



**RESOLUTION MSC.555(108)**  
**(adopted on 23 May 2024)**

**AMENDMENTS TO THE INTERNATIONAL CODE FOR FIRE SAFETY SYSTEMS**  
**(FSS CODE)**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution MSC.98(73), by which it adopted the International Code for Fire Safety Systems ("the FSS Code"), which has become mandatory under chapter II-2 of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"),

RECALLING FURTHER article VIII(b) and regulation II-2/3.22 of the Convention concerning the procedure for amending the FSS Code,

HAVING CONSIDERED, at its 108th session, amendments to the FSS Code, proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1 ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the FSS Code, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 July 2025 unless, prior to that date, more than one third of the Contracting Governments to the Convention, or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet have notified the Secretary-General of their objections to the amendments;

3 INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2026 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

5 ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Contracting Governments to the Convention.

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## ANNEX

### AMENDMENTS TO THE INTERNATIONAL CODE FOR FIRE SAFETY SYSTEMS (FSS CODE)

#### CHAPTER 7

#### Fixed pressure water-spraying and water mist fire-extinguishing systems

### 2 Engineering specifications

1 The following new section 2.5 is added after existing section 2.4 (Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces):

#### **"2.5 Fixed water-based fire-extinguishing system on ro-ro passenger ships' weather decks intended for the carriage of vehicles"**

This paragraph details the specification of fixed water-based fire-extinguishing system on ro-ro passenger ships having weather decks intended for the carriage of vehicles as required by chapter II-2 of the Convention. The requirements of this paragraph shall apply to ro-ro passenger ships constructed on or after 1 January 2026.

**2.5.1** The protected area shall be the entire length and width of the weather deck intended for the carriage of vehicles. The fixed monitor(s) shall be capable of delivering water to:

- .1 the area of weather decks intended for carriage of vehicles; and
- .2 the area, including superstructure boundaries located up to 8.0 m, measured horizontally, from the area intended for vehicle storage, or the next vertical boundaries, whichever is less.

**2.5.2** The combined capacity of all fixed monitors shall be minimum 2.0 L/min per square metre of the protected area, but in no case shall the output of any monitor be less than 1,250 L/min. Even distribution of water shall be ensured.

**2.5.3** The distance from the monitor to the farthest extremity of the protected area forward of that monitor shall not be more than 75% of the monitor throw in still air conditions.

**2.5.4** Each monitor shall be located outside the area which it protects, in a safe position, with access not likely to be cut off in case of fire.

Monitors shall be installed in positions which allow for unobstructed water coverage with vehicles stowed to maximum capacity of the weather deck. However, areas that cannot be covered by water monitors shall be protected by water nozzles. Nozzles shall be designed and installed taking into account weather conditions and provide 5.0 L/min per square metre for the area they cover and have release controls in a position being accessible in case of a fire.

**2.5.5** The system shall be available for immediate use and capable of continuously supplying water. The water supply shall be capable of simultaneously supplying water at the required rate for the entire width of the weather deck intended for carriage of vehicles and a length of 40 m, or the entire length of the weather deck if this is less than 40 m. In no case shall the supply capacity be less than that required for the largest monitor.

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**2.5.6** The system may be supplied by the fire main, the pump(s) serving other fixed water-based fire-fighting systems or a dedicated pump providing a continuous supply of seawater.

Where the ship's fire pumps are used to feed the monitor(s):

- .1 it shall be possible to segregate the ship's fire main from the monitor(s) by means of a valve in order to operate both systems separately or simultaneously; and
- .2 the capacity of the pumps shall be sufficient to serve both systems simultaneously, including two jets of water at the required pressure from the fire main system. In case the weather deck shall also carry dangerous goods, capacity for four jets of water at the required pressure shall be provided.

Where another fixed water-based fire-fighting system is used to feed the monitor(s):

- .3 it shall be possible to segregate the other fixed water-based fire-fighting system from the monitor(s) by means of a valve in order to operate both systems separately or simultaneously; and
- .4 the capacity of the pump(s) shall, in case of open ro-ro spaces, be sufficient to serve both systems simultaneously, minimum two sections of the fixed water-based fire-fighting system being close to the openings facing weather deck and one monitor serving the weather deck. For closed ro-ro spaces and special category spaces, simultaneous operation is not required."

