### STATUTORY INSTRUMENTS

### 1975 No. 330

## The Fishing Vessels (Safety Provisions) Rules 1975

### PART II

### FISHING VESSEL CONSTRUCTION RULES

Н

### STRUCTURAL FIRE PROTECTION AND FIRE DETECTION

### Structural fire protection—general

**55.** Every vessel of 12 metres in length and over to which these Rules apply shall be so constructed and equipped that there is no substantial fire risk to the vessel or to persons on board the vessel.

# Structural fire protection—vessels with hulls constructed of steel or other equivalent material

- **56.**—(1) In every vessel of 12 metres in length and over to which these Rules apply, the hull of which is constructed of steel or other equivalent material, the superstructure, structural bulkheads, decks and deckhouses shall also be constructed of steel or other suitable material, having regard to the risk of fire.
- (2) In every such vessel the bulkheads and decks separating accommodation spaces, service spaces, control stations and emergency firepump space from machinery spaces shall be constructed and insulated to A. 60 standard, provided that the provisions of this paragraph shall not apply to spaces where the fire risk is minimal.
- (3) In every such vessel the bulkheads of corridors serving accommodation spaces, other than bulkheads required to meet the provisions of paragraph (2) above, shall be formed of noncombustible B Class divisions extending from deck to deck.
- (4) In every such vessel interior stairways serving accommodation spaces, service spaces or control stations shall be constructed of steel. In vessels of 24·4 metres in length and over such stairways shall be within enclosures formed of steel, other equivalent material, or non-combustible B Class divisions, except that a stairway connecting only two decks may be enclosed at one deck only.
- (5) In every vessel of 12 metres in length and over to which these Rules apply the number of openings in the bulkheads and decks referred to in paragraph (2) above shall be as few as reasonably practicable. Such openings shall be fitted with closing arrangements which provide protection equivalent to the surrounding structure in resisting fire. In vessels less than 24·4 metres in length the doors provided in casings of the main propelling machinery and boiler spaces shall be self-closing when such casings extend at least 1·8 metres above the freeboard deck.
- (6) In every vessel of 12 metres in length and over to which these Rules apply the number of openings in the bulkheads and decks referred to in paragraphs (3) and (4) above shall be as few as reasonably practicable and fitted with closing arrangements which provide protection equivalent to the surrounding structure in resisting fire. Doors fitted to stairway enclosures shall be selfclosing

and arrangements, where provided, for holding open the doors shall be such that the doors close automatically in the event of fire.

- (7) In every such vessel lift trunks in accommodation and service spaces shall be constructed of steel or equivalent material and the openings therein shall be provided with adequate means of closing which will contain smoke and draughts within the lift trunks and which provide protection equivalent to the surrounding structure in resisting fire.
- (8) In every such vessel boundary bulkheads and decks of spaces containing emergency sources of power and such bulkheads and decks which separate galleys, paint rooms, lamp-rooms or store-rooms containing flammable materials from accommodation spaces, service spaces or control stations shall be constructed to A.60 standard. Bulkheads, other than boundary bulkheads, to paint rooms, lamp-rooms or any other store-rooms containing flammable materials shall be constructed of steel or equivalent material. Entrances to store-rooms containing highly flammable materials or products shall be from the open deck and the materials or products shall be stored in sealed containers, provided that such an entrance may lead into a passageway if the closing arrangements are adequate.
- (9) In every vessel of 24·4 metres in length and over to which these Rules apply bulkheads, linings, ceilings and the support grounds in accommodation spaces, service spaces and control stations shall be constructed of non-combustible material, except that such bulkheads, linings and ceilings may have a combustible veneer the thickness of which shall not exceed 1·5 millimetres.
- (10) In every vessel of 12 metres in length and over to which these Rules apply concealed surfaces behind bulkheads, ceilings, panellings and linings in accommodation spaces, service spaces and control stations, together with all exposed surfaces therein shall be such that a Class 1 or Class 2 surface spread of flame shall not be exceeded. Paints, varnishes and other finishings used on these exposed surfaces shall also be such that a Class 1 or Class 2 surface spread of flame shall not be exceeded.
- (11) In every such vessel deck coverings within accommodation spaces, service spaces and control stations shall be of a type which will not readily ignite.
- (12) In every such vessel curtains, other suspended textile materials and floor coverings shall have adequate fire resistant qualities.
- (13) In every such vessel spaces enclosed behind ceilings, panellings or linings in accommodation spaces, service spaces and control stations shall be suitably sub-divided by close fitting draught stops situated not more than 7 metres apart.
- (14) In every such vessel pipes conveying oil or other combustible liquids or compressed air shall be constructed from steel or other suitable material. Jointing materials used shall be such that they shall not be rendered ineffective by heat.
- (15) In every such vessel overboard scuppers, discharges or other outlets situated below the freeboard deck shall be constructed of steel or other suitable material.
- (16) In every such vessel the hinged portions of skylights serving spaces containing either main propulsion machinery, oil-fired boilers or auxiliary internal combustion machinery shall be capable of being operated from inside and outside such spaces.
- (17) In every such vessel insulation in accommodation spaces, service spaces, control stations and machinery spaces shall be of non-combustible material and such insulation, fitted on the inside of machinery spaces in positions where oil spillage or the emission of oil vapours may arise, shall have exposed surfaces impervious to oils or oil vapours.
- (18) In every such vessel insulation where fitted in refrigerated compartments or fish holds shall be non-combustible unless the exposed surfaces thereof are protected by close fitting cladding.

