§ 174.220 Hatches and coaimings.

(a) Each hatch exposed to the weather must be watertight, except that the following hatches may be only weathertight:

(1) Each hatch on a watertight trunk that extends at least 430 millimeters (17 inches) above the weather deck.

(2) Each hatch in a cabin top.

(b) Each hatch cover must—

(1) Have securing devices; and

(2) Be attached to the hatch frame or coaming by hinges, captive chains, or other devices to prevent its loss.

(c) Each hatch that provides access to quarters or to accommodation spaces for crew members or offshore workers must be capable of being opened and closed from either side.

(d) Except as provided by paragraph (e) of this section, a weathertight door with a permanent watertight coaming at least 380 millimeters (15 inches) high must be installed for each opening in a deckhouse or companionway that—

(1) Gives access into the hull; and

(2) Is in an exposed place.

(e) If an opening in a deckhouse or companionway has a Class-1 watertight door installed, the height of the watertight coaming need only accommodate the door.

§ 174.225 Hull penetrations and shell connections.

Each overboard discharge and shell connection except an engine exhaust must comply with §§56.50–95 and 128.230 of this chapter.

Subpart H—Special Rules Pertaining to Liftboats

§ 174.240 Applicability.

Each liftboat inspected under subchapter L of this chapter must comply with this subpart.

§ 174.245 General.

Each liftboat must comply with §§174.210 through 174.225.

§ 174.250 Unrestricted service.

Each liftboat not limited to restricted service must comply with subpart C of this part in each condition of loading and operation.

§ 174.255 Restricted service.

This section applies to each liftboat unable to comply with §174.250 and limited to restricted service as defined by §125.160 of this chapter.

(a) Intact stability. (1) Each liftboat must be shown by design calculations to meet, under each condition of loading and operation afloat, the following requirements:

(i) Those imposed by §174.045, given a “K” value of at least 1.4.

(ii) A range of positive stability of at least 10 degrees extending from the angle of the first intercept of the curves of righting moment and wind heeling moment, either to the angle of the second intercept of those curves or to the angle of heel at which downflooding would occur, whichever angle is less.

(iii) A residual righting energy of at least 0.003 meter radians (5 foot-degrees) between the angle of the first intercept of the curves of righting moment and wind heeling moment, either to the angle of the second intercept of those curves or to the angle of heel at which downflooding would occur, whichever angle is less.

(b) Damaged stability.

(1) Each liftboat must be designed so that, while it is in each of its normal operating conditions, its final equilibrium waterline will remain below the lowest edge of any opening through which additional flooding can occur if the liftboat is subjected simultaneously to—

(i) Damage causing flooding described by paragraph (b)(4) of this section; and

(ii) Winds of 60 knots for normal conditions of operation afloat and of 70 knots for severe-storm conditions of operation afloat.

(2) For this section, each wind heeling moment must be calculated as prescribed by §174.055 of this part using winds of 60 knots for normal conditions of operation afloat and of 70 knots for severe-storm conditions of operation afloat.

(3) For paragraph (a)(1) of this section, the initial metacentric height must be at least 300 millimeters (1 foot) for each leg position encountered while afloat including the full range of leg positions encountered while jacking.

(b) Damaged stability. (1) Each liftboat must be designed so that, while it is in each of its normal operating conditions, its final equilibrium waterline will remain below the lowest edge of any opening through which additional flooding can occur if the liftboat is subjected simultaneously to—