
Steel drug cabinet — Specification



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Steel drug cabinet — Specification

1 Scope

This Draft African Standard specifies the material, dimensional and constructional requirements for steel drug cabinets intended for use in health facilities.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2808, Paints and varnishes — Determination of film thickness

3 Terms and definitions

For the purpose of this standard the following definitions apply. ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

drug cabinet

cabinet where drugs and medical paraphernalia are stored

3.2

acceptable

approved by the relevant authority administering this specification, or to the parties concluding the purchase contract, as relevant

3.3

bright polished finish

bright reflective finish obtained by polishing the surface without completely obliterating grinding marks or other surface texture

3.4

directional satin finish

finish obtained by so grinding the surface with fine abrasives (without subsequent polishing) as to leave a silky appearance, with the abrasion marks running in the same general direction

4 Requirements

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4.1 Materials

4.1.1 Steel

The steel used shall be as follows:

a) Rolled steel plate

Rolled steel plate shall be of a good quality mild steel and shall be free from cracks, fins, laminations and other defects.

b) Stainless steel

Stainless steel shall be 18/8 (AISI type 304) stainless steel or other acceptable austenitic stainless steel of weldable quality.

4.1.2 Welding electrodes and filler rods

Filler metal used in fusion welding and in braze welding shall be such as to produce joints that have mechanical properties of at least the same order as those of the parent metal.

4.1.3 Epoxy-powder coatings

Epoxy-powder coatings shall be based on a compounded epoxy resin that is suitable for application by a fluidized-bed or an aerostatic spray process.

4.1.4 Nylon-powder coatings

Nylon-powder coatings shall be based on a nylon formulation suitable for application by a fluidized bed process or an aerostatic spray process.

4.2 Fusion welded joints

Parts joined by fusion welding shall be close fitting and in correct alignment. Weld faces shall be smooth, clean and free from porosity, cavities, spatter and trapped slag; they shall merge smoothly into the surface of the parent metal, without overlap or undue undercut. The weld metal, heat affected zone and adjacent parent metal shall be free from cracks. Where welding is done from one side only, there shall be full penetration of the joint.

4.3 Spot welded joints

Spot welded joints shall be close fitting and in correct alignment. Spot welds shall be resistance spot welds, and the spacing and diameter of the spots shall be such as to provide a strong acceptable joint. There shall be proper fusion between the parts welded, and any indentations at the weld shall be minimal.

4.4 Types

The cabinet shall be of one of the following types, as specified by the purchaser:

Note: All dimensions are in millimeters.

a) Type A

A cabinet (see figure 1) suitable for encasing in a wall and having two separate compartments.

