



## **DRAFT TANZANIA STANDARD**

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### **Door Locks and Latches – Specification**

DRAFT FOR PUBLIC COMMENTS

**TANZANIA BUREAU OF STANDARDS**

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The Mechanical Engineering Divisional Standards Committee, under whose supervision this Tanzania Standard was prepared, consists of representatives from the following organizations:

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National Institute of Transport  
Mechanical Engineering Industries Development Agency  
Ministry of Works  
Weights and Measures Agency  
Tanzania Industries Research Development Organization  
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# Door Locks and Latches – Specification

## 0 Foreword

Door Locks and Latches are locks used in door furniture to protect against theft, vandalism, sabotage, espionage, unauthorized use, and harm. They are designed to protect against some degree of forced and surreptitious entry. The door locks and latches must have several important features to be effective. These features need to be standardized so as to meet and address all the factors mentioned above. In making sure that all performance requirements such as strength, security, corrosion resistivity are met, TBS come up with this Tanzania Standard **TZS XXXX: 2021, Door Locks and Latches – Specification**.

This Tanzania Standard has been prepared by the Metals and Structures Technical Committee under the supervision of the Mechanical Engineering Divisional Standards Committee.

For the purpose of deciding whether a particular requirement of this Tanzania Standard is complied with, the final value observed or calculated expressing the result of a measurement or test shall be rounded off in accordance with TZS 4 (see clause 2).

In preparation of this Tanzania Standard the assistance was drawn from:

SANS 4:2008, *Locks, latches, and associated furniture for doors (Domestic Type)*, published by South African Bureau of Standards (SABS).

## 1 Scope

This Tanzania Standard specifies requirements, test methods and sampling of mortice locks and latches, rim locks and latches, and the associated lock and latch furniture. It covers the requirements for the materials, essential dimensions, finish, and performance for mortice locks and latches, rim locks and latches, and the associated lock and latch furniture.

## 2 Normative references

This Tanzania Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Tanzania Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

ISO 3575, Continuous hot-dip zinc-coated carbon steel sheet of commercial and drawing qualities.

ISO 1458, Metallic coatings – Electroplated coatings of nickel.

ISO 1456, Metallic and other inorganic coatings — Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium

ISO 301, Zinc alloy ingots intended for castings.

ISO 2081, Metallic and other inorganic coatings — Electroplated coatings of zinc with supplementary treatments on iron or steel.

ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests

### 3 Terms and Definitions

For the purpose of this standard the following definitions shall apply:

#### 3.1 cylinder assembly

a separate key-operated unit, of the pin-tumbler type, that is fitted to and operated in conjunction with the locking mechanism of a lock/latch

#### 3.2 cylinder mortice lock

a mortice lock for fitting into a mortice cut into the locking edge of a door, and operated by a single- or double-sided cylinder mechanism. (Single-sided versions may, when relevant, have a thumb turn or knob fitted to the non-keyed side of the lock.)

#### 3.3 cylinder rim night latch

a latch for mounting on the inner face of a door and operated from the outside of the door by a cylinder assembly and from the inside by an integral knob or thumb turn or cylinder assembly. (A rim latch may have a secondary button or lever that enables the spring bolt to be retained in either the open or the locked position.)

#### 3.4 deadlock

a lock in which a dead-bolt mechanism is both opened and locked by means of a key, there being no spring action involved in the movement of the dead bolt. (See "Mortice bathroom/toilet lock".)

#### 3.5 defective

a unit that fails, in one or more respects, to comply with the relevant requirements of the specification

#### 3.6 follower

a spindle-operated device that operates a spring-bolt mechanism or a bathroom/toilet lock dead-bolt mechanism

#### 3.7 fore-end

##### a) single

a plate permanently attached to the front of a lock/ latch, and through which the bolt(s) operate

##### b) double

two plates, one permanently attached to the front of a lock/latch and the other superimposed on the first plate and attached by screws to the front of a lock,/latch. The bolt(s) operate through both plates

#### 3.8 furniture

a generic term for all or any of the following items supplied separately, in sets, or as part of a lock/latch set: Lever handles, knobs, escutcheons, spindles, screws, and any other ancillary components

#### 3.9 latch

a spring-loaded bolt mechanism (in a case) operated from one or both sides by a lever handle, knob, thumb turn, key, cylinder mechanism, or any combination of these devices

#### 3.10 lever handle

a lever in the form of handle running in a rose or plate, and that operates a spring-bolt mechanism by means of a spindle

### **3.11 lot**

not less than 10 and not more than 1 200 units, of the same size, type, and finishes, from one manufacturer, and submitted at any one time for inspection and testing

### **3.12 mortice bathroom/toilet lock**

a lock for fitting into a mortice cut into the locking edge of a door and having a spring-bolt mechanism operated from both sides by lever handles and a dead-bolt mechanism operated by a knob or thumb turn from the inner side only. (Provision is often made for a cipher or colour-coded "engaged" indicator that is operated when the dead bolt is locked.)