- (19) In any such vessel insulation to refrigerated compartments within accommodation spaces need not be non-combustible provided the exposed surfaces are protected by non-combustible cladding.
- (20) In every vessel of 24·4 metres in length and over to which these Rules apply an automatic fire detection and alarm system complying with the requirements of Rule 111 of these Rules shall be provided to compartments within accommodation spaces remote from the control stations.

### Structural fire protection—vessels with hulls constructed of a glass reinforced plastic

- **57.**—(1) In every vessel of 12 metres in length and over to which these Rules apply, the hull of which is constructed of glass reinforced plastic, the hull, superstructure, structural bulkheads, decks and deckhouses shall be provided with fire-resistant properties.
- (2) In every such vessel the following structures shall be so insulated and constructed as to meet a B.30 standard:—
  - (a) the internal surfaces of the deckhead, boundary bulkheads, side shell down to light waterline level and the casings of the main machinery space;
  - (b) the adjacent deck areas and bulkheads forming the enclosures to stairways serving accommodation spaces, service spaces or control stations, except that:—
    - (i) all stairways shall be constructed of steel;
    - (ii) a stairway leading between two decks may be enclosed at one deck only;
  - (c) bulkheads and decks enclosing the control stations and corridors serving accommodation spaces, service spaces and control stations.
- (3) In every such vessel lift trunks in accommodation and service spaces shall be provided with adequate means of closing which will contain smoke and draughts within the lift trunk.
- (4) In every such vessel structures enclosing the galley and similar spaces adjacent to or within the accommodation spaces, service spaces or control stations shall be adequately insulated.
- (5) In every such vessel exposed surfaces within accommodation spaces, service spaces, control stations or machinery spaces other than those required to be insulated in accordance with paragraphs (2) and (4) above shall have a final layer of suitable fire retardant resin or be coated with a suitable fire retardant paint, except that the foregoing provisions of this paragraph shall not apply to surface laminates which are self-extinguishing.
- (6) In every such vessel the number of openings in the bulkheads and decks shall be as few as reasonably practicable and fitted with closing arrangements which provide protection equivalent to the surrounding structure in resisting fire. Doors fitted to stairway enclosures shall be self-closing and arrangements, where provided, for holding open the doors shall be such that the doors close automatically in the event of fire. Doorways fitted to casings situated above the machinery spaces and extending above the free board deck shall be fitted with closing appliances of the self-closing type.
- (7) In every such vessel insulation provided within refrigerated compartments or insulated fish-holds shall be non-combustible unless the exposed surfaces of such insulation are protected by close fitting cladding which shall be non-combustible where fitted in spaces containing fire hazards.
- (8) In every such vessel where ceilings, panellings or linings are fitted in accommodation spaces, service spaces or control stations the requirements of Rule 56(10) and (13) of these Rules shall apply to such ceilings, panellings or linings.
- (9) In every such vessel exhaust pipes and ducts which are liable to become heated shall be adequately insulated and properly positioned.
- (10) In every such vessel deck coverings shall comply with the requirements of Rule 56(11) of these Rules.

