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**BS ISO 16706:2016**



**BSI Standards Publication**

# **Ships and marine technology — Marine evacuation systems — Load calculations and testing**

**bsi.**

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## **Ships and marine technology — Marine evacuation systems — Load calculations and testing**

*Navires et technologie maritime — Systèmes d'évacuation en mer —  
Calculs de charge et essais*



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Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
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## 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 1, *Lifesaving and fire protection*.

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## Introduction

The International Convention for the Safety of Life at Sea (SOLAS), 1974 requires all life-saving appliances and arrangements to comply with the requirements of the LSA Code and to be tested in accordance with the recommendations of the IMO. The revised recommendation on testing of life-saving appliances, as adopted by IMO Resolution MSC.81(70), prescribes in paragraph 12.2.2 and 12.3.2.2 the execution of a static load test to the structural attachment to the ship of a marine evacuation system. However, this resolution does not refer to any specific calculation method for this test. This document is intended to provide specifications for an appropriate calculation method for this test in order to facilitate consistent implementation by maritime administrations when approving marine evacuation systems.

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# Ships and marine technology — Marine evacuation systems — Load calculations and testing

## 1 Scope

This document specifies a calculation method for the application of a static load test to the structural attachment of marine evacuation systems to ships.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

International Maritime Organization, *The International Convention for the Safety of Life at Sea (SOLAS)*, 1974, as amended

International Maritime Organization, *The International Life-Saving Appliance (LSA) Code*, as adopted by IMO Resolution MSC 48(66) as amended

International Maritime Organization, *The Revised recommendation on testing of life-saving appliances*, as adopted by IMO Resolution MSC.81(70) as amended

International Maritime Organization, *International Code on Intact Stability, 2008 (2008 IS Code)*, as adopted by IMO Resolution MSC.267(85) as amended

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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

### 3.1

#### **marine evacuation system**

#### **MES**

appliance for the rapid transfer of persons from the embarkation deck of a ship to a *floating platform* (3.3) or survival craft by means of a *passage* (3.2)

### 3.2

#### **passage**

integral component of a *marine evacuation system* (3.1) to provide safe descent of persons from the embarkation station to the *floating platform* (3.3) or survival craft

Note 1 to entry: The passage can be an inflatable or rigid slide, a vertical passage or any other arrangement providing the same function.

### 3.3

#### **floating platform**

inflatable structure which may be fitted to the bottom of the *passage* (3.2) to hold evacuees awaiting entry to survival craft