### **3.13 mortice deadlock**

a deadlock for fitting into a mortice cut into the locking edge of a door

### **3.14 mortice latch**

a latch for fitting into a mortice cut into the locking edge of a door

### **3.15 mortice lock**

a lock for fitting into a mortice cut into the locking edge of a door and having both a spring-bolt mechanism and a key-operated dead-bolt mechanism

### **3.16 paracentric**

descriptive of the section of the keyhole of a cylinder lock mechanism that is such that it does not admit a flat strip of metal. (It is also descriptive of the section of the corresponding key blade)

### **3.17 rim lock**

a lock for fitting to the inner face of a door and having a spring-bolt mechanism and a key-operated dead-bolt mechanism

### **3.18 staple**

a metal box for fitting to the inner face of a door frame and having an opening or openings in which the bolt(s) of a rim lock/latch engage when a door is in the closed position

### **3.19 striking plate**

a plate for fitting to the locking edge of a door frame and having an opening or openings in which the bolt(s) of a mortice lock/latch engage

### **3.20 unit**

a lock or a latch, or a lock set, a latch set, or a furniture set (see 4.1.2)

### **3.21 mortice night latches**

Any mortice lock having a single spring bolt withdrawn from the outside by key and from inside by a handle and with an arrangement whereby the lock can be prevented from being opened by its key from outside while the night latch is used inside the room.

## **4 Requirements**

### **4.1 Type and sets**

#### **4.1.1 Lock and latch types**

Locks and latches shall be of one of the following types and shall be right- or left-handed, as specified

(in both cases) by the purchaser:

- a) cylinder mortice lock (single- or double-cylinder);
- b) cylinder rim night latch;
- c) mortice bathroom/toilet lock;
- d) mortice deadlock;
- e) mortice lock;
- f) mortice latch;
- g) rim lock;
- h) rim latch.

#### 4.1.2 Sets

A lock set, latch set, or furniture set shall be of one of the following types, as specified by the purchaser:

- a) **A lock set.** A lock of the relevant type (see 4.1.1) complete with all appropriate furniture and, when relevant, a key or keys.
- b) **A latch set.** A latch of the relevant type (see 4.1.1) complete with all appropriate furniture and, when relevant, a key or keys.
- c) **Furniture set.** Furniture appropriate to the relevant type of lock/latch (see 4.1.1) and for both sides of a door, with spindle and appropriate screws.

#### 4.1.3 Design and finish

The design of furniture and the decorative finishes on fore-ends and cylinder assemblies shall be as specified by the purchaser. The method of manufacturing of locks, latches and its components is left to the manufacturer; however, it shall meet the requirements laid down in this standard. All components of the locks, latches and keys shall be finished smooth to minimize frictional resistance in their working.

The body of the locks/latches, if required, shall be suitably painted/plated. Steel components shall be suitably protected to resist corrosion.

#### 4.1.4 Lock differs

- a) **Lever locks/latches.** Lever type mortice locks/latches shall have at least the appropriate of the following number of different arrangements of levers or key sections (bullet warding) or both:

| Number of levers or key sections or both in lock/latch                                                                                                                      | No. of differs, min. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 2                                                                                                                                                                           | 12                   |
| 3                                                                                                                                                                           | 36                   |
| 4                                                                                                                                                                           | 48                   |
| 5                                                                                                                                                                           | 250                  |
| <b>NOTE:</b> In no case shall it be possible to unlock a lock/latch with a key of another differ, and in no case shall any differ be repeated in another lever arrangement. |                      |

- b) **Pin-tumbler cylinder mechanisms.** There shall be at least 5 pins (not including driver pins) in a pin-tumbler cylinder mechanism. The pins shall be available in at least 5 different lengths and the differing system shall be capable of using all available lengths. The difference between any 2 lengths of pins shall be at least 0.39 mm, and the pins in an individual cylinder mechanism shall be of at least 2 different lengths.

#### 4.2 Materials

#### 4.2.1 Zinc base alloys

Zinc base alloys used in the manufacture of locks, latches, and lock and latch furniture shall comply with the requirements of ISO 301.

