



Ref. T1/3.02

MSC/Circ.888  
21 December 1998

### **PREVENTING FALLS AT CORRUGATED BULKHEADS IN GENERAL CARGO SHIPS**

1 The Maritime Safety Committee, at its sixty-fifth session, approved MSC/Circ.695 drawing the attention of Member Governments to the risk of falls of cargo handlers whilst working on cargo adjacent to corrugated bulkheads in the holds of general cargo ships.

2 The Committee, at its seventieth session (7 to 11 December 1998), being further aware of these dangers, agreed that further measures should be taken into consideration for general cargo ships for the protection of cargo handlers and other persons working in holds adjacent to corrugated bulkheads. A number of possible methods are set out in the annex. The list is not exhaustive and is not intended to preclude the development of other methods in new or existing ships.

3 As a further reminder, attention is drawn to the risks of injury to cargo handlers and to all personnel whilst working adjacent to corrugated bulkheads where those persons may fall (up to 15 metres or more), through openings produced between stowed cargo used as a working or access platform and the rear of the corrugations.

4 Care should be exercised in the welding of plates or other fittings to corrugated bulkheads, to avoid initiation of structural problems.

5 The provision of appropriate facilities to protect those who have to work adjacent to corrugated bulkheads in the holds of such ships should be considered during the design, construction, repair or working of general cargo ships.

6 Member Governments are invited to bring this circular to the attention of shipowners, ship designers, port authorities and stevedores.

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**ANNEX****PREVENTING FALLS AT CORRUGATED BULKHEADS  
IN GENERAL CARGO SHIPS**

Methods suggested to enhance the safety of personnel working in the vicinity of corrugated bulkheads as permanent fittings, principally in new general cargo ships, include:

1. short vertical plates or bars\* fitted horizontally across corrugations at intervals in the height of such bulkheads, to prevent persons falling into the openings produced by the corrugations. This method will not impede the removal of residues when spaces are used for the loading of dry bulk cargo; and
2. horizontal plates at intervals across corrugations to limit the potential distance of falls from cargo.

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\* In fitting the above plates or bars, care should be taken to avoid welding a single plate or bar to both flanges of a corrugation, thus subjecting it as a strut to forces imposed by the squeezing and stretching movements of the corrugation under load. This could buckle or break the plate or bar, and could also initiate structural problems (see paragraph 4 of the circular). To avoid this, plates or bars should be welded as separate free-ended cantilevers to each corrugation flange, as shown in the attached illustrative diagrams. A separation of 150 mm between each two separate cantilevers is suggested.

*Illustrative diagrams*

