

# Standard Specification for Construction of Fire and Foam Station Cabinets<sup>1</sup>

This standard is issued under the fixed designation F 1333; 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.

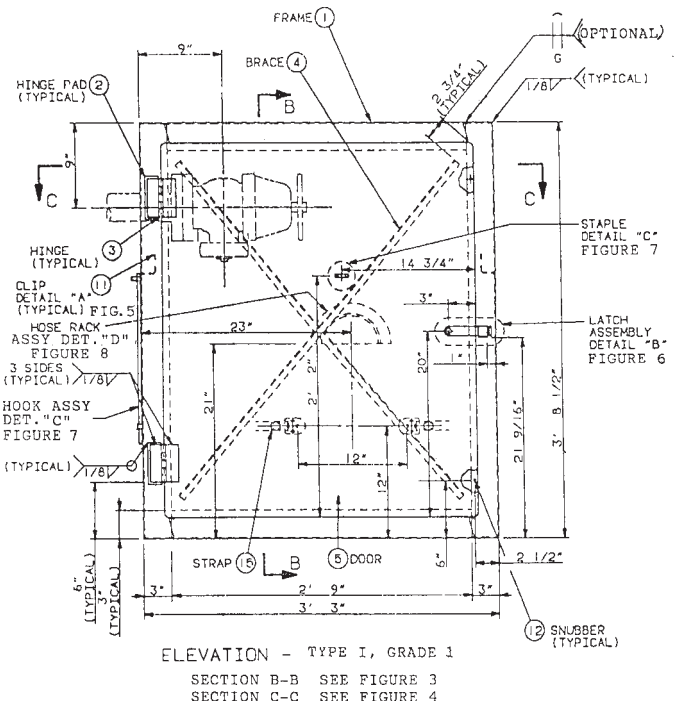
1.2 Optional back and legs may be provided.

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:

- A 36/A 36M Specification for Structural Steel<sup>2</sup>
  - A 53 Specification for Pipe, Steel, Black and Hot Dipped, Zinc Coated Welded and Seamless<sup>3</sup>
  - A 167 Specification for Stainless and Heat-Resisting Chromium Nickel Steel Plate, Sheet and Strip<sup>4</sup>
  - A 312/A 312M Specification for Seamless and Welded Austenitic Stainless Steel Pipe<sup>3</sup>
  - A 569/A 569M Specification for Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip, Commercial Quality<sup>4</sup>
  - B 209 Specification for Aluminum and Aluminum-Alloy Sheet and Plate<sup>5</sup>
  - B 221 Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes<sup>5</sup>
  - F 593 Specification for Stainless Steel Bolts, Hex Cap Screws and Studs<sup>6</sup>
  - F 594 Specification for Stainless Steel Nuts<sup>6</sup>
  - F 783 Specification for Staple, Handgrab, Handle, and Stirrup Rung<sup>7</sup>
- 2.2 American National Standards:<sup>8</sup>
- ANSI B18.21.1 Lock Washer



NOTE 1—1 in. = 25.4 mm.  
**FIG. 1 Fire and Foam Cabinet—Type I**

ANSI B18.22.1 Plain Washer

### 2.3 Other Standards:

- American Bureau of Shipping Rules for Building and Classing of Steel Vessels<sup>9</sup>
- American Welding Society Publication, AWS D 1.1 Structural Welding Code<sup>10</sup>

## 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 A 36/A 36M.

3.1.1.2 *Class B, Stainless Steel*—Specification A 167.

3.1.1.3 *Class C, Aluminum*—Specification B 209.

<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 F25.11 on Machinery and Piping Systems.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 01.04.

<sup>3</sup> Annual Book of ASTM Standards, Vol 01.01.

<sup>4</sup> Annual Book of ASTM Standards, Vol 01.03.

<sup>5</sup> Annual Book of ASTM Standards, Vol 02.02.

<sup>6</sup> Annual Book of ASTM Standards, Vol 01.08.

<sup>7</sup> Annual Book of ASTM Standards, Vol 01.07.

<sup>8</sup> Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

<sup>9</sup> Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060.

<sup>10</sup> Available from The American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126.

