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मानक



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Mazdoor Kisan Shakti Sangathan

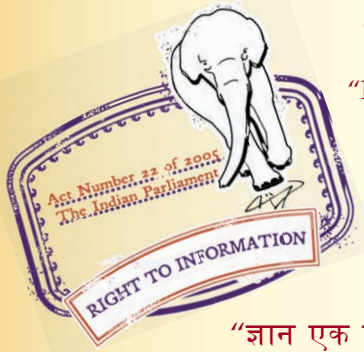
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 5244 (1991): Safe deposit locker cabinets [MED 24:  
Mechanical Engineering]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“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”



भारतीय मानक  
सुरक्षित जमा लाकर केबिनेट – विशिष्ट  
( दूसरा पुनरीक्षण )

*Indian Standard*  
SAFE DEPOSIT LOCKER CABINETS —  
SPECIFICATION  
( *Second Revision* )

UDC 683.342

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**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

## FOREWORD

This Indian Standard ( Second Revision ) was adopted by the Bureau of Indian Standards, after the draft finalized by the Safes Sectional Committee had been approved by the Heavy Mechanical Engineering Division Council.

This Indian Standard was first published in 1969 and revised in 1987. The standard is being revised to bring it in line with the latest developments in the field. In this revision tests and performance requirements for safe deposit locker cabinets have been specified.

Security equipment play a vital role in the safety of cash, jewellery, important documents, etc, in establishments such as banks, hotels, commercial organizations, shops, etc. Safe deposit locker cabinets are designed for convenient deposit and storage of precious articles, documents and the like of a lessee which might otherwise get an access by undesirable persons during an attempted robbery.

In reporting the results of a test or analysis made in accordance with this standard, if the final value, observed or calculated is to be rounded off, it shall be done in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'.

**AMENDMENT NO. 4 SEPTEMBER 2010  
TO  
IS 5244 1991 SAFE DEPOSIT LOCKER CABINETS –  
SPECIFICATION**

*(Second Revision )*

(Amendment No. 3, clause 4.7, third line) -Substitute '0.7' for '0.8'.

(Amendment No. 3, clause 4.7, fourth line) -Substitute 'AC 5' for 'AC 15'.

*(Amendment No. 3, clause 4.7, fifth line)*-Substitute '0.7' for '0.8'.

[Page 4, clause 7.5 (see also Amendment No. 1)]-Add the following matter at the end:

'Any other paint system like polyurethane paint, powder coating, etc, mutually agreed to between the purchaser and the supplier may also be applied.'

*(Page 4, clause 7.6, fourth line)* -Substitute '0.05' for '0.1'.

**(ME 24)**

**AMENDMENT NO. 3 SEPTEMBER 2003**  
**TO**  
**IS 5244 : 1991 SAFE DEPOSIT LOCKER CABINETS —**  
**SPECIFICATION**  
*(Second Revision)*

( Page 1, clause 2 ) — Delete 'IS 1570 (Part 5) : 1985 Schedules for wrought steels : Part 5 Stainless and heat resisting steels (*second revision*)' and add 'IS 1868 : 1996 Anodic coatings of aluminium and its alloys — Specification (*third revision*)' at appropriate place.

( Page 1, clause 2 ) — Insert the following after IS 2932 : 1974:

<i>IS No.</i>	<i>Title</i>
5986 : 2002	Hot rolled steel products for structural forming and flanging purposes — Specification ( <i>second revision</i> )
6603 : 2001	Stainless steel bars and flats — Specification ( <i>first revision</i> )

[ Page 1, clauses **4.1, 4.2, 4.3, 4.4, 4.5 and 4.6** (*see also Amendments No. 1 and 2*) ] — Substitute 'IS 2062 : 1999 or IS 5986 : 2002' for 'IS 2062 : 1992'.

