

## § 92.01-1

(1) Has met the applicable requirements of the Convention; and,

(2) Is currently classed by the Bureau and classification requirements have been dealt with to the satisfaction of the Bureau.

(c) When the Bureau determines that a vessel to which it has issued a Cargo Ship Safety Construction Certificate no longer complies with the Bureau's applicable requirements for classification, the Bureau shall immediately furnish to the Coast Guard all relevant information, which will be used by the Coast Guard to determine whether or not to withdraw, revoke or suspend the Cargo Ship Safety Construction Certificate.

[CGFR 65-50, 30 FR 16974, Dec. 30, 1965, as amended by CGD 90-008, 55 FR 30661, July 26, 1990; CGD 96-041, 61 FR 50729, Sept. 27, 1996]

## PART 92—CONSTRUCTION AND ARRANGEMENT

### Subpart 92.01—Hull Structure

Sec.

92.01-1 Application.

92.01-2 Incorporation by reference.

92.01-5 Vessels subject to load line.

92.01-10 Structural standards.

92.01-15 Special consideration.

92.01-90 Vessels contracted for prior to November 19, 1952.

### Subpart 92.03—Navigation Bridge Visibility

92.03-1 Navigation bridge visibility.

### Subpart 92.05—General Fire Protection

92.05-1 Fire hazards to be minimized.

92.05-5 Woodwork insulated from heated surfaces.

92.05-10 Lamp room construction.

92.05-15 Segregation of spaces containing the emergency source of electric power.

### Subpart 92.07—Structural Fire Protection

92.07-1 Application.

92.07-5 Definitions.

92.07-10 Construction.

92.07-90 Vessels contracted for prior to July 1, 1968.

### Subpart 92.10—Means of Escape

92.10-1 Application.

92.10-5 Two means required.

92.10-10 Location.

92.10-15 Vertical ladders not accepted.

92.10-20 No means for locking doors.

## 46 CFR Ch. I (10-1-96 Edition)

92.10-25 Stairway size.

92.10-30 Dead end corridors.

92.10-35 Public spaces.

92.10-40 Access to lifeboats.

92.10-45 Weather deck communications.

92.10-90 Vessels contracted for prior to November 19, 1952.

### Subpart 92.15—Ventilation

92.15-1 Application.

92.15-5 Vessels using fuel having a flashpoint of 110 degrees or lower.

92.15-10 Ventilation for closed spaces.

92.15-15 Ventilation for crew quarters and, where provided, passenger spaces.

92.15-90 Vessels contracted for prior to November 19, 1952.

### Subpart 92.20—Accommodations for Officers and Crew

92.20-1 Application.

92.20-5 Intent.

92.20-10 Location of crew spaces.

92.20-15 Construction.

92.20-20 Sleeping accommodations.

92.20-25 Washrooms and toilet rooms.

92.20-30 Messrooms.

92.20-35 Hospital space.

92.20-40 Other spaces.

92.20-45 Lighting.

92.20-50 Heating and cooling.

92.20-55 Insect screens.

92.20-90 Vessels contracted for prior to November 19, 1952.

### Subpart 92.25—Rails and Guards

92.25-1 Application.

92.25-5 Where rails required.

92.25-10 Storm rails.

92.25-15 Guards in dangerous places.

92.25-90 Vessels contracted for prior to July 1, 1969.

AUTHORITY: 46 U.S.C. 3306; 5115; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65-50, 30 FR 16983, Dec. 30, 1965, unless otherwise noted.

### Subpart 92.01—Hull Structure

#### § 92.01-1 Application.

(a) The provisions of this subpart, with the exception of § 92.01-90, shall apply to all vessels contracted for on or after November 19, 1952. Vessels contracted for prior to November 19, 1952, shall meet the requirements of § 92.01-90.

**§ 92.01-2 Incorporation by reference.**

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish a notice of change in the FEDERAL REGISTER and make the material available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, and at the U.S. Coast Guard, Office of Design and Engineering Standards (G-MSE), 2100 Second Street SW., Washington, DC 20593-0001 and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are:

*American Society for Testing and Materials (ASTM)*

1916 Race Street, Philadelphia, PA 19103

ASTM F-1196, Sliding Watertight Door Assemblies, 1989 .....	92.01-13
ASTM F-1197, Sliding Watertight Door Control Systems, 1989 .....	92.01-13

[CGD 88-032, 56 FR 35825, July 29, 1991, as amended by CGD 95-072, 60 FR 50464, Sept. 29, 1995; CGD 96-041, 61 FR 50729, Sept. 27, 1996]

**§ 92.01-5 Vessels subject to load line.**

(a) For vessels assigned a load line, see subchapter E (Load Lines) of this chapter, for special requirements as to strength, closure of openings, etc.

