



## Standard Specification for Expanded-Metal Bulkhead Panels<sup>1</sup>

This standard is issued under the fixed designation F1071; 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.

### 1. Scope

1.1 This specification covers steel expanded-metal bulkhead panels suitable for use in storerooms, shops, and as protection against personnel hazards.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *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>

A36/A36M Specification for Carbon Structural Steel  
D3951 Practice for Commercial Packaging

2.2 *Other Documents:*

ABS Rules for Building and Classing Steel Vessels<sup>3</sup>  
AWS D1.1 Structural Welding Code<sup>4</sup>

### 3. Classification

3.1 Bulkhead panels are furnished in three types as follows.

3.1.1 *Type I*—Universal bulkhead panels for use as either a right-hand or left-hand panel.

3.1.2 *Type II*—Right-hand bulkhead panel.

3.1.3 *Type III*—Left-hand bulkhead panel.

3.2 Bulkhead panels are furnished in two classes as follows.

3.2.1 *Class A*—Bulkhead panels, 2 ft (610 cm).

3.2.2 *Class B*—Bulkhead panels, 3 ft (915 cm).

3.3 Bulkhead panels Types II and III, Class A only, are furnished in three sizes as follows.

3.3.1 *Size 1*—76 in. (195 cm) high.

3.3.2 *Size 2*—64 in. (165 cm) high.

3.3.3 *Size 3*—40 in. (100 cm) high.

### 4. Ordering Information

4.1 Orders for expanded-metal panels under this specification shall include this specification number, type, class, and size.

### 5. Materials and Manufacture

5.1 *Materials*—See Table 1.

5.2 *Manufacture:*

5.2.1 Welding shall be in accordance with AWS D1.1 or the ABS Rules for Building and Classing Steel Vessels.

5.2.2 Panels shall be welded and fabricated as shown in Figs. 1-6.

5.2.3 After panels have been shipped to the contractor, the panels will be assembled into bulkheads by welding or bolting by others.

### 6. Tolerances

6.1 *Tolerances*— $\pm 1/16$  in. (1.5 mm).

### 7. Workmanship, Finish, and Appearance

7.1 Expanded-metal panels shall be free from all cracks, burrs, sharp edges, and other defects.

7.2 The panel manufacturer shall apply a nonhazardous corrosion-inhibiting primer coating to all panel assemblies.

### 8. Packaging and Package Marking

8.1 Expanded-metal bulkhead panels shall be individually packed for shipment and storage in accordance with Practice D3951.

8.2 In addition to any special marking required by the contract or purchase order, each expanded-metal panel package shall be marked in accordance with Practice D3951.

<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](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

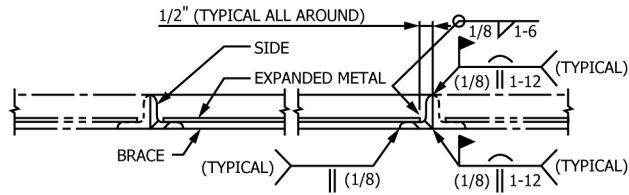
<sup>3</sup> Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060, <http://www.eagle.org>.

<sup>4</sup> Available from American Welding Society (AWS), 8669 NW 36 St., #130, Miami, FL 33166-6672, <http://www.aws.org>.

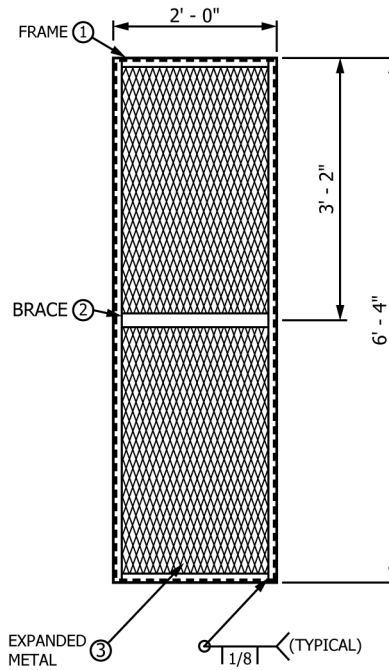
TABLE 1 Expanded-Metal Bulkhead Panel Materials

NOTE 1—1 in. = 25.4 mm.

| Item Number | Description                                                                             |
|-------------|-----------------------------------------------------------------------------------------|
| 1           | Frame angle, 1¼ × 1¼ × ¼ in., Specification A36/A36M                                    |
| 2           | Brace flatbar, ¼ × 2 in., Specification A36/A36M                                        |
| 3           | Expanded metal 13-gage thick × ½ in. flat pattern × 23 in. wide, Specification A36/A36M |
| 4           | Expanded metal 13-gage thick × ½ in. flat pattern × 35 in. wide, Specification A36/A36M |



TYPICAL SECTIONAL PLAN VIEW  
(SEVERAL PANELS WELDED OR BOLTED TOGETHER)



NOTE 1—1 in. = 25.4 mm.

FIG. 1 Expanded-Metal Bulkhead Panel—Type 1, Class A, Size 1

## 9. Keywords

9.1 bulkhead panels; expanded-metal bulkhead panels; panels; steel bulkhead panels