(11) In every vessel of 24·4 metres in length and over to which these Rules apply an automatic fire detection and alarm system complying with the requirements of Rule 111 of these Rules shall be provided to compartments within accommodation spaces and service spaces remote from the control stations

### Structural fire protection—vessels with hulls constructed of wood

- **58.**—(1) In every vessel of 12 metres in length and over to which these Rules apply, the hull of which is constructed of wood:—
  - (a) the following structures shall be constructed from steel or other equivalent material in the propelling machinery space:—
    - (i) the casings;
    - (ii) the beams supporting that part of the deck which forms the crown of this space, except the half-beams and carlings which may be of hard wood and of substantial section;
  - (b) bulkheads which separate the machinery spaces from a adjacent accommodation spaces or control stations shall be constructed of steel, other equivalent material or non-combustible material capable of meeting a B.15 standard. Access doors shall be close fitting and provide protection equivalent to the bulkhead in resisting fire;
  - (c) the deck of a wheelhouse or control station which forms the crown of the machinery space shall be constructed of steel or other equivalent material.
- (2) In every such vessel where cooking or heating appliances are fitted in galleys, service spaces or any space adjacent to or within accommodation spaces and adjacent to wood structure, such surrounding structure shall be adequately insulated.
- (3) In every such vessel ladders or stairways forming means of escape from below deck shall be constructed of steel and the deck openings shall be fitted with closing appliances which provide protection equivalent to the structure in resisting fire.
- (4) In accommodation spaces, service spaces, control stations and machinery spaces in such vessels, paints, varnishes and other finishings used on exposed surfaces shall be such that a Class 1 or Class 2 surface spread of flame shall not be exceeded.
- (5) In every such vessel products and materials which produce smoke or toxic products when exposed to fire shall not be stored in machinery spaces, except those products and materials necessary for operating the machinery.
- (6) In every such vessel insulation provided within refrigerated compartments or insulated fish-holds shall be non-combustible unless the exposed surfaces of such insulation are protected by close fitting cladding which shall be non-combustible where fitted in spaces containing fire hazards.
- (7) In every such vessel the number of openings in the bulkheads and decks shall be a minimum and fitted with closing arrangements which provide protection equivalent to the surrounding structure in resisting fire. Doors in casings extending at least 1·8 metres above the crown of machinery spaces on the freeboard deck shall be fitted with closing appliances of the self-closing type.
- (8) In every such vessel exhaust pipes and ducts which are liable to become heated shall be adequately insulated and properly positioned.
- (9) In every such vessel deck coverings shall comply with the requirements of Rule 56(11) of these Rules.
- (10) In every vessel of 24·4 metres in length and over to which these Rules apply an automatic fire detection and alarm system complying with the requirements of Rule 111 of these Rules shall be

provided to compartments within accommodation spaces and service spaces remote from the control stations.

### Ventilation systems

- **59.**—(1) In every vessel of 12 metres in length and over to which these Rules apply adequate means shall be provided for stopping fans and closing main inlet and outlet openings of ventilation systems from a position outside the spaces served by the ventilation systems.
  - (2) In every such vessel adequate means shall be provided for closing funnel ventilation openings.
- (3) Subject to paragraph (5) below, in every such vessel ventilation systems serving main machinery spaces shall not pass through accommodation spaces, service spaces or control stations.
- (4) Subject to paragraph (5) below, in every such vessel ventilation systems serving accommodation spaces, service spaces or control stations shall not pass through main machinery spaces.
- (5) In every such vessel the requirements of paragraphs (3) and (4) above shall not apply where suitable materials are used in the construction of the ventilation systems and proper means provided to preserve the integrity of the fire divisions.
- (6) In every such vessel ventilation openings shall not be fitted in doors and bulkheads which form part of stairway enclosures:

provided that such openings may be provided in cabin doors which form a fire division if they are situated in the lower portion of the door.

