

भारतीय मानक
Indian Standard

IS 5244 : 2020

सुरक्षा जमा लॉकर अलमारियाँ — विशिष्टि
(चौथा पुनरीक्षण)

Safe Deposit Locker Cabinets —
Specification
(*Fourth Revision*)

ICS 13.310

© BIS 2020



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुरशाह ज़फर मार्ग, नई दिल्ली – 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI-110002
www.bis.gov.in www.standardsbis.in

March 2020

Price Group 4

Security Equipments Sectional Committee, MED 24

FOREWORD

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

This standard was first published in 1969 and subsequently revised in 1987, 1991 and 2014. The standard is being revised after incorporating the amendment no. 1 to IS 5244.

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.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

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 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

**SAFE DEPOSIT LOCKER CABINETS —
SPECIFICATION**

(Fourth Revision)

1 SCOPE

1.1 This standard specifies the general requirements of materials and details of construction of safe deposit locker cabinets which afford security to precious articles, documents or any item that needs to be protected from unauthorized access.

1.2 For the sake of convenience, certain requirements in this standard have been described in terms of the lessee and custodian of the locker cabinet. The functionality of these requirements shall also apply to situations where the custodian and lessee relationships do not exist.

2 REFERENCES

The standards listed in Annex A contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

3 TERMINOLOGY

3.1 Custodian — The entity under whose custody the safe deposit locker cabinet is installed operated and maintained.

3.2 Lessee — The entity who leases one or more locker(s) in a safe deposit locker cabinet for use.

4 TYPES

4.1 Safe deposit locker cabinets shall preferably 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,
- e) *Type 3* — Containing 32 lockers, and
- f) *Type 4* — Any other configuration

4.2 Any other size and/or configuration may also be manufactured, provided the cabinet meets all other

requirements of the standard. Such cabinets shall be designated as Type 4.

4.3 All cabinets of Type 4 shall be clearly designated so as to indicate the number and combination of lockers. The designation shall be given in the following manner:

Type 4/total number of lockers/number of lockers of each size with their designations used in this standard.

For example, cabinet with total 12 lockers, with 6 numbers A-locker, 3 numbers of 2A-lockers and 3 numbers of 4A-lockers shall be designated as Type 4/12/A-6 × 2A-3 × 4A-3.

5 MATERIALS

Materials specified in Table 1 are for general guidance only. The critical quality parameters of the materials used for the components shall be declared by the manufacturer at the time of type approval and records of details of material shall be maintained for conformity during routine production.

6 SIZES

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

7 DESIGNS AND MANUFACTURE

7.1 The construction of safe deposit locker cabinet shall be such that it provides maximum security to the lessee. Lockers shall be secured with unpick able dual control key-lock. Lockers shall be self locking 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 lock 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 number. 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 or any other metal/alloy having non-corrosive properties.

7.2 The locks shall be interchangeable so that when a locker is vacated by a lessee, the lock shall be immediately changed.

IS 5244 : 2020

Table 1 Material for Manufacture of Components of Locker Cabinet

(Clause 5)

Sl No.	Component	Material Thickness (Nominal) <i>Min</i> <i>mm</i>	Material Specification	Finish
(1)	(2)	(3)	(4)	(5)
i)	Sides, top, back	5	Any grade of steel as per IS 2062 or IS 1079 or IS 513 (Part 1), IS 513 (Part 2) or IS 277 or any other equivalent.	The inside and outside surfaces of the locker against cabinet shall be painted or powder coated. In case of paint, an appropriate primer and undercoating shall be used in accordance to industry practices. The minimum overall thickness of the coatings shall be 50 microns for powder coating and 70 microns for liquid paint and cross hatch test as per 9.3 , shall be conducted to conform the adhesion requirements.
ii)	Partitions, shelves	2		
iii)	Bottom	3 (<i>see</i> Note)		
iv)	Door	10		
v)	Hinge/axle	Suitable size	Stainless steel or aluminium or mild steel	Aluminium anodized to minimum 5 micron thickness or powder coated to 50 microns
vi)	Shelf front	5		
vii)	Door front (Fascia) (optional)	0.7		
NOTE — Bottom can also be manufactured in minimum 2 mm nominal thick material with reinforcement of minimum 2 mm nominal thick stiffeners.				

