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# Indian Standard SPECIFICATION FOR STEEL VISIBLE INDEXING SYSTEM CABINETS

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



# Indian Standard

# SPECIFICATION FOR STEEL VISIBLE INDEXING SYSTEM CABINETS

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# Indian Standard

# SPECIFICATION FOR STEEL VISIBLE INDEXING SYSTEM CABINETS

### 0. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 29 January 1981, after the draft finalized by the Furniture Sectional Committee had been approved by the Civil Engineering Division Council.
- 0.2 Visible indexing system cabinets are used for proper storage of information. This system not only helps in locating the stored information with minimum time and labour but also indicates matters that call for attention. This standard is being issued with a view to rationalize sizes of steel visible indexing system cabinets and specify finishes consistent with corrosion protection.
- 0.3 This standard contains clause 9.1 which requires the purchaser to supply certain technical information at the time of placing orders.
- 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 requirements for materials, sizes, construction and finish of steel visible indexing system cabinets.

### 2. MATERIALS

2.1 Filler Rods and Electrodes — Filler rods and electrodes for gas, are and spot welding shall conform to IS: 1278-1972†, IS: 814 (Part II)-1974‡ and IS: 4972-1968§ respectively.

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

<sup>†</sup>Specification for filler rods and wires for gas welding (second revision).

‡Specification for covered electrodes for metal are welding of structural steel:

Part II For welding sheets ( fourth revision ).

Specification for resistance spot-welding electrodes.

- 2.2 Mild Steel Sheets Mild steel sheets shall conform to IS: 513-1973\* or IS: 1079-1973\*.
- 2.3 Screws Screws shall conform to IS: 1365-1978t.
- 2.4 Steel Wire Steel wire for springs shall conform to IS: 4454 (Part I)-1975§.

### 3. TYPES

3.1 Based on the card size to be used for recording information, the cabinets shall be of following three types:

Type	Card Size			
Type 1	$150 \times 100 \text{ mm}$			
Type 2	$200 \times 125 \text{ mm}$			
Type 3	$280 \times 225 \text{ mm}$			

### 4. DIMENSIONS AND TOLERANCES

4.1 The dimensions of cards and overall dimensions of cabinets with 4, 7 and 14 numbers of trays shall be as given in Table 1.

### 4.2 Tolerances

- **4.2.1** Tolerances on Cards The card size shall not vary by more than  $\frac{4}{3}$  mm.
  - **4.2.2** Talerances on Cabinet The overall dimensions of cabinets shall not vary by more than  $\pm 2$  mm.

### 5. FABRICATION

- 5.1 Cabinet Body The cabinet body shall be made out of mild steel sheet not less than 0.8 mm thick. The body shall have a cage and/or shelves which will divide the body into a number of compartments and separate the drawers. The cage and shelves shall be made from mild steel sheet not less than 0.6 mm thick.
- 5.2 Tray The tray shall be made of mild steel sheet not less than 0.6 mm thick. The tray shall move smoothly in and out of the cabinet and in the out position the tray shall hang vertically. Any tray can be set at a convenient angle for posting entries as one of the lower trays acts as a support to the upper tray. Each tray shall have a compressor plate made of mild steel sheet not less than 0.8 mm thick with depthwise

<sup>\*</sup>Specification for cold rolled carbon steel sheets ( second revision ).

<sup>†</sup>Specification for hot rolled carbon steel sheets and strips (third revision).

<sup>\*</sup>Specification for slotted countersunk head screws ( third revision ).

<sup>§</sup>Specification for steel wires for cold formed springs: Part I Patented and cold drawn steel wires — unalloyed (first revision).

adjustment in steps of about 10 mm to keep the cards in place. The outward movement of tray shall be strictly horizontal. Each tray shall have rear flap, hinged at the back corners, made of mild steel sheet not less than 0.8 mm thick, to act as a support for card pockets when the back side of a particular card is required to be referred.

TABLE 1 DIMENSIONS OF CARDS AND STEEL VISIBLE INDEXING SYSTEM CABINETS

( Clause 4.1 )

( All dimensions in millimetres )

Туре	CARD SIZE		No. of Trays*	CABINET SIZE		
	Width	Depth	IRAYS	Height	Width	Depth
(1)	(2)	(3)	<b>(4</b> )	(5)	(6)	(7)
1	150	100	4 7 14	273 <b>375</b> 670	219 220 220	654 660 660
2	200	125	4 7 14	273 375 670	2 <b>7</b> 0 275 <b>27</b> 5	654 660 660
3	280	225	4 7 14	273 375 670	346 350 350	65 <b>4</b> 660 660

<sup>\*</sup>The cabinets may be provided with additional number of trays if so desired by the purchaser.