- (7) In every such vessel, where reasonably practicable, ventilation ducts serving stairway enclosures required to be ventilated shall not serve any other space.
- (8) In every such vessel exhaust ventilation systems from galleys shall be provided with a grease trap and those which pass through accommodation spaces, service spaces or control stations shall be constructed of steel insulated to A.30 standard.
- (9) In every such vessel ventilation systems serving propulsion, essential auxiliary machinery spaces and cargo refrigerating machinery spaces shall be independent of other systems and shall provide adequate ventilation.
- (10) In every such vessel adequate ventilation systems shall be provided to store-rooms containing flammable products, gas cylinders or other dangerous materials. Each system shall be self-contained and the inlet and outlet openings shall be positioned in safe areas and fitted with spark arresters.
- (11) In every such vessel suitable material shall be used in the construction of all ventilation systems.

### Means of escape

- **60.**—(1) In every vessel of 12 metres in length and over to which these Rules apply stairways, ladders and passageways shall be arranged to provide ready means of escape from crew accommodation spaces and access to positions on deck or decks where the life saving appliances will be available for use.
- (2) In every such vessel at least two means of escape, which may include the normal means of access, shall be provided from accommodation, service or working spaces situated on any one deck level within either watertight or fire resistant boundaries, except that:—
  - (a) in vessels less than 24·4 metres in length this provision shall apply to the compartments situated beneath the freeboard deck other than fish-holds;

- (b) only one means of escape may be provided where one such means is adequate having regard to the number of crew and the size of the space involved.
- (3) In vessels of 12 metres in length and over to which these Rules apply, as far as is reasonably practicable, the means of escape provided to meet the requirements of paragraph (2) above shall be so arranged that the deck may be reached without passing through spaces containing a fire hazard. Closing arrangements provided to all openings forming part of an escape route shall be capable of being operated from each side. Such means of escape from spaces which are situated below a complete deck shall be of an enclosed type.
- (4) In every such vessel at least two suitably located means of escape shall be provided from main machinery spaces except where the size of the machinery space renders this impracticable. Where ladders are provided for escape they shall be of steel. In vessels of 60 metres and over in length one of these ladders shall be completely enclosed from the lower part of the machinery space and lead to a safe position outside this space. Where a door constructed of steel or equivalent material which is capable of being operated from both sides provides access to a safe route from the lower part of the machinery space to the embarkation deck no such enclosure need be provided.
- (5) In every such vessel of 12 metres in length and over to which these Rules apply lift trunks shall not be a means of escape for the purpose of these Rules.

### Space heaters and cooking stoves

- **61.**—(1) In every vessel of 12 metres in length and over to which these Rules apply electric space heaters, where provided, shall be so constructed and fitted as to reduce the fire risk to a minimum and where such heaters are situated on decks or bulkheads the structure of such decks or bulkheads shall be protected by non-combustible material. Heaters with exposed elements and open flame solid fuel heaters shall not be provided.
- (2) In every such vessel heating stoves and other similar appliances shall be secured in position and their exhausts, together with the surrounding structure, provided with adequate fire protection. The exhausts of stoves shall be provided with ready means of cleaning. The dampers fitted in exhausts for controlling draught shall provide an adequate flow of air when in the closed position. Where ventilators are used to provide an adequate flow of air to spaces in which such stoves are installed, these ventilators shall not be fitted with means of closing.
- (3) In every such vessel open flame gas heating appliances shall not be fitted except where used as cooking stoves. Adequate ventilation shall be provided to spaces containing such cooking stoves. Pipes supplying gas from the container to the cooking stove shall be constructed of suitable material. Arrangements shall be provided in accordance with the requirements of Rule 34(10) of these Rules for automatic cut-off of the supply of gas when there is a loss of pressure or flame failure.

### **Automatic fire detection systems**

**62.** In every vessel of 12 metres in length and over to which these Rules apply an automatic fire detection and alarm system complying with the requirements of Rule 111 of these Rules shall be installed in the main propulsion machinery spaces of all such vessels the hulls of which are constructed of combustible material and in other vessels of 24·4 metres in length and over.