
International Standard



6042

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Shipbuilding — Weathertight single-leaf steel doors

Construction navale — Portes en acier à un seul battant, étanches aux intempéries

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6042 was developed by Technical Committee ISO/TC 8, *Shipbuilding*, and was circulated to the member bodies in March 1979.

It has been approved by the member bodies of the following countries :

Austria	Italy	Poland
Belgium	Japan	Romania
Bulgaria	Korea, Dem. P. Rep. of	Spain
China	Korea, Rep. of	Turkey
Czechoslovakia	Libyan Arab Jamahiriya	United Kingdom
France	Mexico	
India	Netherlands	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Finland
Germany, F. R.
Norway
Sweden
USSR

Shipbuilding — Weathertight single-leaf steel doors

1 Scope and field of application

This International Standard specifies main dimensions, materials, quality and conditions of manufacture for weathertight single-leaf steel doors for application on board ships, in order to ensure interchangeability. The remaining dimensions, welding and other details are left to the manufacturer.

These doors comply generally with the requirements of the International Convention of Load Lines 1966. The possibility for application of the doors to Position 1 and Position 2 has to be considered for each situation, and where necessary the doors shall be provided with additional stiffening.

Annex A specifies testing of the doors for weathertightness and annex B specifies the dimensions of openings in bulkheads.

NOTE — Users of this International Standard should note that while observing the requirements of the International Standard they should, at the same time, ensure compliance with such statutory requirements, rules and regulations as may be applicable to the individual ship concerned.

2 References

ISO/R 1226, *Symbolic designation of direction of closing and faces of doors, windows and shutters — Part 1.*

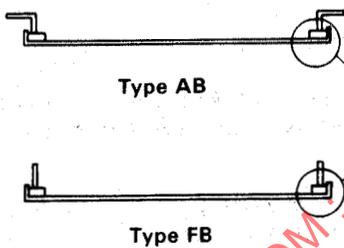
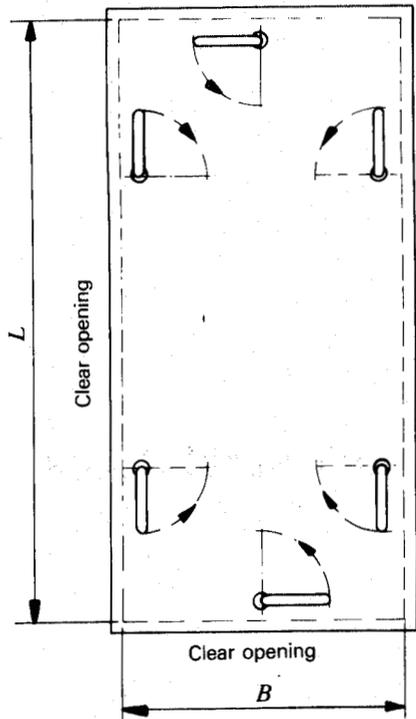
ISO 3796, *Shipbuilding — Clear openings through frames for external single-leaf doors.*

3 Doors, door frames and accessories

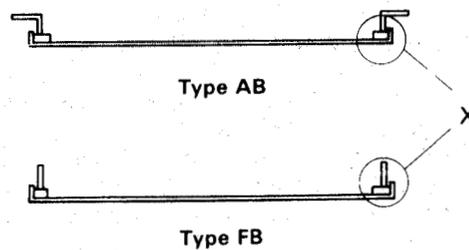
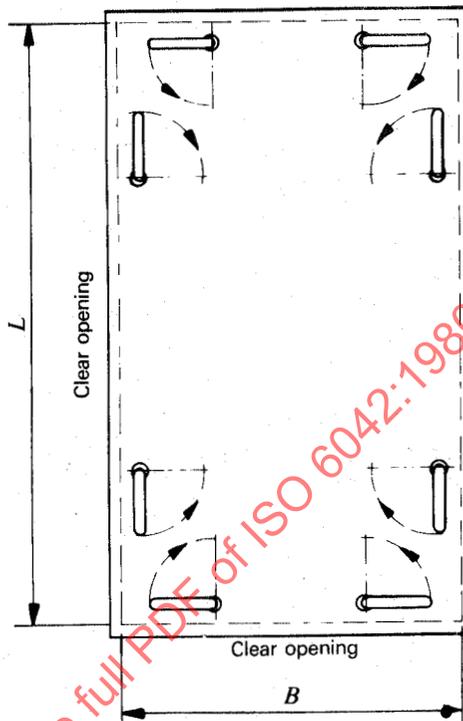
3.1 Door types