( Page 1, clause **4.7** ) — Substitute the following for the existing:

'**4.7** The door shall be covered with stainless steel fronts conforming to Designation X04Cr19Ni9 or X07Cr18Ni9 of IS 6603 : 2001. Alternatively the doors may have anodized aluminium cladding of nominal 0.8 mm thickness minimum, anodized to Grade AC15 as per IS 1868 : 1996 or mild steel sheet of nominal 0.8 mm thickness minimum, powder coated to have corrosion resistance equivalent to anodized aluminium.'

( Page 4, clause **7.2** ) — Substitute the following for the existing matter:

'The gap between the shutter and doorplate shall not be more than 1 mm, if there is a direct thorough passage. Wherever there is no direct thorough passage the gap can be maximum 1.5 mm.'

(ME 24)

**AMENDMENT NO. 2 MAY 1996**  
**TO**  
**IS 5244 : 1991 SAFE DEPOSIT LOCKER**  
**CABINETS — SPECIFICATION**  
*( Second Revision )*

[ *Page 1, clause 2 ( see also Amendment No. 1 )* ] — Insert the following matter after IS 419 :1967:

'IS 513 : 1994 Cold rolled low carbon steel sheets and strips (*fourth revision*)

IS 1079 : 1994 Hot rolled carbon steel sheets and strips (*fifth revision*)'

[ *Page 1, clause 4.3 ( see also Amendment No. 1 )* ] — Substitute the following for the existing matter

'**4.3** The partition and the shelves shall be of minimum 2 mm thick steel plates conforming to IS 2062 : 1992 or IS 513 : 1994 or IS 1079 :1994.'

[ *Page 1, clause 4.4 ( see also Amendment No. 1 )* ] — Substitute the following for the existing matter

'**4.4** The bottom shall be of minimum 3.15 mm thick steel plates conforming to IS 2062 : 1992 or minimum 2 mm thick plate with stiffener reinforcement of 2 mm thickness conforming to IS 2062 : 1992 or IS 513 : 1994 or IS 1079 : 1994.'

(HMD 24)

**AMENDMENT NO. 1 AUGUST 1994**  
**TO**  
**IS 5244 : 1991 SAFE DEPOSIT LOCKER**  
**CABINETS — SPECIFICATION**  
*( Second Revision )*

[ *Page 1, clause 2*, IS 226 : 1975, IS 814 (Part 1): 1974 and IS 814 (Part 2): 1974 ] — Delete.

*(Page 1, clause 2)* — Insert the following matter after IS 419 : 1967:

'814:1991        Covered electrodes for manual arc welding of carbon and carbon manganese steel *(fifth revision)*'

*( Page 1, clause 2 )* — Substitute the following for IS 2062 : 1984 and IS 2074: 1979:

'IS 2062 : 1992    Steel for general structural purposes *(fourth revision)*

IS 2074 :1992    Ready mixed paint, air drying, red oxide-zinc chrome, priming *(second revision)*'

*( Page 1, clauses 4.1, 4.2, 4.3, 4.4, 4.5 and 4.6 )* — Substitute 'IS 2062 : 1992' for 'IS 2062 : 1984 or IS 226 : 1975'.

*( Page 1, clause 4.8 )* — Substitute 'IS 814 : 1991' for 'IS 814 (Part 1) : 1974 or IS 814 (Part 2): 1974'.

*( Page 1, clause 4.10, second line )* — Substitute 'IS 2074 : 1992' for 'IS 2074 : 1979'.

*( Page 4, clause 7.5, fourth line )* — Substitute 'IS 2074 : 1992' for 'IS 2074:1979'.



# *Indian Standard*

## SAFE DEPOSIT LOCKER CABINETS — SPECIFICATION

### ( *Second Revision* )

#### 1 SCOPE

This standard lays down the requirements regarding materials and details of construction of safe deposit locker cabinets which afford security to precious articles, documents and the like of a lessee in as much as undesirable persons not getting access to their vaults by violence or stealth.

