

# SC 212 Shipboard fittings and supporting hull structures associated with towing and mooring on conventional vessels

(Sept 2006)  
(Corr.1 July 2007)  
(Corr.2 Oct 2007)  
(Corr.3 Dec 2019)  
(Rev.1 Nov 2023 Complete Revision)

Interpretation of the Reg. II-1/3-8 of the SOLAS as amended by Resolution MSC.474(102)

**Regulation II-1/ 3-8 reads as follows:**

- 1 Paragraphs 4 to 6 of this regulation apply to ships constructed on or after 1 January 2007.
- 2 Paragraphs 7 and 8 of this regulation only apply to ships:
  - .1 for which the building contract is placed on or after 1 January 2024; or
  - .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2024; or
  - .3 the delivery of which is on or after 1 January 2027.
- 3 This regulation does not apply to towing arrangements provided in accordance with regulation 3-4.
- 4 Ships shall be provided with arrangements, equipment and fittings of sufficient safe working load to enable the safe conduct of all towing and mooring operations associated with the normal operation of the ship.

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Note:

1. This Unified Interpretation is to be uniformly implemented by IACS Societies on ships constructed on or after 1 January 2007.
2. The “date of contract for construction” date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of “contract for construction”, refer to IACS Procedural Requirement (PR) No. 29.
3. Revision 1 of this UI is to be uniformly implemented by IACS Societies;
  - for interpretations 2 and 3, on ships contracted for construction on or after 1 January 2024, and
  - for interpretations 1, 4 and 5, on or after 1 January 2024.

SC  
212

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5 Arrangements, equipment and fittings provided in accordance with paragraph 4 above shall meet the appropriate requirements of the Administration or an organization recognized by the Administration under regulation I/6.\*

\* Refer to the Guidance on shipboard towing and mooring equipment (MSC.1/Circ.1175) for ships constructed on or after 1 January 2007 but before 1 January 2024 and the Guidance on shipboard towing and mooring equipment (MSC.1/Circ.1175/Rev.1) for ships constructed on or after 1 January 2024.

6 Each fitting or item of equipment provided under this regulation shall be clearly marked with any limitations associated with its safe operation, taking into account the strength of the supporting ship's structure and its attachment to it.

7 For ships of 3,000 gross tonnage and above, the mooring arrangement shall be designed, and the mooring equipment including lines shall be selected, in order to ensure occupational safety and safe mooring of the ship, based on the guidelines developed by the Organization. † Ship-specific information shall be provided and kept on board. ‡

† Refer to the Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring (MSC.1/Circ.1619).

‡ Refer to towing and mooring arrangement plan in the Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring (MSC.1/Circ.1619).

8 Ships of less than 3,000 gross tonnage should comply with the requirement in paragraph 7 above as far as reasonably practicable, or with applicable national standards of the Administration.

9 For all ships, mooring equipment, including lines, shall be inspected and maintained in a suitable condition for their intended purposes. §

§ Refer to the Guidelines for inspection and maintenance of mooring equipment including lines (MSC.1/Circ.1620).

### Interpretation

1 The expression "all ships" in SOLAS regulation II-1/3-8.9 means ships constructed before, on, or after 1 January 2009 in accordance with SOLAS regulation II-1/1.3.3

2 While applying the requirements of SOLAS regulation II-1/3-8.4 to regulation II-1/3-8.6 and SOLAS regulation II-1/3-8.8, for ships of less than 3,000 gross tonnage, the following shall be confirmed:

.1 the "Towing and mooring arrangements plan" shall be provided for information, where the maximum brake holding load shall be included in addition to the information provided in section 5 (Towing and mooring arrangements plan) of the annex to MSC.1/Circ.1175/Rev.1. A technical specification document of the mooring lines supplied with the ship shall be provided for information. The manufacturers' recommended minimum diameter D of each fitting in contact with the mooring lines and the Line Design Break Force (LDBF) of the mooring lines shall be included in the document;

