

FREEBOARDS OF FISHING VESSELS**Notice to Fishing Vessel Owners, Skippers and Mates, Shipbuilders and Consultants**

1. The statutory requirements for freeboard are laid down in Rule 15 of the Fishing Vessel (Safety Provisions) Rules 1975. The Rules establish criteria for freeboard which take into account stability criteria, safe working on deck and watertight integrity of the vessel. Draught of water marks are required by Rule 15(2). Rule 15(1) states as follows:

“Every vessel of 12 metres in length and over to which these Rules apply shall be so designed, constructed and operated as to ensure that in all foreseeable operating conditions the freeboard will be adequate to provide:

- (a) compliance with the stability criteria set out in Rule 16 of these Rules;
- (b) reasonable safety for men working on deck;
- (c) reasonable safety to the vessel from the entry of water into enclosed spaces having regard to the closing appliances fitted”.

2. All sections of Rule 15(1) have equal significance and should be properly observed in the design of fishing vessels and their subsequent operation. It should be appreciated that compliance with stability criteria alone does not ensure adequate freeboard and this aspect therefore requires separate assessment.

3. It has been observed that many vessels engaged primarily in bulk fishing are frequently loaded such that the reserves of stability or freeboard remaining may be small to counter any adverse effects of sea or wind with consequent danger to crew on deck or to the vessel itself.

4. Maintenance of adequate freeboard in all parts of the vessel is an important feature of safe operation. When a vessel designed for a particular mode of fishing is altered to suit an entirely different method with new arrangements and rates of stowage, the stability and free board must be verified and assessed for compliance with Rule 15(1).

5. Designers of fishing vessels, ship and boat builders building new vessels or making alterations to existing vessels, and skippers and owners, should take careful note of the following factors:

- (a) In preparing stability information as required by Rules 74 and 75 due consideration should be given to the vessel's capacity to

maintain adequate freeboard at all times and in all foreseeable operating conditions, with particular attention to actual waterlines and the position of openings.

- (b) Extreme trims should be avoided to ensure that the vessel will rise to head and stern seas.
- (c) Vessels to be employed in bulk fishing can be particularly vulnerable to the effects of small reserves of stability, trim and freeboard. Safe limits of loading should be made available to skippers in a readily understandable form.

6. Owners, builders and consultants should note that the Department will check all submissions for approval of Stability and Trim data for compliance with Rule 15. It is possible that failure to demonstrate that Rule 15(1) can be complied with in all foreseeable working conditions will preclude the issue of a United Kingdom Fishing Vessel Certificate or require considerable alteration to structure or fishing capacity to enable the certificate to be issued.

7. It should be noted that stability information in respect of worst operating conditions having particular regard to “Height of stem to top of bulwark or the top of forecastle is specially referred to at paragraph 4.13.2 of the ‘Survey of fishing vessels’—Instructions for the guidance of surveyors” HMSO 1975. This aspect has recently required amplification in conjunction with guidance necessary to interpret the general free board requirements. Following consultation with the industry standards for bow and stern heights have therefore been developed which should be regarded as minima. These are as detailed in the attached Appendix to this Notice. In vessels where the wheelhouse is in the fore part of the vessel it is however recommended that greater bow heights be provided.

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APPENDIX

MINIMUM HEIGHTS OF FORWARD BULWARK AND TOP OF DECK AT SIDE AT BOW AND STERN

L	H _B	H _D	H _{DA}	Notes	
12	1.75	1.15	0.70	1. The length "L" is equal to 96% of the total length on a waterline at 85% of the least depth measured from the keel line, or the length from the foreside of the stem to the axis of the rudder stock on that waterline, whichever is the greater. In vessels designed with a rake of keel the waterline on which this length is measured is parallel to the designed waterline, and perpendicular to the bulkheads.	
13	1.81	1.18	0.73		
14	1.88	1.21	0.77		
15	1.94	1.24	0.80		
16	2.00	1.27	0.83		
17	2.06	1.30	0.87		
18	2.13	1.33	0.90		
19	2.19	1.35	0.93		
20	2.25	1.38	0.97		
21	2.31	1.41	1.00		
22	2.38	1.44	1.03		"Keel line" is the line parallel to the slope of keel passing amidships through
23	2.44	1.47	1.07		
24	2.50	1.50	1.10		
26	2.63	1.63	1.17		(a) the top of the keel or line of intersection of the inside of shell plating with the keel where a bar keel extends above that line of a vessel with a metal shell; or
28	2.75	1.75	1.23		(b) the rabbet lower line of the keel of a vessel with a shell of wood or a composite vessel; or
30	2.88	1.88	1.30		
32	3.00	2.00	1.37		(c) the intersection of a fair extension of the outside of the shell contour at the bottom with the centreline of a vessel with a shell of material other than wood or metal.
34	3.13	2.13	1.43		
36	3.25	2.25	1.50		
38	3.38	2.38	1.57		
40	3.50	2.50	1.63		
42	3.63	2.63	1.70	"Amidships" is the mid-length of L.	
44	3.75	2.75	1.77		
46	3.88	2.88	1.83		
48	4.00	3.00	1.90		
50	4.13	3.13	1.97		
52	4.25	3.25	2.03		
54	4.38	3.38	2.10		
56	4.50	3.50	2.17		
58	4.63	3.63	2.23		
60	4.75	3.75	2.30		
62	4.88	3.88	2.37	2. H _B is the minimum height of the top of the bulwark, or the shell where there is no bulwark, above the waterline at the forward end of "L".	
64	5.00	4.00	2.43		
66	5.13	4.13	2.50	3. H _D is the minimum height of the top of the deck of the W. T. structure above the water line at the forward end of L. If the structure is a forecastle it is to have an intact W. T. length of at least 0.07L, measured abaft the forward end of "L".	
68	5.25	4.25	2.57		
70	5.38	4.38	2.63		

4. H_{DA} is the minimum height of the top of the deck at side above the water line at the after end of “L”.

5. All dimensions are in metres.

6. The tabular values are based on the following formulae,

$$H_B = 1 + \frac{L}{16}$$

$$H_D = 0.8 + \frac{7L}{240}, \text{ for “L” between 12 and 24 metres}$$

$$H_D = \frac{L}{16}, \text{ for “L” = 24 metres or over}$$

$$H_{DA} = 0.3 + \frac{L}{30}$$

7. For intermediate values of “L” the tabular heights should be determined by interpolation.