#### 2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
226:1975	Structural steel (standard quality) ( <i>first revision</i> )
419 : 1967	Putty for use on window frames ( <i>first revision</i> )
814 (Part 1) : 1974	Covered electrodes for metal arc welding of structural steels: Part 1 For welding products other than sheets ( <i>fourth revision</i> )
814 (Part 2) : 1974	Covered electrodes for metal arc welding of structural steels : Part 1 For welding sheets ( <i>fourth revision</i> )
1365 : 1978	Slotted countersunk head screws ( <i>third revision</i> )
1570 (Part 5) : 1985	Schedules for wrought steels: Part 5 Stainless and heat-resisting steels ( <i>second revision</i> )
2062 : 1984	Weldable structural steel ( <i>third revision</i> )
2074 : 1979	Ready mixed paint, air drying, red oxide zinc chrome, priming ( <i>first revision</i> )
2932 : 1974	Enamel, synthetic, exterior (a) under coating, (b) finishing ( <i>first revision</i> )

#### 3 TYPES

**3.1** Safe deposit locker cabinets shall be of the following types:

- a) Type 1 — Containing 75 lockers,
- b) Type 1A — Containing 90 lockers,
- c) Type 2 — Containing 52 lockers,
- d) Type 2A — Containing 51 lockers, and
- e) Type 3 — Containing 32 lockers.

**3.2** Any other configuration may be given subject to agreement between the manufacturer and the purchaser.

#### 4 MATERIAL

**4.1** The two sides and top of the locker cabinets shall be of 5 mm thick steel plates conforming to IS 2062 : 1984 or IS 226 : 1975.

**4.2** The back of the locker cabinets shall be of 5 mm thick steel plates conforming to IS 2062 : 1984 or IS 226 : 1975.

**4.3** The partitions and the shelves shall be of minimum 2 mm thick steel plates conforming to IS 2062 : 1984 or IS 226 : 1975.

**4.4** The bottom shall be of minimum 315 mm thick steel plates conforming to IS 2062 : 1984 or IS 226 : 1975 or minimum 2 mm thick with stiffener reinforcement of 2 mm conforming to IS 2062 : 1984 or IS 226 : 1975.

**4.5** The door shall be of 10 mm thick steel plates conforming to IS 2062 : 1984 or IS 226 : 1975. The hinge arrangement shall be such that it shall provide sufficient resistance against tempering attacks of common hand tools. If the hinges of locker units in a vertical row has a cantenars bar hinge, the arrangement of fixing bar shall be such as to prevent lifting of the bar easily by cutting top or bottom part of the hinge or being bent by being pulled forward with a picking tool.

**4.6** The shelves shall be reinforced at front with a minimum of 5 mm thick steel flats conforming to IS 2062 : 1984 or IS 226 : 1975.

**4.7** The doors shall be covered with stainless steel fronts conforming to Designation 04Cr19Ni9 or 07Cr19Ni9 of IS 1570 (Part 5) : 1985. Alternatively the doors may have anodized aluminium cladding of minimum 0.8 mm thick anodized to 15 microns or mild steel sheet of 0.8 mm thickness powder coated to have corrosion resistance equivalent to anodized aluminium.