Doors shall be specified either as Type AB, using an angle bar frame, or as Type FB, using a flat bar frame. Door plates can be fitted to either type of frame (see figure 1). The nominal sizes are in accordance with ISO 3796.

a) Six clip design



b) Eight clip design

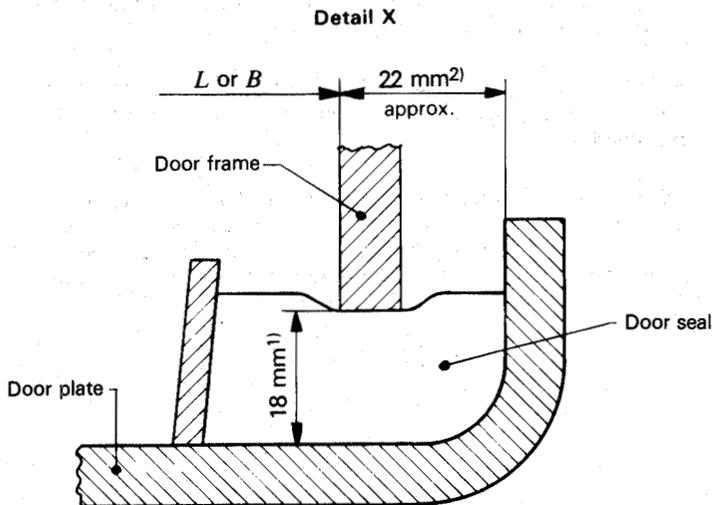


NOTE — Door clips engage wedges in the direction of arrows.

Table 1 — Dimensions of doors

Dimensions in millimetres

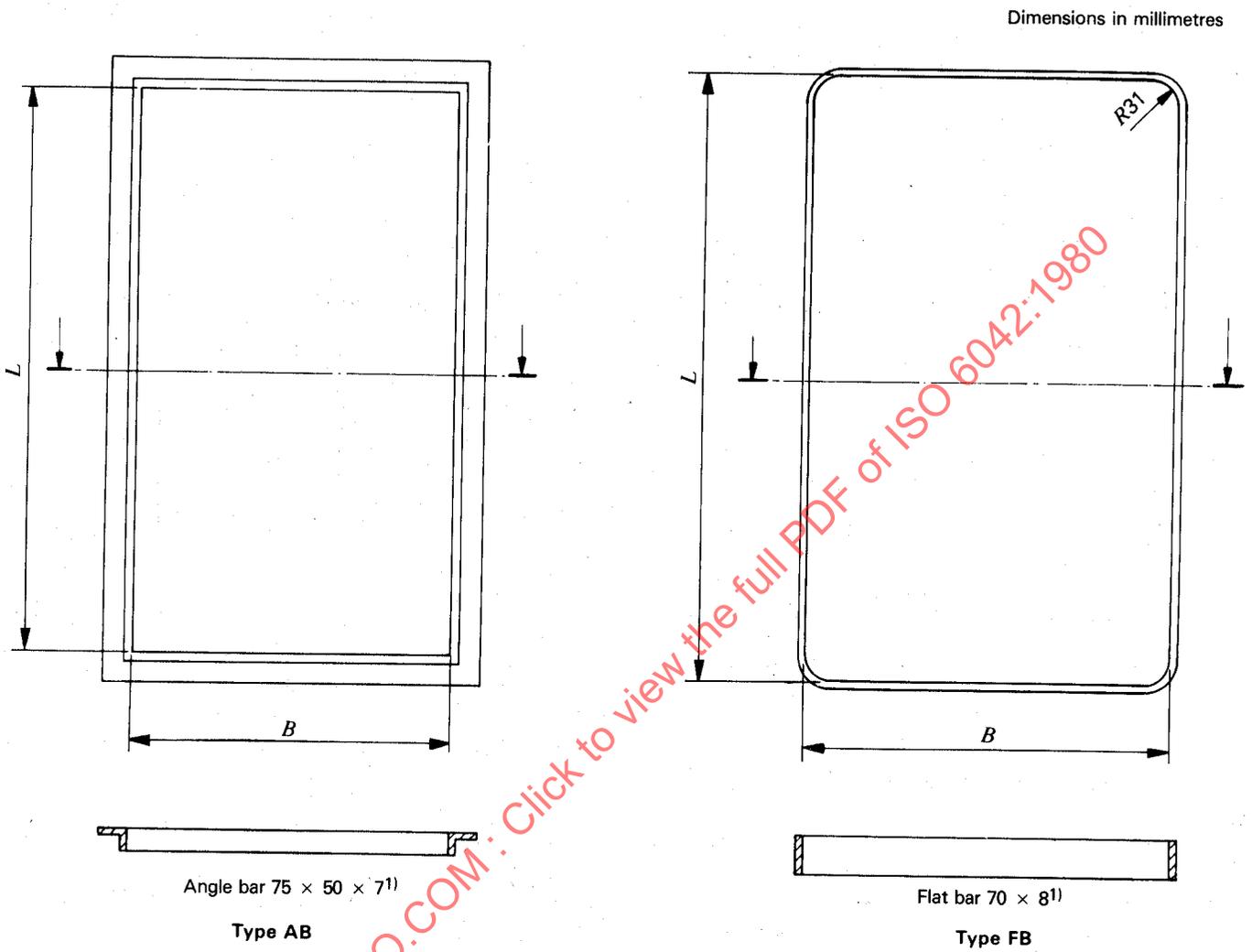
Nominal size	L	B
1 200 × 600	1 200	600
1 400 × 600	1 400	600
1 400 × 750	1 400	750
1 400 × 900	1 400	900
1 600 × 600	1 600	600
1 600 × 750	1 600	750
1 600 × 900	1 600	900



