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**STRENGTH OF RO-RO PASSENGER SHIP "B" CLASS BULKHEADS
TO WHICH HANDRAILS ARE ATTACHED**

1 The Maritime Safety Committee at its seventy-first session (19 to 28 May 1999) approved the Recommendation on strength of "B" class bulkheads for ro-ro passenger ships to which handrails are attached, prepared by the Sub-Committee on Fire Protection at its forty-third session, as set out in the annex.

2 Member Governments are invited to bring the above Recommendation to the attention of shipyards, manufacturers and all concerned with the installation of "B" class panels on board ro-ro passenger ships.

ANNEX**RECOMMENDATION ON STRENGTH OF "B" CLASS BULKHEADS
TO WHICH HANDRAILS ARE ATTACHED
ON RO-RO PASSENGER SHIPS**

- 1 Regulation II-2/28-1.1.2 of the 1974 SOLAS Convention, as amended, requires ro-ro passenger ships to be fitted with handrails in escape routes which will support 750 N/m distributed load, in both the horizontal and downward directions. Handrails attached to "B" class panels should have the strength to support such a loading.
- 2 To avoid the possibility of under strength panels being installed, the type approval process for all "B" class panels to which handrails are attached should include a suitable structural test. However, lining panels, i.e. those which are supported at half height from an adjacent bulkhead and having suitable internal strength arrangements to the ship or deckhouse construction, need not satisfy the strength requirement.
- 3 For panels, which already have type approval, a strength test should be a requirement when the certificate is due for renewal.
- 4 The strength test for "B" class panels is shown in the appendix. In order for manufacturers to obtain type approval, the test procedure should be properly conducted, recorded and independently witnessed.

APPENDIX

STRENGTH TEST FOR "B" CLASS PANELS TO WHICH HANDRAILS ARE ATTACHED ON RO-RO PASSENGER SHIPS

- 1 The specimen should be simply supported along its short edges with the unsupported span equal to the maximum length for which the panel should be approved, simulating the approved arrangements to be fitted on the ship.
- 2 A static load should be applied through a bar having its bearing edge rounded to a radius of 3 mm and a length equal to the width of the panel; it should be parallel to the supporting edges. The load should be applied perpendicular to the plane of the panel at its mid-span. Where the long edges of the panel are raised, for instance by a joining profile, the load should be applied over the flush central portion excluding the raised edges. Alternatively, if a particular method of attaching the handrail to the bulkhead is specified, horizontal and vertical loads may be applied to a handrail attached in this manner.
- 3 Only one specimen needs to be tested.
- 4 The force per unit panel width at which the specimen is judged to have fractured or collapsed should be reported. The panel width should be taken as the effective width between panels when erected as a division.
- 5 Free standing "B" class bulkhead panels should be capable of supporting a load of 750 Newtons per metre width when tested as above.