**4.8** Electrodes for welding shall conform to IS 814 (Part 1) : 1974 or IS 814 (Part 2) : 1974.

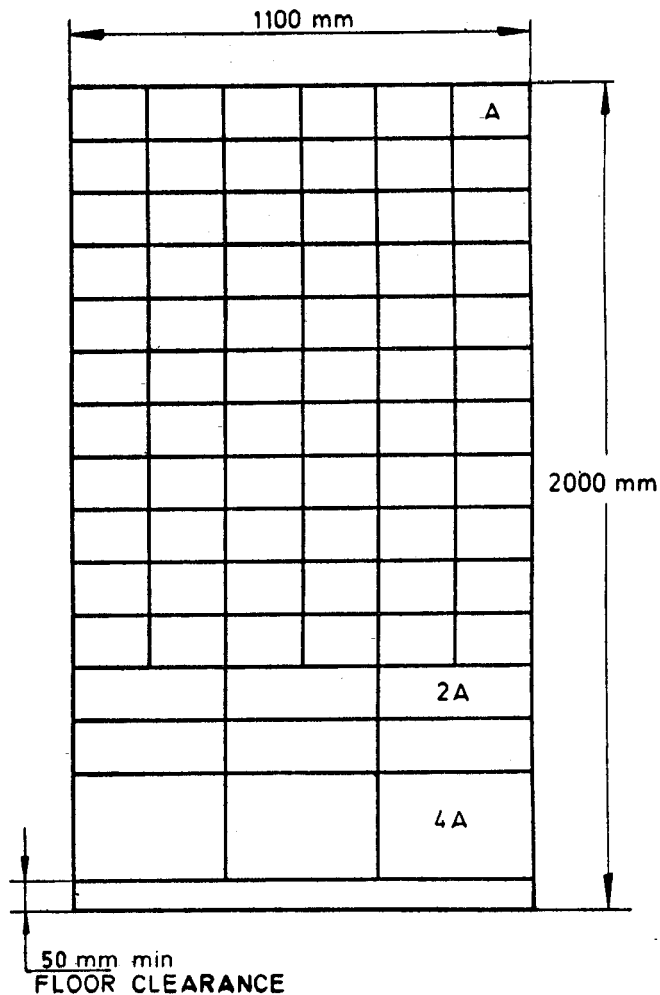
**4.9** Screws shall conform to IS 1365 : 1978.

**4.10** Primer of red oxide-zinc chromate conforming to IS 2074 : 1979 shall be used. Putty shall conform to ISI specification, suitable for leveling surface of metal before painting.

**4.11** Undercoating shall conform to IS 2932 : 1974.

#### 5 SIZES

The dimensions of safe deposit lockers shall be as given in Fig. 1 to 5.



Lockers		Minimum Inside Measurements mm		
No.	Size	High	Wide	Deep
66	A	115	149	470
6	2A	115	329	470
3	4A	266	329	470

Size : 2 000 mm high × 1 100 mm wide × 575 mm deep ( outside). Tolerance : ± 25 mm.

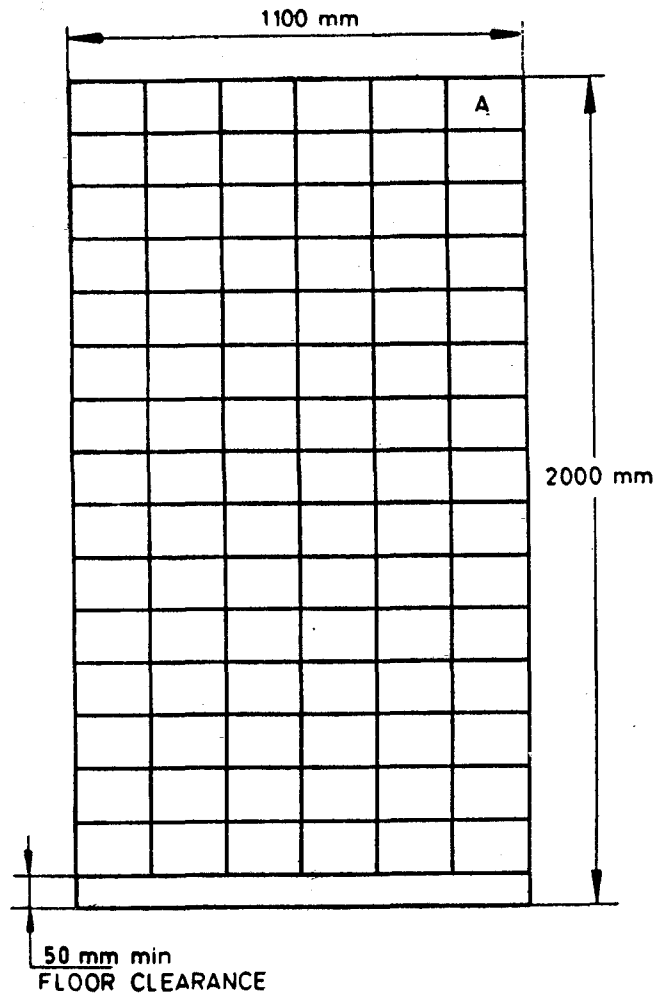
FIG. 1 SAFE DEPOSIT LOCKER CABINET TYPE 1, 75 LOCKERS