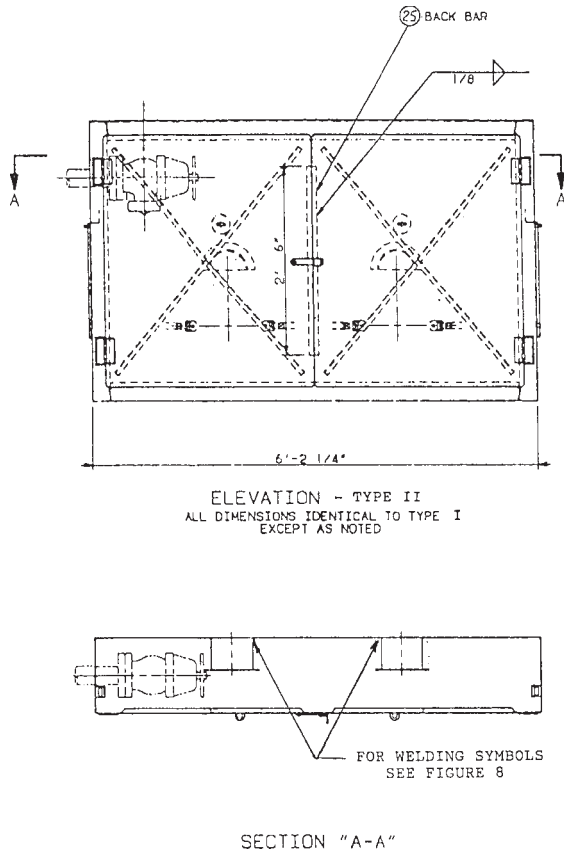


FIG. 2 Fire and Foam Cabinet—Type II

TABLE 1 Parts List

Item Number <sup>A</sup>	Description <sup>B</sup>
1	Frame plate, 12 gage
2	Hinge pad flatbar, 1½ in. by 4½ in. by 12 gage
3	Hinge undrilled butt, 4 in. long by 2 in. wide, commercial stainless steel
4	Brace angle, ¾ by ¾ by ⅝ in.
5	Door plate, 12 gage
6	Staple round bar, ⅝-in. dimensions in accordance with Specification F 783
7	Hook round bar, ¼ in.
8	Latch flat bar, ⅜ by 1 in.
9	Keeper flat bar, ⅜ by 1 in.
10	Rivet button monel or aluminum, ¼ 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 A 53
15	Strap hose securing, quick disconnect, commercial
16	Clip hook securing, commercial, Specification A 167
17	Washer TFE-fluorocarbon
Options	
18	Back plate, ⅜ in.
19	Leg angle, 4 by 3 by ⅜ in., Specification A 36/A 36M
20	Brace angle, 4 by 3 by ⅜ in., Specification A 36/A 36M
21	Bolt hex head, ⅜—16 UNC—2A by 1¼-in. long, stainless steel Type 316, Specification F 593
22	Washer flat, stainless steel Type 316 for ⅜-in. diameter bolt, ANSI B18.22.1, Type B
23	Nut heavy hex ⅜—16 UNC—2B, stainless steel Type 316, Specification F 594
24	Washer lock, stainless steel Type 316 for ⅜-in. diameter bolt, ANSI B18.21.1, Regular
25	Back bar flat bar, 1½ in. by 30 in. by 12 gage

<sup>A</sup> Items 18 to 24 (inclusive) are optional.

<sup>B</sup> 1 in. = 25.4 mm.

3.1.2 Grade 2—Left-hand door.

3.1.2.1 Class A, Mild Steel—Specification A 36/A 36M.

3.1.2.2 Class B, Stainless Steel—Specification A 167.

3.1.2.3 Class C, Aluminum—Specification B 209.

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 A 36/A 36M.

3.2.1.2 Class B, Stainless Steel—Specification A 167.

3.2.1.3 Class C, Aluminum—Specification B 209.

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.

5.1.2.1 All materials for Class A cabinets shall meet the requirements of Specifications A 53 and A 36/A 36M or Specification A 569/A 569M, except as specified in Table 1.