- 1) When the seal is compressed by 2 mm.
- 2) Door panel to be positioned centrally within the frame.

Figure 1 — Types of doors

3.2 Door frames



1) Other sections may be used provided the interchangeability of dimensions is maintained.

Figure 2 – Door frames

Table 2 – Dimensions of door frames

Dimensions in millimetres

Nominal size	<i>L</i>	<i>B</i>
	$0^{1)}_{-3}$	$0^{1)}_{-3}$
1 200 × 600	1 200	600
1 400 × 600	1 400	600
1 400 × 750	1 400	750
1 400 × 900	1 400	900
1 600 × 600	1 600	600
1 600 × 750	1 600	750
1 600 × 900	1 600	900

1) Only for type FB.

3.3 Door plates

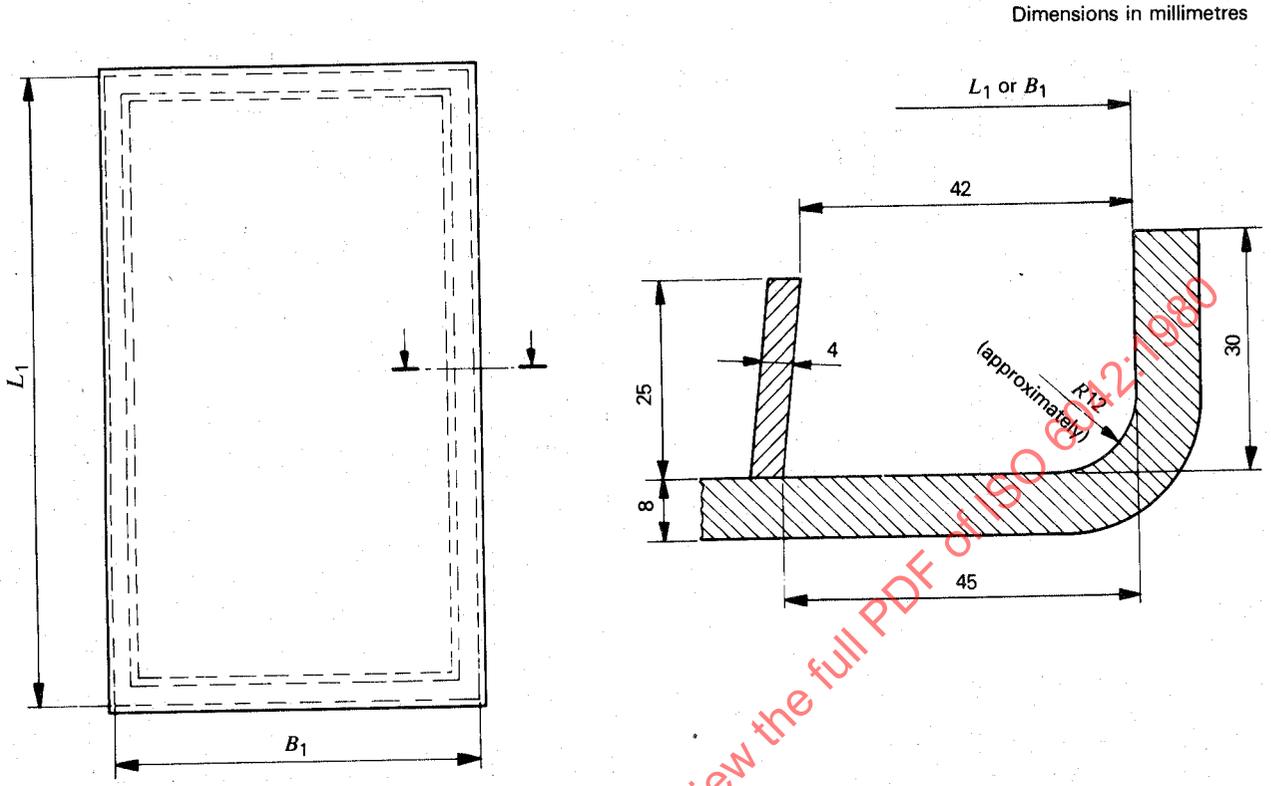


Figure 3 - Door plates

Table 3 - Dimensions of door plates

Dimensions in millimetres

Nominal size	Dimensions in millimetres	
	L_1 ± 2	B_1 ± 2
1 200 × 600	1 244	644
1 400 × 600	1 444	644
1 400 × 750	1 444	794
1 400 × 900	1 444	944
1 600 × 600	1 644	644
1 600 × 750	1 644	794
1 600 × 900	1 644	944

3.4 Fittings

3.4.1 Location of door clips and hinges

All values given in figure 4 for the centrelines of door clips and hinges, are referred to the clear opening (see figure 1).

