

इंटरनेट

मानक



Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

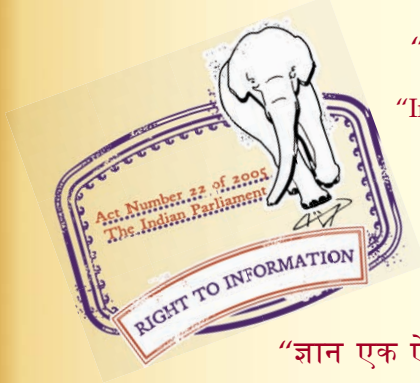
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7534 (1985): Specification for sliding locking bolts for use with padlocks [CED 15: Builder Hardware]



“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”



BLANK PAGE



Indian Standard
SPECIFICATION FOR
SLIDING LOCKING BOLTS FOR
USE WITH PADLOCKS
(*First Revision*)

UDC 683.311.2 : 683.334



© Copyright 1985

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

Indian Standard

**SPECIFICATION FOR
SLIDING LOCKING BOLTS FOR
USE WITH PADLOCKS**

(First Revision)

Builder's Hardware Sectional Committee, BDC 15

<i>Members</i>	<i>Representing</i>
SHRI SAHIB SINGH (<i>In the Chair</i>)	M. C. Mowjee & Company Private Limited, Calcutta
SHRI S. MOWJEE (<i>Alternate</i>)	
SHRI D. S. CHAUHAN	Regional Testing Centre (Northern) (Ministry of Industry), New Delhi
SHRI A. K. DUGGAL (<i>Alternate</i>)	
CONTROLLER OF STORES (EASTERN RAILWAY)	Ministry of Railways
SHRI A. GHOSH	National Test House, Calcutta
SHRI A. K. SARKAR (<i>Alternate</i>)	
SHRI S. K. GOSWAMI	Central Building Research Institute (CSIR), Roorkee
SHRI P. D. GUJRATI	Engineer-in-Chief's Branch, Army Headquarters, New Delhi
SHRI P. K. SETHI (<i>Alternate</i>)	
SHRI N. C. JAIN	Ministry of Defence (DGI)
SHRI D. D. GHOSH (<i>Alternate</i>)	
SHRI S. C. KAPOOR	Directorate General of Supplies & Disposals, New Delhi
SHRI I. C. KHANNA (<i>Alternate</i>)	
SHRI RAM F. KEWALRAMANI	Indian Institute of Architects, Bombay
COL P. C. KHANNA	Argent Industries, New Delhi
MAJ-GEN K. D. CHADHA (<i>Alternate</i>)	
SHRI G. M. MENON	Indian Aluminium Co Ltd, Calcutta
SHRI V. RAMASWAMY (<i>Alternate</i>)	
SHRI AJOYENDU PAUL	Gobindo Sheet Metal Works & Foundry, Calcutta
SHRI AMITABH PAUL (<i>Alternate</i>)	
DR A. V. R. RAO	National Buildings Organization, New Delhi
SHRI O. P. RATRA (<i>Alternate</i>)	
REPRESENTATIVE	Builder's Hardware Industries Association of India, Calcutta
SHRI RAJ KUMAR SOOD	Adarsh Industries, Delhi
SHRI NARENDRA SOOD (<i>Alternate</i>)	

(Continued on page 2)

© Copyright 1985

INDIAN STANDARDS INSTITUTION

This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

(Continued from page 1)

<i>Members</i>	<i>Representing</i>
SUPERINTENDING SURVEYOR OF WORKS I (DAZ)	Central Public Works Department, New Delhi
SURVEYOR OF WORKS (<i>Alternate</i>)	
SHRI M. S. VEDI	Everite Sales Corporation, New Delhi
SHRI R. S. VEDI (<i>Alternate</i>)	
SHRI G. RAMAN, Director (Civ Engg)	Director General, ISI (<i>Ex-officio Member</i>)
 <i>Secretary</i> 	
	SHRI A. K. SAINI Assistant Director (Civ Engg), ISI