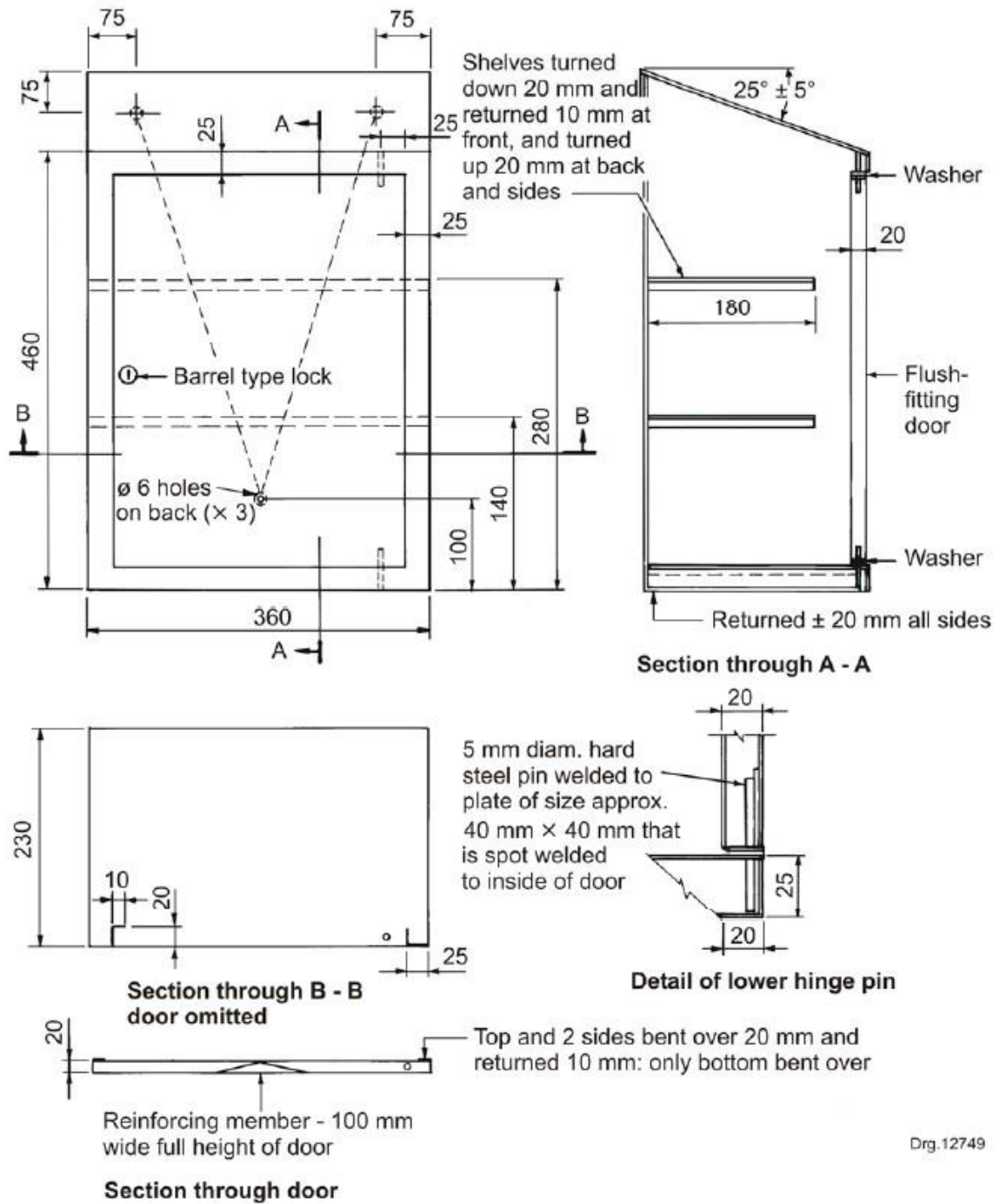


Figure 2 — Type B steel drug cabinet (Small-sized wall-mounted type) illustration

c) Type C

A medium-sized cabinet (see figure 3) suitable for permanent attachment to a wall and having a single compartment divided by two shelves.