## 6 DESIGN AND MANUFACTURE

**6.1** The construction of safe deposit locker cabinet shall be such that it provides maximum security to the lessee. Lockers shall be secured with first class unpickable dual control key-lock. They shall be selflocking so that the custodian does not have to re-lock the locker with his (custodian's) key after the lessee has locked it. The mechanism of the lock shall be such that the lessee shall not be able to withdraw his key unless the locker has been re-locked fully. Once

the lessee has locked the locker, the same cannot be opened unless the custodian turns in his key to take off his control. No key of one lock shall apply to any other lock except its own. The lessee's as well as the custodian's keys shall be made of stainless steel.

**6.2** The locks shall be interchangeable so that when a locker is vacated by a lessee, the lock may be and should be immediately transferred to another locker and *vice versa*.



Lockers		Minimum Inside Measurements mm		
No.	Size	High	Wide	Deep
90	A	115	149	470

Size : 2 000 mm high  $\times$  1 100 mm wide  $\times$  575 mm deep ( outside ). Tolerance :  $\pm$  25 mm.

FIG. 2 SAFE DEPOSIT LOCKER CABINET TYPE 1A, 90 LOCKERS

**6.3** Provision shall be made to fit on the inside of the locker door another strong and unpickable lock of the lessee if so desired by the lessee. Third key hole of the renter's lock, when the lock is not fitted will be protected by a plate or by secure plug, making the inside of the locker inaccessible to access from the outside. An outside pad locking arrangement or hasp shall also be provided.

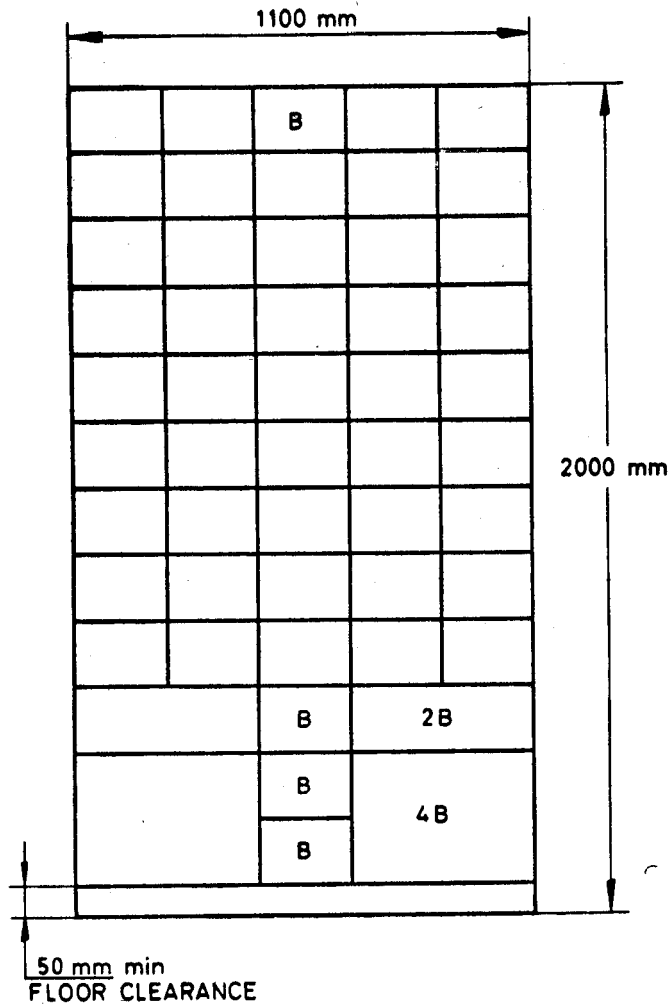
**6.4** The lock and the shutter arrangement shall be such that the lever of the lock projecting into locker or the locking hole, as the case may be, shall have sufficient protection against tampering with crow bar or other hand tools.