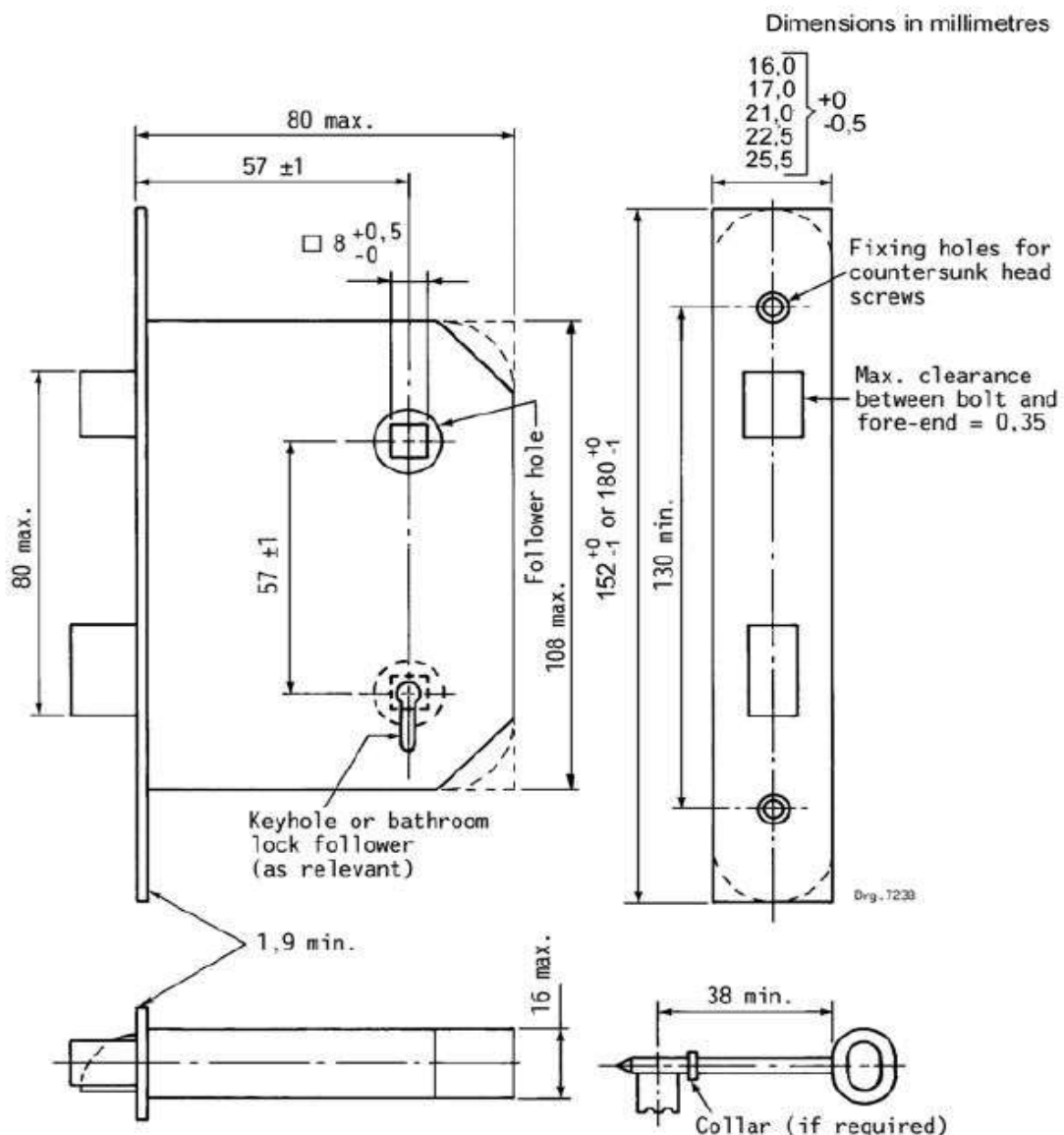
#### 4.2.2 Other materials

Other materials used in manufacturing shall be such that units and components made of these materials pass the relevant tests given in section 6.

### 4.3 Dimensions

### 4.3.1 General dimensions

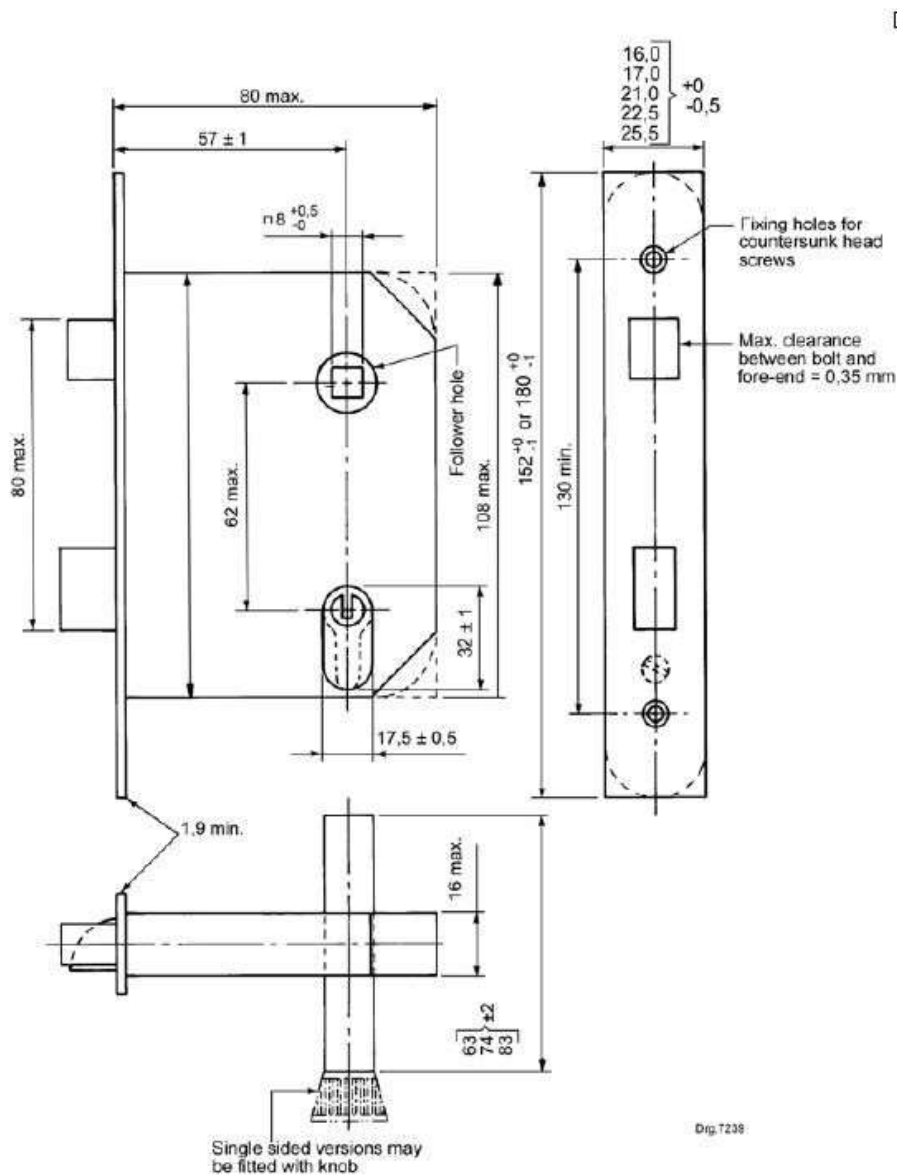
The general dimensions of the different types of locks and latches shall be as shown in the relevant of figures 1-4. Locks and latches having sizes other than those specified in figures 1-4 may also be permitted as agreed to between the purchaser and the supplier.



