Coast Guard, DHS § 179.240

Figure 2 to § 179.220(b)

Freeboard Measurement -

Vessel with Stepped Bulkhead Deck and
a Port Light Below the Bulkhead Deck

(iii) If a vessel has an opening port light below the bulkhead deck, the line shown in Figure 2 to § 179.220(b).

(c) Calculations needed to demonstrate compliance with paragraphs (a) and (b) of this section must be submitted to, and approved by, the Commanding Officer, Marine Safety Center.

§ 179.230 [Reserved]

§ 179.240 Foam flotation material.

(a) Foam may only be installed as flotation material on a vessel when approved by the cognizant OCMI.

(b) If foam is installed as flotation material on a vessel, the owner shall ensure that the following tests are conducted and requirements are met, to the satisfaction of the cognizant OCMI:

1. All foam must comply with NPFC MIL-P-21929C (incorporated by reference, see 46 CFR 175.600). The fire resistance test is not required.

2. Foam may be installed only in void spaces that are free of ignition sources, unless the foam complies with the requirements of 33 CFR 183.114.

3. Foam may be installed adjacent to fuel tanks only if the boundary between the tank and the space has double continuous fillet welds.

4. The structure enclosing the foam must be strong enough to accommodate the buoyancy of the foam.

5. Piping and cables must not pass through foamed spaces unless they are within piping and cable ways accessible from both ends.

6. Blocked foam must:
   (i) Be used in each area that may be exposed to water; and
   (ii) Have a protective cover, approved by the cognizant OCMI, to protect it from damage.

7. A water submergence test must be conducted on the foam for a period of at least 7 days to demonstrate to the satisfaction of the cognizant OCMI that the foam has adequate strength to withstand a hydrostatic head equivalent to that which would be imposed if the vessel were submerged to its bulkhead deck.

8. The effective buoyancy of the foam must be determined at the end of
§ 179.310  Collision bulkheads.
(a) Each collision bulkhead required by §179.210, must be constructed in accordance with §179.320, except that a collision bulkhead:
(1) Must extend to the weather deck or to one deck above the bulkhead deck, whichever is lower, for service on oceans or coastwise routes; and
(2) Must not be fitted with any type of penetration or opening except penetrations may be made if they are located as high and as far inboard as practicable and they have a means to make them watertight.
(b) The forward collision bulkhead required to be on a vessel by §179.210 must be:
(1) Located at least 5 percent but not more than 15 percent of the length between perpendiculars (LBP) aft of the forward perpendicular, or for vessels with bulbous bows extending forward of the forward perpendicular and contributing more than 2 percent of the underwater volume of the vessel, located at least 5 percent but not more than 15 percent of the LBP aft of the middle of such extension; and
(2) Installed in a single plane, with no recess or step, up to the bulkhead deck;
(c) The after collision bulkhead on a double-ended ferry of more than 19.8 meters (65 feet) in length must be:
(1) At least 5 percent but not more than 15 percent of the LBP forward of the after perpendicular; and
(2) Installed in a single plane, with no recess or step, at least up to the bulkhead deck.

§ 179.320  Watertight bulkheads.
(a) Each watertight bulkhead must be of sufficient strength to be capable of remaining watertight with a head of water to the top of the bulkhead.
(b) Each watertight bulkhead must extend to the bulkhead deck and be installed in one plane without steps or recesses insofar as is reasonable and practicable. Any steps or recesses permitted must comply with the applicable subdivision requirements in this subchapter.
(c) The number of penetrations in a watertight bulkhead must be minimized. A penetration in a watertight bulkhead must be as high and as far inboard in the bulkhead as practicable, and made watertight.
(d) Sluice valves are not permitted in watertight bulkheads.

§ 179.330  Watertight doors.
(a) Hinged watertight doors are not permitted in bulkheads required by §179.210 or §179.212 unless the vessel will not proceed more than 20 nautical miles from shore and:
(1) The door separates a machinery space from an accommodation space and, in the judgment of the cognizant OCMI, the door will be kept closed except when a person is passing through the door;
(2) The Commandant determines that, due to the arrangements of the vessel, the door will be kept closed except when a person is passing through the door.
(b) A hinged watertight bulkhead door must be fitted with a quick action closing devise operable from both sides of the door and indicator lights at the operating station showing whether the door is open or closed.
(c) Sliding watertight doors must meet the requirements of part 170, subpart H in subchapter S of this chapter.
(d) No more than one watertight door may be fitted in a watertight bulkhead, and it must be located as high and as far inboard as practicable.

§ 179.340  Trunks.
Where a trunk (i.e., an enclosed passageway through a deck or bulkhead) is installed, it must comply with the requirements of §179.360(a)(1) and with