- 5.2.1 Each tray shall have a minimum card pocket holding capacity of 75, 70 and 50 for Type 1, Type 2 and Type 3 cabinets respectively. The brass or aluminium card holders capacity per tray shall not be less than 60, 55 and 40 for Type 1, Type 2 and Type 3 cabinets respectively.
- 5.3 Door The door shall be retractable, made of mild steel sheet not less than 0.8 mm thick.
- 5.4 Tray Support The tray support shall easily sustain a load of 100 N. When the tray is full of cards held in card pockets, it shall exhibit a smooth motion.
- 5.5 Card Pockets Card pockets meant for holding cards shall be made of craft paper not less than 0.15 mm thick.
- 5.6 Card Holders Card holders meant for holding cards shall be made of brass or aluminium alloy sheet not less than 0.3 mm thick.
- 5.7 Coloured Plastic Signals Plastic signals, meant for indicating instantly and desired information and directing attention to it, shall be made of various coloured cellulose acetate films or PVC (transparent) films not less than 0.25 mm thick.

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- 5.8 Handles Each tray shall be fitted with a corrosion resistant metal handle which shall be fixed to the front of the tray or a built-in pull.
- **5.9 Label Holders** Each tray shall be provided with a label holder made from corrosion resistant metal and shall be fitted to the front of the tray or a built-in label holder. In case of built-in mild steel label holder it shall be finished in accordance with **6**.
- 5.10 Lock The cabinet shall be fitted with an unpickable lock with duplicate keys.

### 6. FINISH

- **6.1** All 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 matter.
- 6.2 Immediately after pickling mild steel components shall be given phosphating treatment conforming to Class C of IS: 3618-1966\*. The process for application of 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: 426-1961. Aluminium primer shall conform to IS: 2931-1964.

- 6.3 Coat/coats of enamel paint shall then be applied as follows:
  - a) Finish coat with enamels conforming to IS: 151-1950||, IS: 2932-1974¶ or IS: 2933-1975\*\*.
  - b) In case of stoving enamel the components shall thereafter be baked at a specified temperature in an oven heated uniformly. The finish shall be smooth and uniform with a hard and tough film of enamel strongly adhering to the surface. The finish shall be free from all visible defects and shall not chip when tapped lightly with a dull pointed instrument.

†Gode of practice for phosphating of iron and steel. ‡Specification for paste filler for colour coats ( revised ).

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

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

<sup>\*</sup>Specification for phosphate treatment of iron and steel for protection against corrosion.

<sup>§</sup>Specification for ready mixed paint, brushing, aluminium-zinc oxide composite primer.

<sup>¶</sup>Specification for enamel, synthetic, exterior, (a) undercoating, (b) finishing (first revision).

### 7. PERFORMANCE REQUIREMENTS OF FINISH

- 7.1 Scratch Hardness Test A sample of mild steel plate 150 × 50 mm in size and thickness 0.315 mm finished as given in 6 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.
- 7.2 Pressure Test Samples prepared from mild steel plates of thickness 0.315 mm and finished as given in 6 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.
- 7.3 Flexibility and Adhesion Test A sample of mild steel plate  $150 \times 50$  mm in size and thickness 0.315 mm finished as given in 6 shall be subjected to flexibility and adhesion test in accordance with 16 of IS: 101-1964\*. The paint on the test piece shall not show damage detachment or cracking when examined under  $\times 10$  magnification.
- 7.4 Stripping Test A sample of mild steel plate  $150 \times 50$  mm in size and thickness 0.315 mm finished as given in 6 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.
- 7.5 Test for Protection Against Corrosion Under Conditions of Condensation A mild steel panel of size 150 × 100 mm and thickness 1.25 mm finished as given in 6 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.

### 8. PACKING

8.1 All component parts of cabinets shall be packed in such a way, that no damage is caused to them during transit.

### 9. INFORMATION TO BE SUPPLIED BY THE PURCHASER

- 9.1 Following information shall be supplied by the purchaser along with the order:
  - a) Type required,
  - b) Number of cards required,
  - c) Card size required,
  - d) Type of card holders required,
  - e) Colour and type of finish, and
  - f) Number of trays required.

<sup>\*</sup>Methods of test for ready mixed paints and enamels ( second revision ).

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### 10. MARKING

10.1 All cabinets shall be marked with a suitable mark identifying the manufacturer.

10.1.1 The cabinets 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 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.