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Mazdoor Kisan Shakti Sangathan

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“Step Out From the Old to the New”

IS 7076 (1983): metal book ends [CED 35: Furniture]



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“Invent a New India Using Knowledge”



“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

"पुनर्पुष्ट १९९०"

SPECIFICATION FOR
METAL BOOK ENDS

"REAFFIRMED 1990"

(*First Revision*)

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MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

SPECIFICATION FOR METAL BOOK ENDS

(*First Revision*)

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**SPECIFICATION FOR
METAL BOOK ENDS**

(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 30 December 1983, after the draft finalized by the Furniture Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 Metal book ends are commonly used by administrative staff in commercial and government offices. In order to keep books in upright position and to prevent them from damage due to falling down from table tops or side racks the use of such book ends not only helps in procedure. This standard was first prepared in 1973 to rationalize the sizes and to specify the finishes consistent with the corrosion resistance. In this revision the grade of materials to be used in the components have been specified.

0.3 This standard contains clause 7 which requires the purchaser to supply certain technical information at the time of placing order.

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 lays down requirements for materials, size manufacture and finish of metal book ends.

2. MATERIAL

2.1 Aluminium Sheets — Aluminium sheets shall conform to Grades 31000 or 52000 of IS : 737-1974†. The sheets shall be in $\frac{1}{2}$ H condition.

*Rules for rounding off numerical values (revised).

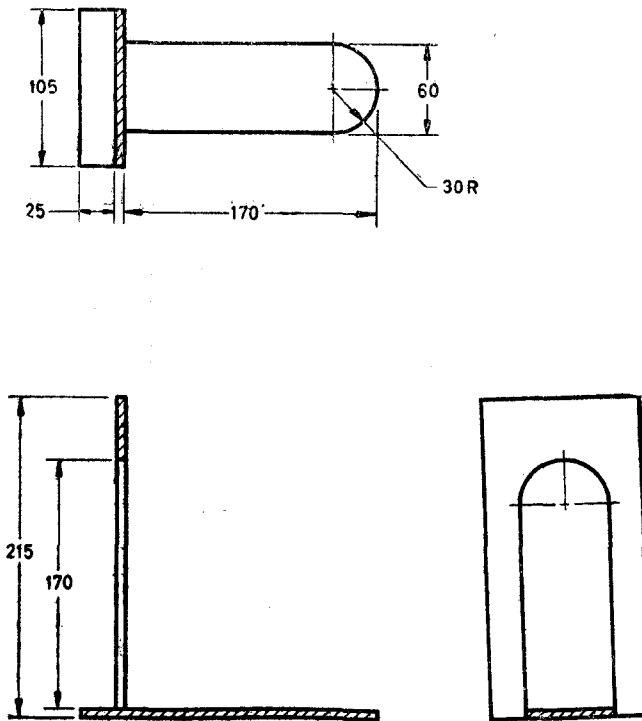
†Specification for wrought aluminium and aluminium alloys, sheet and strip (for general engineering purposes) (second revision).

2.2 Mild Steel Sheets — Mild steel sheets shall conform to grade 0 of IS : 513-1973* or grade 0 of IS : 1079-1973†.

3. SHAPE AND DIMENSIONS

3.1 The shape and dimensions of the book end shall be as shown in Fig. 1.

3.1.1 The book ends may be manufactured in other shapes and dimensions where so agreed to between the manufacturer and the purchaser.



All dimensions in millimetres.

FIG. 1 TYPICAL SKETCH OF A METAL BOOK END

4. MANUFACTURE

4.1 The book ends shall be made from steel sheet not less than 1.6 mm thick or aluminium sheet not less than 2.0 mm thick. These shall be without any burrs or dent.

*Specification for cold rolled carbon steel sheets (*second revision*).

†Specification for hot rolled carbon steel sheet and strip (*third revision*).

5. FINISH

5.1 All dents, burrs and sharp edges shall be removed from the various components. The components shall be individually pickled, scrubbed and rinsed to remove grease, rust, scale or any other foreign element.

5.2 Immediately after pickling, all the mild steel parts shall be given phosphating treatment conforming to Class C of IS : 3618-1966*. The process for application phosphate coating shall be in accordance with IS : 6005-1970†.

NOTE — Putty shall be applied to all the surfaces requiring filling and shall conform to IS : 110-1968‡. Aluminium primer shall conform to IS : 5660-1970§.

5.3 Coat/coats of enamel paint shall then be applied as follows :

Finish coat with enamels, conforming to IS : 151-1950||, IS : 2932-1974¶ or IS : 2933-1975**.

5.4 Aluminium book ends may be anodized, if required by the purchaser and the anodic coating shall not be less than Grade AC 15 of IS : 1868-1968††.

6. PERFORMANCE REQUIREMENTS OF FINISH

6.1 Scratch Hardness Test — A sample of mild steel plate 150 × 50 mm in size and thickness 0.315 mm finished as given in 5, shall be subjected to scratch hardness test in accordance with 15.1 of IS : 101-1964‡‡. A scratch, showing the bare metal shall not be produced on the test sample.

6.2 Pressure Test — Samples prepared from mild steel plates of thickness 0.315 mm and finished as given in 5, shall be subjected to pressure test in accordance with 15.2 of IS : 101-1964‡‡. The metal surface shall not be rendered visible when the test pieces are separated after the test.

6.3 Flexibility and Adhesion Test — A sample of mild steel plate 150 × 50 mm in size and thickness 0.315 mm and finished as given in 5, shall be subjected to flexibility and adhesion test in accordance with 17 of IS : 101-1964‡‡. The paint film on the test piece shall not show damage, detachment or cracking when examined under ×10 magnification.

*Specification for phosphate treatment of iron and steel for protection against corrosion.

†Code of practice for phosphating of iron and steel.

‡Specification ready mixed paint, brushing grey filler, for enamels, for use over primers (*first revision*).

§Specification for ready mixed paint, brushing, aluminium red oxide primer.

||Specification for ready mixed paint, spraying, finishing, stoving, enamel, for general purposes colour as required.

¶Specification for enamel, synthetic, exterior (a) undercoating (b) finishing (*first revision*).

**Specification for enamel, exterior (a) undercoating, (b) finishing (*first revision*).

††Specification for anodic coatings on aluminium (*first revision*).

‡‡Methods of test for ready mixed paints and enamels (*second revision*).

6.4 Stripping Test — A sample of mild steel plate 150 × 50 mm in size and thickness 0.315 mm and finished as given in 5, shall be subjected to stripping test in accordance with 17 of IS : 101-1964*. The scratch produced after the test shall be free from jagged edges.

6.5 Test for Protection Against Corrosion Under Conditions of Condensation — A mild steel panel of size 150 × 100 mm and thickness 1.25 mm and finished as given in 5, shall be subjected to test for protection against corrosion under conditions of condensation in accordance with 18 of IS : 101-1964*. The metal surface shall show no signs of corrosion after the test.

7. INFORMATION TO BE SUPPLIED BY THE PURCHASER

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

- a) Colour and finish, and
- b) Where alternative shapes and finish are specified they shall be clearly stated in the order.

8. MARKING

8.1 All metal book ends shall be marked with a suitable mark identifying the manufacturer.

8.1.1 The metal book ends 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.

*Methods of test for ready mixed paints and enamels (*second revision*).