



Standard Specification for Construction of Fire and Foam Station Cabinets¹

This standard is issued under the fixed designation F1333; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification provides design and construction criteria for double and single fire and foam station cabinets. See Fig. 1 and Fig. 2. Valves, hose, and fittings are not included.

1.2 Optional back and legs may be provided.

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

2. Referenced Documents

2.1 ASTM Standards:²

- A36/A36M Specification for Carbon Structural Steel
- A53/A53M Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- A167 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip (Withdrawn 2014)³
- A312/A312M Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes
- A569/A569M Specification for Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial (Withdrawn 2000)³
- B209 Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- B221 Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- F593 Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs
- F594 Specification for Stainless Steel Nuts
- F783 Specification for Staple, Handgrab, Handle, and Stirrup Rung

2.2 American National Standards:⁴

- ANSI B18.21.1 Lock Washer
- ANSI B18.22.1 Plain Washer

2.3 Other Standards:

- American Bureau of Shipping Rules for Building and Classing of Steel Vessels⁵
- American Welding Society Publication, AWS D 1.1 Structural Welding Code⁶

3. Classification

3.1 Type I, Single Cabinet (see Fig. 1 and Figs. 3-9):

- 3.1.1 Grade 1—Right-hand door active leaf.
 - 3.1.1.1 Class A, Mild Steel—Specification A36/A36M.
 - 3.1.1.2 Class B, Stainless Steel—Specification A167.
 - 3.1.1.3 Class C, Aluminum—Specification B209.
- 3.1.2 Grade 2—Left-hand door.
 - 3.1.2.1 Class A, Mild Steel—Specification A36/A36M.
 - 3.1.2.2 Class B, Stainless Steel—Specification A167.
 - 3.1.2.3 Class C, Aluminum—Specification B209.

3.2 Type II, Double Cabinet (see Fig. 2 and Fig. 8):

- 3.2.1 Grade 1—Right-hand doors active leaf.
 - 3.2.1.1 Class A, Mild Steel—Specification A36/A36M.
 - 3.2.1.2 Class B, Stainless Steel—Specification A167.
 - 3.2.1.3 Class C, Aluminum—Specification B209.

4. Ordering Information

4.1 Fire and foam cabinets ordered in accordance with this specification shall include the following:

- 4.1.1 ASTM title, designation, and year of issue,
- 4.1.2 Quantity (number of cabinets),
- 4.1.3 Type, grade, and class, and
- 4.1.4 Optional features.

5. Materials and Manufacture

5.1 Materials:

- 5.1.1 See Table 1.
- 5.1.2 Class materials.

¹ This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.11 on Machinery and Piping Systems.

Current edition approved Oct. 1, 2013. Published October 2013. Originally approved in 1991. Last previous edition approved in 2007 as F1333 - 91(2007). DOI: 10.1520/F1333-91R13.

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 The last approved version of this historical standard is referenced on www.astm.org.

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

⁵ Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060, http://www.eagle.org.

⁶ Available from American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126, http://www.aws.org.

