INTERNATIONAL STANDARD

ISO 6042

Third edition
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Ships and marine technology — Weathertight single-leaf steel doors

Navires et technologie maritime — Portes en acier à un seul battant, étanches aux intempéries

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 8, *Ship design*.

This third edition cancels and replaces the second edition (ISO 6042:1998), which has been technically revised.

Ships and marine technology — Weathertight single-leaf steel doors

1 Scope

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

These doors generally conform to the requirements of the International Convention on Load Lines 1966 (ICLL66). 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 (see also Table 1).

Users of this International Standard should note that while observing the requirements of this 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 Normative references

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

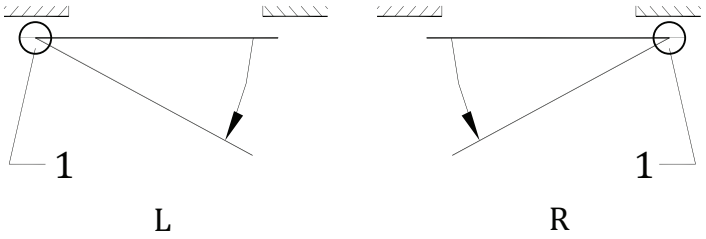
ISO 3796, *Ships and marine technology — Clear openings for external single-leaf doors*

3 Doors, door frames, door plates, and accessories

3.1 Opening direction

For the definitions of left-hand door and right-hand door, see Figure 1.

Doors in accordance with this International Standard can be used for both opening directions (left-hand or right-hand) before they are installed in bulkhead plates.