**§ 92.01-10 Structural standards.**

(a) In general, compliance with the standards established by the American Bureau of Shipping, see subpart 90.35 of this subchapter, will be considered as satisfactory evidence of the structural efficiency of the vessel. However, in special cases, a detailed analysis of the entire structure or some integral part may be made by the Coast Guard to determine the structural requirements.

**§ 92.01-15 Special consideration.**

(a) Special consideration will be given to the structural requirements

for small vessels or vessels of an unusual design not contemplated by the rules of the American Bureau of Shipping.

**§ 92.01-90 Vessels contracted for prior to November 19, 1952.**

(a) Existing structure previously approved will be considered satisfactory so long as it is maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standard as the original construction.

**Subpart 92.03—Navigation Bridge Visibility**

**§ 92.03-1 Navigation bridge visibility.**

Each cargo and miscellaneous vessel which is 100 meters (328 feet) or more in length and contracted for on or after September 7, 1990, must meet the following requirements:

(a) The field of vision from the navigation bridge, whether the vessel is in a laden or unladen condition, must be such that:

(1) From the conning position, the view of the sea surface is not obscured forward of the bow by more than the lesser of two ship lengths or 500 meters (1,640 feet) from dead ahead to 10 degrees on either side of the vessel. Within this arc of visibility any blind sector caused by cargo, cargo gear, or other permanent obstruction must not exceed 5 degrees.

(2) From the conning position, the horizontal field of vision extends over an arc from at least 22.5 degrees abaft the beam on one side of the vessel, through dead ahead, to at least 22.5 degrees abaft the beam on the other side of the vessel. Blind sectors forward of the beam caused by cargo, cargo gear, or other permanent obstruction must not exceed 10 degrees each, nor total more than 20 degrees, including any blind sector within the arc of visibility described in paragraph (a)(1) of this section.

(3) From each bridge wing, the field of vision extends over an arc from at least 45 degrees on the opposite bow, through dead ahead, to at least dead astern.

(4) From the main steering position, the field of vision extends over and arc from dead ahead to at least 60 degrees on either side of the vessel.

(5) From each bridge wing, the respective side of the vessel is visible forward and aft.

(b) Windows fitted on the navigation bridge must be arranged so that:

(1) Framing between windows is kept to a minimum and is not installed immediately in front of any work station.

(2) Front windows are inclined from the vertical plane, top out, at an angle of not less than 10 degrees and not more than 25 degrees.

(3) The height of the lower edge of the front windows is limited to prevent any obstruction of the forward view previously described in this section.

(4) The height of the upper edge of the front windows allows a forward view of the horizon at the conning position, for a person with a height of eye of 1.8 meters (71 inches), when the vessel is at a forward pitch angle of 20 degrees.

(c) Polarized or tinted windows must not be fitted.

[CGD 85-099, 55 FR 32248, Aug. 8, 1990]

### Subpart 92.05—General Fire Protection

#### § 92.05-1 Fire hazards to be minimized.

(a) The general construction of the vessel shall be such as to minimize fire hazards insofar as is reasonable and practicable.

#### § 92.05-5 Woodwork insulated from heated surfaces.

(a) Internal combustion engine exhausts, boiler and galley uptakes, and similar sources of ignition shall be kept clear of and suitably insulated from any woodwork or other combustible matter.

#### § 92.05-10 Lamp room construction.

(a) Lamp, paint, and oil lockers and similar compartments shall be constructed of steel or shall be wholly lined with metal.

#### § 92.05-15 Segregation of spaces containing the emergency source of electric power.

(a) The provisions of this section shall apply to all vessels contracted for on or after October 1, 1958.

(b) When a compartment containing the emergency source of electric power, or vital components thereof, adjoins a space containing either the ship's service generators or machinery necessary for the operation of the ship's service generators, all common bulkheads and/or decks shall be protected by approved "structural insulation" or other approved material. This protection shall be such as to be capable of preventing an excessive temperature rise in the space containing the emergency source of electric power, or vital components thereof, for a period of at least one hour in the event of fire in the adjoining space. Bulkheads or decks meeting Class A-60 requirements, as defined by § 72.05-10 of Subchapter H (Passenger Vessels) of this chapter, will be considered as meeting the requirements of this paragraph.

