



# THE USE OF FLUSH DECK HATCHES IN LIEU OF RAISED COAMINGS

*This equivalent means of compliance is approved by the National Regulator in accordance with section 17 of Marine Order 503 (Certificates of survey - national law) 2018.*

## Application

This equivalent solution applies to vessels that operate in operational areas B, C, D or E, that are not required to have a load line certificate.

**Note:** DCV-ITS-012 specifies the conditions for the “Authority to be satisfied” for vessels that fall within the scope of the USL; Section 5C, Part II, C.68, Section 5D Part III, D.20, or Section 5D, Part IV, D.31.

## Current Requirement

USL Section 5C – Watertight Subdivision of Passenger Vessels states:

### Part II: Class 1 vessels less than 35 metres in measured length

#### C.68 Hatches and Coamings

C68.1 Unless otherwise provided in the Load lines Section of these Uniform Requirements, the height above deck of the coamings of hatchways and the permanent weathertight sills of openings in deckhouses or companionways which give access into spaces below the weatherdeck, shall be in accordance with Table 2 and associated notes:

TABLE 2

Class	Length of Vessel	Height of Coaming or Sill
A,B, & C	10 m and over but less than 18 m	300mm
	18 m and over but less than 24 m	300 + 50(L—18) mm
	24 m and over	600mm
D	less than 10 m	150mm
	10 m and over but less than 18 m	200mm
	18 m and over	250mm
E	All lengths	150mm

#### Notes:

- In vessels of Class A, B and C where the openings in deckhouses or companionways referred to in this sub-clause are situated so as to be shielded from the full force of the sea, the permanent watertight sills required to be provided for such openings may be reduced in height but shall not in any case be less than 150mm for vessels less than 18 metres in length, 150 + 37.5 (L—18)mm for vessels of 18 metres in length and over but not exceeding 24 metres in length and 375mm for vessels exceeding 24 metres in length.
- In vessels of Class 1D & 1E sills may be omitted from the openings to deckhouses, provided that in the case of Class 1D vessels sills having a height in accordance with the above table are provided at each access into spaces below the weatherdeck.
- Where, in Class 1D & 1E vessels, accesses into spaces below the weatherdeck are situated within the mid half beam of the vessel, and are of a width less than half the beam of the vessel and the Authority is satisfied that the safety of the vessel will not be impaired by doing so, the Authority may determine that sills for such accesses may be omitted.

## The use of flush deck hatches in lieu of raised coamings

USL Section 5D – Watertight Subdivision of Class 2 and Class 3 Vessels states:

**Part III: Special provisions applicable to Class 2 vessels not subject to the provisions of the Load Lines Section and class 3 vessels other than vessels to which Part IV applies**

**D.20 Hatchway Coamings**

D.20.1 Hatchway coamings shall be of substantial construction of equivalent strength to the deck or deckhead on which they are mounted. The height of the coaming above the deck shall be not less than that given in the table below:

	<i>Measured length</i>			
	<i>less than 12.5m</i>	<i>12.5 m and over but less than 20m</i>	<i>20m and over but less than 30m</i>	<i>30m and over</i>
Cargo hatches on weatherdeck	200	300	450	600
Hatches in weatherdeck giving direct access to machinery or accommodation spaces below deck	200	300	450	600
Hatches in weatherdeck providing direct access to machinery or accommodation spaces below the weatherdeck from inside deckhouses fitted with sills as provided in sub-clause D.19.3 or superstructures	nil	nil	nil	nil

**Part IV: Modifications applicable to Class 2B and Class 2C vessels less than 16 metres in measured length, Class 3B and Class 3C vessels less than 20 meters in measured length, Class 2D, Class 2E, Class 3D and Class 3E vessels**

**D.31 Hatchway Coamings**

D.31.1 Hatchway coamings shall be of substantial construction of equivalent strength to the deck or deckhead on which they are mounted. The height of the coaming above the deck in millimetres shall be not less than that given in Table 1.

TABLE 1  
Height of hatch coamings and door sills

	<i>Class of Vessel</i>	<i>Measured length (m)</i>		
		<i>&lt;12.5</i>	<i>12.5-20</i>	<i>&gt;20</i>
Hatches in weatherdeck giving direct access to machinery or accommodation spaces or to spaces which are required to be opened for loading at sea	B&C	200	300	
	D&E	100	150	250
Hatches in weatherdeck giving direct access to spaces not normally opened at sea	B&C	100	150	
	D&E	100	100	150
Hatches inside non weathertight deckhouses giving direct access to spaces below the weatherdeck and having after doors only	B&C	100	200	
	D&E	100	150	150
Hatches inside non weathertight deckhouses giving direct access to spaces below the weatherdeck and having side doors	B&C	150	200	
	D&E	100	150	200
Sills in access ways to spaces below the weatherdeck inside non weathertight deckhouses	B&C	200	300	
	D&E	100	150	200
Openings in deck heads not less than 1.5 metres above the weatherdeck	B&C	100	150	
	D&E	nil	nil	nil

## The use of flush deck hatches in lieu of raised coamings

**Equivalent Solution**

For vessels not required to hold a Load Line Certificate, operating in area B or below:

The equivalent solution to the USL Code coaming height requirements above, for a hatchway through the weather deck is a reduced height or flush coaming subject to the conditions below.

**Conditions**

1. The hatch must not be of a width greater than half the beam of the vessel.
2. The hatch must not be used as a dedicated passenger access, or form part of an escape that leads to an area on deck that is not shielded from the full force of the sea.
3. The hatch must not be necessary for general operations, or the space would not normally be required to be accessed at sea (where access is required to the space at sea or where the space is a manned space, there must be an alternative protected means of access provided).
4. If the hatch provides the single means of access to an unmanned machinery space, then the vessel must have a second separated machinery space.
5. Spaces accessible through the hatchway must be serviced by a bilge pump and bilge alarm.
6. If access is required through the hatch for the activation of firefighting or bilge systems, then a remote means of activation from outside the space must be provided.
7. The location of the hatch must not be exposed to green water under normal operating conditions.
8. If the hatch is located forward of midships or is not protected by superstructures, then the cover must be hinged on the forward side.
9. Hatches must be clearly marked on both sides of the hatch cover, with the following text:
  - a. 'MUST BE CLOSED AT SEA'.
  - b. for an escape, with additional text - 'ESCAPE – DO NOT OBSTRUCT' (Escape hatches must be capable of being opened from both sides) and
  - c. for an escape, the deck must also be marked with contrasting colour markings that extend at least 100mm past the periphery of the hatch.
10. Hatch covers must be permanently attached to the surrounding structure.
11. Hatch covers must be fitted with securing devices on all sides. (Hinges are not considered to be a securing device).
12. Hatch covers are to have strength, packing and means for securing which are sufficient to maintain watertightness.
13. The vessels plans must be approved by an accredited surveyor with category (a). The plans and approval letter must clearly indicate each hatch and the spaces that are accessible through the hatchway that are in accordance with this generic equivalent solution (GES).