



Australian Government

Australian Maritime Safety Authority

Domestic Commercial Vessel

INSTRUCTIONS TO SURVEYORS

DCV-ITS-020 (12/2022)

| | |
|---|--|
| Title: | Freeboard Marks - National Standard for Commercial Vessels (NSCV), Part C2 – Watertight and Weathertight integrity (NSCV Part C2). |
| Subject: | This instruction provides information on AMSA's preferred method of initial survey for the freeboard mark on a new domestic commercial vessel (DCV) as required by NSCV Part C2. |
| General: | Similar to the load line mark, the freeboard mark serves to provide a quick indicator of a vessel's permissible loading limit. NSCV Part C2 requires that the mark be displayed on both sides of the vessel at a height that indicates the deepest permissible waterline determined from stability (NSCV Part C6 – Stability), hull scantlings (NSCV Part C3 - Construction) and minimum freeboard (NSCV Part C2). |
| Application and implementation period: | <ul style="list-style-type: none">▪ For two years commencing 1 January 2023, designers have the option of using the NSCV Part C2 standard or the applicable USL 5C and 5D standards. After this time (from 1 January 2025 onwards), it will be mandatory to use the NSCV Part C2 standard.▪ Only vessels using the NSCV Part C2 standard will be required to display a freeboard mark.▪ During the 2-year implementation period, plan approval surveyors must clearly indicate which standard they are using in their design approval letter.▪ The NSCV Part C2 standard does not apply to existing or transitional vessels unless the owners opt into its use. |
| Determination of minimum freeboard: | <p>It is AMSA's preferred method that designers include the following information in an appendix in the vessel's stability book¹ that addresses the freeboard mark:</p> <ul style="list-style-type: none">▪ Applicable Freeboards:<ol style="list-style-type: none">1) Stability (NSCV Part C6 – Stability),2) Structure (NSCV Part C3 - Construction)3) Freeboard (NSCV Part C2 – Watertight and Weathertight integrity)4) Applicable minimum freeboard (which is the greater of the three options above)▪ A diagram indicating the vertical location of the deck line as well as the height of the freeboard mark with respect to the deck line. In addition, the diagram should show the longitudinal location of both lines with respect to an easily identifiable point on the vessel above the waterline.² |
| Verification of freeboard mark: | <ul style="list-style-type: none">▪ The construction or commissioning surveyor(s) should verify that the freeboard and deck line marks are permanently marked³ in accordance with the diagram shown in the stability book and Annex A of NSCV Part C2.▪ The surveyor should recommend the freeboard mark verification as part of the draft / freeboard mark survey (IMAR) and upload a report that includes photographs⁴ and a description of the method used to verify the markings. |

Notes

1. Additional to the normative requirements of NSCV C6C. The requirement to address freeboard marks will be included into NSCV C6C Appendix F when the standard is next revised. In the meantime, if this information is not included in the stability book, a separate diagram may be provided by a competent person.
2. This may include internal frames / bulkheads where welding is visible on the external hull plating; freeing ports; superstructure features; transom / side shell intersection. The freeboard mark must be located at the LCF of the waterline on which it is marked.
3. For guidance on the permanent marking of deck and freeboard marks on various hull materials see NSCV C2 Figures A3, A4 and A5.
4. For example, annotated macro and detailed (zoomed out and zoomed in) photos of the physical points on the vessel from which the longitudinal and vertical positions of the freeboard mark and deck line is measured.