### Subpart 92.07—Structural Fire Protection

#### § 92.07-1 Application.

(a) The provisions of this subpart, with the exception of § 92.07-90, shall apply to all vessels of 4,000 gross tons and over contracted for on or after January 1, 1962. Such vessels contracted for prior to January 1, 1962, shall meet the requirements of § 92.07-90(a).

(b) The provisions of this subpart, with the exception of § 92.07-90, shall apply to all industrial vessels of 300 gross tons and over but less than 4,000 gross tons, contracted for on or after July 1, 1968, which carry in excess of 12 industrial personnel. Such vessels contracted for prior to July 1, 1968, shall meet the requirements of § 92.07-90(b).

[CGFR 67-90, 33 FR 1015, Jan. 26, 1968]

#### § 92.07-5 Definitions.

(a) *Standard fire test.* A "standard fire test" is one which develops in the test

furnace a series of time temperature relationships as follows:

- 5 minutes—1,000° F.
- 10 minutes—1,300° F.
- 30 minutes—1,550° F.
- 60 minutes—1,700° F.

(b) *“A” Class divisions.* Bulkheads or decks of the “A” Class shall be composed of steel or equivalent metal construction, suitably stiffened and made intact with the main structure of the vessel; such as shell, structural bulkheads, and decks. They shall be so constructed, that if subjected to the standard fire test, they would be capable of preventing the passage of flame and smoke for one hour.

(c) *“B” Class bulkheads.* Bulkheads of the “B” Class shall be constructed with approved incombustible materials and made intact from deck to deck and to shell or other boundaries. They shall be so constructed that, if subjected to the standard fire test, they would be capable of preventing the passage of flame for one half hour.

(d) *“C” Class divisions.* Bulkheads or decks of the “C” Class shall be constructed of approved incombustible materials, but need meet no requirements relative to the passage of flame.

(e) *Steel or other equivalent metal.* Where the term “steel or other equivalent metal” is used in this subpart, it is intended to require a material which, by itself or due to insulation provided, has structural and integrity qualities equivalent to steel at the end of the applicable fire exposure.

(f) *Approved material.* Where in this subpart approved materials are required, they refer to materials approved under the applicable subparts of Subchapter Q (Specifications) of this chapter, as follows:

Deck Coverings .....	164.006
Structural Insulations .....	164.007
Bulkhead Panels .....	164.008
Incombustible Materials .....	164.009
Interior Finishes .....	164.012

(g) *Stairtower.* A stairtower is a stairway which penetrates more than a single deck within the same enclosure.

[CGFR 65-50, 30 FR 16983, Dec. 30, 1965, as amended by CGFR 67-90, 33 FR 1015, Jan. 26, 1968; CGD 75-032, 41 FR 17910, Apr. 29, 1976]

**§ 92.07-10 Construction.**

(a) The hull, superstructure, structural bulkheads, decks, and deckhouses shall be constructed of steel. Alternately, the Commandant may permit the use of other suitable material in special cases, having in mind the risk of fire.

(b) Bulkheads of galleys, paint and lamp lockers, and emergency generator rooms shall be of “A” Class construction.

(c) The boundary bulkheads and decks separating the accommodations and control stations from cargo and machinery spaces, galleys, main pantries and storerooms, other than small service lockers, shall be of “A” Class construction.

(d) Within the accommodation and service areas the following conditions shall apply:

(1) Corridor bulkheads in accommodation spaces shall be of the “A” or “B” Class intact from deck to deck. Stateroom doors in such bulkheads may have a louver in the lower half.

(2) Stairtowers, elevator, dumbwaiter, and other trunks shall be of “A” Class construction.

(3) Bulkheads not already specified to be of “A” or “B” Class construction may be of “A”, “B”, or “C” Class construction.

(4) The integrity of any deck in way of a stairway opening, other than a stairtower, shall be maintained by means of “A” or “B” class bulkheads and doors at one level. The integrity of a stairtower shall be maintained by “A” Class doors at every level. The doors shall be of self-closing type. Holdback hooks, or other means of permanently holding the door open will not be permitted. However, magnetic holdbacks operated from the bridge or from other suitable remote control positions are acceptable.

(5) Interior stairs, including stringers and treads, shall be of steel.

(6) Except for washrooms and toilet spaces, deck coverings within accommodation spaces shall be of an approved type. However, overlays for leveling or finishing purposes which do not meet the requirements for an approved deck covering may be used in thicknesses not exceeding 3/8 of an inch.

(7) Ceilings, linings, and insulation, including pipe and duct laggings, shall be of approved incombustible materials.

(8) Any sheathing, furring or holding pieces incidental to the securing of any bulkhead, ceiling, lining, or insulation shall be of approved incombustible materials.

