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Indian Standard SPECIFICATION FOR BALL CATCHES FOR USE WOODEN ALMIRAHS

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



Indian Standard

SPECIFICATION FOR BALL CATCHES FOR USE IN WOODEN ALMIRAHS

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Indian Standard

SPECIFICATION FOR BALL CATCHES FOR USE IN WOODEN ALMIRAHS

0. FOREWORD

- **0.1** This Indian Standard was adopted by the Indian Standards Institution on 22 February 1978, after the draft finalized by the Builder's Hardware Sectional Committee had been approved by the Civil Engineering Division Council.
- 0.2 Ball catch is a door fastening device in which a spring controlled ball, projecting through a hole of smaller diameter than the ball, engages with a striking plate. Ball catches are commonly used in wooden almirahs to keep their doors in closed position after the doors are pushed in fully. These are manufactured in the country extensively and this standard is being issued to cover basic requirements of ball catches.
- 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** This standard is one of a series of Indian Standards on builder's hardware. A list of standards published so far in the series is given on page 8.
- 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, 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 the requirements for materials, sizes and finish of ball catches for use in wooden almirahs.

^{*}Rules for rounding off numerical values (revised).

IS: 8756 - 1978

2. SIZES

2.1 The sizes of ball catches shall be as follows:

6, 7.5, 9.5 and 12.5 mm.

2.1.1 The size shall be denoted by the external diameter (D) of the cylinder as shown in Fig. 1.

3. MATERIALS

- 3.1 Steel Balls Steel balls shall conform to IS: 2898-1976*.
- 3.2 Brass Sheets Brass sheets shall conform to Grade CuZn 40 of IS: 410-1967†.
- 3.3 Cast Brass Cast brass shall conform to IS: 292-1961‡.
- 3.4 Spring Steel wire for spring shall conform to Grade 3 or 4 of IS: 4454 (Part I)-1975§.

4. SHAPE

4.1 The shape and design of a ball catch indicated in Fig. 1 is illustrative only. The manufacturer may make ball catches of any shape to suit his design.

5. DIMENSIONS

5.1 The dimensions of the ball catches and tolerances thereon shall conform to those given in Table 1 and Fig. 1.

(Clause 5.1 and Fig. 1) All dimensions in millimetres.						
St. No.	A	В	C	D		
i)	14	11.2	10	12.5		
ii)	11	8.2	8	9.5		
iii)	10	8.5	6	7.5		
iv)	9	8	5	6		
Tolerance	± 0·2	± 0°2	As per tolerances for respective	± 0.5		

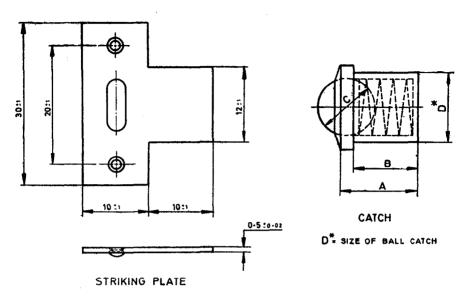
diameters given in IS: 2898-1976*

*Specification for steel balls for rolling bearings (first revision).

^{*}Specification for steel balls for rolling bearings (first revision).

⁺Specification for rolled brass plate, sheet, strip and foil (second revision).

[†]Specification for brass ingots and castings (revised). §Specification for steel wire for cold formed springs: Part I Patented and cold drawn steel wire—unalloyed (first revision).



All dimensions in millimetres.

Fig. 1 Typical Illustration of a Ball Catch

5.1.1 It may be manufactured in other dimensions where so agreed to between the manufacturer and the purchaser.

6. MANUFACTURE

6.1 When the almirah door is in closed position, it shall be retained in that position by the spring section of the ball catch and working shall be ensured in continuous usage. The door shall open only when it is pulled to open.

7. WORKMANSHIP AND FINISH

7.1 Ball catches when assembled shall have smooth and easy working. The body and striking plate of ball catches shall be satin or bright polished.

8. MARKING

8.1 Each ball catch shall be clearly marked with the manufacturer's name or trade-mark.

IS: 8756 - 1978

8.1.1 Ball catches 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.

9. PACKING

- 9.1 Ball catches shall be packed in cardboard boxes or in any other approved packing; number of pieces in each packing shall not exceed 100.
- 9.2 Each package shall be labelled showing the following particulars:
 - a) Size of ball catches;
 - b) Quantity of ball catches; and
 - c) Name of manufacturer or trade-mark, if any.