**Figure 1 — 80 mm Mortice lock, mortice latch, mortice deadlock, and mortice bathroom/toilet lock**

NOTE:

- a) These illustrations are for purpose of giving certain essential dimensions and are not intended to show design details.
- b) The overall length and width of the fore-end shall be as specified by the purchaser, the value in each case being one of those given above.



**Figure 2 — Double cylinder mortice lock**

NOTE:

- a) These illustrations are for purpose of giving certain essential dimensions and are not intended to show design details.
- b) The overall length and width of the fore-end shall be as specified by the purchaser, the value in each case being one of those given above.

Dimensions in millimetres

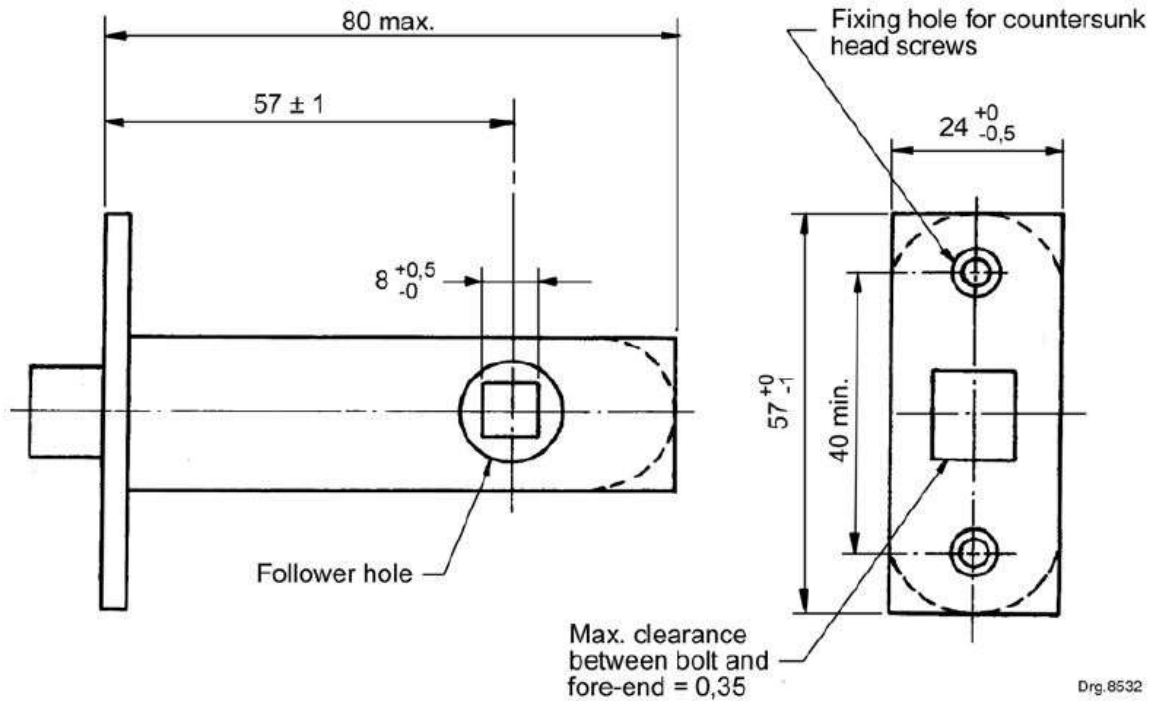


Figure 2(a) — Mortice lock (Tubular type)

NOTE: This illustration is for purpose of giving certain essential dimensions and is not intended to show design details.