**SC  
212**  
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- .2 for confirmation of the appropriate selection of mooring line, the properties of mooring lines related to LDBF and bend radius (D/d ratio) shall be submitted to the Administration or the RO. A warning shall be provided that the wear rate of lines may be higher for lower diameter (paragraph 5.6 of MSC.1/Circ.1620); and
    - .3 at delivery of the ship, the Administration or the RO shall confirm that the towing and mooring arrangements plan is provided on board.
  - 3 While applying the requirements of SOLAS regulation II-1/3-8.4 to regulation II-1/3-8.6 and the SOLAS regulation II-1/3-8.7, for ships of 3,000 gross tonnage and above, the following shall be confirmed in addition to those specified under paragraph 2 of this interpretation:
    - .1 a document shall be provided by the designer for information and as a supplement to the towing and mooring arrangements plan, confirming that MSC.1/Circ.1619 has been considered. The document shall explicitly state that the deviations, if any, were unavoidable;
    - .2 deviations shall be recorded (paragraph 6.1 of MSC.1/Circ.1619), justification and suitable safety measures shall be provided (paragraph 6.2 of MSC.1/Circ.1619) in the supplement to the towing and mooring arrangements plan. A reference to the supplement shall be included in the towing and mooring arrangements plan (paragraph 6.3 of MSC.1/Circ.1619);
    - .3 if deviations are not found necessary, and the supplement is not needed, then this shall be mentioned explicitly in the towing and mooring arrangements plan;
    - .4 the mooring maximum brake holding load shall be less than 100% of the Ship Design Minimum Breaking Load (MBLSD) (paragraphs 5.2.3.3 and 5.2.4 of MSC.1/Circ.1619). The winches shall be fitted with brakes that allow for the reliable setting of the brake rendering load; and
    - .5 at delivery of the ship, the Administration or the RO shall confirm that the towing and mooring arrangements plan and the supplement describing deviations and suitable safety measures is provided on board.
- 4 While applying the requirements of SOLAS regulation II-1/3-8.9, the following shall be complied with, and compliance shall be confirmed by the surveyor at the initial survey for new ships or at the first annual / intermediate / renewal survey for the issuance of the Cargo Ship Safety Construction Certificate or renewal survey for the issuance of the Passenger Ship Safety Certificate after 1 January 2024 for existing ships:
  - .1 procedures for mooring operations, inspection and maintenance of mooring equipment, including mooring lines, shall be established and available on board (paragraph 3.1 of MSC.1/Circ.1620), taking into account industry practices (section 7 of MSC.1/Circ.1620);
  - .2 procedures to allow the identification and control of mooring lines, tails and associated attachments shall be established and available on board (paragraph 3.3 of MSC.1/Circ.1620);
  - .3 the periodic inspection of mooring lines, mooring line tails and associated attachments shall be included in the onboard maintenance plan or equivalent maintenance management system (paragraph 4.1.1 of MSC.1/Circ.1620);

**SC  
212**  
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- .4 manufacturers' criteria for replacement of mooring lines shall be available (paragraph 4.3.1 of MSC.1/Circ.1620);
- .5 records of the original design concept, equipment, arrangements and specifications shall be available on board (paragraph 4.4.4 of MSC.1/Circ.1620). For ships the keels of which were laid before 1 January 2007 and without appropriate documentation, owners may establish the MBLSD for mooring based on the safe working load of mooring equipment provided on board. If no safe working load is specified, then owners are advised to check strength of mooring equipment and their supporting hull structure based on MSC.1/Circ.1175/Rev.1 and determine MBLSD based on actual capacity of the equipment and their supporting hull structure on board. Manufacturers' test certificates for mooring lines, joining shackles and synthetic tails shall be kept on board and properly linked back to the equipment, if available (paragraph 6.2 of MSC.1/Circ.1620); and
- .6 a document shall be provided on board for gathering the information above and describing how the information listed above is filed and collected.

5 While applying the requirements of SOLAS regulation II-1/3-8.9, the following shall be complied with, and the compliance shall be confirmed by the surveyor at every periodical survey for endorsement/issue of the Cargo Ship Safety Construction Certificate or every renewal survey for the Passenger Ship Safety Certificate after 1 January 2024 for existing ships:

- .1 the records of inspection and maintenance of mooring equipment and inspection and replacement of mooring lines, since the last periodical survey, shall be kept updated and available on board (paragraphs 4.4.3 and 6.1 of MSC.1/Circ.1620).

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