Dimensions in millimetres

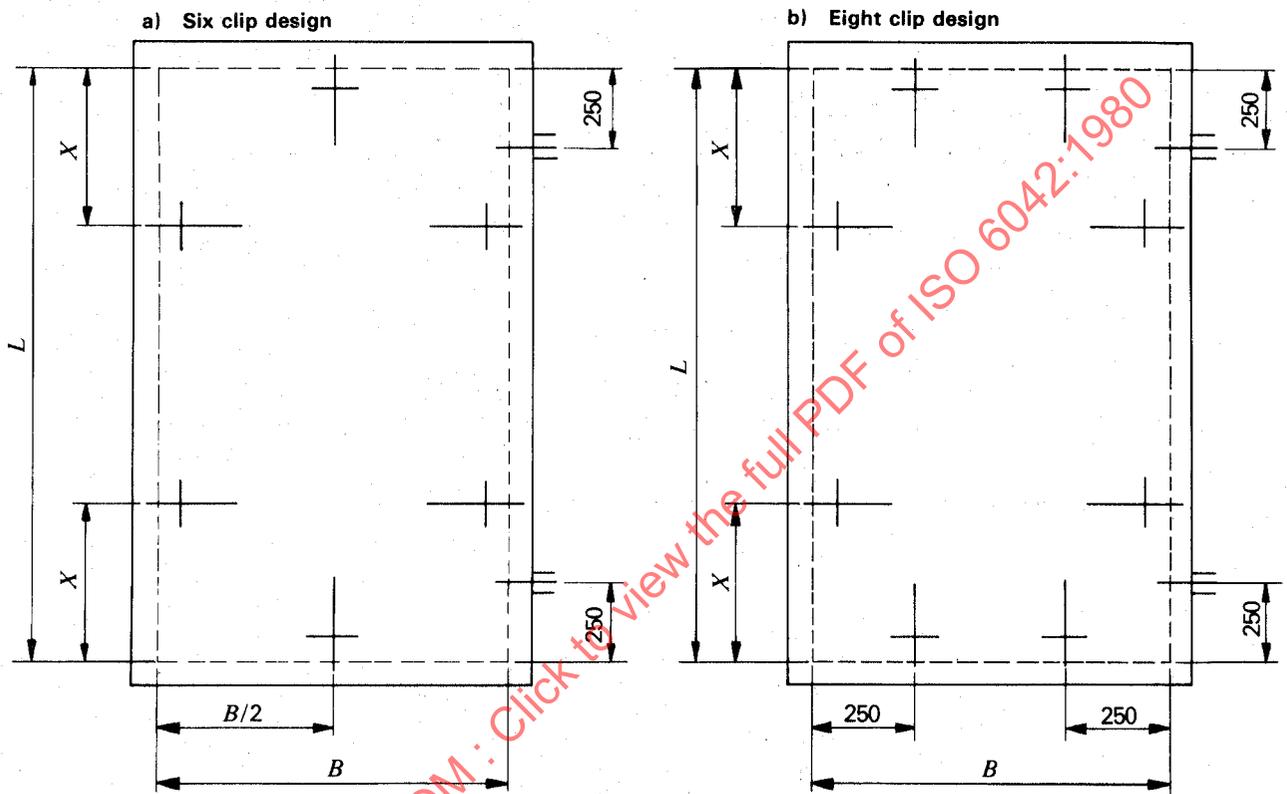


Figure 4 – Fittings

Table 4 – Location of fittings

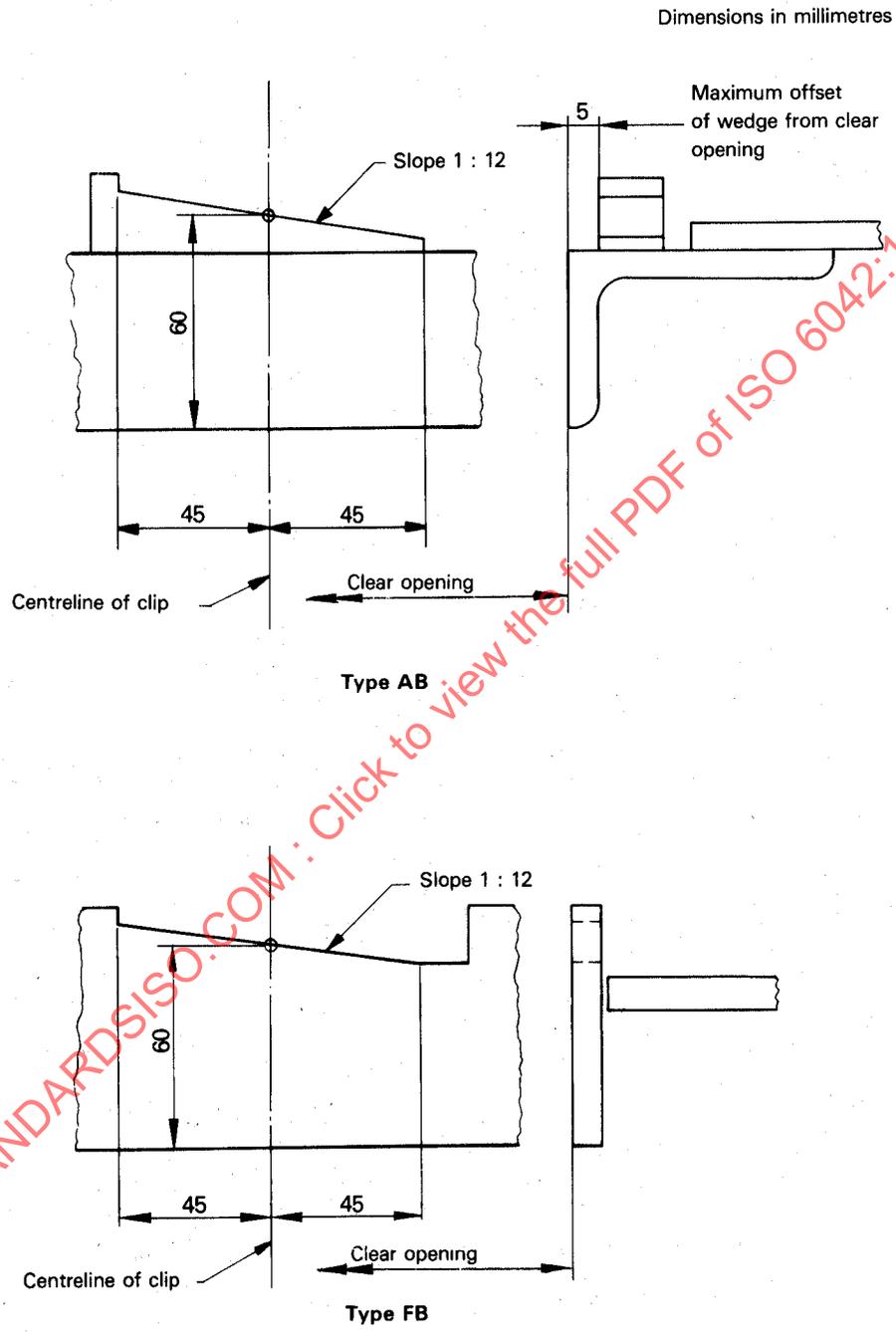
Dimensions in millimetres

Nominal sizes	Number of clips	X
1 200 × 600	6	350
1 400 × 600	6	350
1 400 × 750	6	350
1 400 × 900	8	350
1 600 × 600	6	410
1 600 × 750	6	410
1 600 × 900	8	410

3.4.2 Wedges

Wedges shall be arranged on the frames to align with the centrelines of each clip. A slope of 1 : 12 is recommended.

