

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part R

Fire Protection, Detection and Extinction

Rules for the Survey and Construction of Steel Ships

Part R

2021 AMENDMENT NO.2

Guidance for the Survey and Construction of Steel Ships

Part R

2021 AMENDMENT NO.2

Rule No.61 / Notice No.58 27 December 2021

Resolved by Technical Committee on 28 July 2021

ClassNK
NIPPON KAIJI KYOKAI

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part R

**Fire Protection, Detection and
Extinction**

RULES

2021 AMENDMENT NO.2

Rule No.61 27 December 2021

Resolved by Technical Committee on 28 July 2021

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

Rule No.61 27 December 2021

AMENDMENT TO THE RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

“Rules for the survey and construction of steel ships” has been partly amended as follows:

Part R FIRE PROTECTION, DETECTION AND EXTINCTION

Chapter 19 CARRIAGE OF DANGEROUS GOODS

19.2 General Requirements

19.2.2 Application for Categories of Cargo Spaces*

Sub-paragraph (1) has been amended as follows.

The following cargo spaces are to govern the application of **Tables R19.1 and R19.2**:

- (1) Weather deck cargo spaces (includes the following (2) to (6) where applicable);
((2) to (7) are omitted.)

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 27 December 2021.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part R

**Fire Protection, Detection and
Extinction**

GUIDANCE

2021 AMENDMENT NO.2

Notice No.58 27 December 2021

Resolved by Technical Committee on 28 July 2021

AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Part R FIRE PROTECTION, DETECTION AND EXTINCTION

Amendment 2-1

R3 DEFINITIONS

R3.2 Definitions

Paragraph R3.2.4 has been added as follows.

R3.2.4 “B” Class Divisions

A division constructed of non-combustible core materials coated by combustible veneers may be accepted as a “B” class division provided the following conditions are satisfied:

- (1) the non-combustible core materials are tested in accordance with Part 1, Annex 1 of the FTP Code;
- (2) the “B” class division is tested in accordance with Part 3, Annex 1 of the FTP Code; and
- (3) the veneers are tested in accordance with the Part 2 (if applicable) and Part 5, Annex 1 of the FTP Code.

Paragraph R3.2.10 has been added as follows.

R3.2.10 “C” Class Divisions

A division constructed of non-combustible core materials but coated with combustible veneers may be accepted as a “C” class division provided that the following conditions are satisfied:

- (1) the non-combustible core materials are tested in accordance with Part 1, Annex 1 of the FTP Code; and
- (2) the veneers are tested in accordance with Part 2 (if applicable) and Part 5, Annex 1 of the FTP Code.

R19 CARRIAGE OF DANGEROUS GOODS

R19.2 General Requirements

Paragraph R19.2.2 has been amended as follows.

R19.2.2 Application for Categories of Cargo Spaces

~~1 With respect to the provisions of 19.2.2, Part R of the Rules, ro-ro spaces fully open above and with full openings in both ends may be treated as a weather deck.~~

~~21~~ The wording “container cargo spaces” specified in 19.2.2(3), Part R of the Rules means spaces equipped with cell-guides for stowage and securing of containers.

~~32~~ For the application of 19.2.2, Part R of the Rules, vehicle spaces are considered as a ro-ro space as defined in 19.2.2(4) or (5), Part R of the Rules.

~~43~~ The provisions of 19.2.2(7), Part R of the Rules cover only those cargoes listed in Group B of the *IMSBC* Code except cargoes of *MHB* (materials hazardous only in bulk). The carriage of other dangerous solid bulk cargoes is to be subject to acceptance by the Administrations involved.

R29 FIXED FIRE DETECTION AND FIRE ALARM SYSTEMS

R29.2 Engineering Specifications

Paragraph R29.2.1 has been amended as follows.

R29.2.1 General Requirements

1 In applying 29.2.1-2.(4), Part R of the Rules, watertight doors complying with 13.3.3, Part C of the Rules which also serve as fire doors are not to close automatically in the case of fire detection.