7.3 Provision shall be made to fit on the inside of the locker door another strong and unpick able 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 may also be provided if asked by the customer.

7.4 The lock and the shutter arrangement shall be such that the main bolt of the lock projecting into locker or the locking hole, as the case may be, shall meet the requirement of 9.1, against tampering with crow bar or other hand tools.

7.5 Main bolt of lock shall be strong enough in both the directions of its section (that is, Ixx and Iyy) to provide resistance against bending.

7.6 The main bolt of lock when lock is in locked position shall have depth of engagement of not less than 5 mm.

8 WORKMANSHIP

8.1 All dents, burrs and sharp edges shall be removed from the various components and they shall be thoroughly degreased and cleaned of rust.

8.2 Tolerance

Gap around the door plate on front, top and bottom shall not be more than 1 mm, if there is direct through passage. Wherever there is no direct through passage the gap shall be maximum 1.5 mm.

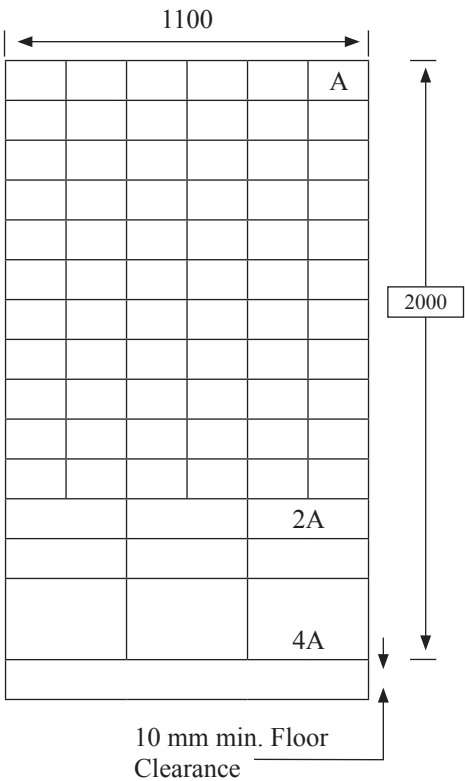
9 TESTING

9.1 The locker unit shall be tested for its performance against burglarious attacks with common hand tools. The locker unit shall be able to successfully withstand such attack for a period of not less than 15 min.

The test shall meet following conditions:

- Screwdrivers (dia $\leq$ 12mm, length $\leq$ 200 mm including handle), spanners, pliers (length $\leq$ 160 mm), chisels (dia $\leq$ 12mm, length $\leq$ 150 mm), punches, prying tools (total weight $\leq$ 0.5 kg, length $\leq$ 200 mm) and crowbars (dia $\leq$ 12mm , length $\leq$ 200 mm including handle) may be used for the test.
- Not more than one piece of the same tool shall be used for a test.
- No tool shall be more than 500 g in weight.
- The test shall be done by a single person and more than 3 tools shall not be used for a single test. The choice of the tools shall be the prerogative of the testing team. However, the reasons for the choice shall be recorded in the test report.'
- The test shall be carried out continuously, without a break.
- Five percent of the locker units in a cabinet shall be randomly chosen by the testing team and subjected to the test. In the event of a fractional number, the next higher number shall be tested.

