than 2 meters above the waterline with the vessel—
(i) In the fully loaded condition;
(ii) Under unfavorable conditions of trim; and
(iii) Listed up to 20 degrees either way, or to the angle at which the vessel’s weatherdeck edge becomes submerged, whichever is less.

(5) Sufficiently ready for use so that two crew members can complete preparations for embarkation and launching in less than 5 minutes;

(6) In a secure and sheltered position and protected from damage by fire and explosion, as far as practicable; and

(7) So as not to require lifting from its stowed position in order to launch, except that—
(i) A davit-launched liferaft may be lifted by a manually powered winch from its stowed position to its embarkation position; or
(ii) A survival craft that weights 185 kilograms (407.8 pounds) or less may be lifted not more than 300 millimeters (1 foot) in order to launch.

(b) Additional lifeboat stowage requirements. In addition to the requirements of paragraph (a) of this section, each lifeboat must be stowed as follows:

(1) Each lifeboat for lowering down the side of the vessel must be stowed as far forward of the vessel’s propeller as practicable. Each lifeboat, in its stowed position, must be protected from damage by heavy seas.

(2) Each lifeboat must be stowed attached to its launching appliance.

(3) Each lifeboat must have a means for recharging the lifeboat batteries from the vessel’s power supply at a supply voltage not exceeding 50 volts.

(c) Additional liferaft stowage requirements. In addition to the requirements of paragraph (a) of this section, each liferaft must be stowed as follows:

(1) Each liferaft must be stowed to permit manual release from its securing arrangements.

(2) Each liferaft must be stowed at a height above the waterline not greater than the maximum stowage height indicated on the liferaft container with the vessel in its lightest seagoing condition. Each liferaft without an indicated maximum stowage height must be stowed not more than 18 meters (59 feet) above the waterline with the vessel in its lightest seagoing condition.

(3) Each liferaft must be arranged to permit it to drop into the water from the deck on which it is stowed. A liferaft stowage arrangements meets this requirement if it—
(i) Is outboard of the rail or bulwark;
(ii) Is on stanchions or on a platform adjacent to the rail or bulwark; or
(iii) Has a gate or other suitable opening large enough to allow the liferaft to be pushed directly overboard and, if the liferaft is intended to be available for use on either side of the vessel, such gate or opening is provided on each side of the vessel.

(4) Each davit-launched liferaft must be stowed within reach of its lifting hook, unless some means of transfer is provided that is not rendered inoperable—
(i) Within the limits of trim and list specified in paragraph (a)(4) of this section;
(ii) By vessel motion; or
(iii) By power failure.

(5) Each rigid container for an inflatable liferaft to be launched by a launching appliance must be secured so that the container or parts of it do not fall into the water during and after inflation and launching of the contained liferaft.

(6) Each liferaft must have a painter system providing a connection between the vessel and the liferaft.

(7) Each liferaft or group of liferafts must be arranged for float-free launching. The arrangement must ensure that the liferaft or liferafts, when released and inflated, are not dragged under by the sinking vessel. A hydrostatic release unit used in a float-free arrangement must be approved under approval series 160.162.
§ 199.145 Marine evacuation system launching arrangements.

(a) Arrangements. Each marine evacuation system must—

(1) Be capable of being deployed by one person;

(2) Enable the total number of persons for which it is designed, to be transferred from the vessel into the inflated liferafts within a period of 30 minutes in the case of a passenger vessel and 10 minutes in the case of a cargo vessel from the time an abandon-ship signal is given;

(3) Be arranged so that liferafts may be securely attached to and released from the marine evacuation system platform by a person either in the liferaft or on the platform;

(4) Be capable of being deployed from the vessel under unfavorable conditions of trim of up to 10 degrees either way and of list of up to 20 degrees either way;

(5) If the marine evacuation system has an inclined slide, it must—

(i) Be arranged so the angle of the slide from horizontal is within a range of 30 to 35 degrees when the vessel is upright and in its lightest seagoing condition; and

(ii) If the vessel is a passenger vessel, be arranged so the angle of the slide from horizontal is no more than 55 degrees in the final stage of flooding as described in subchapter S of this chapter; and

(6) Be capable of being restrained by a bowsing line or other positioning system that is designed to deploy automatically and if necessary, is capable of being adjusted to the position required for evacuation.

(b) Stowage. Each marine evacuation system must be stowed as follows:

(1) There must not be any openings between the marine evacuation system’s embarkation station and the vessel’s side at the waterline with the vessel in its lightest seagoing condition.

(2) The marine evacuation system’s launching positions must be arranged, as far as practicable, to be straight down the vessel’s side and to safely clear the propeller and any steeply overhanging positions of the hull.

(3) The marine evacuation system must be protected from any projections of the vessel’s structure or equipment.

(4) The marine evacuation system’s passage and platform, when deployed; its stowage container; and its operational arrangement must not interfere with the operation of any other lifesaving appliance at any other launching station.

(5) The marine evacuation system’s stowage area must be protected from damage by heavy seas.

(c) Stowage of associated liferafts. Inflatable liferafts used in conjunction with the marine evacuation system must be stowed—

(1) Close to the system container, but capable of dropping clear of the deployed chute and boarding platform;

(2) So it is capable of individual release from its stowage rack;

(3) In accordance with the requirements of §199.130; and

(4) With pre-connected or easily connected retrieving lines to the platform.

§ 199.150 Survival craft launching and recovery arrangements; general.

(a)(1) Each launching appliance must be approved under 46 CFR part 160, subpart 160.132 for use with the intended craft, with a winch approved under 46 CFR part 160, subpart 160.115 for use with the intended craft.

(2) Each launching appliance for a davit-launched liferaft must include an automatic disengaging apparatus approved under 46 CFR part 160, subpart 160.170 and be either—

(i) A launching appliance approved on or before November 10, 2011 under approval series 160.163.

(b) Unless expressly provided otherwise in this part, each survival craft must be provided with a launching appliance or marine evacuation system, except those survival craft that—