

**RECOMMENDATION CONCERNING
FIRE SAFETY REQUIREMENTS
FOR PASSENGER SHIPS
CARRYING NOT MORE THAN 36 PASSENGERS**

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RESOLUTION A.372(X)

adopted on 14 November 1977

RECOMMENDATION CONCERNING FIRE SAFETY REQUIREMENTS FOR PASSENGER SHIPS CARRYING NOT MORE THAN 36 PASSENGERS

THE ASSEMBLY,

NOTING Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

NOTING FURTHER Resolution 1 item 3 of the International Conference on Safety of Life at Sea, 1974, which calls for further improvements of fire safety requirements of ships, *inter alia* passenger ships carrying not more than 36 passengers,

HAVING CONSIDERED the Recommendation of the Maritime Safety Committee at its thirty-sixth session,

ADOPTS the Recommendation concerning Fire Safety Requirements for Passenger Ships carrying not more than 36 Passengers, the text of which is shown at Annex to this Resolution,

RECOMMENDS governments to apply the improved fire safety requirements for passenger ships carrying not more than 36 passengers in addition to :

- (a) the applicable requirements of Chapter II of the International Convention for the Safety of Life at Sea, 1960 ; or
- (b) the applicable requirements of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, when that Convention comes into force,

INVITES all governments concerned :

- (a) to make known the provisions of the fire safety requirements for passenger ships carrying not more than 36 passengers to shipowners and operators under their jurisdiction ;
- (b) to make every effort to ensure that these requirements apply uniformly to all new passenger ships carrying not more than 36 passengers as soon as possible ;
- (c) to inform the Organization of measures taken by them in this respect,

REQUESTS the Maritime Safety Committee to continue work on this subject with a view to *improving the requirements* and, at the appropriate time, to redraft the requirements for *insertion* into Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, with a view to their adoption as amendments to that Convention after its entry into force.

ANNEX

RECOMMENDATION CONCERNING FIRE SAFETY REQUIREMENTS FOR PASSENGER SHIPS CARRYING NOT MORE THAN 36 PASSENGERS

Specific terms in these Requirements have the meaning as defined in Regulation 3 of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974. Wherever the term "Convention" appears in these Requirements it means the International Convention for the Safety of Life at Sea, 1974.

Regulation 1

Structure

(a) The hull, superstructure, structural bulkheads, decks and deckhouses shall be constructed of steel or other equivalent material. For the purpose of applying the definition of steel or other equivalent material as given in Regulation 3(g) of Chapter II-2 of the Convention the "applicable fire exposure" shall be according to the integrity and insulation standards given in the tables of Regulation 4 of these Requirements. An example where divisions such as decks or sides and ends of deckhouses are permitted to have "B-O" fire integrity, the "applicable fire exposure" shall be one half-hour.

(b) Provided that in cases where any part of the structure is of aluminium alloy, the following requirements shall apply :

- (i) The insulation of aluminium alloy components of "A" or "B" Class divisions, except structure which, in the opinion of the Administration, is non-load-bearing, shall be such that the temperature of the structural core does not rise more than 200 degrees Celsius above the ambient temperature at any time during the applicable fire exposure to the standard fire test.
- (ii) Special attention shall be given to the insulation of aluminium alloy components of columns, stanchions and other structural members required to support lifeboat and liferaft stowage, launching and embarkation areas, and "A" and "B" Class divisions to ensure :
 - (1) that for such members supporting lifeboat and liferaft areas and "A" Class divisions, the temperature rise limitation specified in sub-paragraph (i) of this paragraph shall apply at the end of one hour ; and
 - (2) that for such members required to support "B" Class divisions, the temperature rise limitation specified in sub-paragraph (i) of this paragraph shall apply at the end of one half-hour.
- (iii) Crowns and casings of machinery spaces of Category A shall be of steel construction adequately insulated and openings therein, if any, shall be suitably arranged and protected to prevent the spread of fire.

Regulation 2

Main Vertical Zones

(a) The hull, superstructure and deckhouses in the way of accommodation and service spaces shall be subdivided into main vertical zones by "A" Class divisions. These divisions shall have insulation values in accordance with tables in Regulation 4 of these Requirements.

(b) As far as practicable, the bulkheads forming the boundaries of the main vertical zones above the bulkhead deck shall be in line with watertight subdivision bulkheads situated immediately below the bulkhead deck.

(c) Such bulkheads shall extend from deck to deck and to the shell or other boundaries.

(d) Where a main vertical zone is subdivided by horizontal "A" Class divisions into horizontal zones for the purpose of providing an appropriate barrier between sprinklered and non-sprinklered zones of the ship, the divisions shall extend between adjacent main vertical zone bulkheads and to the shell or exterior boundaries of the ship and shall be insulated in accordance with the fire insulation and integrity values given in Table 2 of Regulation 4 of these Requirements.

Regulation 3

Internal Bulkheads

(a) All bulkheads within accommodation and service spaces which are not required to be "A" Class divisions shall be at least "B" Class or "C" Class divisions as prescribed in the tables in Regulation 4 of these Requirements. All such divisions may be faced with combustible materials in accordance with the provisions of Regulation 10 of these Requirements.