**6.5** Lever of lock shall be strong enough in both the directions of its section ( that is, Ixx and IYY ) to provide resistance against bending.

**6.6** The lever when lock is in locked position, shall have depth of engagement of not less than 5 mm.

## 7 WORKMANSHIP AND FINISH

**7.1** All dents, burrs and sharp edges shall be removed from the various components and they shall be thoroughly degreased and cleaned of rust and scale preferably by sand blasting or by normal pickling process.



Lockers		Minimum Inside Measurements mm		
No.	Size	High	Wide	Deep
48	B	148	184	470
2	2B	148	401	470
2	4B	314	401	470

Size : 2000 mm high × 1 100 mm wide × 575 mm deep (outside). Tolerance : ± 25 mm.

FIG. 3 SAFE DEPOSIT LOCKER CABINET TYPE 2, 52 LOCKERS

**7.2 Tolerance**

The gap between the shutter and frame shall not be more than 1.0 mm. The rebate cover shall be minimum 8 mm.

**7.3** Welded joints shall be free from welding slags.

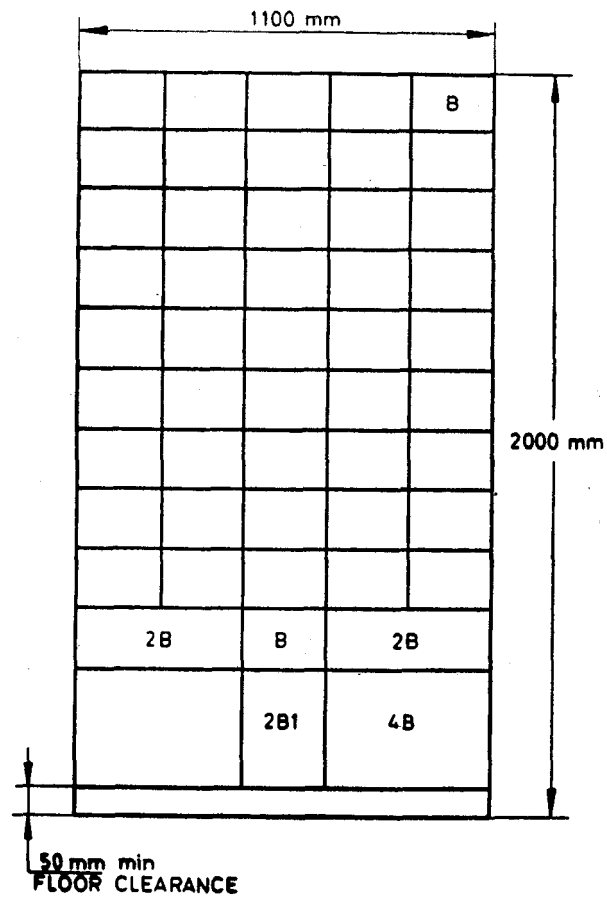
**7.4** All surfaces shall be phosphatized or shot/sand blasted before application of rust proof primer.

**7.5** Putty conforming to IS 419 : 1967 shall be applied to all surface requiring filling. Two coats of undercoat and final coat paint conforming to IS 2074 : 1979 shall be applied.

**7.6** Finish shall be smooth, uniformly applied and free from visible defects. It shall be smooth and shall not readily chip or flake. The dry film thickness shall not be less than 0.1 mm and shall be polished to bring out lustre.