10. SAMPLING

10.1 Sampling and inspection of a consignment of ball catches locks shall be carried out in accordance with the provisions laid down in Appendix A.

APPENDIX A

(Clause 10.1)

SAMPLING AND CRITERIA FOR CONFORMITY

A-1. LOT

A-1.1 In any consignment all the ball catches of the same size and grade shall constitute a lot. This shall be ascertained by carrying out a general visual inspection of the consignment to check that the lot is of the same type and size and appears to be homogeneous in regard to origin, source of production, period of manufacture and any other visually ascertainable characteristic. In case, the consignment does not appear to be homogeneous, it should be segregated into separate groups; each group being homogeneous within itself and treated as a separate lot for the purpose of sampling.

A-1.2 Number of ball catches to be selected at random from a lot shall depend upon the size of the lot and shall be in accordance with col 1 and 2 of Table 2.

TABLE 2 SCALE OF SAMPLING AND PERMISSIBLE NUMBER OF DEFECTIVE BALL CATCHES

(Clauses A-1.2 and A-2.1)

Lot Size	SAMPLE SIZE	Permissible Number of Defectives
(1)	(2)	(3)
Up to 200	15	0
201 ,, 300	20	1
301 ,, 500	30	2
501,,800	40	2
801 and above	50	3

A-1.3 Ball catches for the sample shall be selected at random from at least 10 percent of the packages subject to a minimum of three packages, equal number of ball catches being selected from each such package.

A-2. CRITERIA FOR CONFORMITY

A-2.1 Ball catches selected according to A-1.3 shall be inspected for conformity to dimension, workmanship and finish, manufacturing details and testing for smooth working. The lot shall be considered as conforming to these requirements if the number of ball catches failing in any one or more of the requirements does not exceed the permissible number of defectives given in col 3 of Table 2.

INDIAN STANDARDS

ON

BUILDER'S HARDWARE

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IS:
 204-1974 Tower bolts (third revision)
 205-1966 Non-ferrous metal butt hinges ( second revision )
 206-1973 Tee and strap hinges ( second revision )
 208-1972 Door handles ( second revision )
 281-1973 Mild steel sliding door bolts for use with padlocks ( second revision )
 362-1975 Parliament hinges (third revision)
 363-1976 Hasps and staples (third revision)
 364-1970 Fanlight catch ( second revision )
 452-1973 Door springs, rat tail type ( second revision )
 453-1973 Double-acting spring hinges ( second revision )
 729-1969 Brass drawer locks, cupboard locks and box locks (second revision)
1019-1974 Rim latches ( second revision )
1341-1976 Steel butt hinges (third revision)
1495-1970 Mild steel dust bins (first revision)
1823-1974 Floor door stoppers ( second revision )
1837-1966 Fanlight pivots (first revision)
           Mortice locks (vertical type) (third revision)
2209-1976
2681-1966 Non-ferrous metal sliding door bolts for use with padlocks (first revision)
           Door closers (hydraulically regulated) (second revision)
3564-1975
            Continuous ( piano ) hinges ( first revision )
3818-1971
           Ventilator chains
3828-1966
3843-1966 Steel backflap hinges
3847-1966 Mortice night latches
4621-1975 Indicating bolts for use in public baths and lavatories (first revision)
           Welded steel wire fabric for general use ( first revision )
4948-1974
           Door handles for mortice locks (vertical type) (first revision)
4992-1975
           Flush bolts ( first revision )
5187-1972
5899-1970 Bathroom latches
5930-1970 Mortice latch (vertical type)
           Floor springs (hydraulically regulated) for heavy doors
6315-1971
6318-1971 Plastic window stays and fasteners
           Door closers (pneumatically regulated) for light door weighing up to 40 kg
6343-1971
6602-1972 Ventilator poles
           Rebated mortice locks (vertical type)
6607-1972
7197-1974 Double action floor springs ( without oil check ) for heavy doors
7198-1974 Hold fast
7534-1974 Mild steel locking bolts with holes for padlocks
7540-1974 Mortice dead locks
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