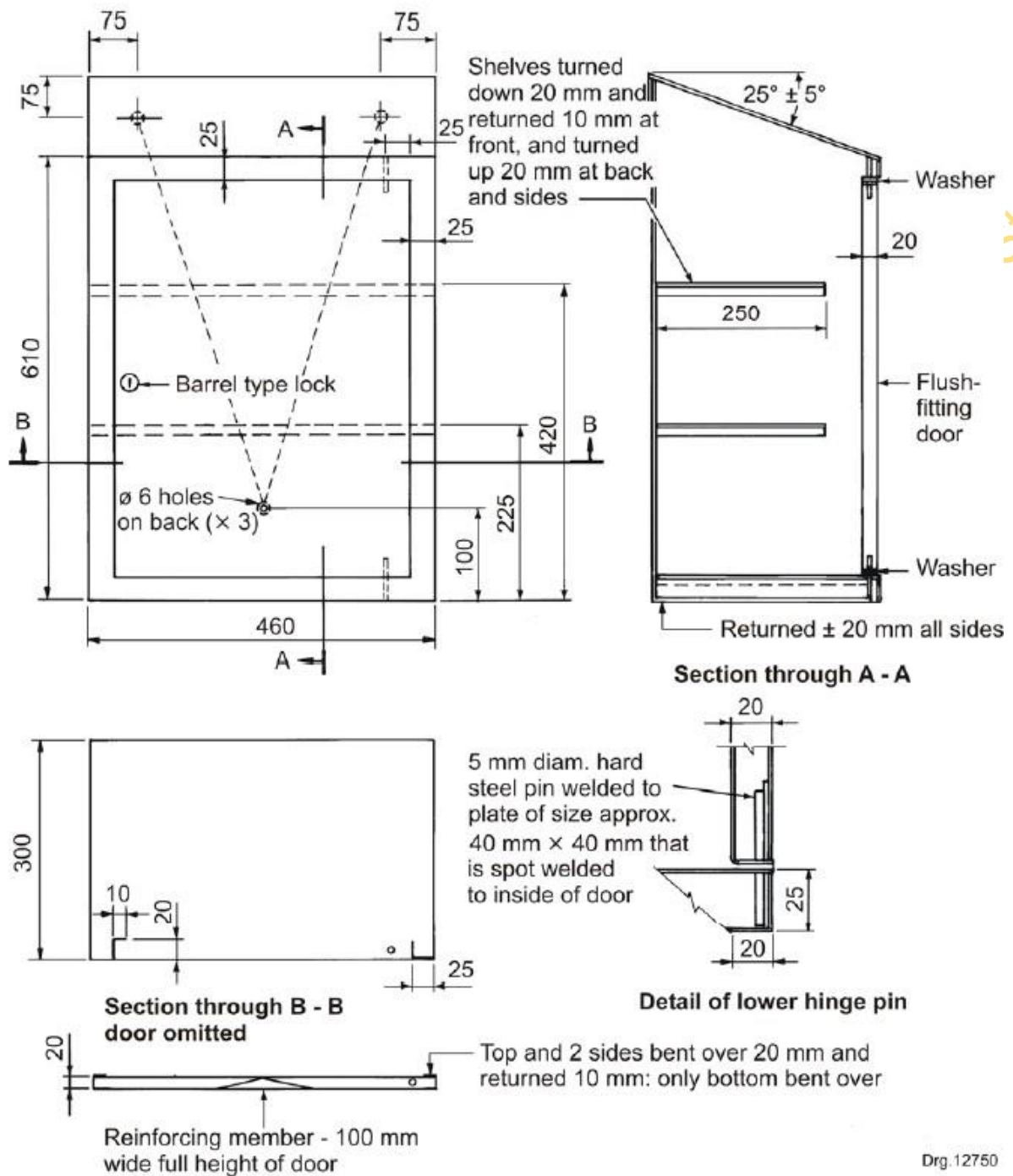


Figure 3 — Type C steel drug cabinet (Medium-sized wall-mounted type) illustration

d) Type D

A large-sized cabinet (see figure 4) suitable for permanent attachment to a wall and having double access doors revealing a compartment with an inner lockable cupboard and further compartmental subdivision by two shelves.

