



Standard Specification for Chocks, Panama, Mooring Cast Steel¹

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1. Scope

1.1 This specification covers the principal dimensions and materials of chocks installed in ships to comply with the regulations of the Panama Canal.

1.2 Chocks can be used with either wire rope or fiber and synthetic ropes.

1.3 Chocks are for mounting directly on a deck, seat (foundation) or for mounting in a bulwark.

1.4 To meet Panama Canal Company regulations the radius of contact surfaces of lines must be 180 mm.

1.5 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.6 *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:*²

A27/A27M Specification for Steel Castings, Carbon, for General Application

2.2 *ANSI Standards:*³

B 46.1 Surface Texture (Roughness, Waviness, Lay)

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *bulwark*—a structural enclosure along the edge of the ship to serve as a rail.

¹ This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.01 on Structures.

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

3.1.2 *closed chock*—a metal flared ring-like fitting mounted on a ship through which mooring lines pass to tow or moor a ship.

3.1.3 *mooring ring or pipe*—a chock mounted in the bulwark and conforming to Type II or IV.

3.1.4 *rope contact area*—that part of the fitting in contact with the mooring line in normal mooring operations.

4. Classification

4.1 The size of the chock shall be identified by the nominal size “L” and “H” of the opening as shown in Table 1 and Fig. 1, and Table 2 and Fig. 2. Sizes larger than 360 mm by 260 mm may be considered as double chocks.

4.2 Chocks are furnished in types as follows:

4.2.1 *Type I*—Deck mounted, as shown in Fig. 1, and conforms to all dimensions in Table 1.

4.2.2 *Type II*—Bulwark mounted, as shown in Fig. 2, and conforms to all dimensions in Table 2.

4.2.3 *Type III*—Deck mounted conforming only to dimensions “L”, “H”, and 180 mm radius at entrance, as shown in Fig. 1 and Table 1.

4.2.4 *Type IV*—Bulwark mounted conforming only to dimensions “L”, “H”, and 180 mm radius at entrance, as shown in Fig. 2 and Table 2.

4.3 Chocks shall be furnished in either of the following grades:

4.3.1 *Grade 1*—Surface finish shall be in the as cast condition.

4.3.2 *Grade 2*—Surface finish in way of rope contact shall be in accordance with 7.2.

5. Ordering Information

5.1 Orders for chocks under this specification shall include this standard date, and the following:

5.1.1 Quantity (number) of chocks required,

5.1.2 Size (opening, $L \times H$),

5.1.3 Type and grade,

5.1.4 Primer and coating, if any (see 7.3), and

5.1.5 Marking.

6. Materials and Manufacture

6.1 Material shall be cast steel in accordance with Specification A27/A27M, Grade 60–30.