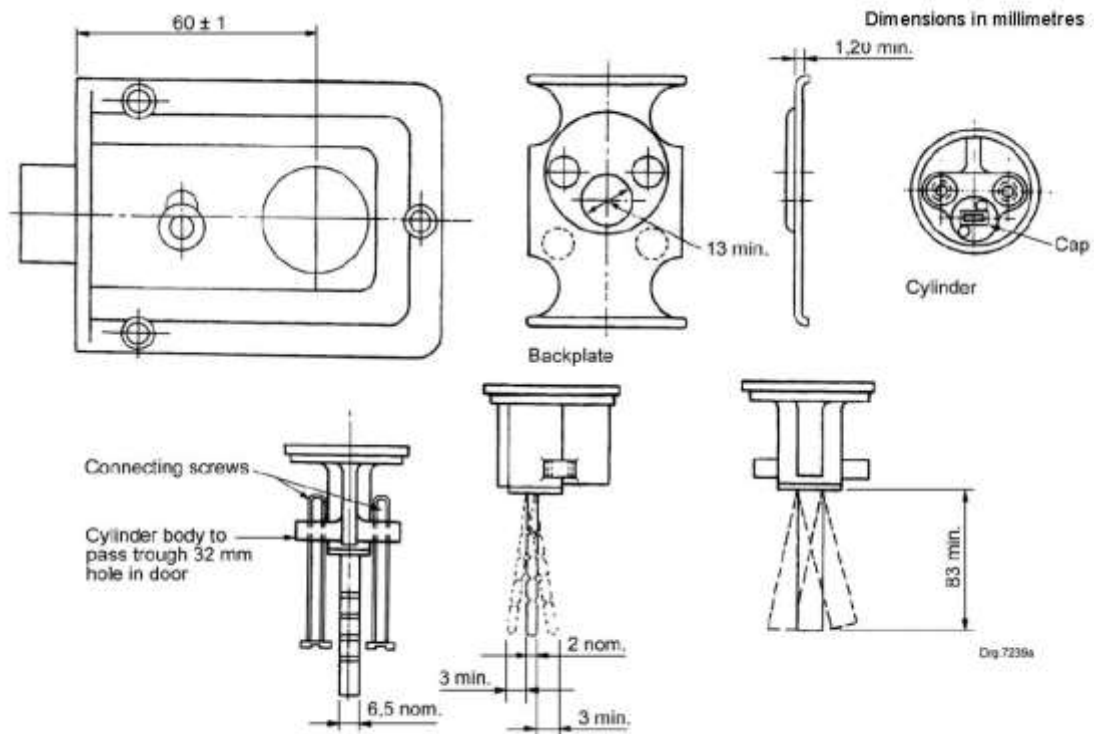
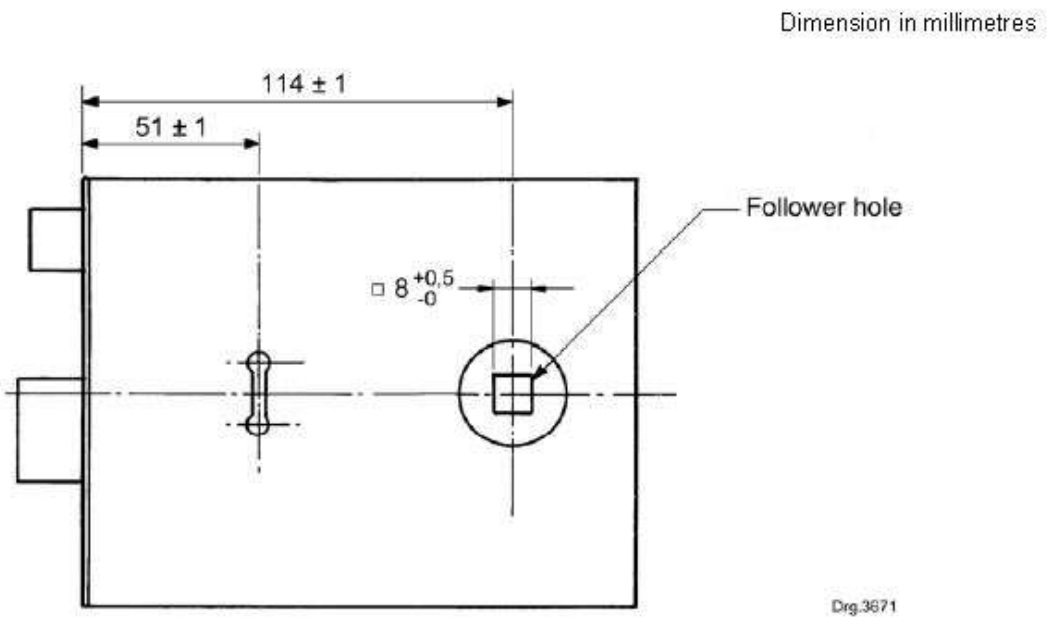


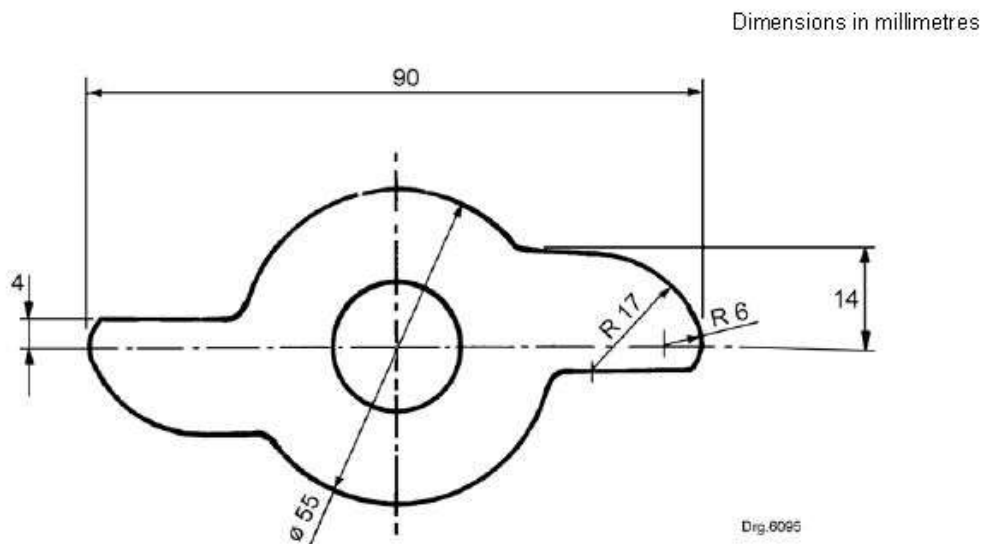
Figure 3 — Cylinder rim night latch

NOTE: These illustrations are for the purpose of giving certain essential dimensions and are not intended to show design details.