(9) Bulkheads, linings, and ceilings may have a combustible veneer within a room not to exceed  $\frac{1}{8}$  of an inch in thickness. However, combustible veneers, trim, decorations, etc., shall not be used in corridors or hidden spaces. This is not intended to preclude the use of an approved interior finish or a reasonable number of coat of paint.

(e) Wood hatch covers may be used between cargo spaces or between stores spaces. Hatch covers in other locations shall be of steel or equivalent metal construction. Tonnage openings shall be closed by means of steel plates.

(f) Nitrocellulose or other highly flammable or noxious fume-producing paints or lacquers shall not be used.

(g) The provisions of paragraph (d) (1) through (9) of this section apply to control spaces on vessels whose initial Application for Inspection is submitted to an Officer in Charge, Marine Inspection on or after June 15, 1987.

[CGFR 65-50, 30 FR 16983, Dec. 30, 1965, as amended by CGFR 67-90, 33 FR 1015, Jan. 26, 1968; CGD 84-073, 52 FR 18364, May 15, 1987; 52 FR 22751, June 15, 1987]

**§ 92.07-90 Vessels contracted for prior to July 1, 1968.**

(a) For all vessels of 4,000 gross tons and over contracted for prior to January 1, 1962, existing structure arrangements and materials previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standard as the original construction. Major alterations and conversions shall be in compliance with the provisions of this subpart to the satisfaction of the Officer in Charge, Marine Inspection.

(b) For industrial vessels of 300 gross tons and over but less than 4,000 gross tons, contracted for prior to July 1, 1968, which carry in excess of 12 indus-

trial personnel, existing structure arrangements and materials previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standard as the original construction. Major alterations and conversions shall be in compliance with this subpart to the satisfaction of the Officer in Charge, Marine Inspection.

[CGFR 67-90, 33 FR 1016, Jan. 26, 1968]

**Subpart 92.10—Means of Escape**

**§ 92.10-1 Application.**

(a) The provisions of this subpart, with the exception of § 92.10-90, shall apply to all vessels contracted for on or after November 19, 1952. Vessels contracted for prior to November 19, 1952, shall meet the requirements of § 92.10-90.

**§ 92.10-5 Two means required.**

(a) There shall be at least two means of escape from all general areas accessible to the passengers, if carried, or where the crew may be quartered or normally employed. At least one of these two means of escape shall be independent of watertight doors.

**§ 92.10-10 Location.**

(a) The two means of escape shall be as remote as practicable so as to minimize the possibility of one incident blocking both escapes.

**§ 92.10-15 Vertical ladders not accepted.**

(a) Vertical ladders and deck scuttles shall not in general be considered satisfactory as one of the required means of escape. However, where it is demonstrated that the installation of a stairway would be impracticable, a vertical ladder may be used as the second means of escape.

**§ 92.10-20 No means for locking doors.**

(a) No means shall be provided for locking doors giving access to either of the two required means of escape, except that crash doors or locking devices, capable of being easily forced in

an emergency, may be employed provided a permanent and conspicuous notice to this effect is attached to both sides of the door. This paragraph shall not apply to outside doors to deck-houses where such doors are locked by key only and such key is under the control of one of the vessel's officers.

**§92.10-25 Stairway size.**

(a) Stairways shall be of sufficient width having in mind the number of persons having access to such stairs for escape purposes.

(b) Vessels contracted for on or after January 1, 1959, shall meet the requirements of this paragraph. Special consideration for relief may be given in the case of small vessels if it is shown to be unreasonable or impracticable to meet the requirements.

(1) All interior stairways, other than those within the machinery spaces or cargo holds, shall have a minimum width of 28 inches. The angle of inclination with the horizontal of such stairways shall not exceed 50 degrees.

**§92.10-30 Dead end corridors.**

(a) Dead end corridors, or the equivalent, more than 40 feet in length shall not be permitted.

**§92.10-35 Public spaces.**

(a) In all cases, public spaces having a deck area of over 300 square feet shall have at least two exits. Where practicable, these exits shall give egress to different corridors, rooms, or spaces to minimize the possibility of one incident blocking both exits.

**§92.10-40 Access to lifeboats.**

(a) The stairways, corridors, and doors shall be so arranged as to permit a ready and direct access to the various lifeboat embarkation areas.

**§92.10-45 Weather deck communications.**

(a) Vertical communication shall be provided between the various weather decks by means of permanent inclined ladders.

