Flux | weber | Wb | 1 Wb = 1 V.s |
| Flux density | tesla | T | 1 T = 1 Wb/m ² |
| Frequency | hertz | Hz | 1 Hz = 1 c/s (s ⁻¹) |
| Electric conductance | siemens | S | 1 S = 1 A/V |
| Electromotive force | volt | V | 1 V = 1 W/A |
| Pressure, stress | pascal | Pa | 1 Pa = 1 N/m ² |

**AMENDMENT NO. 1 SEPTEMBER 1993
TO
IS 11679 : 1986 SPECIFICATION FOR WOODEN
TABLES FOR OFFICE USE**

(Page 4, clause 2.4) — Add the following new clause after 2.4 and renumber the subsequent clauses:

“2.5 Medium Density Fibreboards (MDF)

MDF used for the manufacture of wooden tables shall conform to IS 12406 : 1988 ‘Specification for medium density fibreboard for general purposes’.”

(CED 35)

Reprography Unit, BIS, New Delhi, India

AMENDMENT NO. 2 JANUARY 1997
TO
IS 11679 : 1986 SPECIFICATION FOR WOODEN
TABLES FOR OFFICE USE

(*Page 3, clause 0.2*) — Insert the following new clause after 0.2 and renumber the subsequent clauses:

‘0.3 A scheme of labelling environment friendly products to be known as ECO Mark is being introduced at the instance of the Ministry of Environment and Forests (MEF), Government of India. The ECO Mark shall be administered by the Bureau of Indian Standards (BIS) under the *BIS Act*, 1986 as per the Resolution No. 71 dated 21 February 1991 published in the Gazette of the Government of India. For a product to be eligible for ECO Mark, it shall also carry the Standard Mark of the BIS besides meeting additional optional environment friendly requirements.’

(*Page 3, clause 2.1*) — Substitute the following for the existing clause:

‘2.1 Timber — Any species of timber specified in IS 13622 : 1993 ‘Indian timber for furnitures and cabinets — Classification’ shall be used in the manufacture of wooden tables for office purposes.

2.1.1 For ECO Mark, only species of timber as specified in IS 13622:1993 from sources other than natural forests, such as timber from industrial and social forestry plantations, shade trees from tea and coffee estates, etc, shall be used for the manufacture of wooden tables for office purposes.’

(*Page 4, clause 2.2*) — Insert the following at the end of the clause:

“For ECO Mark, the block board shall conform to the requirements specified in IS 1659 : 1990 ‘Specification for block boards (*third revision*)’ for ECO Mark purposes.”

[*Page 4, clause 2.5 (see also Amendment No. 1)*] — Insert the following at the end of the clause:

‘For ECO Mark, the medium density fibreboard shall conform to the requirements specified in IS 12406 : 1988 for ECO Mark purposes.’

(*Page 5, clause 8.2.3*) — Insert the following new clauses after 8.2.3 and renumber the subsequent clauses:

'9 ADDITIONAL REQUIREMENTS FOR ECO MARK

9.1 General Requirements

9.1.1 The product shall conform to the requirements of quality and performance as specified in the standard.

9.1.2 The manufacturer shall produce to BIS environmental consent clearance from the concerned State Pollution Control Board as per the provisions of the *Water (Prevention and Control of Pollution) Act, 1974* and *Air (Prevention and Control of Pollution) Act, 1981* alongwith the authorization, if required under the *Environment (Protection) Act, 1986*, while applying for ECO Mark.

9.2 Specific Requirements

The product shall conform to the specific requirements given for ECO Mark under relevant clauses of this standard.

NOTE — The manufacturer shall provide documentary evidence by way of certificate or declaration to this effect to the Bureau of Indian Standards while applying for ECO Mark.'

(*Page 7, clause 11.1.1*) — Insert the following new clause at the end of the clause:

'11.2 The criteria for which the product has been labelled as ECO Mark.'