

§ 108.123

(c) Each internal opening fixed with appliances to ensure watertight integrity which are used intermittently during operation of the unit while afloat must meet the following:

(1) Each door, hatch, and scuttle must—

(i) Be remotely controlled from a normally manned control station, and be operable locally from both sides of the bulkhead; or

(ii) If there is no means of remote control there must be an alarm system which signals whether the appliance is open or closed both locally at each appliance and in a normally manned control station.

(2) Each closing appliance must remain watertight under the design water pressure of the watertight boundary of which it is a part.

(d) Each external opening fitted with an appliance to ensure weathertight integrity must be located so that it would not be submerged below the final equilibrium waterline if the unit is subjected simultaneously to—

(1) Damage causing flooding described in §174.075 through §174.085 of this chapter; and

(2) A wind heeling moment calculated in accordance with §174.055 of this chapter using a wind velocity of 50 knots (25.8 meters per second).

[CGD 73-251, 43 FR 56808, Dec. 4, 1978, as amended by CGD 79-023, 48 FR 51008, Nov. 4, 1983]

FIRE PROTECTION: GENERAL

§ 108.123 Isolation of combustible material.

Each internal combustion engine exhaust, boiler and galley uptake, and similar heat source must be separated or insulated from combustible materials.

§ 108.127 Storage lockers for combustibles.

Each oil and paint locker must be made of steel or an equivalent material or be completely lined with steel or an equivalent material as described in §108.131(c) of this subpart.

46 CFR Ch. I (10-1-11 Edition)

STRUCTURAL FIRE PROTECTION

§ 108.131 Definitions.

(a) *Standard Fire Test* means the test in which specimens of the relevant bulkheads or decks, having a surface of approximately 4.65 square meters (50 square feet) and a height of 2.44 meters (8 feet) resembling as closely as possible the intended construction and including, where appropriate, at least one joint, are exposed in a test furnace to a series of temperature relationships approximately as follows:

(1) At the end of 5 minutes—538°C. (1,000°F.)

(2) At the end of 10 minutes—704°C. (1,300°F.)

(3) At the end of 30 minutes—843°C. (1,550°F.)

(4) At the end of 60 minutes—927°C. (1,700°F.)

(b) Bulkheads and decks are defined and classed as follows:

(1) *A class bulkhead or deck* means a bulkhead or deck that—

(i) Is made of steel or other equivalent material; and

(ii) Prevents the passage of flame and smoke for 60 minutes if subjected to the standard fire test.

(2) *A 60 bulkhead or deck* means an A class bulkhead or deck that—

(i) Is insulated with approved insulation, bulkhead panels, or deck covering;

(ii) If subjected to the standard fire test for 60 minutes, has an average temperature rise on the unexposed side of the insulated bulkhead or deck of less than 139°C. (250°F.) above the temperature before the standard fire test and has a temperature rise at any point on the unexposed surface, including any joint, of less than 180°C. (325°F.) above the temperature before the standard fire test.

(3) *B class bulkhead or deck* means a bulkhead or deck that—

(i) Is made of approved noncombustible material;

(ii) Prevents flame from passing through it for 30 minutes if subjected to the standard fire test.

(4) *C class bulkhead or deck* means a bulkhead or deck made of approved noncombustible material.

(c) *Equivalent material* means a material that by itself or with insulation

has smoke and fire retardant properties equal to that of the steel required for “A” or “B” class bulkheads or decks and has structural qualities equivalent to steel at the end of the applicable fire exposure.

(d) *Approved material* means a material approved under one of the following subparts of Subchapter Q of this chapter:

- (1) Deck coverings, Subpart 164.006.
- (2) Structural insulation, Subpart 164.007.
- (3) Bulkhead panel, Subpart 164.008.
- (4) Noncombustible materials, Subpart 164.009;
- (5) Interior finishes, Subpart 164.012.

(e) *Stairtower* means a stairway that penetrates more than one deck within the same enclosure, or two or more stairways that—

- (1) Are arranged vertically one above the other; or
- (2) Penetrate both the deck and the overhead within the same enclosure.

(f) *Accommodation space* includes, sleeping, mess, hospital, recreational, toilet, washing and shower spaces, and corridors.

§ 108.133 Hull superstructure, structural bulkheads, decks, and deckhouses.

Each hull superstructure, structural bulkhead, deck, and deckhouse must be made of steel or an equivalent material.

§ 108.135 Boundary bulkheads, decks of galleys, and combustible material lockers.

Each boundary bulkhead and deck of each galley, each combination galley and messroom, and each combustible material storage locker must be an A class bulkhead and A class deck respectively.

§ 108.137 Bulkhead and deck separations of accommodation spaces.

Each boundary bulkhead and deck that separates an accommodation space or control station from the following must be an A class bulkhead and A class deck respectively—

- (a) Machinery space;
- (b) Galley or combination galley and messroom;
- (c) Main pantry;
- (d) Classified space;

- (e) Store room.

§ 108.139 Boundary bulkheads and decks of a space containing emergency power.

Each boundary bulkhead and deck of a space containing an emergency electric power source or components of an emergency electric power source must be an A class bulkhead and A class deck respectively. When separate but adjoining spaces are provided for such equipment, boundary bulkhead type construction is not required for the separating partitions common to each space.

§ 108.141 Boundary bulkheads and decks between the emergency power source and service generators.

Each boundary bulkhead and deck of a space containing an emergency electric power source or components of an emergency electric power source that adjoins a space containing a ship's service generator, the components of a ship's service generator, or a classified space must be an A-60 bulkhead and A-60 deck.

§ 108.143 Accommodation space.

(a) Each corridor bulkhead in an accommodation space must be an A class or B class bulkhead except if an A class bulkhead is specifically required by this part.

(b) No door in a corridor bulkhead in an accommodation space may have a louver, except that a stateroom, lounge, or recreation room door may have louvers in its lower half.

(c) Each stairtower, elevator, and dumbwaiter, and other trunk must be enclosed by A class bulkheads.

(d) Each bulkhead not described under paragraph (a) of this section must be either A class, B class, or C class bulkheads.

(e) At least one opening to each stairway must be enclosed by either A class or B class bulkheads and doors.

(f) Each stairtower must have doors at all levels and each must be an A class door.

(g) Each door required by paragraphs (e) and (f) of this section—

- (1) Must be self-closing;
- (2) May not have any means to permanently hold the door open, except