**Figure 4 — Horizontal two-bolt rim lock**

NOTE: This illustration is for purpose of giving certain essential dimensions and is not intended to show design details.



**Figure 5 — Rotating cam**

#### 4.3.2 Rebated fore-end

The depth of the rebate of a rebated fore-end shall be at least 12.5 mm.

#### 4.3.3 Throw of bolts

The throw of a bolt shall be

- a) in the case of a dead bolt and a spring bolt other than a spring bolt for a tubular mortice latch, at least 10 mm; and
- b) in the case of a spring bolt for a tubular mortice latch (see figure 2(a)), at least 8 mm.

#### 4.3.4 Spindle

A spindle shall be of 8 mm square cross-section, with a tolerance of  $\frac{+0}{-0.5 \text{ mm}}$ .

### 4.4 Construction

#### 4.4.1 Keys

Keys shall be of the appropriate of the following types, and the number to be supplied with each lock/latch shall be as specified by the purchaser:

- a) **Cylinder type keys.** Cylinder type keys shall consist of a paracentric blade with cuts in the edge that operate the pins of a cylinder assembly and, at the other end of the blade, a bow for turning the key.
- b) **Lever type keys.** Lever type keys shall consist of a round shank with, when relevant (see 4.4.2), a collar, and having on one end a bit containing steps to operate the locking mechanism of a lock/latch and, at the other end, a bow for turning the key.

#### 4.4.2 Keystop and key collar

When necessary in a double-sided lock/latch, a suitable keystop in the lock/latch or a collar on the key shall be provided to prevent the key bit from being pushed through both keyholes from one side.

#### 4.4.3 Latch spring action

In a mortice lock/latch the spring-bolt mechanism shall have one of the following actions, as specified by the purchaser:

- a) **Plain action**, i.e. a latch mechanism so sprung as to be suitable for use with knobs or spring loaded lever handles.
- b) **Easy action**, i.e. a latch mechanism suited for use with unsprung lever handles and so sprung as to permit easy closing of a door to which it is fitted, but having additional spring-loading so arranged as to ensure the return of the spring bolt follower to the original position after the handle is released.

#### 4.4.4 Striking plate

Striking plates shall be one of the following, as specified by the purchaser:

- a) **Plain**, i.e. a plate having suitable apertures to accept the bolt(s) of a mortice lock/latch and having holes for fixing screws.
- b) **Box**, i.e. a similar plate to (a), but having an additional box-like structure fitted to the rear face to strengthen the plate and protect the bolt(s) of a mortice lock/latch.

#### 4.4.5 Bathroom/toilet lock

Mortice bathroom/toilet locks shall be fitted with means for opening from the outside in an emergency.

## 4.5 Performance requirements

### 4.5.1 General requirement

When submitted to the relevant tests given in 6.2.2 - 6.2.8 (inclusive) locks, latches, and components of lock sets, latch sets, and furniture sets shall not jam or break, and, after testing, shall still be capable of correctly performing the functions related to the test conducted.

### 4.5.2 Durability of lever handles

When tested in accordance with 6.2.5, a lever handle and its plate or rose shall, on completion of the test, be intact and shall operate the spring-bolt mechanism without undue difficulty. Minor sagging of the lever handle shall be permitted provided that the correct operation of the spring-bolt mechanism is not affected.

### 4.5.3 Accuracy of follower

When a lock/latch is tested in accordance with 6.2.9, the follower shall be capable of being turned (in both directions, if the design allows) sufficiently to withdraw the latch bolt completely. On release of the follower, the latch bolt shall be returned to its original position by its own spring pressure.

### 4.5.4 Strength of spring-bolt spring

The force required to depress a spring bolt to within 1 mm of the fore-end, determined in accordance with 6.2.10, and shall be  $11.5 \pm 2.5$  N.

### 4.5.5 Security of dead bolt

When the dead bolt of a lock is tested in accordance with 6.2.11,

- a) it shall be possible, by turning the key, to throw out the dead bolt to the locked position while it supports the test load;
- b) there shall be no tendency for the dead bolt to drop back into the withdrawn position while the key remains in the locked position; and
- c) it shall be possible to withdraw the bolt to the unlocked position while it still supports the test load.

## 4.6 Finish

### 4.6.1 General

With the exception of springs, all components not made from inherently corrosion-resistant material from corrosion by an acceptable coating that complies with relevant requirements of 4.6.2 or 4.6.3.