**§92.10-90 Vessels contracted for prior to November 19, 1952.**

(a) Existing arrangements previously approved will be considered satisfac-

tory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original design: *Provided*, That in no case will a greater departure from the standards of §§92.10-5 through 92.10-45 be permitted than presently exists. Nothing in this paragraph shall be construed as exempting any vessel from having 2 means of escape from all main compartments which are accessible to the passengers, if carried, or where the crew are normally quartered or employed.

**Subpart 92.15—Ventilation**

**§92.15-1 Application.**

The provisions of this subpart, with the exception of §92.15-90, shall apply to all vessels contracted for on or after November 19, 1952. Vessels contracted for prior to November 19, 1952, shall meet the requirements of §92.15-90.

**§92.15-5 Vessels using fuel having a flashpoint of 110 degrees or lower.**

(a) Where liquid fuel having a flashpoint of 110 degrees F. or lower is used for main or auxiliary machinery or for starting purposes, the spaces containing such machinery or fuel tanks shall have ventilation as required by this section.

(1) At least 2 ventilators fitted with cowls or their equivalent for the purpose of properly and effectively ventilating the bilges of every engine and fuel-tank compartment in order to remove any flammable or explosive gases.

(2) Vessels constructed so that the greater portions of the bilges under the engine and fuel tanks are open or exposed to the natural atmosphere at all times are not required to be fitted with ventilators.

**§92.15-10 Ventilation for closed spaces.**

(a) Except as noted in paragraph (c) of this section, all enclosed spaces within the vessel shall be properly vented or ventilated. Means shall be provided to close off all vents and ventilators.

§ 92.15-15

(b) Means shall be provided for stopping all fans in ventilation systems serving machinery and cargo spaces and for closing all doorways, ventilators and annular spaces around funnels and other openings to such spaces, from outside these spaces, in case of fire.

(c) On unmanned cargo barges not fitted with a fixed bilge system, vents and ventilators may be omitted from void spaces.

(d) The ventilation of spaces which are "specially suitable for vehicles" shall be in accordance with the provisions of this paragraph. In addition, if vehicles are operated inside of enclosed spaces, the ventilation shall be in accordance with subpart 97.80 of this subchapter.

(1) Areas below the weather deck shall be provided with continuous pressure-positive ventilation at each level on which vehicles are transported.

(2) The quantity of ventilating air shall be not less than 1 cubic foot per minute per square foot of deck area.

(3) The ventilation system shall be such as to prevent air stratification as well as to prevent the accumulation of air pockets.

(4) An alarm system shall be provided which will indicate the loss of required ventilation. The alarm location shall be in a normally manned space acceptable to the Commandant.

(e) For requirements regarding controls of electrically powered ventilation systems, see subchapter J (Electrical Engineering) of this chapter.

[CGFR 65-50, 30 FR 16983, Dec. 30, 1965, as amended by CGFR 66-33, 31 FR 15284, Dec. 5, 1966]

**§ 92.15-15 Ventilation for crew quarters and, where provided, passenger spaces.**

(a) All living spaces shall be adequately ventilated in a manner suitable to the purpose of the space.

(b) On vessels of 100 gross tons and over, except for such spaces as are so located that under all ordinary conditions of weather, windows, ports, skylights, etc., and doors to passageways can be kept open, all crew spaces shall be ventilated by a mechanical system, unless it can be shown that a natural system will provide adequate ventila-

46 CFR Ch. I (10-1-96 Edition)

tion. However, vessels which trade regularly in the tropics shall, in general, be fitted with a mechanical ventilation system.

**§ 92.15-90 Vessels contracted for prior to November 19, 1952.**

(a) Existing arrangements previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original design provided that in no case will a greater departure from the standards of §§ 92.15-5 through 92.15-15 be permitted than presently exists.

**Subpart 92.20—Accommodations for Officers and Crew**

SOURCE: CGD 95-027, 61 FR 26005, May 23, 1996, unless otherwise noted.

**§ 92.20-1 Application.**

(a) The provisions of this subpart apply to all vessels of 100 gross tons and over contracted for on or after November 19, 1952. Vessels of 100 gross tons and over contracted for prior to November 19, 1952 must meet the requirements of § 92.20-90.

(b) Vessels of less than 100 gross tons must meet the applicable requirements of this subpart insofar as is reasonable and practicable.

**§ 92.20-5 Intent.**

It is the intent of this subpart that the accommodations provided for officers and crew on all vessels must be securely constructed, properly lighted, heated, drained, ventilated, equipped, located, arranged, and insulated from undue noise, heat, and odors.

