



Standard Specification for Sliding Watertight Door Assemblies¹

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1. Scope

1.1 This specification covers the design, manufacture, and testing of sliding watertight door assemblies intended to ensure the watertight integrity of personnel access openings in watertight bulkheads.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 ASTM Standards:²

A36/A36M Specification for Carbon Structural Steel
F1197 Specification for Sliding Watertight Door Control Systems

2.2 Military Specification:

MIL-S-901 Shock Test, H.I. (High Impact); Shipboard Machinery, Equipment and Systems, Requirements for³

2.3 American Bureau of Shipping:

Rules for Building and Classing Steel Vessels⁴

2.4 Code of Federal Regulations:⁵

Title 46, Part 159.010, Independent Laboratory: Acceptance, Listing and Termination
Title 46, Part 163.001, Doors, Watertight, Sliding (and Door Controls), for Merchant Vessels (through the 1991 edition)

¹ This specification is under the jurisdiction of Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.03 on Outfitting and Deck Machinery.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://www.dodssp.daps.mil>.

⁴ Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060, <http://www.eagle.org>.

⁵ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

2.5 International Maritime Organization (IMO):

International Code for the Application of Fire Test Procedures (FTP)⁶

3. Terminology

3.1 Definitions:

3.1.1 *door assembly*—a door panel and its associated panel stiffening.

3.1.2 *frame assembly*—a rigid frame designed to be attached to a watertight bulkhead. The guide tracks necessary to ensure proper door and frame alignment are also included as part of the frame assembly.

3.1.3 *horizontal sliding watertight door*—a sliding watertight door that opens and closes with a horizontal movement.

3.1.4 *opening hand*—the direction in which a horizontal sliding watertight door opens. A left-hand opening door opens to the left when viewed from the side of the bulkhead on which the door assembly is located. A right-hand opening door opens to the right when viewed from the side of the bulkhead on which the door assembly is located.

3.1.5 *pressure head*—the pressure which a sliding watertight door assembly is designed to withstand. For a door located below the bulkhead deck, it is equivalent to the pressure exerted by a column of water the height of which is equal to the vertical distance from the bulkhead deck to the door sill in its installed location. For a door located above the bulkhead deck, it is equivalent to the pressure exerted by the maximum head of water for its location, as determined in the damage stability calculations.

3.1.6 *sliding watertight door assembly*—a steel door assembly and a steel frame assembly fitted with a replaceable interface between the two that ensures watertightness between door and frame at the design pressure head.

3.1.7 *vertical sliding watertight door*—a sliding watertight door that opens and closes with a vertical movement.

4. Classification

4.1 Sliding watertight doors consist of four types:

⁶ Available from the International Maritime Organization, 4 Albert Embankment, London, SE1 7SR UK.