

(d) If a vessel has two or less shaft tunnels, only one door is permitted between them and the machinery space. If a vessel has more than two shaft tunnels, only two doors are permitted between them and the machinery space.

**§ 171.105 Double bottoms.**

(a) This section applies to each vessel that carries more than 12 passengers on an international voyage and all other vessels that are—

- (1) 100 gross tons or more; and
- (2) In ocean or Great Lakes service.

(b) Each vessel over 165 feet (50 meters) and under 200 feet (61 meters) in LBP must have a double bottom that extends from the forward end of the machinery space to the fore peak bulkhead.

(c) Each vessel over 200 feet (61 meters) and under 249 feet (76 meters) in LBP must have a double bottom that extends from the fore peak bulkhead to the forward end of the machinery space

and a double bottom that extends from the aft peak bulkhead to the aft end of the machinery space.

(d) Each vessel 249 feet (76 meters) in LBP and upward must have a double bottom that extends from the fore to the aft peak bulkhead.

(e) Each double bottom required by this section must be at least the depth at the centerline given by the following equation:

$$D=18.0+0.05(L) \text{ inches}$$

$$D=45.7+0.417(L) \text{ centimeters}$$

where—

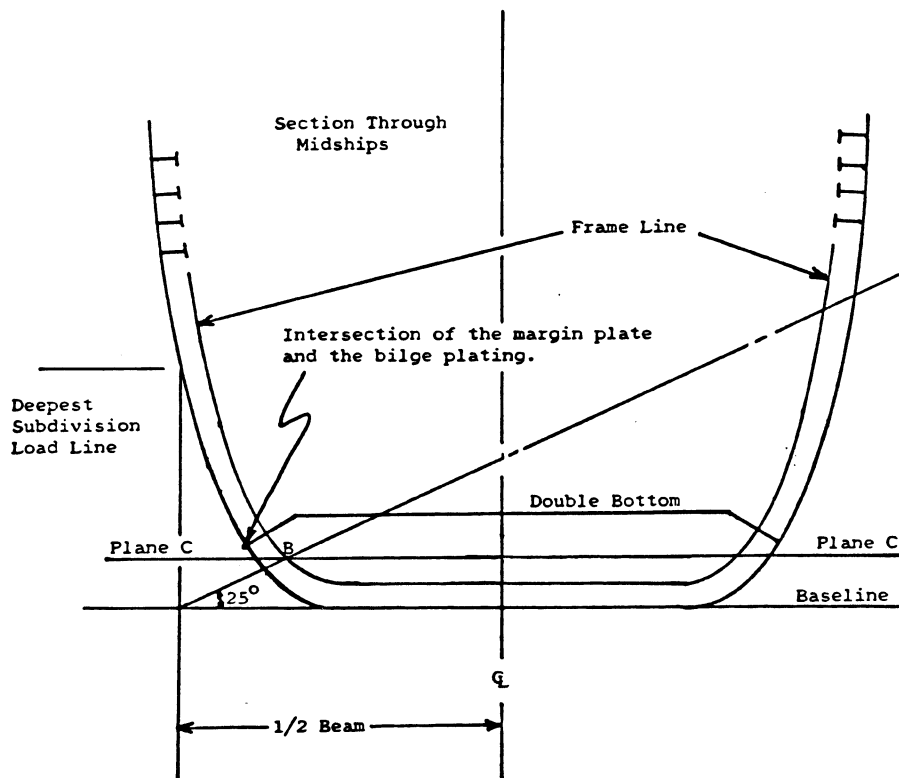
D=the depth at the centerline in inches (centimeters).

L=LBP in feet (meters).

(f) The line formed by the intersection of the margin plate and the bilge plating must be above the horizontal plane C, illustrated in Figure 171.105, at all points. The horizontal plane C is defined by point B, located, as shown in Figure 171.105, in the midships section.

Figure 171.105

Lower Limit of the Intersection of Margin Plate and Bilge Plating



(g) A double bottom is not required in a tank that is integral with the hull of a vessel if—

- (1) The tank is used exclusively for the carriage of liquids; and
- (2) It is approved by the Commanding Officer, Marine Safety Center.

(h) A double bottom is not required in any part of a vessel where the separation of main transverse watertight bulkheads is governed by a factor of subdivision less than or equal to 0.50 if—

- (1) The Commanding Officer, Marine Safety Center approves;

(2) The vessel makes short international voyages; and

(3) The vessel is permitted by § 75.10-10 of this chapter to carry a number of passengers in excess of the lifeboat capacity.

[CGD 79-023, 48 FR 51017, Nov 4, 1983, as amended by CGD 88-070, 53 FR 34532, Sept. 7, 1988]

**§ 171.106 Wells in double bottoms.**

(a) This section applies to each vessel that has a well installed in a double bottom required by § 171.105.