

**PART II RULES FOR THE
CONSTRUCTION AND
CLASSIFICATION OF VESSELS
IDENTIFIED BY THEIR MISSIONS**

**TITLE 15 ROLL ON - ROLOL OFF CARGO
SHIPS**

SECTION 1 NAVAL ARCHITECTURE

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- B DOCUMENTS, REGULATIONS AND
STANDARDS
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- D ACTIVITIES / SERVICES
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CHAPTER A SCOPE

CHAPTER CONTENTS

A1. APPROACH

A2. DEFINITIONS

A1. APPLICATION

100. Application

101. The present Title 15 applies to roll on – roll off cargo ships as defined in Part I, Title 01, Section 1, Table T.B3.101.1, and its requirements are additional to those of Part II, Title 11, Section 1.

200. Proportions of dimensions
- See Part II, Title 11, Section 1

A2. DEFINITIONS

100. Additional definitions to Part II, Title 11, Section 1

101. Ro/Ro cargo spaces are spaces not normally subdivided in any way and extending to either a substantial length or the entire length of the ship, in which motor vehicles with fuel in their tanks for their own propulsion and/or goods (packaged or in bulk, in or on rail or road cars, vehicles (including road or rail tankers), trailers, containers, pallets, demountable tanks or in similar stowage units or other receptacles, which can be loaded and unloaded normally in a horizontal direction.

CHAPTER B DOCUMENTS, REGULATIONS AND STANDARDS

B1. DOCUMENTS

B1. DOCUMENTS

100. Additional plans for Ro/Ro vessels

101. In addition to the documentation required by Part II, Title 11, Section 1, Chapter B, the following plans are to be submitted for approval:

- a. General arrangement of vehicle decks
- b. General arrangement and details of stern and bow ramps
- c. General arrangement and details of movable decks, if fitted, including stowing arrangements for portable components
- d. Arrangement and location of shell stern, bow and side doors, as applicable

CHAPTER E CONFIGURATIONS

E1. CONFIGURATION

E1. CONFIGURATION

100. Configuration

101. The most usual configurations and the applicable requirements are shown in Table T.E1.101.1 below:

TABLE T.E1.101.1 – CONFIGURATIONS OF ROLL ON ROLL OFF SHIPS AND APPLICABLE REGULATIONS

Ship Type	GT ≥ 500	GT < 500
<p>Roll on / roll off cargo ship Roll on-Roll off are multi-deck ships with double bottom and, in some cases, with wing tanks up to the lowest deck above the full load waterline, which has one or more decks closed or open not normally subdivided and generally running the entire length of the ship intended for the carriage of:</p> <p>a. vehicles which embark and disembark on their own wheels, and/or goods in or on pallets or containers which can be loaded and unloaded by means of wheeled vehicles</p> <p>b. railway cars, on fixed rails, which embark and disembark on their own wheels</p> <p>Class notation: Ro/Ro cargo</p>	<p>Section 1 Part II, Title 15</p> <p>Section 2 Part II, Title 15</p> <p>Section 3 Part II, Title 15</p> <p>Section 5 Part II, Title 11</p> <p>Section 6 Part II, Title 15</p> <p>Section 7 Part II, Title 15</p>	<p>Section 1 Part II, Title 11</p> <p>Section 2 Part II, Title 15</p> <p>Section 3 Part II, Title 11 (as applicable)</p> <p>Section 5 Part II, Title 11</p> <p>Section 6 Part II, Title 15</p> <p>Section 7 Part II, Title 15</p>
<p>Roll on / roll off pure car carrier Ro/Ro cargo vessels which, however, carry exclusively cars, trucks and buses.</p> <p>Class notation: Ro/Ro cargo, pure car</p>	Same as roll on/roll off cargo	Same as roll on/roll off cargo
<p>Roll on / roll off container Roll-on-roll-off cargo vessels which also carry containers.</p> <p>Class notation: Ro-Ro cargo, container</p>	Same as roll on/roll off cargo However, special consideration is to be given for the carriage of containers (See part II, Title 12).	Not applicable
<p>Roll on / roll off dangerous goods Roll-on-roll-off cargo vessels which also carry dangerous goods</p> <p>Class notation: Ro/Ro cargo, DG-P</p>	Same as roll on/roll off cargo Additional requirements for dangerous goods in Part II, Title 104).	Same as roll on/roll off cargo Additional requirements for dangerous goods in Part II, Title 104).
<p>Roll on / roll off passenger and cargo Roll on-Roll off are multi-deck ships with double bottom and, in some cases, with wing tanks up to the lowest deck above the full load waterline, which has one or more decks closed or open not normally subdivided and generally running the entire length of the ship intended for the carriage of:</p> <p>a. passengers</p> <p>b. vehicles which embark and disembark on their own wheels, and/or goods in or on pallets or containers which can be loaded and unloaded by means of wheeled vehicles</p> <p>c. railway cars, on fixed rails, which embark and disembark on their own wheels</p> <p>Class notation: Ro/Ro passengers and cargo</p>	<p>Section 1 Part II, Title 26</p> <p>Section 2 Part II, Title 15</p> <p>Section 3 Part II, Title 26</p> <p>Section 5 Part II, Title 11</p> <p>Section 6 Part II, Title 26</p> <p>Section 7 Part II, Title 26</p>	<p>Section 1 Part II, Title 11</p> <p>Section 2 Part II, Title 15</p> <p>Section 3 Part II, Title 11 (as applicable)</p> <p>Section 5 Part II, Title 11</p> <p>Section 6 Part II, Title 26</p> <p>Section 7 Part II, Title 11</p>