Door and Window Fittings Subcommittee, BDC 15 : 1

<i>Members</i>	
SHRI K. K. AIYER	Engineer-in-Chief's Branch, Army Headquarters, New Delhi
SHRI P. B. KUMBHARE (<i>Alternate</i>)	
SHRI S. D. CHAUHAN	Regional Testing Centre (Northern) (Ministry of Industry), New Delhi
SHRI A. K. DUGGAL (<i>Alternate</i>)	
SHRI JASWANT SINGH	Eastern Commercial & Industrial Enterprises Pvt Ltd, Vishakhapatnam
SHRI RAVI MEHRA (<i>Alternate</i>)	
SHRI RAKESH KAMBOJ	Jayna Trading Corporation, Delhi
SHRI NAWAL KAMBOJ (<i>Alternate</i>)	
SHRI I. C. KHANNA	Directorate General of Supplies & Disposals (Ministry of Supply), New Delhi
COL P. C. KHANNA	Argent Industries, New Delhi
MAJ-GEN K. D. CHADHA (<i>Alternate</i>)	
SHRI AJOYENDU PAUL	Gobindo Sheet Metal Works & Foundry, Calcutta
SHRI AMITABH PAUL (<i>Alternate</i>)	
SHRI V. K. PUNJ	Ministry of Railways
SHRI SAHIB SINGH	M. C. Mowjee & Company Private Limited, Calcutta
SHRI S. MOWJEE (<i>Alternate</i>)	
SURVEYOR OF WORKS (DAZ)	Central Public Works Department, New Delhi
SHRI M. S. VEDI	Everite Sales Corporation, New Delhi
SHRI R. S. VEDI (<i>Alternate</i>)	

Indian Standard
SPECIFICATION FOR
SLIDING LOCKING BOLTS FOR
USE WITH PADLOCKS
(*First Revision*)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 15 March 1985, after the draft finalized by the Builder's Hardware Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 Locking bolts are fasteners like sliding door bolts for securing doors. Sliding door bolts with hasps and staples have been covered separately in IS : 281 -1973*. These locking bolts are type of sliding door bolts in which the hasp and staple are omitted. The bolt is locked either directly to the door frame or with a plate fixed at right angle to the bolt plate. These type of locking bolts are used in large numbers.

0.3 This standard was originally published in 1974. In the present revision locking bolt with curved plate has been included. The dimensions of locking bolt with straight plate have been modified and use of aluminium in addition to mild steel has been permitted.

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 the requirements regarding materials, dimension, manufacture and finish of sliding locking bolts commonly used for locking doors, gates, etc, with padlocks.

*Mild steel sliding door bolts for use with padlocks (*second revision*).

†Rules for rounding off numerical values (*revised*).

2. LOCKING BOLTS

2.1 These shall be of two types:

Type I — with straight locking plate, and

Type II — with curved locking plate.

3. SIZES

3.1 Locking bolts shall be of 110, 150, 200, 250 and 300 mm size.

3.1.1 The size shall be denoted by the length of bolt (see Fig. 1 and 2).

3.2 Locking bolts of sizes other than those specified in 3.1 may also be supplied by mutual agreement between the purchaser and the supplier.

4. MATERIAL

4.1 Materials used for the manufacture of locking bolts shall comply with the requirements given in Table 1.

TABLE 1 REQUIREMENTS FOR MATERIALS FOR LOCKING BOLTS

SL No.	PART	MATERIAL	SUITABLE GRADE IN INDIAN STANDARD
i)	Bolt plate and receiving plate	Mild steel sheet	Grade 0-1079 of IS : 1079-1973*
		Aluminium alloy sheet	IS Designation 52000 or 65032 of IS : 737-1974†
ii)	Bolt	Mild steel rods	Grade Fe 310-0 of IS : 1977-1975‡
		Aluminium alloy extruded rod	IS Designation 63400 WP or 65032 WP of IS : 733-1983§