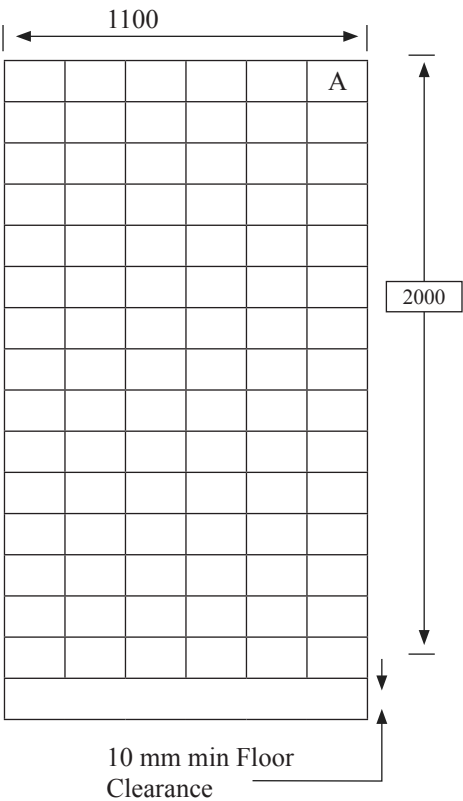
9.2 Each locker unit shall be tested to ensure that the customer's key does not come out unless the lock is fully locked.



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: 2000 mm High × 1100 mm Wide × 575 mm Deep (Outside)
Tolerance ± 25 mm
All dimensions in millimeters.

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

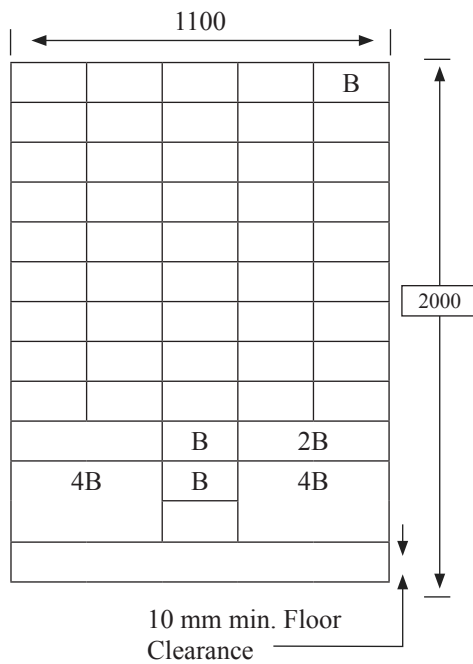


Lockers		Minimum Inside Measurements mm		
No	Size	High	Wide	Deep
90	A	115	149	470

Size: 2000 mm High × 1100 mm Wide × 575 mm Deep (Outside)
Tolerance ± 25 mm
All dimensions in millimeters.

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

IS 5244 : 2020



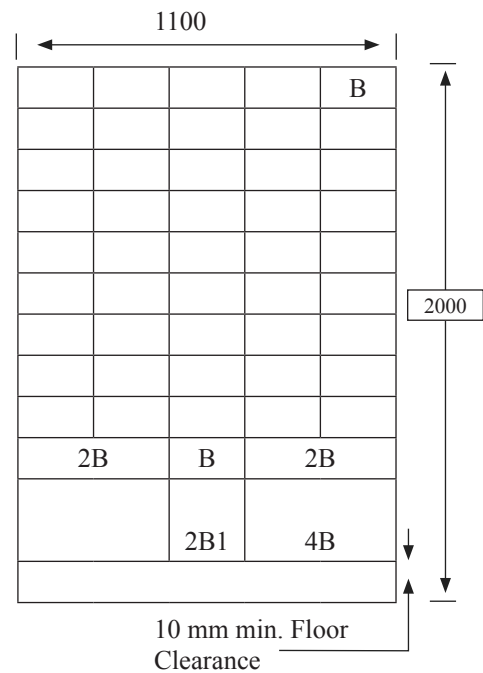
<i>Lockers</i>		<i>Minimum Inside Measurements mm</i>		
No.	Size	High	Wide	Deep
48	B	148	184	470
2	2B	148	401	470
2	4B	314	401	470

Size: 2000 mm High $\times$ 1100 mm Wide $\times$ 575 mm Deep (Outside)

Tolerance $\pm$ 25 mm

All dimensions in millimeters.