2 In applying 29.2.1-5, Part R of the Rules, reference is made to the “General Requirements for Electromagnetic Compatibility for All Electrical and Electronic Equipment” (IMO Res. A.813(19)).

Annex R9.3.1 DETAILS OF PENETRATIONS

2 DETAILS

2.1 Penetration of Pipes

2.1.3 Prevention of Heat Transmission

Sub-paragraph -2 has been amended as follows.

2 Notwithstanding -1 above, for a penetration of a pipe made of material having low-heat conductivity character (e.g. a metallic pipe) and an outside diameter of less than 150 *mm* in a “B” class division, the insulation may be terminated at the end of penetration piece or sleeve as required. (See Fig. 2.1.3-2)

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 27 December 2021.

R10 FIRE FIGHTING

R10.8 Cargo Tank Protection

R10.8.1 Fixed Deck Foam Systems

Sub-paragraph -1 has been amended as follows.

1 With respect to the requirements of **10.8.1, Part R of the Rules**, the fire pumps or the emergency fire pump required in **10.2, Part R of the Rules** may be utilized as pumps for fixed deck foam systems provided that those pumps have sufficient capacity for supplying both the deck foam systems and the water supply systems as required. ~~A common line for fire main and deck foam line can only be accepted provided it can be demonstrated that the hose nozzles can be effectively controlled by one person when supplied from the common line at a pressure needed for operation for monitors.~~

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 27 December 2021.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to ships the keels of which were laid or which were at *a similar stage of construction* before 1 January 2014.
(Note) The term “*a similar stage of construction*” means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 tonnes or 1%* of the estimated mass of all structural material, whichever is the less.

R20 PROTECTION OF VEHICLE AND RO-RO SPACES

R20.5 Fire-extinction

R20.5.1 Fixed Fire-extinguishing Systems

Sub-paragraph -3 has been amended as follows.

3 The wording “other fixed fire-extinguishing system” specified in **20.5.1-3, Part R of the Rules** means the system complying with the requirements of sections 1, 2, 3 and 5 of “*Revised Guidelines for the Design and Approval of Fixed Water-based Fire-fighting Systems for Ro-ro Spaces and Special Category Spaces*” (MSC.1/Circ.1430/Rev.~~1~~2).

R27 FIXED PRESSURE WATER-SPRAYING AND WATER-MIST FIRE-EXTINGUISHING SYSTEMS

R27.2 Engineering Specifications

Paragraph R27.2.3 has been amended as follows.

R27.2.3 Fixed Water-based Fire-fighting Systems for Ro-ro Spaces and Vehicle Spaces

“Approved system” specified in **27.2.3, Part R of the Rules** means a system which complies with the requirements of “*Revised Guidelines for the Design and Approval of Fixed Water-based Fire-fighting Systems for Ro-ro Spaces and Special Category Spaces*” (MSC.1/Circ.1430/Rev.~~1~~2) and is approved by organizations authorized by the Administration or deemed appropriate by the Society.

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 January 2022.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to fixed water-based fire-fighting systems installed before 1 January 2021.

R35 INERT GAS SYSTEMS

R35.2 Engineering Specifications

R35.2.2 Requirements for All Systems

Sub-paragraph -1 has been amended as follows.

1 In cases where plastic pipes are used for the drainage piping from the scrubbers and blower fan casings specified in **35.2.2-1(3), Part R of the Rules**, the following requirements are to be complied with:

- (1) The materials, design requirements, piping arrangements, connections of pipes, tests and inspections are to be as specified in **Annex ~~D12.1.6-2~~, Part D of the Rules** **~~“GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PLASTIC PIPES”~~**.
- (2) (Omitted)

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 July 2022.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to plastic piping systems other than those which fall under the following:
 - (1) plastic piping systems for which the application for approval of use is submitted to the Society on or after the effective date;
 - (2) plastic piping systems for which the date of renewal of approval of use is on or after the effective date; or
 - (3) plastic piping systems used on ships for which the date of contract for construction* is on or after 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.