

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;