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



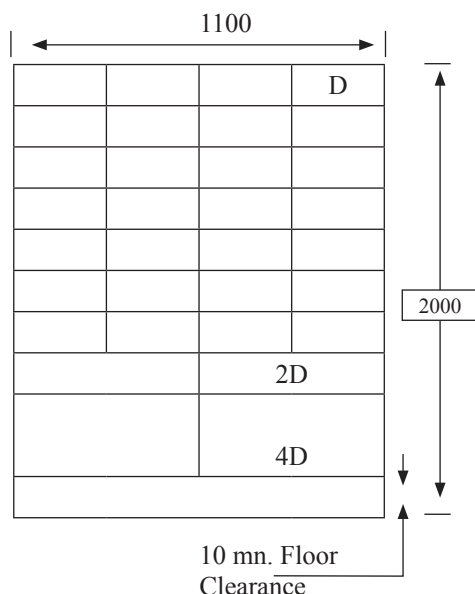
<i>Lockers</i>		<i>Minimum Inside Measurements mm</i>		
No.	Size	High	Wide	Deep
46	B	148	184	470
2	2B	148	401	470
1	2B1	314	184	470
2	4B	314	401	470

Size: 2000 mm High $\times$ 1100 mm Wide $\times$ 575 mm Deep (Outside)

Tolerance $\pm$ 25 mm

All dimensions in millimeters.

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: 2000 mm High $\times$ 1100 mm Wide $\times$ 575 mm Deep (Outside)
Tolerance $\pm$ 25 mm
All dimensions in millimeters.

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

9.3 Cross Hatch Test

- Make 6 parallel cut marks using sharp metal pointer and straight edge, through the painted/coated surface, so as to make the base surface visible through cut marks.
- Cut marks shall be minimum 20 mm long and at 2 mm distance from each other.
- Make 6 similar cut marks in the direction perpendicular to first set of cut marks, with same length and spacing.

- These 12 cut marks together shall make a pattern of 25 squares of 2 mm $\times$ 2 mm size, totally separated from each other.
- A good quality transparent adhesive tape not less than 20 mm width shall be stuck on the pattern, parallel to any one set of cut marks.
- To ensure continuous contact with paint/coat film, rub the tape firmly and remove air bubbles under the tape, if any.
- Within 60 to 120 s after sticking the tape, remove it by seizing free end of the tape and rapidly pulling it off at an angle close to 180°.
- Painting/coating quality is considered as acceptable, if no part of any 2 mm $\times$ 2 mm square of paint/coat comes off the surface due to pulling the tape.

10 MARKING

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

10.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

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

10.4 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.

11 PACKING

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

IS 5244 : 2020

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
277 : 2018	Galvanized steel strips and sheets (plain and corrugated) — Specification (<i>seventh revision</i>)	513 (Part 2) : 2016	Cold reduced carbon steel sheets and strips: Part 2 High tensile and multi-phase steel (<i>sixth revision</i>)
513 (Part 1) : 2016	Cold reduced carbon steel sheets and strips: Part 1 Cold forming and drawing purpose (<i>sixth revision</i>)	1079 : 2017	Hot rolled carbon steel sheets and strips — Specification (<i>seventh revision</i>)
		2062 : 2011	Hot rolled medium and high tensile structural steel (<i>seventh revision</i>)

ANNEX B

(Foreword)