Key

1 hinge
L left-hand
R right-hand

Figure 1 — Opening direction

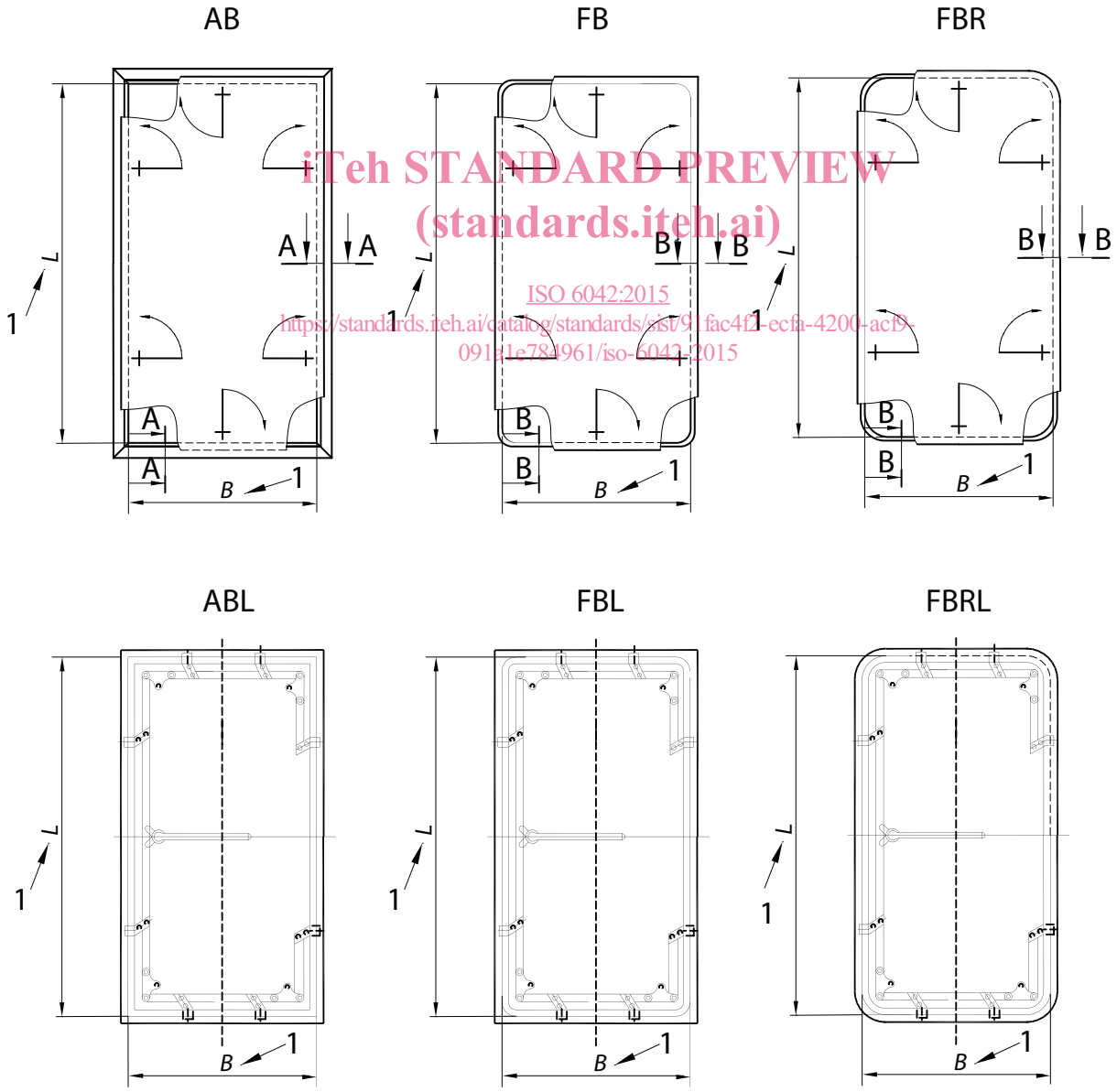
3.2 Door types

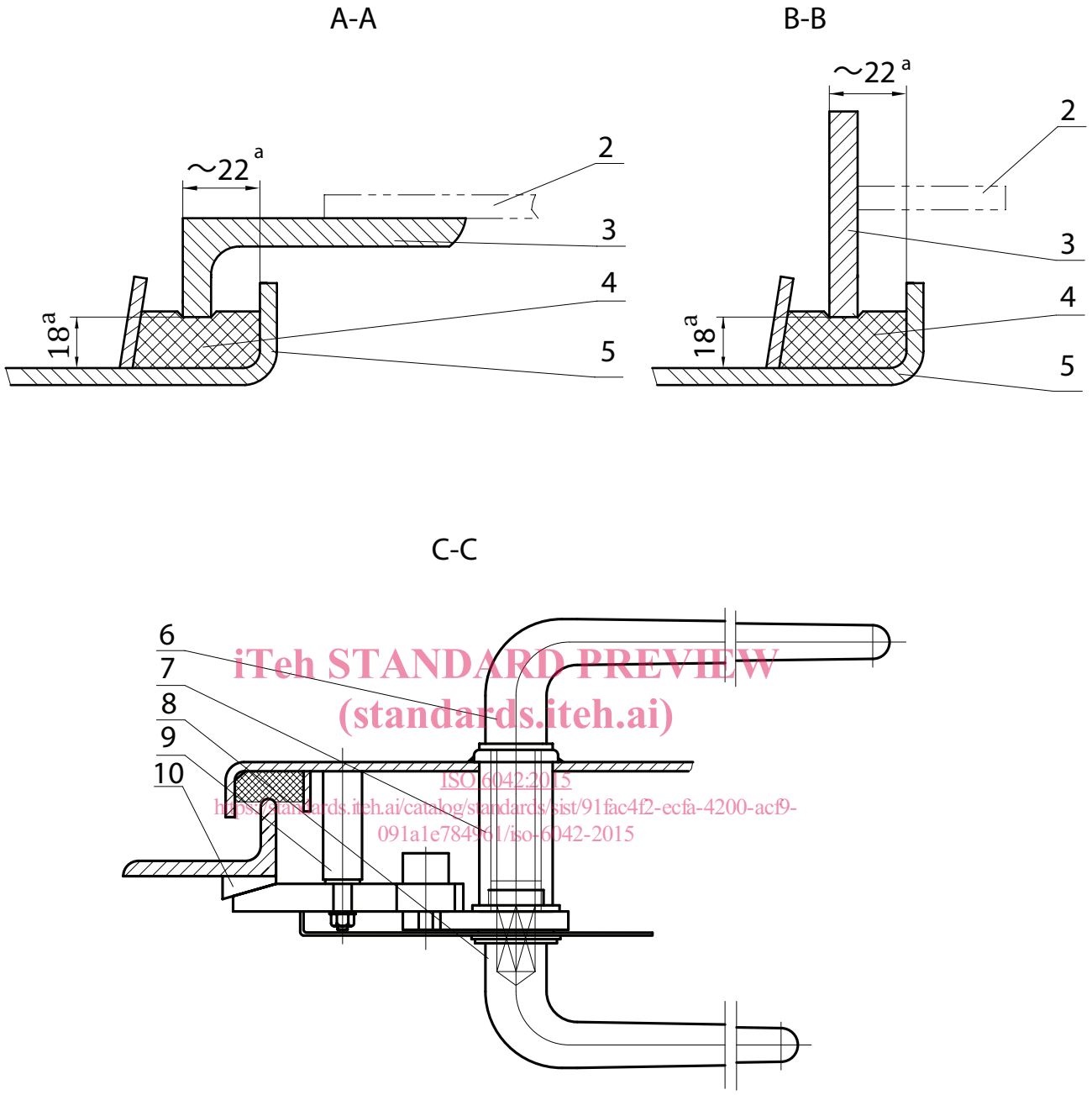
The types of doors shall conform to the detail of Table 1 and Figure 2. The nominal sizes (height L × width B) given in Table 2 are in accordance with ISO 3796. The assignment of door types to door frames and door plates is shown in Table 3.

