

accommodate, each having a mass of 75 kg, and seated in their normal positions.

(7) The floor of the liferaft shall be waterproof and shall be capable of being sufficiently insulated against cold either:

(a) by means of 1 or more compartments that the occupants can inflate, or which inflate automatically and can be deflated and reinflated by the occupants; or

(b) by other equally efficient means not dependent on inflation.

(8) The liferaft shall be inflated with a non-toxic gas by an inflation system complying with the requirements of Part VIII of this performance standard. Inflation shall be completed within a period of 1 minute at an ambient temperature of between 18°C and 20°C and within a period of 3 minutes at an ambient temperature of -30°C. After inflation the liferaft shall maintain its form when loaded with its full complement of persons and equipment.

(9) Each inflatable compartment shall be capable of withstanding a pressure equal to at least 3 times the working pressure and shall be prevented from reaching a pressure exceeding twice the working pressure either by means of relief valves or by a limited gas supply. Means shall be provided for fitting the topping-up pump or bellows required by Part IV of this performance standard so that the working pressure can be maintained.

(10) The number of persons which a liferaft shall be permitted to accommodate shall be equal to the lesser of:

(a) the greatest whole number obtained by dividing by 0.096 the volume, measured in cubic metres of the main buoyancy tubes (which for this purpose shall include neither the arches nor the thwarts if fitted) when inflated; or

(b) the greatest whole number obtained by dividing by 0.372 the inner horizontal cross-sectional area of the liferaft measured in square metres (which for this purpose may include the thwart or thwarts, if fitted) measured to the innermost edge of the buoyancy tubes; or

(c) the number of persons having an average mass of 75 kg, all wearing lifejackets, that can be seated with sufficient comfort and headroom without interfering with the operation of any of the liferaft's equipment.

(11) No liferaft shall be approved which has a carrying capacity of less than 6 persons calculated in accordance with the requirements of sub-clause (10) of this clause, except that in ships of Classes III, IV, V, VI, IX, or X the minimum carrying capacity of liferafts may be 4 persons, provided that liferafts which are deemed fit to accommodate less than 6 persons shall only be carried on such ships in which the total number of persons on board is less than 6.

(12) Unless the liferaft is to be launched by an approved launching appliance complying with the requirements of Part III of the Performance Standard for Launching Appliances and is not required to be portable, the total mass of the liferaft, its container and its equipment shall not be more than 185kg.

3. Liferaft Fittings—(1) Lifelines shall be securely becketed around the inside and outside of the liferaft.

(2) The liferaft shall be provided with arrangements for adequately siting and securing in the operating position the antenna provided with portable radio equipment required by the LSA Regulations.

(3) The liferaft shall be fitted with an efficient painter of length equal to not less than twice the distance from the stowed position to the waterline in the lightest seagoing condition or 15 metres whichever is the greater.

(4) The breaking strength of the painter system including its means of attachment to the liferaft except the weak link required by Part V of this performance standard shall be:

(a) 7.5 kilonewtons for liferafts accommodating up to 8 persons;

(b) 10.0 kilonewtons for liferafts accommodating 9 to 25 persons;

(c) 15.0 kilonewtons for liferafts accommodating more than 25 persons or have a factor of safety of 3 in association with the requirement of clause 2(4) above whichever is the greater.

(5) At least 1 entrance shall be fitted with a semi-rigid boarding ramp to enable persons to board the liferaft from the sea so arranged as to prevent significant deflation of the liferaft if the ramp is damaged. Liferafts accommodating more than 25 persons shall have at least 2 diametrically opposite entrances fitted with semi-rigid boarding ramps. In the case of davit-launched liferafts a boarding ramp shall not be fitted at the entrance where bousing lines and embarkation facilities are fitted.

(6) Entrances not provided with a boarding ramp shall have a boarding ladder, the lowest step of which shall be weighted and float at a level not less than 0.4 metres below the liferaft's light waterline.

(7) There shall be means inside the liferaft to assist persons to pull themselves into the liferaft from the ladder.

(8) The stability of liferafts capable of carrying 25 persons or less when in the inverted position shall be such that they can be righted in a seaway and in calm water by 1 person. Liferafts in excess of 25 persons capacity shall have righting facilities acceptable to the Chief Surveyor. The righting position of the liferaft shall be suitably marked and have a non-skid surface.

(9) The stability of the liferaft when loaded with its full complement of persons and equipment shall be such that it can be towed at speeds of up to 3 knots in calm water.

(10) The liferaft shall be fitted with water pockets complying with the following requirements:

(a) The cross-sectional area of the pockets shall be in the shape of an isosceles triangle with the base of the triangle attached to the underside of the liferaft.

(b) The design shall be such that the pockets fill to approximately 60 percent of capacity within 15–25 seconds of deployment.

(c) The pockets shall normally have an aggregate capacity of between 225 litres and 250 litres for inflatable liferafts up to and including the 10 person size.

(d) The pockets to be fitted on liferafts certified to carry more than 10 persons shall have an aggregate capacity of $(20 \times N)$ litres, where $N =$ Number of persons carried but in no case should the aggregate capacity be less than $(18 \times N)$ litres.

(e) The pockets shall be attached on all of their sides to the underside of the liferaft.

(f) The pockets shall be distributed symmetrically round the circumference of the liferaft either side of the CO₂ bottle with sufficient separation between each pocket to enable air to escape readily. The minimum number of pockets shall normally be in accordance with the following table:

| Raft Capacity | No. of Pockets |
|-----------------|----------------|
| 4–5 inclusive | 4 |
| 6–8 inclusive | 5 |
| 9–16 inclusive | 7 |
| 17–25 inclusive | 11 |

Any arrangement less than the above must be submitted to the Chief Surveyor for consideration.

(11) Any equivalent stability arrangement other than that detailed in paragraph (10) of this clause must be submitted to the Director for consideration.

(12) At least 1 manually controlled lamp complying with the requirements of Part VII of this performance standard shall be fitted to the top outside of the liferaft canopy.

(13) A manually controlled lamp complying with the