5.1.2.2 All materials for Class B cabinets shall meet the requirements of Specifications A 167 and A 312/A 312M, except as specified in Table 1.

5.1.2.3 All materials for Class C cabinets shall meet the requirements of Specifications B 209 and B 221 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 ⅛-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.

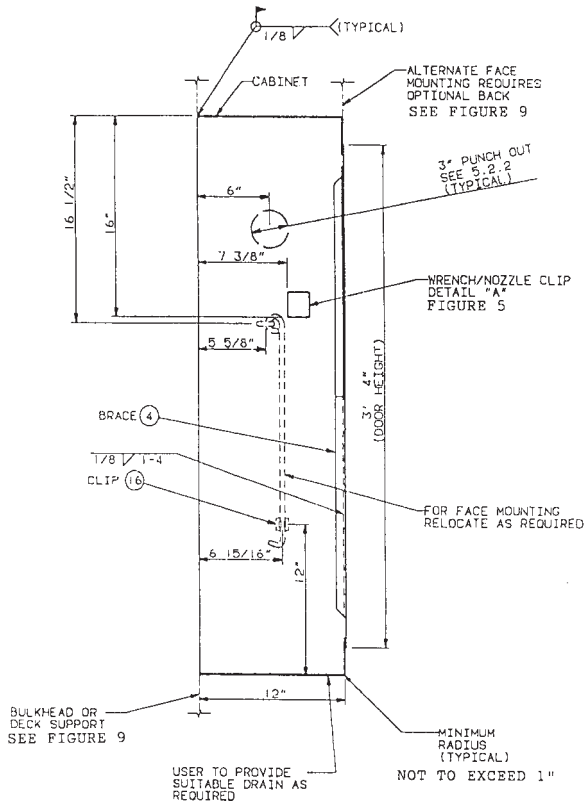


FIG. 3 Section "B-B"

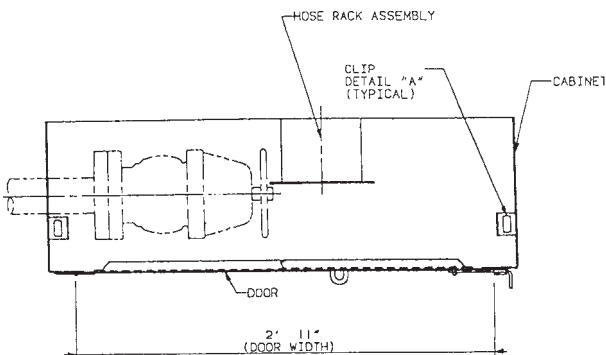


FIG. 4 Section "C-C"

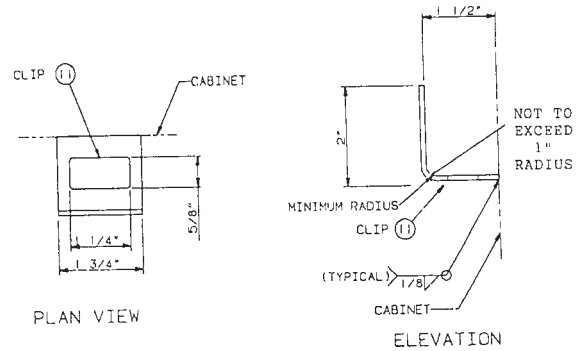


FIG. 5 Wrench/Nozzle Clip Detail "A"

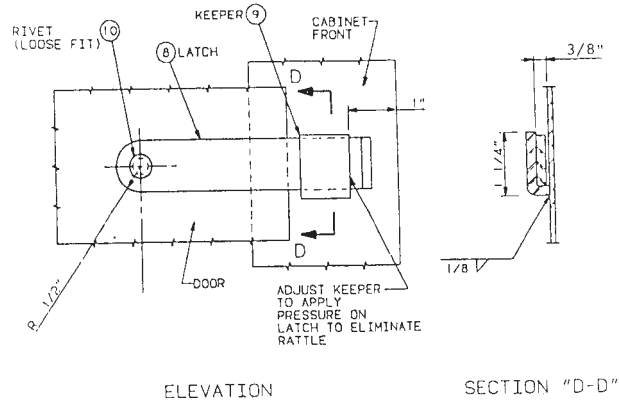
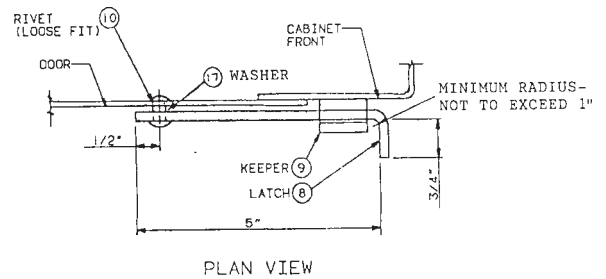