Table 1 — Types of doors

Types	Definition
AB	Multi-handles door using angle bar frame
FB	Multi-handles door using flat bar frame (radius of 31 mm)
FBR	Multi-handles door using flat bar frame (radius of 100 mm)
ABL	Single-handle with interlock clips door using angle bar frame
FBL	Single-handle with interlock clips door using flat bar frame (radius of 31 mm)
FBRL	Single-handle with interlock clips door using flat bar frame (radius of 100 mm)

Dimensions in millimetres





Key

1	clear opening	7	sleeve
2	bulkhead plate	8	inside handle
3	door frame	9	interlock
4	door seal	10	inclined wedge
5	door plate	11	total thickness of door
6	door handle	a	When the seal is compressed by 2 mm, door plate shall be positioned centrally within the frame.

NOTE 1 Six clips and single-handle design with interlock clips.

NOTE 2 For four clips design and eight clips design, see 3.5.1 and Figure 5.

Figure 2 — Types of doors

Table 2 — Doors, nominal sizes, and application

Dimensions in millimetres

Door Nominal size $L \times B$	Application in accordance with ICLL66 in position (s)
1 200 × 600	1 and 2
1 400 × 600	
1 400 × 750	
1 400 × 900	
1 500 × 600	2 only
1 500 × 750	
1 500 × 900	
1 600 × 600	
1 600 × 750	
1 600 × 900	
1 700 × 600	
1 700 × 750	
1 700 × 900	
1 800 × 600	
1 800 × 750	
1 800 × 900	

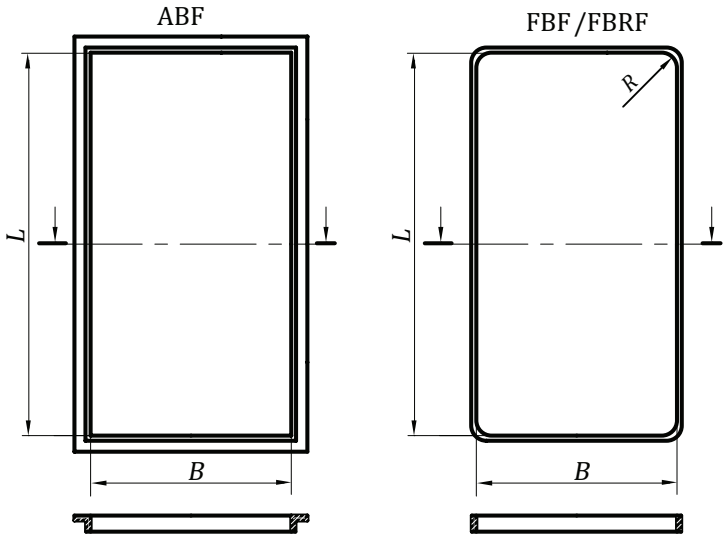
Table 3 — Assignment of door type to door frames and door plates

Door type	Associated type of	
	door frame (according to 3.3)	door plate (according to 3.4)
AB	ABF	SP
FB	FBF	SP
FBR	FBRF	RP
ABL	ABF	SP
FBL	FBF	SP
FBRL	FBRF	RP

3.3 Door frames (see Figure 3)

In order to prevent damage to the door seal, the edges of the upper part of the door frame shall be rounded or chamfered.

The dimensions of door frames are given in Table 4.



NOTE Angle bar 75 × 50 × 7[a]; Flat bar 70 × 8[a].

[a] Other sections may be used, provided that the interchangeability of dimensions is maintained.

Figure 3 — Types of door frames

Table 4 — Dimensions of door frames

Dimensions in millimetres

Nominal size	*L* 0 -2	B 0 -2	R for type	
			FBF	FBRF
1 200 × 600	1 200	600	31 ± 1	100 ± 1,5
1 400 × 600	1 400	600		
1 400 × 750	1 400	750		
1 400 × 900	1 400	900		
1 500 × 600	1 500	600		
1 500 × 750	1 500	750		
1 500 × 900	1 500	900		
1 600 × 600	1 600	600		
1 600 × 750	1 600	750		
1 600 × 900	1 600	900		
1 700 × 600	1 700	600		
1 700 × 750	1 700	750		
1 700 × 900	1 700	900		
1 800 × 600	1 800	600		
1 800 × 750	1 800	750		
1 800 × 900	1 800	900		

3.4 Door plates

The door-seal retaining bar can be placed in inclined or vertical position, as indicated in Figure 4.

The dimensions (height, *L* and width, *B*) of door plates are given in Table 5.