## **CHAPTER 9**

### **Fixed fire detection and fire alarm systems**

#### **1 Application**

2 Paragraph 1.1 is replaced by the following:

"1.1 This chapter details the specification of fixed fire detection and fire alarm systems as required by chapter II-2 of the Convention. Unless expressly provided otherwise, the requirements of this chapter shall apply to ships constructed on or after 1 July 2012. The requirements of 2.3.1.5 and 2.4.2.2 of this chapter shall apply to ships constructed on or after 1 January 2026."

#### **2 Engineering specifications**

##### **2.3 Component requirements**

3 Paragraphs 2.3.1.3 and 2.3.1.4 are replaced by the following:

"2.3.1.3 Heat detectors and linear heat detectors shall be certified to operate before the temperature exceeds 78°C but not until the temperature exceeds 54°C, when the temperature is raised to those limits at a rate less than 1°C per min, when tested according to relevant parts of standards EN 54:2001 and IEC 60092-504. Alternative testing standards may be used as determined by the Administration. At higher rates of temperature rise, the heat detector and linear heat detector shall operate within temperature limits to the satisfaction of the Administration having regard to the avoidance of detector insensitivity or oversensitivity.

2.3.1.4 The operation temperature of heat detectors and linear heat detectors in drying rooms and similar spaces of a normal high ambient temperature may be up to 130°C, and up to 140°C in saunas."

4 The following new paragraph 2.3.1.5 is inserted after the existing paragraph 2.3.1.4 and subsequent paragraphs are renumbered accordingly:

"2.3.1.5 Linear heat detectors shall be tested according to standards EN 54-22:2015 and IEC 60092-504. Alternative testing standards may be used as determined by the Administration."

## **2.4 Installation requirements**

### **2.4.2 Positioning of detectors**

5 Paragraph 2.4.2.2 and the associated table 9.1 (Spacing of detectors) therein are replaced by the following:

"**2.4.2.2** The maximum spacing of detectors shall be in accordance with the table below:

**Table 9.1 – Spacing of detectors**

<b>Type of detector</b>	<b>Maximum floor area per detector (m<sup>2</sup>)</b>	<b>Maximum distance apart between centres (m)</b>	<b>Maximum distance away from bulkheads (m)</b>
Heat	37	9	4.5
Smoke	74	11	5.5
Combined smoke and heat	74	9	4.5

**2.4.2.2.1** The Administration may require or permit other spacing based upon test data which demonstrate the characteristics of the detectors. Detectors located below movable ro-ro decks shall be in accordance with the above.

**2.4.2.2.2** The distance between two sensor cables of the linear heat detection system shall not be more than 9.0 m, while the distance between such cables and bulkheads shall not be more than 4.5 m."

## **2.5 System control requirements**

### **2.5.1 Visual and audible fire signals**

6 The following new paragraphs 2.5.1.2, 2.5.1.3 and 2.5.1.4 are inserted after paragraph 2.5.1.1 and the subsequent paragraphs are renumbered accordingly:

**2.5.1.2** On ro-ro passenger ships constructed on or after 1 January 2026, alarm notifications shall follow a consistent alarm presentation scheme (wording, vocabulary, colour and position). Alarms shall be immediately recognizable on the navigation bridge and shall not be compromised by noise or poor placing.

**2.5.1.3** On ro-ro passenger ships constructed on or after 1 January 2026, the interface shall provide alarm addressability, allow the crew to identify the alarm history, the most recent alarm and the means to suppress alarms while ensuring the alarms with ongoing trigger conditions are still clearly visible.

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**2.5.1.4** On ro-ro passenger ships constructed on or after 1 January 2026, the smoke detector function in special category and ro-ro spaces may be disconnected during loading and unloading of vehicles. The time of disconnection shall be adapted to the time of loading/unloading and be automatically reset after this predetermined time. The central unit shall indicate whether the detector sections are disconnected or not. Disconnection of the heat detection function or manual call points shall not be permitted."