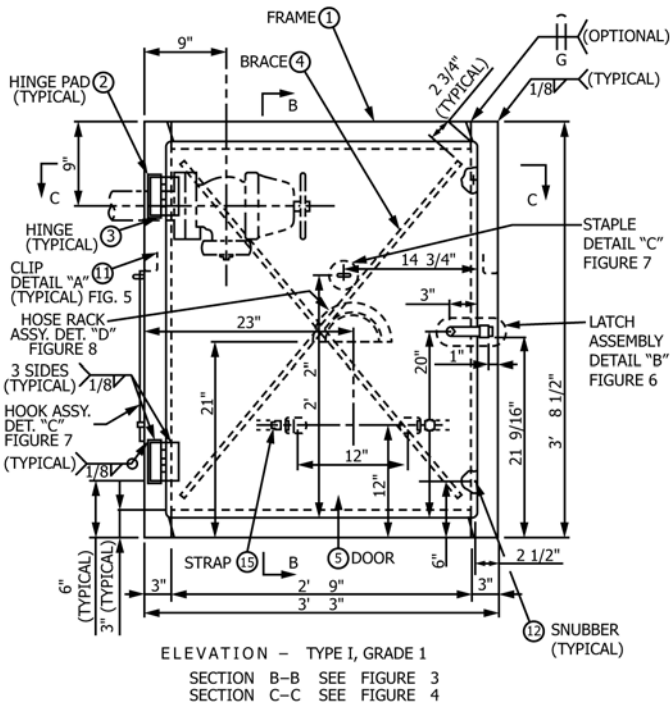


FIG. 1 Fire and Foam Cabinet—Type I

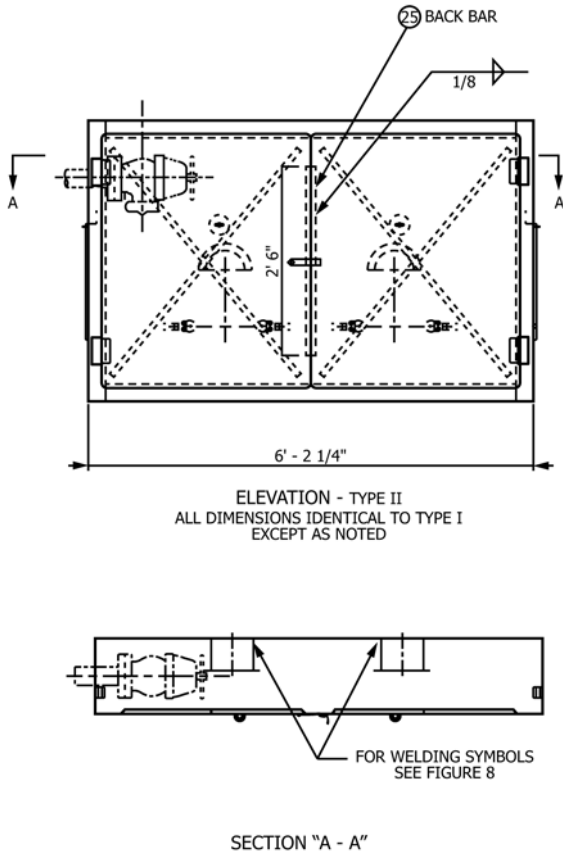


FIG. 2 Fire and Foam Cabinet—Type II

| Item Number ^A | Description ^B |
|--------------------------|---|
| 1 Frame | plate, 12 gage |
| 2 Hinge pad | flat bar, 1 1/2 in. by 4 1/2 in. by 12 gage |
| 3 Hinge | undrilled butt, 4 in. long by 2 in. wide, commercial stainless steel |
| 4 Brace | angle, 3/4 by 3/4 by 1/8 in. |
| 5 Door | plate, 12 gage |
| 6 Staple | round bar, 3/8-in. dimensions in accordance with Specification F783 |
| 7 Hook | round bar, 1/4 in. |
| 8 Latch | flat bar, 3/16 by 1 in. |
| 9 Keeper | flat bar, 3/4 by 1 in. |
| 10 Rivet | button monel or aluminum, 1/4 in. |
| 11 Clip | wrench/nozzle, plate 12 gage |
| 12 Snubber | rubber, commercial |
| 13 Retainer | plate, 12 gage |
| 14 Saddle | pipe 6 NPS Schedule 40, Specification A53/A53M |
| 15 Strap | hose securing, quick disconnect, commercial |
| 16 Clip | hook securing, commercial, Specification A167 |
| 17 Washer | TFE-fluorocarbon |
| Options | |
| 18 Back | plate, 3/16 in. |
| 19 Leg | angle, 4 by 3 by 3/8 in., Specification A36/A36M |
| 20 Brace | angle, 4 by 3 by 3/8 in., Specification A36/A36M |
| 21 Bolt | hex head, 3/8 —16 UNC—2A by 1 1/4-in. long, stainless steel Type 316, Specification F593 |
| 22 Washer | flat, stainless steel Type 316 for 3/8-in. diameter bolt, ANSI B18.22.1, Type B |
| 23 Nut | heavy hex 3/8 —16 UNC—2B, stainless steel Type 316, Specification F594 |
| 24 Washer | lock, stainless steel Type 316 for 3/8-in. diameter bolt, ANSI B18.21.1 A36/A36M, Regular |
| 25 Back bar | Type II Double Cabinet Only flat bar, 1 1/2 in. by 30 in. by 12 gage |

^A Items 18 to 24 (inclusive) are optional.

^B 1 in. = 25.4 mm.