**§ 92.20-10 Location of crew spaces.**

(a) Crew quarters must not be located farther forward in the vessel than a vertical plane located at 5 percent of the vessel's length abaft the forward side of the stem at the designed summer load water line. However, for vessels in other than ocean or coastwise service, this distance need not exceed 8.5 meters (28 feet). For the purposes of this paragraph, the vessel's length

must be as defined in §43.15-1 of subchapter E (Load Lines) of this chapter. Unless approved by the Commandant, no section of the deck head of the crew spaces may be below the deepest load line.

(b) There must be no direct communication, except through solid, close fitted doors, or hatches between crew spaces and chain lockers, or machinery spaces.

**§92.20-15 Construction.**

All crew spaces are to be constructed and arranged in a manner suitable to the purpose for which they are intended and so that they can be kept in a clean, workable, and sanitary condition.

**§92.20-20 Sleeping accommodations.**

(a) Where practicable, each licensed officer must be provided with a separate stateroom.

(b) Sleeping accommodations for the crew must be divided into rooms, no one of which shall berth more than 4 persons.

(c) Each room must be of such size that there is at least 2.78 square meters (30 square feet) of deck area and a volume of at least 5.8 cubic meters (210 cubic feet) for each person accommodated. The clear head room must be not less than 190 centimeters (75 inches). In measuring sleeping accommodations, any furnishings contained therein for the use of the occupants are not to be deducted from the total volume or from the deck area.

(d) Each person shall have a separate berth and not more than one berth may be placed above another. The berth must be composed of materials not likely to corrode. The overall size of a berth must not be less than 68 centimeters (27 inches) wide by 190 centimeters (75 inches) long, except by special permission of the Commandant. Where 2 tiers of berths are fitted, the bottom of the lower berth must not be less than 30 centimeters (12 inches) above the deck. The berths must not be obstructed by pipes, ventilating ducts, or other installations.

(e) A locker must be provided for each person accommodated in a room.

**§92.20-25 Washrooms and toilet rooms.**

(a) There must be provided at least 1 toilet, 1 washbasin, and 1 shower or bathtub for each 8 members or portion thereof in the crew who do not occupy rooms to which private or semi-private facilities are attached.

(b) The toilet rooms and washrooms must be located convenient to the sleeping quarters of the crew to which they are allotted but must not open directly into such quarters except when they are provided as private or semi-private facilities.

(c) All washbasins, showers, and bathtubs shall be equipped with adequate plumbing, including hot and cold running water. All toilets must be installed with adequate plumbing for flushing.

(d) At least 1 washbasin must be fitted in each toilet room, except where private or semi-private facilities are provided and washbasins are installed in the sleeping rooms.

(e) Where more than 1 toilet is located in a space or compartment, each toilet must be separated by partitions.

**§92.20-30 Messrooms.**

(a) Messrooms must be located as near to the galley as is practicable except where the messroom is equipped with a steam table.

(b) Each messroom must seat the number of persons expected to eat in the messroom at one time.

**§92.20-35 Hospital space.**

(a) Each vessel which in the ordinary course of its trade makes voyages of more than 3 days duration between ports and which carries a crew of 12 or more, must be provided with a hospital space. This space must be situated with due regard to the comfort of the sick so that they may receive proper attention in all weathers.

(b) The hospital must be suitably separated from other spaces and must be used for the care of the sick and for no other purpose.

(c) The hospital must be fitted with berths in the ratio of 1 berth to every 12 members of the crew or portion thereof who are not berthed in single occupancy rooms, but the number of berths need not exceed 6.

(d) The hospital must have a toilet, washbasin, and bathtub or shower conveniently situated. Other necessary suitable equipment such as a clothes locker, a table, and a seat shall be provided.

(e) On vessels in which the crew is berthed in single occupancy rooms, a hospital space will not be required, provided that one room is designated and fitted for use as a treatment or isolation room. This room must meet the following standards:

(1) The room must be available for immediate medical use; and

(2) A washbasin with hot and cold running water must be installed either in or immediately adjacent to the space and other required sanitary facilities must be conveniently located.

**§ 92.20-40 Other spaces.**

Each vessel must have—

(a) Sufficient facilities where the crew may wash and dry their own clothes, including at least 1 sink supplied with hot and cold fresh water;

(b) Recreation spaces; and

(c) A space or spaces of adequate size on an open deck to which the crew has access when off duty.

[CGD 95-027, 61 FR 26005, May 23, 1996; 61 FR 32900, June 25, 1996]

**§ 92.20-45 Lighting.**

Each berth must have a light.

**§ 92.20-50 Heating and cooling.**

(a) All manned spaces must be adequately heated and cooled in a manner suitable to the purpose of the space.