### 4.6.2 Plated coatings

- a) **Zinc plating.** The thickness of an electroplated coating of zinc on a lock- or latch-case or an inner component shall comply with the requirement of ISO 2081.
- b) **Nickel plating.** The adhesion of a nickel-plated coating on a component made of iron or steel shall comply with the adhesion requirement of ISO 1458 and its thickness shall comply, in the case of keys, with the requirement for application grade LOW and, in the cases of other components, with the requirement for application grade MEDIUM of table 1 of ISO 1458.
- c) **Chromium on nickel plating.** The adhesion of a combined chromium-plated coating and a nickel-plated base coating on an exposed component shall comply with the adhesion requirement of ISO 1456, and the thickness of the component coatings shall comply with the relevant requirements of ISO 1456 for Service condition 3 (severe), subject in the case of nickel and (when relevant) copper to a tolerance of  $-20$  %.
- d) **Hot-dip galvanizing.** A coating that is applied by means of for hot-dip galvanizing shall comply with the requirements for a coating of class of ISO 3575.

#### 4.6.3 Paint coatings

When subjected, in accordance with 6.2.13, for a period of 24 h, to a salt spray, a paint coating shall show no blistering, wrinkling, or loss of adhesion and there shall be no sign of corrosion of the base metal.

## 5 Sampling and compliance with the specification

### 5.1 Sampling

The following sampling procedure shall be applied in determining whether a lot submitted for inspection and testing complies with the relevant requirements of the specification. The samples so taken shall be deemed to represent the lot for the respective properties.

#### 5.1.1 Sample for inspection

From the lot take at random the number of units given in column 2 of table 1 relative to the appropriate lot size given in column 1.

#### 5.1.2 Sample for testing

From the lot or, after inspection (see 6.1), from the sample taken in accordance with 5.1.1 take at random the number of units given in column 4 of table 1 relative to the appropriate lot size given in column 1.

**Table 1 — Sample sizes**

| Size of lot<br>units | Sample for inspection |                                 | Sample for testing<br>units |
|----------------------|-----------------------|---------------------------------|-----------------------------|
|                      | Sample size<br>units  | Acceptance number<br>defectives |                             |
| 10 – 25              | 3                     | 0                               | 2                           |
| 26 – 90              | 5                     | 0                               | 2                           |
| 91 – 150             | 8                     | 0                               | 4                           |
| 151 – 280            | 13                    | 1                               | 4                           |
| 281 – 500            | 20                    | 2                               | 6                           |
| 501 – 1200           | 32                    | 3                               | 8                           |

### 5.2 Compliance with the specification

The lot shall be deemed to comply with the requirements of the specification if

- a) after inspection of the sample taken in accordance with 5.1.1, the number of defectives found does not exceed the relevant acceptance number shown in column 3 of table 1; and
- b) after testing of the sample taken in accordance with 5.1.2, no defective is found.

## 6 Inspection and test methods

### 6.1 Inspection

Visually examine and, where relevant, measure each unit in the sample taken in accordance with 5.1.1 for compliance with the requirements of section 7 and the other requirements of the specification compliance with which is not assessed by tests given in 6.2.2 - 6.2.13.

## 6.2 Methods of test

### 6.2.1 Test conditions and mounting of units for testing

Test each unit in the sample taken in accordance with 5.1.2 in the "as received" condition and fully assembled. Do not dismantle, lubricate, or otherwise precondition the mechanism before testing a unit. Firmly mount a lock/latch (with, when relevant, its associated furniture) in a jig so designed as to ensure accurate alignment of the various components of a lock/latch set with each other. If the units in the lot are locks or latches, any suitable furniture or device for operating the units may be used to facilitate testing. If the units in the lot are furniture sets, use, for testing the units, any lock/latch of the type for which the furniture sets are intended.

### 6.2.2 Strength of latch mechanism

Mount the lock/latch under test as described in 6.2.1 (but without furniture). Insert a follower spindle into the follower, apply a torque of 10 N·m to the spindle for a period of 30 s, and then check for compliance with 4.5.1.

### 6.2.3 Dead-bolt mechanism durability test

Mount the lock under test as described in 6.2.1 with the fore-end vertical and the key (when applicable) inserted in the lock. Position the bow of the key in a loose-fitting chuck which is so arranged that, when turned, only a pure torque is applied to the key. By turning, in the case of a bathroom/toilet lock, the thumb turn/knob through an angle sufficient to fully extend the dead bolt, and in other cases by turning the key through an angle of not less than 180° and not more than 360°, and then returning the thumb turn/knob or the key through the same angle, operate the deadlock mechanism for 30 000 cycles at a rate of  $60 \pm 5$  cycles per minute.

NOTE: Throwing the bolt fully out to the extended position and then fully withdrawing it constitutes a complete cycle.

If, in the case of a mortice lock or a rim lock, either the deadlock mechanism or key or, in the case of a cylinder mortice or bathroom lock, the deadlock mechanism, fails during the test, consider the unit to be a defective. On completion of the test check for compliance with 4.5.1.

### 6.2.4 Cylinder assembly durability test

Mount the cylinder mortice lock/cylinder rim night latch under test as described in 6.2.1 with the fore-end vertical. Conduct the test as follows:

a) **Cylinder mortice locks.** Insert the key into the cylinder to operate the deadlock mechanism and, by turning the key, throw the dead bolt into the locked position and then into the unlocked position and withdraw the key, thus completing one cycle.

b) **Cylinder rim night latches.** Insert the key into the cylinder to operate the latch, so turn the key as to withdraw the latch bolt to within 1 mm of the fore-end, release the key (and thus the latch bolt), and withdraw the key, thus completing one cycle. Carry out test (a) or (b) above (as relevant) for a total of 30 000 cycles at a rate of  $60 \pm 5$  cycles per minute, and if, during the test, either the key or the cylinder mechanism fails, consider the unit to be a defective. On completion of the appropriate test, check the lock/latch for compliance with 4.5.1.