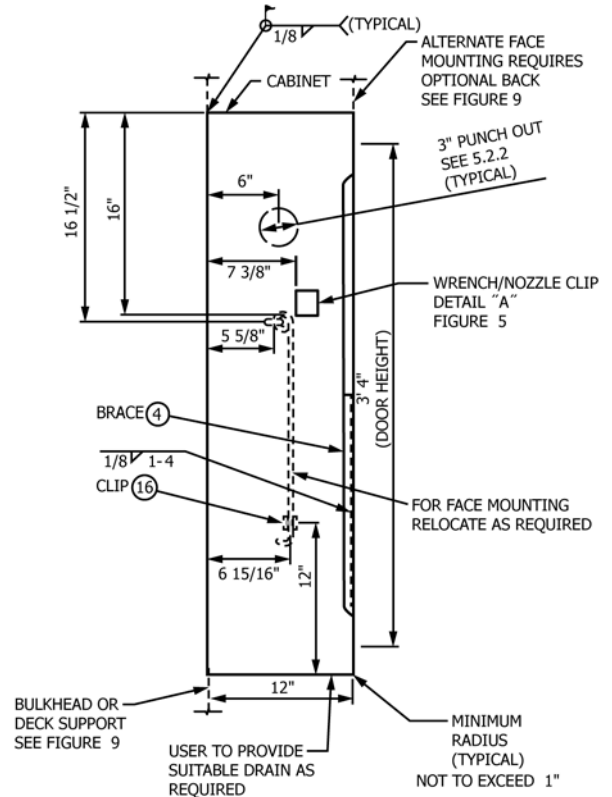


FIG. 3 Section "B-B"

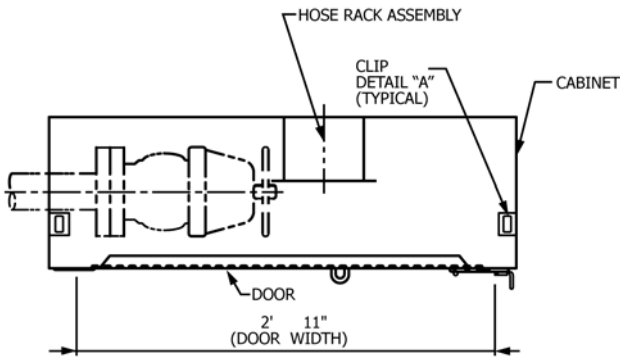


FIG. 4 Section "C-C"

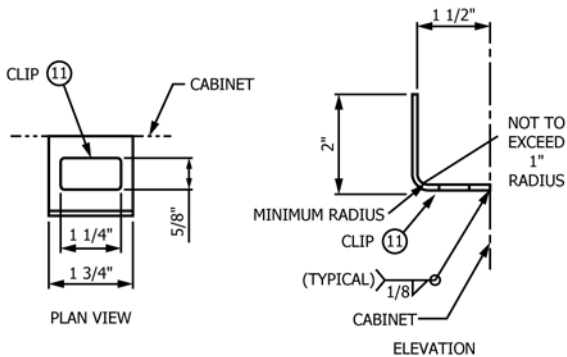


FIG. 5 Wrench/Nozzle Clip Detail "A"

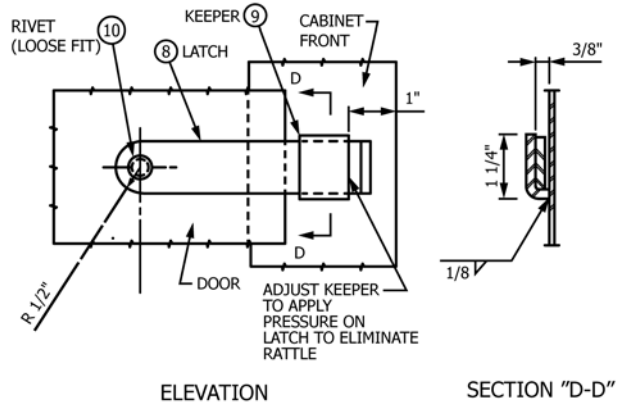
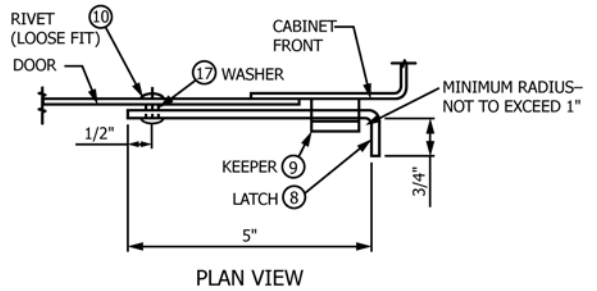


FIG. 6 Latch Assembly, Type II, Grade 1 Cabinet Shown, Others Similar, Detail "B"

5.1.2.1 All materials for Class A cabinets shall meet the requirements of Specifications A53/A53M and A36/A36M or Specification A569/A569M, except as specified in Table 1.

5.1.2.2 All materials for Class B cabinets shall meet the requirements of Specifications A167 and A312/A312M, except as specified in Table 1.

5.1.2.3 All materials for Class C cabinets shall meet the requirements of Specifications B209 and B221 except as specified in Table 1.

5.2 Manufacture:

5.2.1 Welding shall be in accordance with the American Bureau of Shipping Rules for Building and Classing of Vessels or American Welding Society Structural Welding Code AWS D1.1.