(b) The heating and cooling system for accommodations must be capable of maintaining a temperature of 21° C (70° F) under normal operating conditions without curtailing ventilation.

(c) Radiators and other heating apparatus must be so placed and shielded, where necessary, to avoid risk of fire, danger, or discomfort to the occupants. Pipes leading to radiators or heating apparatus must be insulated where those pipes create a hazard to persons occupying the space.

**§ 92.20-55 Insect screens.**

Provisions must be made to protect the crew quarters against the admission of insects.

**§ 92.20-90 Vessels contracted for prior to November 19, 1952.**

(a) Vessels of less than 100 gross tons, contracted for prior to November 19, 1952, must meet the general intent of § 92.20-5 and in addition must meet the following requirements:

(1) Existing structure, arrangements, materials, and facilities, previously accepted or approved will be considered satisfactory so long as they are maintained in a suitable condition to the satisfaction of the Officer in Charge, Marine Inspection.

(2) Minor repairs and alterations may be made to the same standard as the original construction.

(b) Vessels of 100 gross tons and over, contracted for prior to March 4, 1915, must meet the following requirements:

(1) Existing structure, arrangements, materials, and facilities, previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

(2) Minor repairs and alterations may be made to the same standard as the original construction, provided that in no case will a greater departure from the standards of §§ 92.20-5 through 92.20-55 be permitted than presently exists.

(c) Vessels of 100 gross tons and over, contracted for on or after March 4, 1915, but prior to January 1, 1941, must meet the following requirements:

(1) Existing structure, arrangements, materials, and facilities, previously approved will be considered satisfactory so long as they are maintained in a suitable condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standard as the original construction.

(2) Each vessel, which in the ordinary course of its trade makes a voyage of more than 3 days duration between ports and which carries a crew of 12 or more persons, must be provided with a suitable hospital space for the exclusive use of the sick or injured.

(3) The crew spaces must be securely constructed, properly lighted, heated, drained, ventilated, equipped, located, arranged, and insulated from undue noise, heat, and odors.

(d) Vessels of 100 gross tons and over, contracted for on or after January 1,

1941, but prior to November 19, 1952, must meet the following requirements:

(1) Existing structure, arrangements, materials, and facilities, previously approved will be considered satisfactory so long as they are maintained in a suitable condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standard as the original construction.

(2) Washbasins, showers, and bathtubs if substituted for showers, must be equipped with adequate plumbing including hot and cold running water.

(3) Each crewmember must have a separate berth, and berths may not be placed more than 2 high.

(4) Each vessel, which in the ordinary course of its trade makes a voyage of more than 3 days duration between ports and which carries a crew of 12 or more persons, must be provided with a suitable hospital space for the exclusive use of the sick or injured. Berths shall be provided in the ratio of 1 berth for each 12 members of the crew or fraction thereof, but the number of berths need not exceed 6.

(5) The crew spaces must be securely constructed, properly lighted, heated, drained, ventilated, equipped, located, arranged, and insulated from undue noise, heat, and odors.

### Subpart 92.25—Rails and Guards

#### § 92.25-1 Application.

(a) The provisions of this subpart, with the exception of § 92.25-90, shall apply to all vessels contracted for on or after July 1, 1969. Vessels contracted for prior to July 1, 1969, shall meet the requirements of § 92.25-90.

[CGFR 65-50, 30 FR 16983, Dec. 30, 1965, as amended by CGFR 69-72, 34 FR 17484, Oct. 29, 1969; CGD 80-120, 47 FR 5723, Feb. 8, 1982]

#### § 92.25-5 Where rails required.

(a) All vessels shall have efficient guard rails or bulwarks on decks and bridges. The height of rails or bulwarks shall be at least 39½ inches from the deck except that where this height would interfere with the normal operation of the vessel, a lesser height may be approved by the Commandant. At exposed peripheries of the freeboard and superstructure decks, the rails

shall be in at least three courses, including the top. The opening below the lowest course shall not be more than 9 inches. The courses shall not be more than 15 inches apart. In the case of ships with rounded gunwales the guard rail supports shall be placed on the flat of the deck. On other decks and bridges the rails shall be in at least two courses, including the top, approximately evenly spaced. If it can be shown to the satisfaction of the Officer in Charge, Marine Inspection, that the installation of rails of such height will be unreasonable and impracticable, having regard to the business of the vessel, rails of a lesser height or in some cases grab rails may be accepted and inboard rails may be eliminated if the deck is not generally accessible.

(b) Where it can be shown to the satisfaction of the Commandant that a vessel is engaged exclusively in voyages of a sheltered nature, the provisions of paragraph (a) of this section may be relaxed.