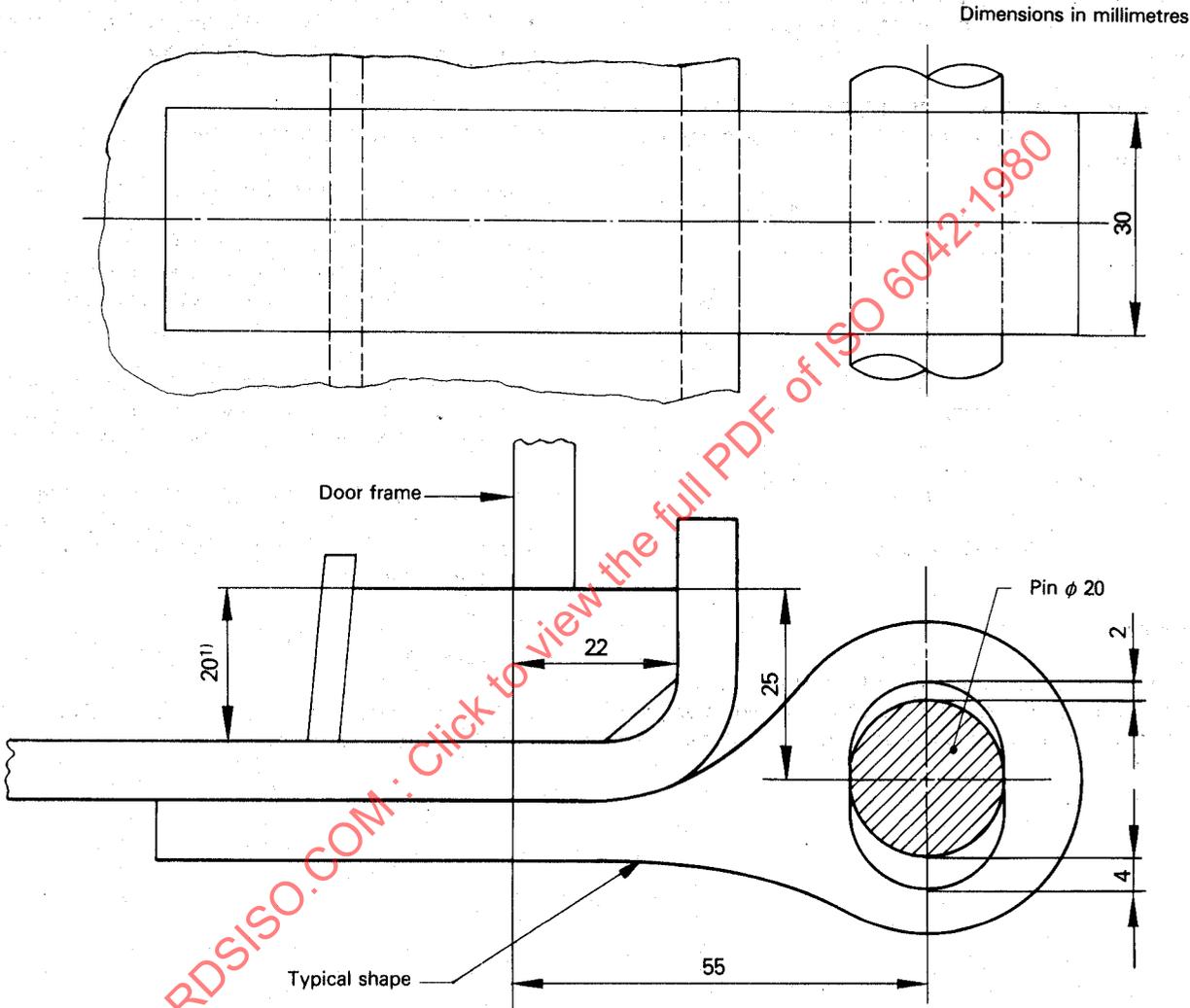
The direction of the slope of the wedge shall correspond to the required closing direction of the clips as shown in figure 1.



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3.4.3 Hinges

Two hinges shall be fitted to each door. Each hinge shall be provided with an oval eye hole, in order to allow clips to compress the door seal uniformly.



1) Seal uncompressed

Figure 6 — Hinges