

Maritime New Zealand Guidelines

MARINE GUIDANCE NOTICE ISSUE 9 – SEPTEMBER 2008

BULWARK AND GUARDRAIL HEIGHT – FISHING VESSELS

This guidance is for:

- commercial fishing vessel owners and operators
- safe ship management companies
- ship surveyors
- maritime safety inspectors
- boat builders.

Purpose

This guidance notice aims to:

- provide a reminder of the maritime rule requirements for bulwark and guardrail heights
- encourage skippers and crew to critically look at the bulwarks and guardrails on their vessels and assess whether they are adequately protected from accidentally falling overboard, during normal fishing operations.

Hazardous situation

Skippers and crew are at risk everyday of falling over the side of their vessel if the bulwarks and guardrails are too low or the gaps between the guardrails are too big.

During the review of Maritime Rules Part 40D in 2005 Maritime New Zealand discovered that of the 58 commercial fishing vessels inspected:

- 26 had bulwarks and/or guardrails below the required 750 mm
- 6 had guardrails missing in areas considered to be outside of the normal fishing area on the vessel
- 10 had the intermediate spacing between the guardrails bigger than the maximum gap of 380 mm
- 2 had no intermediate rails.

Low bulwarks and guardrails can be considered to be more dangerous than having no bulwarks or guardrails at all because they become a trip hazard rather than a piece of safety equipment. Also, low bulwarks allow more water to get on deck, which increases the danger of slipping.

Legal requirements

Part 40D.22 requires bulwarks and guardrails to be at a minimum of 750 mm above deck, except in the way of normal fishing operations.

The applicable part of the rule is reproduced below:

- 1) *Efficient bulwarks or guard rails must be fitted on all exposed parts of the working deck and on superstructure decks to which crew have normal access.*
- 2) *Except as provided in rule 40D.22(3), the height of bulwarks or guard rails above deck must be –*
 - (a) *for any ship of 24 metres or more in length, at least 1 metre; and*
 - (b) *for any ship of less than 24 metres in length, at least 750 mm.*

- 3) *Where the prescribed heights for bulwarks and guard rails would interfere with the normal fishing operations of the ship, a lesser height may be approved by the surveyor, provided that*
 - (a) *a reduction in height is not permitted in way of wheelhouse and deckhouse doors; and*
 - (b) *a fixed bulwark must not be less than 450 mm in height.*
- 4) *Clearance below the lowest course of guard rails is not to exceed 230 mm. Other courses must not be more than 380 mm apart, and the distance between stanchions must not be more than 1.5 metres. On a ship with rounded gunwales, guard rail supports must be placed on the flat of the deck. Rails must be free from sharp points, edges and corners and be of sufficient strength to prevent persons from falling overboard.*
- 5) *Storm rails must be fitted as necessary to the outside of all deckhouses and casings to secure safety of passage or work for the crew.*
- 6) *Stern trawlers must be provided with suitable protection such as doors, gates or nets at the top of the stern ramp at the same height as the adjacent bulwark or guard rails.*

Additionally, the Health and Safety in Employment Act 1992 (HSE Act) requires employers to take all practicable steps to ensure the safety of employees while at work. In particular, employers must provide and maintain a safe working environment and ensure that plant used by any employee at work is safe to use.

Conclusions

Any reduction in the height of bulwarks and guardrails to accommodate normal fishing operations has the potential to compromise safety and should only be applied where absolutely necessary.

A 450 mm high bulwark is below the knee in many cases, which can be more dangerous than not having one at all owing to the trip hazard it creates. A 750 mm high bulwark is at thigh height, which provides reasonable protection.

A gap bigger than 380 mm between guardrails increases the risk of falling overboard for anyone sliding into them.

Recommendations

- Look at the bulwarks and guardrails on the vessel you work on and assess if they give you adequate protection from falling overboard.
- Confirm that the bulwarks comply with the requirements of Maritime Rules Part 40D.
- Talk the options over with your surveyor.
- Make any necessary modifications to your bulwarks and guardrails in consultation with your surveyor.

Further information

For further information about bulwarks and guardrails, please contact:

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