[CGFR 69-72, 34 FR 17484, Oct. 29, 1969, as amended by CGD 80-120, 47 FR 5723, Feb. 8, 1982]

#### § 92.25-10 Storm rails.

(a) On vessels in ocean and coastwise service, suitable storm rails shall be installed in all passageways and at the deckhouse sides where persons on board might have normal access. Storm rails shall be installed on both sides of passageways which are 6 feet or more in width.

#### § 92.25-15 Guards in dangerous places.

(a) Suitable hand covers, guards, or rails shall be installed in way of all exposed and dangerous places such as gears, machinery, etc.

#### § 92.25-90 Vessels contracted for prior to July 1, 1969.

(a) Vessels contracted for prior to July 1, 1969, assigned a deeper load line under part 42 of subchapter E (Load Lines) of this chapter shall have efficient guard rails or bulwarks as required by § 92.25-5. Otherwise, existing structure, arrangements, materials, and facilities previously approved will be considered satisfactory so long as they are maintained in good condition to the satisfaction of the Officer in

Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original construction. However, in no case will greater departure from the standards of §§92.25-5 through 92.25-15 be permitted than presently exists.

[CGFR 69-72, 34 FR 17484, Oct. 29, 1969, as amended by CGD 80-120, 47 FR 5723, Feb. 8, 1982]

**PART 93—STABILITY**

**Subpart 93.01—Application**

Sec.

93.01-1 General.

**Subpart 93.20—Bulk Grain Cargoes**

- 93.20-01 Application.
- 93.20-05 General.
- 93.20-10 Document of authorization.
- 93.20-15 Certificate of loading.
- 93.20-20 Exemptions for certain voyages.

AUTHORITY: 46 U.S.C. 3306; 5115; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65-50, 30 FR 16988, Dec. 30, 1965, unless otherwise noted.

**Subpart 93.01—Application**

**§93.01-1 General.**

Each vessel must meet the applicable requirements in subchapter S of this chapter.

[CGD 79-023, 48 FR 51008, Nov. 4, 1983]

**Subpart 93.20—Bulk Grain Cargoes**

SOURCES: CGD 74-182, 40 FR 36343, Aug. 20, 1975, unless otherwise noted.

**§93.20-01 Application.**

The provisions of this subpart apply to all vessels that load grain in bulk after September 19, 1975 except:

- (a) U.S. tank vessels which meet the requirements of 46 CFR 31.10-33.
- (b) Vessels engaged on voyages solely between ports within the limits of the Great Lakes and the St. Lawrence River as far east as a straight line drawn from Cap de Rosiers to West Point, Anticosti Island, and east of line along the 63rd meridian from Anticosti

Island to the north shore of St. Lawrence River.

**§93.20-05 General.**

(a) Each cargo vessel or barge that carries grain in bulk must comply with the Annex to International Maritime Organization (IMO, formerly Inter-Governmental Maritime Consultative Organization or IMCO) Resolution A.264(VIII). As used in Resolution A.264(VIII), the term "Administration" means "U.S. Coast Guard." Copies of Resolution A.264 (VIII) may be obtained from the National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007-2914; the Commandant (G-M), U.S. Coast Guard, Washington, DC 20593-0001 or the office of any Coast Guard District Commander or Officer in Charge, Marine Inspection. The provisions of IMO Resolution A.264(VIII) are published separately in U.S. Coast Guard Navigation and Inspection Circular No. 3-75 dated August 20, 1975.

(b) Notwithstanding the provisions of 46 CFR 56.50-50, bilges must be properly prepared and sounding pipes in place, clear and operable. If bilges are not present, suction must be boxed.

(c) When calculating the minimum required metacentric height (GM), a free surface allowance must be made for slack liquids. The free surface allowance used must be equal to or greater than the free surface allowance for the following combination of tanks:

- (1) The maximum free surface for the pair of tanks, port and starboard, of each type of consumable liquid, having the largest free surface.
- (2) The maximum free surface of the fuel oil settlers.
- (3) The free surface at 5 degrees heel for all fuel tanks assumed 98% full except for the pair considered in paragraph (c)(1), of this section.

[CGD 74-182, 40 FR 36343, Aug. 20, 1975, as amended by CGD 88-070, 53 FR 34534, Sept. 7, 1988; CGD 96-041, 61 FR 50729, Sept. 27, 1996]

**§93.20-10 Document of authorization.**

(a) Before it can load grain, each vessel that carries grain in bulk must have a document of authorization issued in accordance with one of the following:

- (1) If the document of authorization is issued on or after September 19, 1975,