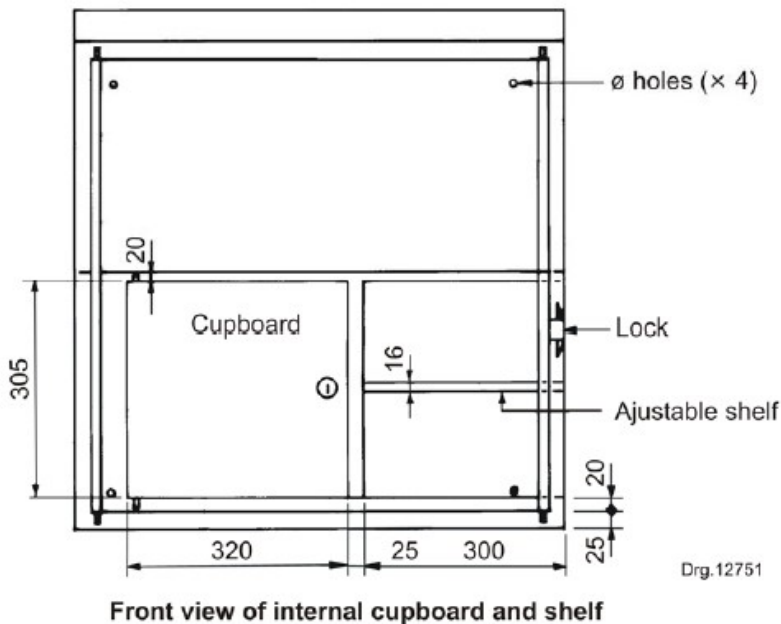
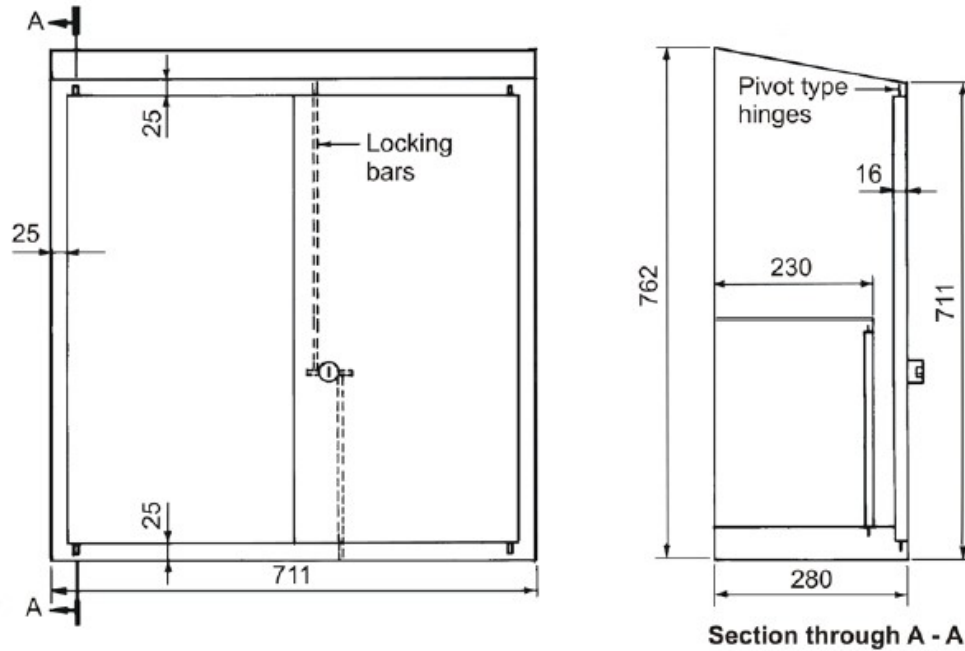


Figure 4 — Type D drug/poison cabinet (Double door — Wall-mounted type) illustration

4.5 Design and dimensions

4.5.1 General

The design of the cabinet shall be generally similar to that illustrated in figure 1, figure 2, figure 3 or figure 4, as relevant. The dimensions shall, subject to a tolerance of 5 %, conform to the values given in the appropriate figure. The cabinets, shelves and doors shall be of mild steel or stainless steel, as specified by the purchaser. The nominal thickness of mild steel plate shall be at least 1.2 mm and of stainless steel plate at least 0.90 mm.

4.5.2 Type A cabinet

A type A cabinet shall comprise an open-fronted casing that has vertical sides, a vertical back, and a horizontal top and bottom, and is divided horizontally into two separate compartments. There shall be two set-back shelves (one in each compartment), an individual flush-fitting door for each compartment and, on each door, a lock.

