

Designation: F1333 – 91(Reapproved 2007)

An American National Standard

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

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A569/A569M Specification for Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial (Withdrawn 2000)³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.

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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.

 $^{^{3}\,\}mbox{The last approved version of this historical standard is referenced on www.astm.org.$

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.

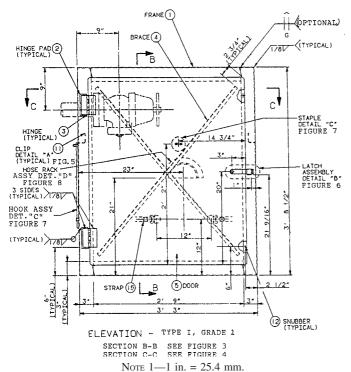
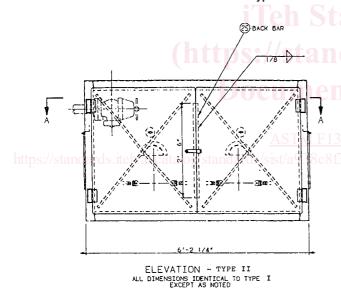
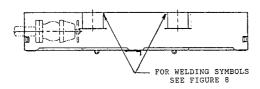


FIG. 1 Fire and Foam Cabinet—Type I





SECTION "A-A"
FIG. 2 Fire and Foam Cabinet—Type II

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.

TABLE 1 Parts List

IABLE I FAITS LIST	
Item Number ^A	Description ^B
1 Frame	plate, 12 gage
2 Hinge pad	flatbar, 11/2 in. by 41/2 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, %-in. dimensions in accordance with Specification F783
7 Hook	round bar, ¼ in.
8 Latch	flat bar, 3/16 by 1 in.
9 Keeper	flat bar, 3/1 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, % —16 UNC—2A by 11/4-in. long,
	stainless steel Type 316, Specification F593
22 Washer	flat, stainless steel Type 316 for %-in. diameter bolt, ANSI B18.22.1, Type B
23 Nut	heavy hex % —16 UNC—2B, stainless steel Type 316, Specification F594
24 Washer	lock, stainless steel Type 316 for %-in. diameter
	bolt, ANSI B18.21.1A36/A36M, Regular
	Type II Double Cabinet Only
25 Back bar	flat bar, 11/2 in. by 30 in. by 12 gage

A Items 18 to 24 (inclusive) are optional.

Preview

- 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 ½16-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.

 $^{^{}B}$ 1 in. = 25.4 mm.