Ship Type	GT ≥ 500	GT < 500
<p>Ferry Boat Title 22 – Ferry boat (passengers + vehicles) A ship fitted with double bottom which has one or more decks closed or open not normally subdivided and generally running the entire length of the ship, typically employed in short crossings, intended for the carriage of:</p> <p>a. passengers b. vehicles which embark and disembark on their own wheels</p> <p>Class notation: Ferry Boat (Short crossings)</p>	<p>Section 1 Part II, Title 26</p> <p>Section 2 Part II, Title 15</p> <p>Section 3 Part II, Title 26</p> <p>Section 5 Part II, Title 11</p> <p>Section 6 Part II, Title 26</p> <p>Section 7 Part II, Title 26</p>	<p>Section 1 Part II, Title 11</p> <p>Section 2 Part II, Title 15</p> <p>Section 3 Part II, Title 11 (as applicable)</p> <p>Section 5 Part II, Title 11</p> <p>Section 6 Part II, Title 26</p> <p>Section 7 Part II, Title 11</p>

**CHAPTER G
CAPACITIES AND SUBDIVISION**

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- G1. HULL SUBDIVISION
- G2. CAPACITIES – See Part II, Title 11, Section 1

G1. HULL SUBDIVISION

100. Main transverse bulkheads, compartments, tanks and empty spaces

101. to 104. - See Part II, Title 11, Section 1

105. The carriage of vehicles inside the hold is to be especially considered by RBNA, in accordance with the arrangement.

**CHAPTER H
LOADING CONDITIONS, BUOYANCY AND STABILITY**

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- H1. LOAD LINE -See Part II, Title 11, Section 1
- H2. SHIP'S LIGHTWEIGHT-See Part II, Title 11, Section 1
- H3. LOADING CONDITIONS
- H4. BUOYANCY-See Part II, Title 11, Section 1
- H5. INTACT STABILITY
- H6. DAMAGE STABILITY

H3. LOADING CONDITIONS

100. Configuration of loading and combination

101. The limiting or partial loading conditions are to be subjected for approval.

102. The basic conditions shall include as a minimum:

- a. Light ship departure at 100% consumables and arrival at 10% consumables.
- b. Fully loaded ship departure at 100% consumables and arrival at 10% consumables.

103. Intermediate conditions of loading are to be considered as necessary. In particular, the intended condition of operating with loading or unloading in a single pass, i.e. comprising cargo space empty from

amidships to one end, is included. See Part II, Title 15, Section 2.

H5. INTACT STABILITY

100. Additional requirements of stability for ships with fixed fire-fighting equipment of high pressure spraying in Ro/Ro cargo compartments

101. In Ro/Ro cargo compartments (intended for the carriage of motor vehicles with fuel for its self-propelling) equipped with firefighting systems spray fire fighting, the devices of drainage are to be arranged in such a way as to prevent the formation of free surface. If this could not be possible, the adverse effect on the stability of the ship caused by the weight added by water of the spray system and the consequent free surface is to be taken into account in the calculation of the stability.

H6. DAMAGE STABILITY

100. Additional requirements for stability

101. A Ro/Ro vessel covered by Title 15 greater than or equal to 80 meters in length where is required additional class notation EAV (damage stability, Part I, Title 01, Section 1, Chap. B3.309 shall comply with the requirements of Part II, Title 11, Section 1, Sub Chapter H6 for cargo ships.

H7. HULL INTEGRITY

100. Openings in watertight bulkheads and internal decks in cargo ships [SOLAS II-1/B2/13-1]

101. The number of openings in watertight subdivisions is to be kept to a minimum compatible with the design and proper working of the ship. Where penetrations of watertight bulkheads and internal decks are necessary for access, piping, ventilation, electrical cables, etc., arrangements are to be made to maintain the watertight integrity. The Administration may permit relaxation in the watertightness of openings above the freeboard deck, provided that it is demonstrated that any progressive flooding can be easily controlled and that the safety of the ship is not impaired.

102. Doors provided to ensure the watertight integrity of internal openings which are used while at sea are to be sliding watertight doors capable of being remotely closed from the bridge and are also to be operable locally from each side of the bulkhead. Indicators are to be provided at the control position showing whether the doors are open or closed, and an audible alarm is to be provided at the door closure. The power, control and indicators are to be operable in the event of main power failure. Particular

attention is to be paid to minimizing the effect of control system failure. Each power-operated sliding watertight door is to be provided with an individual hand-operated mechanism. It is to be possible to open and close the door by hand at the door itself from both sides.

103. Access doors and access hatch covers normally closed at sea, intended to ensure the watertight integrity of internal openings, is to be provided with means of indication locally and on the bridge showing whether these doors or hatch covers are open or closed. A notice is to be affixed to each such door or hatch cover to the effect that it is not to be left open.

104. Watertight doors or ramps of satisfactory construction may be fitted to internally subdivide large cargo spaces, provided that the Administration is satisfied that such doors or ramps are essential. These doors or ramps may be hinged, rolling or sliding doors or ramps, but shall not be remotely controlled. Should any of the doors or ramps be accessible during the voyage, they is to be fitted with a device which prevents unauthorized opening.

405. Other closing appliances which are kept permanently closed at sea to ensure the watertight integrity of internal openings is to be provided with a notice which is to be affixed to each such closing appliance to the effect that it is to be kept closed. Manholes fitted with closely bolted covers need not be so marked.

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