

shall be made of material approved by the Chief Surveyor and shall be efficiently constructed for its intended duty.

(2) Every watertight door of the sliding type shall be capable of being operated by efficient hand-operated gear both at the door itself and from an accessible position above the bulkhead deck.

(3) The operating gear for operating from above the bulkhead deck any sliding watertight door fitted in the bulkhead of a machinery space shall be situated outside the machinery space, unless such a position is inconsistent with the efficient arrangement of the necessary gearing and an alternative position is approved by the Chief Surveyor.

(4) Where there is access from the lower part of a machinery space to a watertight shaft tunnel, the access opening shall be provided with a sliding watertight door which shall be capable of being operated locally on both sides of the door.

(5) Means shall be provided at remote operating positions to indicate when a sliding door is closed.

(6) Watertight doors shall be capable of being operated when the ship is inclined up to 15 degrees.

(7) The Chief Surveyor may permit the fitting of hinged watertight doors in approved positions provided these are fitted with quick action closing devices operable from each side of the bulkhead.

(8) Each sliding watertight door shall be tested by water pressure to a head up to the freeboard deck. The test shall be made before the ship is put into service, either before or after the door is fitted. Hinged watertight doors shall be hose tested.

9. Openings in the Sides of the Ship—(1) Efficient means shall be provided for preventing the accidental admission of water into any ship through any openings in the sides of the ship.

(2) Side scuttles, windows, and other openings in the shell plating, superstructure, and deckhouses and their means of closing shall be of efficient design and construction and of sufficient strength, having regard to the space in which they are fitted and to the intended service of the ship.

(3) Efficient inside deadlights, which can be effectively closed and secured watertight, shall be provided for all sidescuttles to spaces below the weather deck in every ship proceeding beyond extended river limits.

(4) Every sidescuttle below the bulkhead deck in every ship proceeding beyond extended river limits shall be fitted with an efficient hinged deadlight permanently attached so that it can be effectively closed and secured watertight.

(5) No sidescuttles shall be fitted in any spaces which are appropriated exclusively to the carriage of cargo or coal.

(6) The arrangements for closing each such opening shall be consistent with its intended purpose, and shall be such as will ensure watertightness.

(7) Each inlet and discharge led through the shell plating below the bulkhead deck shall be fitted with efficient and readily accessible means for preventing the accidental admission of water into the ship.

(8) All cocks and valves attached to inlets or discharges, other than inlets or discharges connected with machinery, shall be made of steel, bronze, or other material approved by the Chief Surveyor.

(9) Main and auxiliary inlet and discharges connected with machinery shall be fitted with readily accessible cocks or valves between the pipes and the ship's shell plating or between the pipes and a fabricated box attached to the shell plating. All such cocks or valves attached to such inlets or discharges and all fittings outboard thereof shall be made of steel, bronze, or such other material approved by the Chief Surveyor. If made of steel, such cocks and valves shall be protected against corrosion.

(10) All discharge pipes led through the shell plating below the

bulkhead deck and the valves relating thereto shall be protected from damage.

(11) Any gangway port, cargo port, or re-fuelling port fitted below the bulkhead deck shall be of adequate strength, and its lowest point shall not be below the ship's deepest load waterline.

10. Weather Deck—(1) The bulkhead deck or a deck above the bulkhead deck shall be weathertight. All openings in a weathertight deck shall have coamings of height and strength approved by the Chief Surveyor and shall be provided with efficient and rapid means of closing so as to make them weathertight. Freeing ports or scuppers of a total area approved by the Chief Surveyor shall be provided for clearing every such deck of water under all weather conditions.

(2) Where the height above the summer load-waterline of an enclosed cargo deck is such that in the opinion of the Chief Surveyor the operation of overside discharging scuppers from that space might be rendered ineffective by sinkage or inclining following damage to the ship, the Chief Surveyor may require drain wells to be fitted port and starboard connected to the bilges by pipes fitted with screw-down non-return valves operated from the deck above the cargo deck, or other suitable arrangements. The number, size and disposition of the drain wells and drain pipes shall be approved by the Chief Surveyor.

B. STABILITY—

11. Stability Information—(1) Every ship of 24 metres in length or over and every ship which carries more than 50 passengers shall be inclined upon its completion and the elements of its stability determined.

(2) For every such ship stability information shall be supplied by the owner in an approved form to the Chief Surveyor to enable the Chief Surveyor to be satisfied that the ship's stability is adequate for its intended service.

(3) Every ship of less than 24m in length which carries 50 or fewer passengers shall on its completion be subject to a test with two-thirds of the passengers on one side of the ship and one third on the other side, and the resulting angle shall not exceed seven degrees. A further test shall demonstrate that when all passengers are on one-side of the ship the angle of heel shall not exceed fifteen degrees. For the purpose of each test the passengers shall be located at one-quarter the beam from the ship's centre line.

(4) In the case of every other ship to which this Code applies a Surveyor shall be satisfied that the ship has adequate stability for its intended service.

PART IV

BILGE PUMPING ARRANGEMENTS

12. General—(1) An efficient bilge pumping system shall be provided capable of pumping from and draining any watertight compartment other than a space permanently appropriated for the carriage of fresh water, water ballast, oil fuel or liquid cargo and for which other efficient means of pumping are provided, under all practical conditions. Efficient means shall be provided for draining water from insulated holds.

Provided that the Chief Surveyor may allow the provision for drainage to be omitted in a particular compartment if the Chief Surveyor is satisfied that the provision of drainage would be undesirable or unnecessary and that the safety of the ship would not be impaired by that omission.

(2) The bilge and ballast pumping systems shall be so arranged as to prevent water passing from the sea or from water-ballast spaces into the ship's cargo spaces or into any part of the machinery space or from one watertight compartment in the ship to another. The bilge connection to any pump which effects suction from the sea or from water-ballast spaces shall be made by means of either a non-return valve or a cock which cannot be opened at the same time to the bilges and to the sea or to the bilges and the water-ballast spaces. Valves in bilge