NOTE: Test (a) may be conducted in conjunction with the test on cylinder mortice locks given in 6.2.3.

### 6.2.5 Durability test for spring-bolt mechanisms, knobs and lever handles

Mount the unit as described in 6.2.1 with the fore-end of the lock/latch vertical. Using a suitable mechanism, so operate (by applying a pure torque only) the lever handle or knob that the latch follower withdraws the spring bolt to within 1 mm of the fore-end and then releases it, allowing the spring bolt to return completely to the rest position. Repeat this sequence of operations for 100 000 cycles at a rate of  $60 \pm 5$  cycles per minute.

Then if the unit under test is:

- a) a lock/latch or a lock/latch set, check the lock/latch for compliance with 4.5.1;
- b) or a lock set, a latch set, or a furniture set, check the knob or lever handle and its plate or rose for compliance with 4.5.2.

#### 6.2.6 Durability test for latch mechanisms

Mount the lock/latch under test as described in 6.2.1 with the fore-end vertical. By means of a suitable rotating cam (see figure 5), depress the spring bolt to within 1 mm of the fore-end and then release it, allowing the spring bolt to return completely to the rest position (thus completing one cycle). Repeat this sequence of operations for 100 000 cycles at a rate of  $60 \pm 5$  cycles per minute, and then check for compliance with 4.5.1.

#### 6.2.7 Strength of lockcase and bolts

Mount the lock/latch under test as described in 6.2.1. Apply without shock, and as follows, a static force of 1 600 N to the bolt(s) in the unit under test: Using a steel bearer having a rounded edge which is so positioned that it bears against the bolt 3 mm from and parallel to the fore-end, apply the force in a direction perpendicular to the securing face of a bolt and to each of the locking faces of a dead bolt, and check for compliance with 4.5.1.

#### 6.2.8 Strength of staples

With the staple under test mounted in the normal manner (using the screws supplied) apply without shock, a static force of 1 600 N in a direction perpendicular to the inner face of the staple against which the bolt(s) would bear, applying the force by means that simulate the position(s) and width(s) of the bolt(s) of the lock or latch. In the case of a staple for a two-bolt lock apply the force twice, once to each bolt position. Then check for compliance with 4.5.1.

#### 6.2.9 Accuracy of follower

Mount the lock/latch under test as described in 6.2.1, turn the lever handle or knob first in one direction as far as possible and release it, then turn it in the other direction (if the unit allows it) as far as is possible and release it. Check for compliance with 4.5.3.

#### 6.2.10 Strength of spring-bolt spring

Support the lock/latch in a suitable manner. Apply a force to the end of the spring bolt and determine the minimum force required to depress the spring bolt to within 1 mm of the fore-end, and check for compliance with 4.5.4.

#### 6.2.11 Security of dead bolt

Support the lock under test with the dead bolt withdrawn and with the fore-end horizontal and facing upwards. Support a mass of  $1.5 \pm 0.1$  kg on the end of the dead bolt and use the key to check for compliance with 4.5.5.

#### 6.2.12 Plating tests

- a) **Zinc plating.** Use the relevant method given in ISO 2081 to determine the thickness of zinc coating.
- b) **Nickel plating.** Use either or (in cases of doubt) both of the relevant methods given in ISO 1458 to test the adhesion of the coating, and use the relevant method in ISO 1458 to determine its thickness.
- c) **Chromium on nickel plating.** Use the relevant methods given in ISO 1456 to test the adhesion of the coatings and to determine their thicknesses.

#### **6.2.13 Corrosion resistance of paint coatings**

Use the apparatus and procedure given in ISO 9227, to test painted units or components in the "as received" condition. Examine for compliance with 4.6.3.

### **7 Packaging and Marking**

7.1 Each lock and/or latch with its keys shall be packed in a moisture proof paper or polyethylene bag, or as agreed to between the purchaser and the supplier.

7.2 Each package of lock and/or latch shall be marked with the following information:

- a) manufacturer's name or initials or trademark;
- b) batch number;
- d) country of origin;

7.3 Each lock and latch shall be marked with the following information:

- a) manufacturer's name or initials or trademark;
- b) batch number;

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## ANNEX A

(Informative)

### Notes to purchasers

**A.1** The following requirements must be specified in tender invitations and in each order or contract:

- a) the type of lock/latch and whether left- or right-handed (see 4.1.1);
- b) in the case of cylinder mortice locks, whether single- or double-cylinder versions are required (see 4.1.1(a));
- c) when relevant, the type of set (see 4.1.2);
- d) the design of furniture and the type of finish required on cylinder assemblies and fore-ends (see 4.1.3);
- e) the number of keys to be supplied with each lock/latch (see 4.4.1)
- f) when relevant, the type of latch spring action required (see 4.4.3);
- g) when relevant, the type of striking plate (see 4.4.4);
- h) when relevant, the nominal overall length and width of the fore-end, (see figures 1 and 2).

**A.2** It should be noted that

- a) in general, 2-lever locks should not be used on doors that give external access to premises unless at least one other auxiliary security device or a second more secure lock is also fitted;
- b) in determining the relative security of double-sided type lever locks the number of "different" levers in a lock can be more important than the actual number of levers.

DRAFT FOR PUBLIC COMMENTS