**8 TESTING**

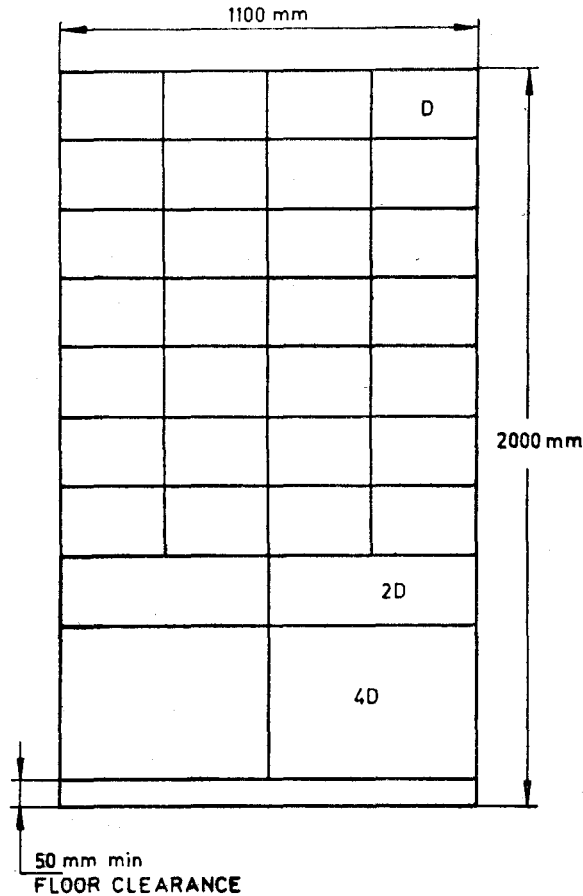
**8.1** The locker unit shall be tested for its performance against burglarious attacks with common hand tools such as spanners, pliers, chisels, punches, hammers (not exceeding 1 kg in mass), crow bars (maximum 500 mm in length and 15 mm in diameter) and screw drivers. The locker units shall be able to withstand such attacks successfully for a period of not less than 15 minutes.



Lockers		Minimum Inside Measurements mm		
No.	Size	High	Wide	Deep
46	B	148	184	470
2	2B	148	401	470
2	4B	314	401	470
1	2B1	314	184	470

Size : 2 000 mm high × 1 100 mm wide × 575 mm deep ( outside ). Tolerance : ± 25 mm.

FIG. 4 SAFE DEPOSIT LOCKER CABINET TYPE 2A, 51 LOCKERS



Lockers		Minimum Inside Measurements mm		
No.	Size	High	Wide	Deep
28	D	178	238	470
2	2D	178	506	470
2	4D	394	506	470

Size : 2 000 mm high × 1 100 mm wide × 575 mm deep ( outside ). Tolerance : ± 25 mm.

FIG. 5 SAFE DEPOSIT LOCKER CABINET TYPE 3, 32 LOCKERS

**8.2** Each locker unit shall be tested to ensure that the customer's key does not come out unless the shutter is completely closed and the lock is fully locked.

**9 MARKING**

**9.1** All the safe deposit locker cabinets shall be marked with the manufacturer's name or trade-mark, the type and year of manufacture.

**9.1.1 Certification Marking**

Safe deposit locker cabinets may also be marked with the Standard Mark.

**9.2** The lockers shall be serially numbered and marked on the outside of locker doors by the manufacturer as desired by the customer.

**9.3 Marking on Keys**

The keys shall be marked with an identification number which shall not be the same as the serial number of the corresponding locker.

**10 INSPECTION**

The purchaser or his authorized representative shall normally have free access to inspect the safe deposit locker cabinets at various stages of manufacture.

**11 PACKING**

All the component parts shall be packed in such a way that no damage is caused to them during transit. The key shall be sealed in a box and dispatched separately to the purchaser in person.

### **Standard Mark**

The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The Standard 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 denned system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

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Doc : No. HMD 24 ( 0036 )

#### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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