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

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

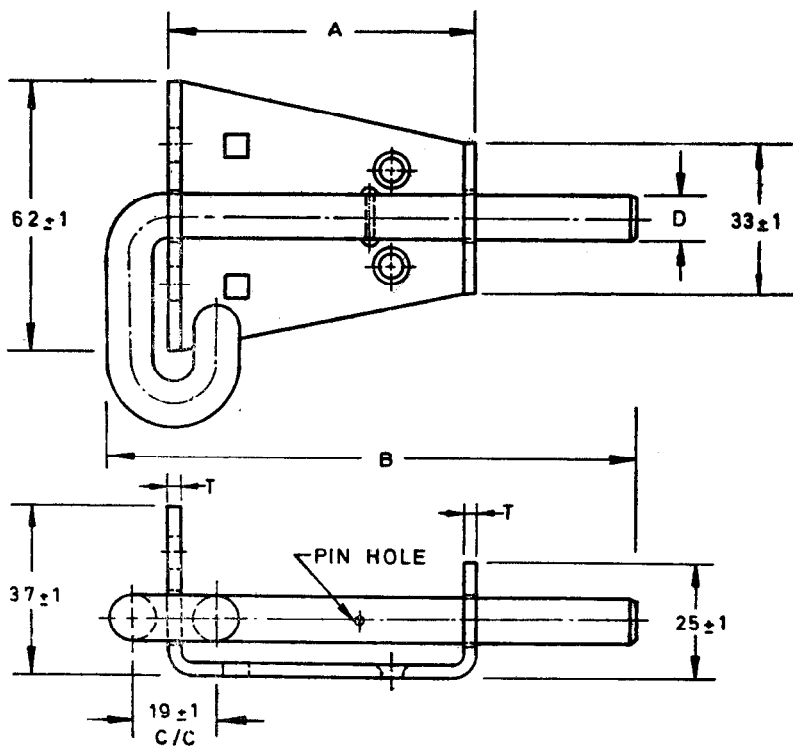
‡Specification for structural steel (ordinary quality) (*second revision*).

§Specification for wrought aluminium and aluminium alloy bars, rods, and sections (for general engineering purposes) (*third revision*).

5. MANUFACTURE

5.1 **General** — The locking bolts shall have smooth sliding action. All sharp edges and corners shall be removed and finished smooth. All screw holes shall be countersunk to suit the countersunk head wood screws (see IS : 6760-1972*) of sizes as specified in Table 2.

*Specification for slotted countersunk head wood screws.



All dimensions in millimetres.

FIG. 2 SLIDING LOCKING BOLT WITH CURVED LOCKING PLATE (TYPE II)

TABLE 2 DIMENSIONS OF LOCKING BOLT

(Clause 6.1 and Fig. 1 and 2)

All dimensions in millimetres.

TYPE	REF TO FIG.	SIZE	LENGTH OF BOLT PLATE	LENGTH OF BOLT	DIA OF BOLT	WIDTH OF BOLT PLATE	THICKNESS OF BOLT PLATE	THICKNESS OF PLATE CARRYING HOLES FOR LOCKING	SCREW HOLES	
									No. in Plate Locking	Size Designation (see IS : 6760-1972*)
(1)	(2)	(3)	A	B	D	E	T ₁	T ₂	(10)	(11)
I	1	150	210 ± 1	150 ± 2	10 ± 0.5 or 12 ± 0.5	45 ± 1	Mild Steel: 2 ± 0.10 Aluminium: 3 ± 0.10	Mild Steel: 2 ± 0.10 Aluminium: 3 ± 0.10	8	9
		200	260 ± 1	200 ± 2						
		250	310 ± 1	250 ± 2						
		300	360 ± 1	300 ± 2						
II	2	110	A 65 ± 1	B 110 ± 2	D 10 ± 0.5	T 3 ± 0.10		4	9	

*Specification for slotted countersunk head wood screws.

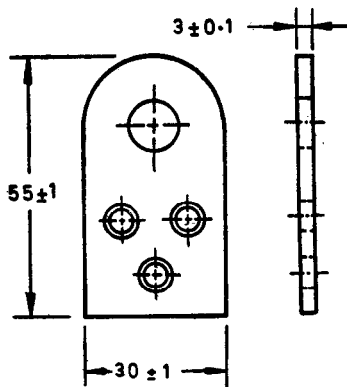
7

5.1.1 Bolt Plate — The bolt plate shall be made from either mild steel or aluminium alloy sheets and shall be cut, bent to shape and finished smooth.

5.1.2 Bolt — Bolts shall be made from either mild steel or aluminium alloy rods and shall be cut, bent to shape and shall be firmly riveted or spot welded in the middle to restrict its movement.

6. DIMENSIONS AND TOLERANCES

6.1 The size and dimensions of the locking bolts and receiving plate shall conform to Table 2 read with Fig. 1, 2 and 3.



All dimensions in millimetres.

NOTE 1 — Clear edge distance of holes = 5 mm, *Min.*

NOTE 2 — Screw hole designation No. 9 (see IS : 6760-1972).

