§ 171.120 Watertight Integrity Above the Margin Line

§ 171.120 Specific applicability.
Each vessel that is 100 gross tons or more must comply with §171.122 and each vessel under 100 gross tons must comply with §171.124.


§ 171.122 Watertight integrity above the margin line in a vessel of 100 gross tons or more.

(a) For the purpose of this section, a partial watertight bulkhead is one in which all portions are not watertight.
(b) Except as provided in paragraph (d) of this section, the bulkhead deck or a deck above it must be watertight.
(c) Partial watertight bulkheads or web frames must be located in the immediate vicinity of main transverse watertight bulkheads to minimize as much as practicable the entry and spread of water above the bulkhead deck.
(d) If a partial watertight bulkhead or web frame is located on the bulkhead deck in order to comply with paragraph (c) of this section, the joint between it and the shell and bulkhead deck must be watertight.
(e) If a partial watertight bulkhead does not line up with a main transverse watertight bulkhead below the bulkhead deck, the bulkhead deck between them must be watertight.
(f) Each opening in an exposed weather deck must—

(1) Have a coaming that complies with the height requirements in table 171.124(d); and
(2) Have a means for closing it watertight.
(g) Each port light located between the bulkhead deck and the next deck above the bulkhead deck must have an inside dead cover than can be secured watertight.


§ 171.124 Watertight integrity above the margin line in a vessel less than 100 gross tons.

(a) Each hatch exposed to the weather must be watertight; except that, the following hatches may be weather-tight:
(1) Each hatch on a watertight trunk that extends at least 12 inches (30.5 centimeters) above the weather deck.
(2) Each hatch in a cabin top.
(3) Each hatch on a vessel that operates only on protected waters.
(b) Each hatch cover must—

(1) Have securing devices; and
(2) Be attached to the hatch frame or coaming by hinges, captive chains, or to other devices to prevent its loss.
(c) Each hatch that provides access to crew or passenger accommodations must be operable from either side.
(d) Except as provided in paragraph (e) of this section, a weathertight door with permanent watertight coamings that comply with the height requirements in table 171.124(d) must be provided for each opening located in a deck house or companionway that—

(1) Gives access into the hull; and
(2) Is located in—

(i) A cockpit;
(ii) A well; or
(iii) An exposed location on a flush deck vessel.

Table 171.124(d)

<table>
<thead>
<tr>
<th>Route</th>
<th>Height of coaming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposed or partially protected</td>
<td>6 inches (15.2 centimeters).</td>
</tr>
<tr>
<td>Protected</td>
<td>3 inches (7.6 centimeters).</td>
</tr>
</tbody>
</table>

(e) If an opening in a location specified in paragraph (d) of this section is provided with a Class 1 watertight door, the height of the watertight coaming need only be sufficient to accommodate the door.


Subpart H—Drainage of Weather Decks

§ 171.130 Specific applicability.

(a) Section 171.135 applies to each vessel that is 100 gross tons or more.
Coast Guard, DHS

(b) Sections 171.140, 171.145, 171.150, and 171.155 apply to each vessel under 100 gross tons.


§ 171.135 Weather deck drainage on a vessel of 100 gross tons or more.

The weather deck must have free- ing ports, open rails, and scuppers, as necessary, to allow rapid clearing of water under all weather conditions.

§ 171.140 Drainage of a flush deck vessel.

(a) Except as provided in paragraph (b) of this section, the weather deck on a flush deck vessel must be watertight and have no obstruction to overboard drainage.

(b) Each vessel with a flush deck may have solid bulwarks in the forward one-third length of the vessel if—

(1) The bulwarks do not form a well enclosed on all sides; and

(2) The foredeck of the vessel has sufficient sheer to ensure drainage aft.


§ 171.145 Drainage of a vessel with a cockpit.

(a) Except as follows, the cockpit must be watertight:

(1) A cockpit may have companionways if they comply with §171.124(d).

(2) A cockpit may have ventilation openings along its inner periphery if—

(i) The vessel operates only on protected or partially protected waters;

(ii) The ventilation openings are located as high as possible in the side of the cockpit; and

(iii) The height of the ventilation opening does not exceed 2 inches (5 centimeters).

(b) The cockpit must be designed to be self-bailing.

(c) Scuppers installed in a cockpit must be located to allow rapid clearing of water in all probable conditions of list and trim.

(d) Scuppers must have a combined area of at least the area given by either of the following equations:

\[ A = 0.1(D) \text{ square inches} \]

\[ A = 6.94(D) \text{ square centimeters} \]

Where—

A = the combined area of the scuppers in square inches (square centimeters).

D = the area of the cockpit in square feet (square meters).

(e) The cockpit deck of a vessel that operates on exposed or partially protected waters must be at least 10 inches (24.5 centimeters) above the deepest subdivision load line, unless the vessel complies with—

(1) The intact stability requirements of §171.150;

(2) The Type II subdivision requirements in §§171.070, 171.072, and 171.073; and

(3) The damage stability requirements in §171.080.

(f) The cockpit deck of all vessels that do not operate on exposed or partially protected waters must be located as high above the deepest subdivision load line as practicable.


§ 171.150 Drainage of a vessel with a well deck.

(a) Each well deck on a vessel must be watertight.

(b) Except as provided in paragraphs (c) and (d) of this section, the area required for free- ing ports in the bulwarks that form a well must be determined as follows:

(1) If a vessel operates on exposed or partially protected waters, it must have at least 100 percent of the freeing port area derived from table 171.150.

(2) If a vessel operates only on protected or partially protected waters and complies with the requirements in the following sections for a vessel that operates on exposed waters, it must have at least 50 percent of the freeing port area derived from table 171.150:

(i) The intact stability requirements of §171.030 or 171.050 and §171.170.

(ii) The subdivision requirements of §171.040, 171.043, or 171.070.

(iii) The damage stability requirements of §171.080.

(3) If a vessel operates only on protected waters, the freeing port area must be at least equal to the scupper area required by §171.145(d) for a cockpit of the same size.

(c) The freeing ports must be located to allow rapid clearing of water in all probable conditions of list and trim.