(b) All corridor bulkheads where not required to be "A" Class shall be "B" Class divisions which shall extend from deck to deck except:

- (i) when continuous "B" Class ceilings and/or linings are fitted on both sides of the bulkhead, the portion of the bulkhead behind the continuous ceiling or lining shall be of material which, in thickness and composition, is acceptable in the construction of "B" Class divisions but which shall be required to meet "B" Class integrity standards only in so far as is reasonable and practicable in the opinion of the Administration;
- (ii) in the case of a ship protected by an automatic sprinkler system complying with the provisions of Regulation 12 of Chapter II-2 of the Convention, the corridor bulkheads of "B" Class materials may terminate at a ceiling in the corridor provided such a ceiling is of material which, in thickness and composition, is acceptable in the construction of "B" Class divisions. Notwithstanding the requirements of Regulation 4 of these Requirements, such bulkheads and ceilings shall be required to meet "B" Class integrity standards only in so far as is reasonable and practicable in the opinion of the Administration. All doors and frames in such bulkheads shall be of non-combustible materials and shall be constructed and erected so as to provide substantial fire resistance to the satisfaction of the Administration.

(c) All bulkheads required to be "B" Class divisions, except corridor bulkheads, shall extend from deck to deck and to the shell or other boundaries unless continuous "B" Class ceilings and/or linings are fitted on both sides of the bulkhead, in which case the bulkhead may terminate at the continuous ceiling or lining.

Regulation 4

Fire Integrity of Bulkheads and Decks

(a) In addition to complying with the specific provisions for fire integrity of bulkheads and decks mentioned elsewhere in these Requirements, the minimum fire integrity of bulkheads and decks shall be as prescribed in Table 1 and Table 2 of this Regulation.

(b) The following requirements shall govern application of the tables:

- (i) Tables 1 and 2 shall apply respectively to the bulkheads and decks separating adjacent spaces.

- (ii) For determining the appropriate fire integrity standards to be applied to divisions between adjacent spaces, such spaces are classified according to their fire risk as shown in Categories (1) to (11) below. The title of each category is intended to be typical rather than restrictive. The number in parenthesis preceding each category refers to the applicable column or row in the tables.

(1) Control Stations

Spaces containing emergency sources of power and lighting.
Wheelhouse and chartroom.
Spaces containing the ship's radio equipment.
Fire-extinguishing rooms, fire control stations and fire-recording stations.
Control room for propelling machinery when located outside the machinery space.
Spaces containing centralized fire alarm equipment.

(2) Corridors

Corridors and lobbies.

(3) Accommodation Spaces

Public spaces such as halls, dining rooms, lounges and similar permanently enclosed spaces.
Lavatories, cabins, offices, hospitals, cinemas, games and hobbies rooms.
Panttries containing no cooking appliances and similar spaces.

(4) Stairways

Interior stairways, lifts and escalators (other than those wholly contained within the machinery spaces) and enclosures thereto.
In this connexion, a stairway which is enclosed only at one level shall be regarded as part of the space from which it is not separated by a fire door.

(5) Service Spaces (Low Risk)

Lockers and store-rooms having areas of less than 2 square metres, drying rooms and laundries.

(6) Machinery Spaces of Category A

Spaces as defined in Regulation 3(o) of Chapter II-2 of the Convention.

(7) Other Machinery Spaces

Spaces as defined in Regulation 3(p) of Chapter II-2 of the Convention excluding machinery spaces of Category A.

(8) Cargo Spaces

All spaces used for cargo (including cargo oil tanks) and trunkways and hatchways to such spaces, other than special category spaces.

(9) Service Spaces (High Risk)

Galleys, pantries containing cooking appliances, paint and lamp rooms, lockers and store-rooms having areas of 2 square metres or more, workshops other than those forming part of the machinery spaces.

(10) Open Decks

Open deck spaces and enclosed promenades containing no fire risk. Air spaces (the space outside superstructures and deckhouses).

(11) Special Category Spaces

All enclosed spaces above or below the bulkhead deck intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion, into and from which such vehicles can be driven and to which passengers have access.

- (iii) In determining the applicable fire integrity standard of a boundary between two spaces within a main vertical zone or horizontal zone which is not protected by an automatic sprinkler system complying with the provisions of Regulation 12 of Chapter II-2 of the Convention or between such zones neither of which is so protected, the higher of the two values given in the tables shall apply.
 - (iv) In determining the applicable fire integrity standard of a boundary between two spaces within a main vertical zone or horizontal zone which is protected by an automatic sprinkler system complying with the provisions of Regulation 12 of Chapter II-2 of the Convention or between such zones both of which are so protected, the lesser of the two values given in the tables shall apply. In instances where a sprinklered zone and a non-sprinklered zone meet within accommodation and service spaces, the higher of the two values given in the tables shall apply to the division between the zones.
- (c) Continuous "B" Class ceilings or linings, in association with the relevant decks or bulkheads, may be accepted as contributing, wholly or in part, to the required insulation and integrity of a division.
- (d) External boundaries which are required in paragraph (a) of Regulation 1 of these Requirements to be of steel or equivalent material may be pierced for the fitting of windows and sidescuttles provided that there is no requirement for such boundaries to have "A" Class integrity elsewhere in these Requirements. Similarly, in such boundaries which are not required to have "A" Class integrity, doors may be of materials to the satisfaction of the Administration.