FIG. 3 TYPICAL SKETCH OF RECEIVING PLATE

7. FINISH

7.1 Mild steel locking bolts shall be copper oxidized, electrogalvanized or stove enamelled black. Aluminium alloy bolt shall be anodized to a bright, natural mat or satin finish or dyed. The anodic coating shall not be less than Grade AC 10 of IS : 1868-1982* or as required by the purchaser. All bolts shall be finished bright.

8. MARKING

8.1 Each locking bolt shall be marked with the manufacturer's name or trade-mark.

*Specification for anodic coatings on aluminium (*second revision*).

8.1.1 Locking bolt 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. SAMPLING AND CRITERION FOR CONFORMITY

9.1 The method of selecting locking bolts and criterion for conformity shall be as given in Appendix A.

A P P E N D I X A

(Clause 9.1)

SAMPLING OF SLIDING LOCKING BOLTS FOR USE WITH PADLOCKS

A-1. SCALE OF SAMPLING

A-1.1 Lot — In any consignment all the locking bolts of the same size, same type and manufactured at the same time shall be grouped together to constitute a lot.

A-1.2 For ascertaining the conformity of the lot to the requirements of this specification, samples shall be tested from each lot separately.

A-1.3 The number of locking bolts to be selected from the lot shall depend on the size of the lot and shall be according to Table 3.

A-1.3.1 These locking bolts shall be selected at random from at least 10 percent of the packages subject to a minimum of three packages, equal number of locking bolts being selected from each such package. In order to ensure the randomness of selection, procedures given in IS : 4905-1968* may be followed.

*Methods for random sampling.

**TABLE 3 SCALE OF SAMPLING AND PERMISSIBLE
NUMBER OF DEFECTIVES**

(Clause A-1.3)

NO. OF LOCKING BOLTS IN THE LOT	SAMPLE SIZE	PERMISSIBLE NO. OF DEFECTIVES
(1)	(2)	(3)
Up to 150	13	0
151 to 300	20	1
301 to 500	32	2
501 and above	50	3

A-2. NUMBER OF TESTS AND CRITERIA FOR CONFORMITY

A-2.1 All the locking bolts selected according to **A-1.3** shall be examined for dimensional requirements (*see 6*), defects in manufacture (*see 5*) and finish (*see 7*). Any locking bolts failing to satisfy one or more of these requirements shall be considered as defective.

A-2.2 The lot shall be considered as conforming to the requirements of this specification if the number of defectives found in the sample does not exceed the corresponding permissible number of defectives given in col 3 of Table 3.

NOTE — For conformity of the requirements of the material given in 4 of the specification, the manufacturer shall provide a test certificate.



INDIAN STANDARDS INSTITUTION

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones : 3 31 01 31, 3 31 13 75

Telegrams : Manaksanstha
(Common to all Offices)

Regional Offices :

Telephone

*Western : Manakalaya, E9 MIDC, Marol, Andheri (East), BOMBAY 400093 6 32 92 95

†Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola, CALCUTTA 700054 36 24 99

Southern : C. I. T. Campus, MADRAS 600113 41 24 42

Northern : B69 Phase VII, Industrial Focal Point, S. A. S. NAGAR 160051 (Punjab) 8 73 28

Branch Offices :

'Pushpak', Nurmohamed Shaikh Marg, Khanpur, AHMADABAD 380001 { 2 63 48
2 63 49

'F' Block, Unity Bldg, Narasimharaja Square, BANGALORE 560002 22 48 05

Gangotri Complex, Bhadbhada Road, T. T. Nagar, BHOPAL 462003 6 27 16

22E Kalpana Area, BHUBANESHWAR 751014 5 36 27

5-8-56C L. N. Gupta Marg, HYDERABAD 500001 22 10 83

R14 Yudhister Marg, C Scheme, JAIPUR 302005 6 98 32

117/418 B Sarvodaya Nagar, KANPUR 208005 4 72 92

Patliputra Industrial Estate, PATNA 800013 6 23 05

Hantex Bldg (2nd Floor), Rly Station Road, TRIVANDRUM 695001 32 27

Inspection Office (With Sale Point) :

Institution of Engineers (India) Building, 1332 Shivaji Nagar, PUNE 410005 6 24 36

*Sales Office in Bombay is at Novelty Chambers, Grant Road, Bombay 400007 89 65 28

†Sales Office in Calcutta is at 5 Chowringhee Approach, P. O. Princep Street, Calcutta 700072 27 68 00