COMMITTEE COMPOSITION

Security Equipment Sectional Committee, MED 24

<i>Organization</i>	<i>Representative(s)</i>
Reserve Bank of India, Mumbai	SHRI J. JAYAPRAKASH (Chairman)
Bank of India, Mumbai	CAPT R. PATNEY CAPT VIRINDER MINHAS (<i>Alternate</i>)
Central Bank of India, Mumbai	COL A. K. JHA
Central Building Research Institute, Roorkee	DR SUVIR SINGH DR RAJIV KUMAR (<i>Alternate</i>)
Emtac Laboratories Pvt Ltd, Hyderabad	SHRI C. K. MAHESHWARI SHRI SUPRIYO GANGULY (<i>Alternate</i>)
Godrej & Boyce Manufacturing Co Ltd, Mumbai	SHRI PRASHANT H. CHOUTHKANTHIWAR SHRI PUSHKAR GOKHALE (<i>Alternate</i>)
Guardwel Industries Pvt Ltd, Mumbai	SHRI JOHN DMELLO SHRI LEON GEORGE (<i>Alternate</i>)
Gunnebo India Pvt Ltd, Mumbai	SHRI R. SRINIVASAN SHRI ASHUTOSH SATPUTE (<i>Alternate</i>)
Indian Banks Association, Mumbai	SHRI K. UNNIKRISHNAN
Indian Overseas Bank, Mumbai	CAPT M. P. SIVAN
Indian Institute of Technology Bombay, Mumbai	PROF P. P. DATE
Insurance Regulatory & Development, Hyderabad	SHRI T. S. NAIK
Methodex Systems Ltd, Indore	SHRI S. K. SINGH SHRI SUMIT GUHA (<i>Alternate</i>)
Punjab National Bank, New Delhi	CAPT B. K. TYAGI SHRI ARUN KUMAR (<i>Alternate</i>)
Safeage Security Products Pvt Ltd, Mumbai	SHRI RAJAN VASANOI SHRI NARESH PANCHAL (<i>Alternate</i>)
Sherni Locks Manufacturers Pvt Ltd, Pune	SHRI FAROKH KUTAR SMT ARTI GUPTA (<i>Alternate</i>)
Shriram Institute For Industrial Research, Delhi	DR TARSAME SINGH SIEN
State Bank of India, Mumbai	CAPT ARUN THAKUR CAPT SUSHIL SINGH
Tata Consultancy Services, New Delhi	SHRI AJIT MENON DR R. K. RAGHAVAN (<i>Alternate</i>)
Union Bank Of India, Mumbai	BR ASHUTOSH SIROTHIA
Voice, New Delhi	SHRI M. A. U. KHAN

IS 5244 : 2020

<i>Organization</i>	<i>Representative(s)</i>
In personal capacity (<i>Plot No. 41, Block No. 5, Mehta cottage, Dr Raut Road, Shivaji Park, Dadar, Mumbai 400 028</i>)	SHRI A. G. NARAVANE
BIS Directorate General	SHRI RAJNEESH KHOSLA SCIENTIST 'E' AND HEAD (MED) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary

Ms KHASHBOO KUMARI
SCIENTIST 'C' (MED), BIS

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 2016* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

This Indian Standard has been developed from Doc No.: MED 24 (13318).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones: 2323 0131, 2323 3375, 2323 9402

Website: www.bis.gov.in

Regional Offices:

Telephones

Central	: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{ 2323 7617 2323 3841
Eastern	: 1/14 C.I.T. Scheme VII M, V.I.P. Road, Kankurgachi KOLKATA 700054	{ 2337 8499, 2337 8561 2337 8626, 2337 9120
Northern	: Plot No. 4-A, Sector 27-B, Madhya Marg CHANDIGARH 160019	{ 265 0206 265 0290
Southern	: C.I.T. Campus, IV Cross Road, CHENNAI 600113	{ 2254 1216, 2254 1442 2254 2519, 2254 2315
Western	: Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400093	{ 2832 9295, 2832 7858 2832 7891, 2832 7892

Branches : AHMEDABAD. BENGALURU. BHOPAL. BHUBANESHWAR. COIMBATORE.
DEHRADUN. DURGAPUR. FARIDABAD. GHAZIABAD. GUWAHATI.
HYDERABAD. JAIPUR. JAMMU. JAMSHEDPUR. KOCHI. LUCKNOW.
NAGPUR. PARWANOO. PATNA. PUNE. RAIPUR. RAJKOT. VISAKHAPATNAM.

Published by BIS, New Delhi