FIG. 6 Latch Assembly, Type II, Grade 1 Cabinet Shown, Others Similar, Detail "B"

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

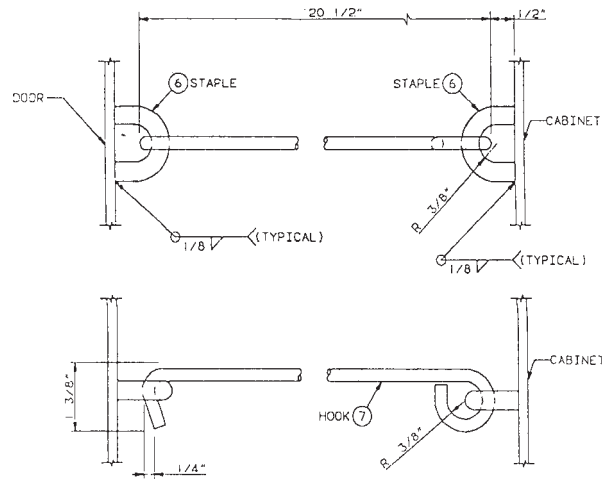


FIG. 7 Hook Assembly Detail "C"

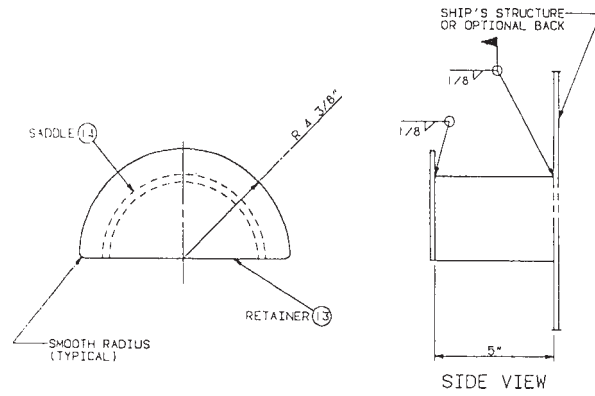


FIG. 8 Hose Rack Detail "D"

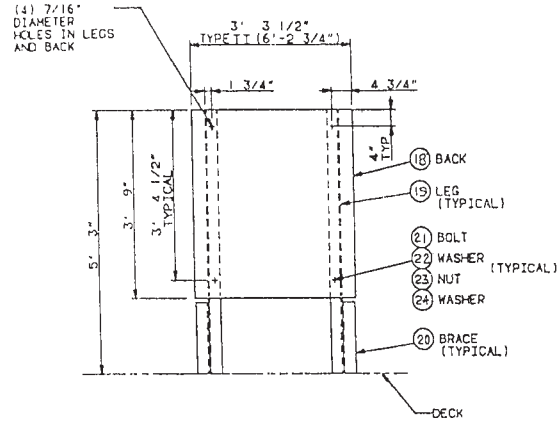
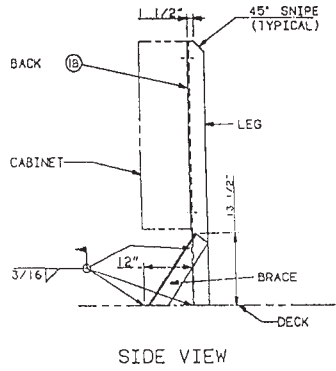


FIG. 9 Front View of Back Leg and Back Option Detail "E"

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