4.5.3 Type B and type C cabinets

Type B and type C cabinets shall comprise an open-fronted casing that has vertical sides, a vertical back, and a horizontal bottom, and, when a sloping top is specified by the purchaser, the top shall slope downwards at an angle of 20° from back to front. The cabinets shall have two set-back shelves and a flush-fitting door fitted with a lock.

4.5.4 Type D cabinet

A type D cabinet shall conform to the following:

- a) external doors of the cabinet and the internal door of the cupboard shall be flush fitting and shall be fitted with locks;
- b) edges of the doors shall be angled internally in an acceptable manner to ensure rigidity and, in addition, shall be reinforced internally by vertical channel members centrally positioned;
- c) locking bars of the external right-hand door shall be of mild steel of diameter at least 6 mm;
- d) left-hand door shall be constructed in a manner to ensure that it is securely held in a locked position by the right-hand door;
- e) pins of the pivot hinges shall be of stainless steel of diameter at least 5 mm and the lower pins shall be provided with suitable thrust washers;
- f) shelves shall be of rigid construction; and
- g) back of the casing shall have four holes each of diameter 6 mm, to secure the cabinet to the wall.

4.5.5 Cabinet locks

Cabinet locks shall:

- a) be of the double-sided slide barrel type;
- b) be of a series of lock such that the chance of selecting a fitting key, from a random set of keys belonging to the same series, does not exceed one in two thousand;
- c) be delivered with two keys;
- d) be of such design that the key cannot be extracted from the lock when unlocked;
- e) have restricted access to the key and lock to prevent easy identification through marking or number on key to open the lock; and
- f) of acceptable quality.

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4.6 Construction

4.6.1 Casing

4.6.1.1 All joints in the casing shall be fusion welded or spot welded or any other suitable joining procedure to ensure structural integrity. The sides, back and front shall be cut (in one piece) from a single plate.

4.6.1.2 The top and side edges of the openings for the doors shall be flanged inwards for at least 12 mm.

4.6.1.3 In addition, the side edge of the opening on which each door closes shall be so flanged (parallel to the front) for at least 10 mm as to form a ledge against which the door closes. The back of the casing for types A, B and C cabinets shall have three holes (in the positions shown in figure 1, 2 and 3, as relevant) to secure the cabinet to the wall. Type D cabinets shall have four holes (in the positions shown in figure 4) to secure the cabinet to the wall.

4.6.2 Shelves

The front edge of each shelf shall be flanged downwards for 25 mm and turned inwards 10 mm; the other edges shall be flanged upwards and attached by welding to the walls of the cabinet.

4.6.3 Doors

4.6.3.1 The top and side edges of each door shall be so flanged as to form a channel reinforcement; the bottom edge shall be flanged to form an angle reinforcement but shall not be flanged parallel to the door surface.

4.6.3.2 The door shall be fitted flush with the outer surface of the casing and shall be hinged, at the top and bottom right-hand corners, with acceptable pivot type hinges.

4.6.3.3 The pins of the hinges for types A, B and C cabinets shall be of diameter at least 5 mm, and shall be of acceptable hardness.

4.7 Finish

4.7.1 General

All surfaces (including welds) shall be free from pits, deep scratches, scale, crimps, buckles and other defects. Mild steel surfaces shall have a smooth epoxy-powder-coated finish or a nylon powder-coated finish, as specified by the purchaser, and of the colour specified by the purchaser. Stainless steel surfaces shall have a medium directional satin or bright polished finish, as specified by the purchaser.

4.7.2 Thickness of epoxy-powder coatings

The thickness of coated finish shall be at least 60 µm when in accordance with ISO 2808.

5 Labelling

5.1 The cabinet shall be legibly and indelibly marked with the manufacturer's name or trade name or trademark.

5.2 The package shall be legibly and indelibly labelled with the following information:

- a) name and physical address of manufacturer;

- b) name of product as “steel drug cabinet”
- c) instruction for use; and
- d) country of origin.

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Bibliography

CKS 181. 2009, *Drug/poison cabinets*

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