## § 179.212

- (b) A vessel of not more than 19.8 meters (65 feet) in length must have a collision bulkhead if it:
  - (1) Carries more than 49 passengers;
  - (2) Operates on exposed waters;
- (3) Is of more than 12.2 meters (40 feet) in length and operates on partially protected waters; or
- (4) Is constructed of wood on or after March 11, 2001, and operates in cold water.
- (c) A double-ended ferry required to have a collision bulkhead must have a collision bulkhead at each end of the vessel

## § 179.212 Watertight bulkheads for subdivision and damage stability.

- (a) Except as provided in paragraph (c) of this section, each vessel must comply with the Type II subdivision and damage stability requirements of §§171.070 through 171.073 and 171.080 of this chapter if it meets one or more of the following criteria:
- (1) Is more than 19.8 meters (65 feet) in length;
  - (2) Carries more than 49 passengers;
- (3) Is constructed of wood on or after March 11, 2001, and operates in cold water: or
- (4) Is constructed before January 1, 2009 and carries more than 12 passengers on an international voyage.
- (b) Vessels constructed on or after January 1, 2009 and carrying more than 12 passengers on an international voyage must comply with the applicable requirements of IMO Res. MSC.216(82) (incorporated by reference, see §179.15) unless permitted otherwise.
- (c) As an alternative to complying with the Type II subdivision and damage stability requirements of §§171.070 through 171.073 and 171.080 of this chapter, a monohull vessel which undergoes a simplified stability proof test in accordance with §178.330 of this chapter may comply with §179.220 of this part.
- (d) For the purpose of demonstrating compliance with the Type II subdivision and damage stability requirements of §§171.070 through 171.073 and 171.080 of this chapter, the requirements of IMO Res. MSC.216(82) may be considered equivalent.

 $[ {\rm USCG\text{--}2007\text{--}0030},\, 75\; {\rm FR}\; 78091,\, {\rm Dec.}\; 14,\, 2010 ]$ 

## § 179.220 Location of watertight bulkheads for subdivision.

- (a) The maximum distance between adjacent main transverse watertight bulkheads on a vessel, required by §179.212(a) of this part to comply with this section, must not be more than the smaller of the following:
- (1) One third of the length of the bulkhead deck; or
- (2) The distance given by the following equation:

$$d = \frac{(F)(f)(L)}{D}$$

where:

d=the maximum length of the bulkhead deck in meters (feet) between adjacent main transverse watertight bulkheads;

F=the floodable length factor from Table 179.220(a);

f=the effective freeboard in meters (feet) calculated for each pair of adjacent bulkheads in accordance with paragraph (b) of this section;

L=Length Over Deck in meters (feet) measured over the bulkhead deck; and

D=the depth in meters (feet), measured amidships at a point one-quarter of the maximum beam out from the centerline, from the inside of the bottom planking or plating to the level of the top of the bulkhead deck at side as shown in Figure 179.220(a).

TABLE 179.220(a)—TABLE OF FLOODABLE LENGTH FACTORS

(x/L) × 100	F
0–15	0.33
20	0.34
25	0.36
30	0.38
35	0.43
40	0.48
45	0.54
50	0.61
55	0.63
60	0.58
65	0.53
70	0.48
75	0.44
80	0.40
85	0.37
90–100	0.34

NOTE 1: Where: x=distance in meters (feet) from the midpoint of the compartment to the forward-most point on the bulkhead deck excluding sheer; and L=length over deck in meters (feet) measured over the bulkhead deck.

NOTE 2: Intermediate values of floodable length factor may be obtained by interpolation.