Amendment on 20 June 2025
Resolved by Technical Committee on 29 January 2025

Interpretation of Crowns of Machinery Spaces of Category A

Object of Amendment

Guidance for the Survey and Construction of Steel Ships Part R
Guidance for the Survey and Construction of Passenger Ships

Reason for Amendment

SOLAS Chapter II-2/11.4.1 requires that crowns and casings of machinery spaces of category A be appropriately insulated.

However, there were concerns that the term “crown” in said regulation was not clearly defined, which might lead to improper application of the insulation requirements. Therefore, the IMO agreed to an unified interpretation clarifying the meaning of “crown” at the 10th session of the IMO Sub-Committee on Ship Systems and Equipment (SSE 10) held in March 2024. This unified interpretation was approved at the 109th session of the Maritime Safety Committee (MSC 109) held in December 2024.

IACS, in response, adopted the unified interpretation agreed to at IMO SSE 10 as IACS UI SC302 and also clarified the effective date for its application.

Accordingly, relevant regulations are established based on the unified interpretation approved at MSC109 and IACS UI SC302.

Outline of Amendment

Specifies interpretation of the crowns of machinery spaces of category A.

Effective Date and Application

This amendment applies to ships for which the date of contract for construction is on or after 1 July 2025.

ID: DX24-11

Amended-Original Requirements Comparison Table (Interpretation of Crowns of Machinery Spaces of Category A)

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS **Part R FIRE PROTECTION, DETECTION AND EXTINCTION** **R11 STRUCTURAL INTEGRITY** **R11.4 Machinery Spaces of Category *A*** **R11.4.1 Crowns and Casings** **1** Notwithstanding the provisions of **11.4.1, Part R of the Rules**, the crowns and casings exposed to the open air need not be insulated. **2** The crown of a machinery space of category *A* is to be understood to mean the underside of the deck and the uppermost horizontal part of the main space of the machinery space. If the upper side bulkheads are sloping, the sloping parts of the bulkheads are to be included in the crown.	**GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS** **Part R FIRE PROTECTION, DETECTION AND EXTINCTION** **R11 STRUCTURAL INTEGRITY** **R11.4 Machinery Spaces of Category *A*** **R11.4.1 Crowns and Casings** Notwithstanding the provisions of **11.4.1, Part R of the Rules**, the crowns and casings exposed to the open air need not be insulated. (Newly added)	

Amended	Original	Remarks

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS

Annex 7-1 INTERPRETATION OF PROVISION OF CHAPTER II-2, *SOLAS* CONVENTION ON PASSENGER SHIPS

1 INTERPRETATION OF PROVISION OF CHAPTER II-2, *SOLAS* CONVENTION

1.1 Interpretation

Table 7-1-A1 Interpretation of *SOLAS* II-2

Number	*SOLAS*	Interpretation
(Number 3.1 to Number 10.10.2.4 are omitted.)		
11.3	Unless otherwise specified in paragraph **2**, in case where any part of the structure is of aluminium alloy, the following shall apply: .1 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***[*1], shall be such that the temperature of the structural core ***does not rise more than 200℃ above the ambient temperature***[*2] at any time during the applicable fire exposure to the standard fire test; and .2 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: .2.1 that for such members supporting lifeboat and liferaft areas and "*A*" class divisions, the temperature rise limitation specified in	*1: Load-bearing division is a deck or bulkhead including stiffeners, pillars, stanchions and other structural members which, if eliminated, would adversely affect the designated structural strength of the ship. When, however, spaces of category (1) to (5) and (10) in regulation **II-2/9** are located on top of aluminum decks, the deck does not need to be insulated from the upper side, provided the deck is protected by a not readily ignitable deck covering. *2: The average temperature of the structural core is not to rise more than 200℃ above the initial temperature during the test for 1 *hour*.

Amended-Original Requirements Comparison Table (Interpretation of Crowns of Machinery Spaces of Category A)

Amended		Original	Remarks
	paragraph **3.1** shall apply at the end of one *hour*; and .2.2 that for such members required to support "*B*" class divisions, the temperature rise limitation specified in paragraph **3.1** shall apply at the end of half an *hour*.		
11.4.1	Crowns and casings of machinery spaces of category *A*[*1] shall be of steel construction and shall be ***insulated***[*2] as required by **Table 9.5** and **9.7**, as appropriate.	*1： Refer to **R11.4.1-2, Part R of the Guidance for the Survey and Construction of Steel Ships** for the interpretations of crowns and casings of machinery spaces of category *A*. *2: "insulated" means that crowns and casings of machinery spaces of category *A* is to be insulated in compliance with the regulation **II-2/9**. Accordingly, crowns and casings exposed to air need not be insulated, except for at least 450*mm* range from not exposed part and for the part which is required by the regulation **II-2/9** (mainly, adjacent parts of category (4) "Evacuation stations and external escape routes").	
11.5	Materials readily rendered ineffective by heat shall not be used for ***overboard scuppers***[*], sanitary discharges, and other outlets which are close to the waterline and where the failure of the material in the event of fire would give rise to danger of flooding.	*: The parts where the use of materials readily rendered ineffective by heat (PVC, FRP, aluminum alloys, lead, copper and copper alloys) is prohibited for overboard scuppers and sanitary discharges are to be in accordance with the requirements in **R11.5.1**, **Part R of the Guidance for the Survey and Construction of Steel Ships.**	
（Number 13.1 to Number 21.4.13 are omitted.）			

Amended-Original Requirements Comparison Table (Interpretation of Crowns of Machinery Spaces of Category A)

Amended	Original	Remarks
EFFECTIVE DATE AND APPLICATION **1.** The effective date of the amendments is 1 July 2025. **2.** Notwithstanding the amendments, the current requirements apply to ships for which the date of contract for construction* is before the effective date. * "contract for construction" is defined in the latest version of IACS Procedural Requirement (PR) No.29. IACS PR No.29 (Rev.0, July 2009) **1.** The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding. **2.** The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided: (1) such alterations do not affect matters related to classification, or (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval. The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed. **3.** If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1.** and **2.** above apply. **4.** If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder. Note: This Procedural Requirement applies from 1 July 2009.		