



## Standard Specification for Doors, Furniture, Marine<sup>1</sup>

This standard is issued under the fixed designation F782; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

*This standard has been approved for use by agencies of the U.S. Department of Defense.*

### 1. Scope

1.1 This specification covers the construction of furniture doors for use where invoked by other marine furniture specifications.

1.2 This specification applies to all furniture doors for marine furniture, in items requiring hinged doors.

1.3 ~~Values~~The values stated in inch-pound units are to be regarded as ~~the~~ standard. ~~The metric equivalents, values given in parentheses, are for information only.~~ parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:<sup>2</sup>

[A240/A240M Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications](#)

[A1008/A1008M Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable](#)

[A582/A582M Specification for Free-Machining Stainless Steel Bars](#)

[B209 Specification for Aluminum and Aluminum-Alloy Sheet and Plate](#)

[B221 Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes](#)

[B633 Specification for Electrodeposited Coatings of Zinc on Iron and Steel](#)

[C1036 Specification for Flat Glass](#)

[C1048 Specification for Heat-Strengthened and Fully Tempered Flat Glass](#)

[D907 Terminology of Adhesives](#)

~~F2119~~[D4802 Test Method for Evaluation of MR Image Artifacts from Passive Implants](#)[Specification for Poly\(Methyl Methacrylate\) Acrylic Plastic Sheet](#)

#### 2.2 American Institute of Steel Construction Manual:<sup>3</sup>

[AISC Wire and Sheet Metal Gages—Equivalent Thickness in Decimals of an Inch, U.S. Standard Gage \(USSG\) for Uncoated Hot and Cold-Rolled Sheets](#)

#### 2.3 Federal Specifications:<sup>4</sup>

~~DD-G-1403~~ [Glass, Plate \(Float\), Sheet Figured, and Spandrel \(Heat Strengthened and Fully Tempered\)](#)

~~LP-391~~ [Plastic Sheets, Rods and Tubing, Rigid Cast, Methacrylate \(Multiapplication\)](#)

~~QQ-C-320~~ [AMS-QQ-C-320 Chromium Plating \(Electrodeposited\)](#)

~~QQ-Z-325~~ [Zinc Coating, Electrodeposited](#)

<sup>1</sup> This specification is under the jurisdiction of ASTM 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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<sup>2</sup> 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.

<sup>3</sup> Available from the American Institute of Steel Construction, 400 N. Michigan Ave., Chicago, IL 60611; Construction (AISC), 130 E. Randolph St., Suite 2000, Chicago, IL 60601-6219, <http://www.aisc.org>.

<sup>4</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS; <http://quicksearch.dla.mil>.

2.4 American National Standard Institute Standards:<sup>5</sup>

**ANSI Z97.1-1975Z97.1** Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings

### 3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *flush doors*—*doors, n*—metal doors with a smooth surface on the exterior face.

3.1.2 *hinged door*—*door, n*—door equipped with hinges that permit it to swing about the vertical hinge axis, either right hand or left hand.

3.1.2.1 *right-hand door*—*door, n*—door with hinges on the right side when viewed from the exterior of the furniture item containing the door.

3.1.2.2 *left-hand door*—*door, n*—door with hinges on the left side when viewed from the exterior of the furniture item containing the door.

3.1.3 *panel doors*—*doors, n*—doors with metal stiles and rails that support a panel insert of transparent safety glazing or expanded aluminum.

3.1.3.1 *stiles*—*stiles, n*—the vertical members in the frame of a panel door that support the central panel.

3.1.3.2 *rails*—*rails, n*—the horizontal members in the frame of a panel door that support the central panel.

### 4. Classification

4.1 Doors shall be of the following types as required by the specifications for the item of furniture in which they are installed and as indicated in ordering documents. See Fig. 1 for details.

4.1.1 *Type I*—Flush hinged door.

4.1.2 *Type II*—Panel hinged door.

### 5. Ordering Information

5.1 Doors are included as part of the orders for items of furniture requiring doors. To describe adequately the door or doors required, these orders shall include, as necessary, the following information:

5.1.1 Type.

5.1.2 Size, see Section 8.

5.1.3 Paint:

5.1.3.1 *Color*—Per the purchaser's requirements.

5.1.3.2 *Manufacturer's* standard baked enamel will be furnished unless otherwise required and indicated by the purchaser.

5.1.4 For single-hinged doors, indicate hand if not obvious or if a specific hand is required.

5.1.5 Material for Type II (panel) doors may be either steel or aluminum. Material selected shall be the option of the furniture purchaser.

### 6. Materials and Manufacture

6.1 For typical design, see Fig. 1.

6.2 Sheet metal shall be cold-rolled steel, commercial quality, furniture grade in accordance with Specification **A1008/A1008M**.

6.3 Aluminum extrusions shall be Type 6063-T6 aluminum alloy in accordance with Specification **B221**. Aluminum sheet shall be Type 5052-H32 aluminum alloy in accordance with Specification **B209**.

6.4 *Joining of metal parts:*

6.4.1 Metal components shall be joined by welding or gluing with a structural adhesive as defined in Terminology **D907**.

6.4.2 Joining shall be adequate to prevent racking during handling.

6.4.3 Spotwelds shall be spaced approximately 3 in. (76.2 mm) on centers.

6.4.4 Visible spotwelds on exterior face of door higher than the general surface of the metal shall be ground flush.

6.4.5 Visible spotweld depressions shall be spot filled and sanded flush.

6.5 All doors shall be square and form a plane through the four corners.

6.6 All doors shall incorporate a latch or other positive means to prevent opening in heavy seas. Spring, bullet, magnetic, or bayonet-type catches shall not be permitted. Furniture doors shall not open when furniture unit in which door is installed is tilted a maximum of 30° from the vertical.

6.7 Latches for doors shall be one of the two following types as selected by the furniture purchaser:

<sup>5</sup> Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.