5.2.2 Punchout shall have a 3-in. (approximately 76-mm) diameter hole with three evenly spaced 1/16-in. (approximately 1.5-mm) tabs for both sides of cabinet (see Fig. 3).

6. Workmanship, Finish, and Appearance

6.1 Fire and foam cabinets shall be free of weld spatter, burrs, and sharp corners, rough edges, and other defects which might be hazardous to personnel and equipment.

6.2 Surface Requirements:

6.2.1 Class A Cabinets—Coat with 1.0-mil dry film thickness, inorganic zinc silicate, including options.

6.2.2 Class B Cabinets—Uncoated. Optional legs coated with 1.0-mil dry film thickness, inorganic zinc silicate.

6.2.3 Class C Cabinets—Uncoated.

7. Packaging and Package Marking

7.1 Loose fasteners and hardware shall be packaged and securely attached inside each cabinet.

7.2 Shipping—Each cabinet shall bear a weathertight tag showing the purchase order number, ASTM standard designation, type, and name of manufacturer.

7.3 The cabinets shall be crated or attached to a pallet in a manner acceptable for shipment by commercial carrier. The cabinets shall be crated individually.

8. Keywords

8.1 fire; foam; foam station cabinet; marine technology; ships

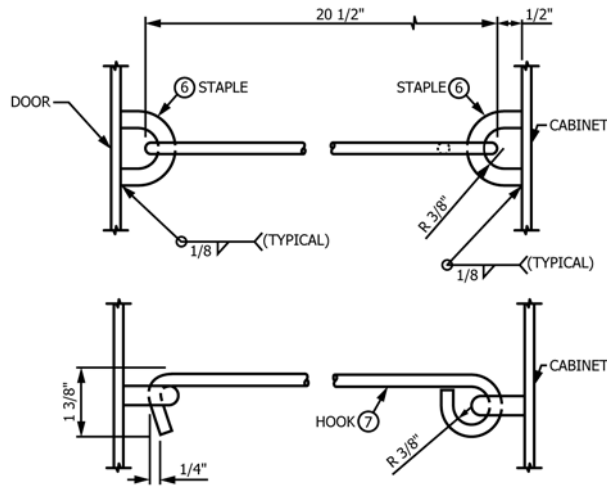


FIG. 7 Hook Assembly Detail "C"

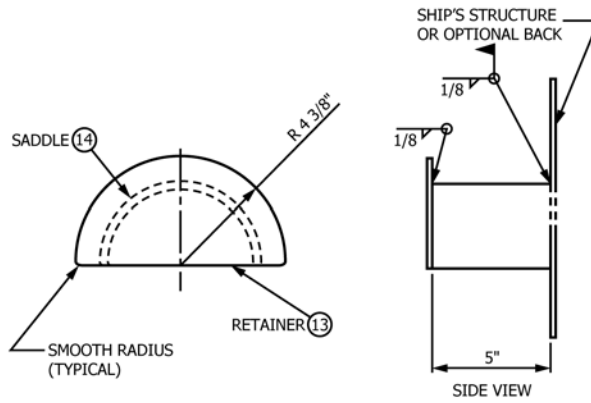


FIG. 8 Hose Rack Detail "D"

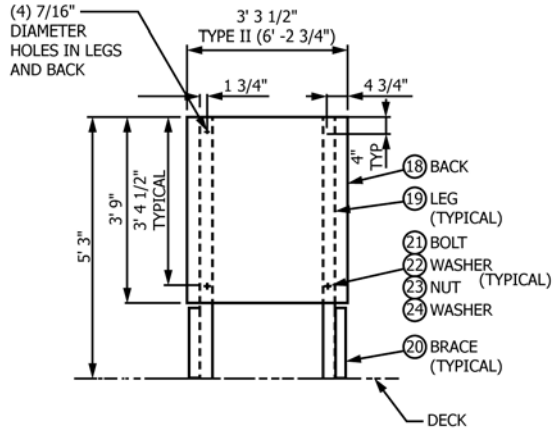
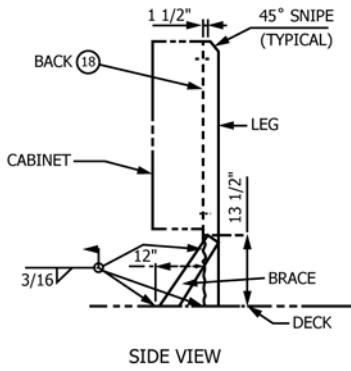


FIG. 9 Front View of Back Leg and Back Option Detail “E”

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/