
International Standard



5485

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

Shipbuilding — Inland vessels — Fixed steel deck stairs

Construction navale — Bateaux de navigation intérieure — Échelles métalliques de pont stationnaires

First edition — 1986-12-01

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 5485:1986](https://standards.iteh.ai/catalog/standards/sist/dadf2a57-e5fb-4295-b2da-e43b78fbb3d1/iso-5485-1986)

<https://standards.iteh.ai/catalog/standards/sist/dadf2a57-e5fb-4295-b2da-e43b78fbb3d1/iso-5485-1986>

UDC 629.122.011.57-034.1

Ref. No. ISO 5485-1986 (E)

Descriptors : shipbuilding, inland navigation, decks, stairways, dimensions, specifications.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5485 was prepared by Technical Committee ISO/TC 8, *Shipbuilding and marine structures*.

This first edition cancels and replaces ISO 5485/2-1980, of which it constitutes a minor revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Shipbuilding — Inland vessels — Fixed steel deck stairs

iTeh STANDARD PREVIEW (standards.iteh.ai)

1 Scope and field of application

This International Standard specifies the technical requirements and main dimensions of fixed steel deck stairs, used in inland vessels.

It is not applicable to indoor stairs, outboard stairs, emergency and special purpose stairs.

2 Technical requirements

2.1 Stairs

2.1.1 The stairs shall permit water drainage and easy removal of snow and ice.

2.1.2 They shall be made without a lower protective plate.

2.1.3 They shall be welded or bolted in place on lugs or brackets. The treads shall be welded or bolted to the side plates.

2.2 Side plates

2.2.1 Side plates may be stamped or bent from a steel plate in the form of a channel, Γ -shaped profile or other suitable profile.

2.2.2 If the superstructure wall is sufficiently solid at the place of installation of the stairs, the treads may be welded directly to the wall without the side plate.

If necessary, the wall may be suitably reinforced around the stair treads.

2.3 Treads

2.3.1 Treads shall be manufactured by stamping from fluted steel plates or from a steel plate having anti-slip formed lugs, or made in the form of a grille. Treads may also be manufactured from a smooth steel plate with a fluted strip fixed on the front part of the tread.

2.3.2 Treads shall be inclined 1° or 2° backwards for water drainage. Grille treads need not be inclined.

2.3.3 The tolerance for deviation from the theoretical tread spacing shall be ± 3 mm.

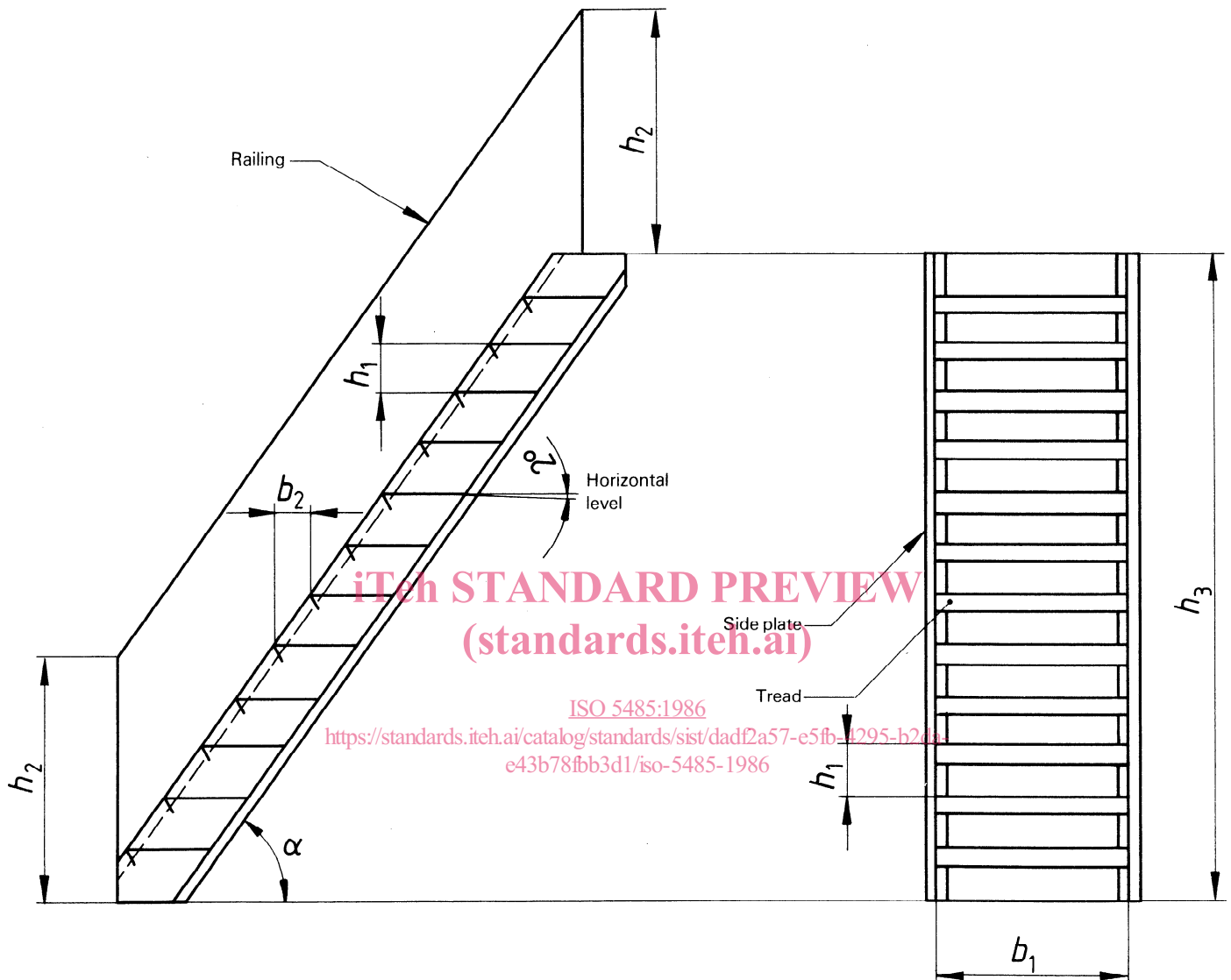
2.4 Hand-rail

Stairs shall have a hand-rail attached to the side plate. If the stairs are installed near the superstructure wall, the hand-rail shall be fitted only on the side opposite the wall.

For passenger ships, hand-rails shall be fitted to both sides of the stairs.

3 Main dimensions

Dimensions in millimetres



Symbol	Designation	Dimension(s)
α	Inclination of stairs	45°, 50°, 55° ¹⁾
b_1	Width of stairs	600, 700, 800, 1 000 ²⁾
b_2	Tread width :	
	— for stairs inclined at 50°	150 min. ²⁾
	— for stairs inclined at 55°	140 min. ²⁾
h_1	Tread spacing	200 to 250 ³⁾
h_2	Hand-rail height	900 to 1 000
h_3	Height of stairs	As needed

NOTE — A smaller inclination, α , and a smaller tread spacing, h_1 , shall be used in wide stairs. A greater inclination, α , and a greater tread spacing, h_1 , shall be used in narrow stairs.

Figure — Main dimensions

1) For passenger ships, an inclination, α , of 45°, minimum tread width of 160 mm and minimum stairs width, b_2 , of 800 mm is recommended.

2) The nominal stairs width, b_1 , is determined by the tread length.

3) The spacing between the upper tread and the deck shall be within the limit of 0,4 to 1,0 h_1 .