



## NAVIGATIONAL BRIDGE RETRACTABLE SOLAR CONTROL SCREENS LEGISLATION

Solar glare has always hindered the safe navigation of mariners at sea; however, it is only in recent years that guidance and recommendations have been published.

The whole issue of the effects of solar glare on safe navigation is underpinned by Rule 5 of the international Collision Regulations entitled 'Look-out'. This reads, '**Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and the risk of collision.**'

Naturally, if solar glare is hindering the mariner in making a full appraisal of the situation and risk of collision, he must have some means of allowing him to do so. This is where **SG GLIDER** retractable solar screens come in. It may be tempting to specify tinted glass in wheelhouse windows but at night this can cause distortions and hinder colour identification of navigation lights. Moreover, **SOLAS, Class Societies, MCA and USCG** specify that polarised and tinted windows should not be fitted. The British **Department of Trade, Merchant Shipping Notice No M.760** reads:-

**2. Owners and builders will no doubt be aware of the possible implications which could arise if a ship with tinted glass wheelhouse windows were involved in a casualty and the question of a proper lookout being maintained became relevant.**

**3. No objection would be raised to the provision of tinted screens or visors to overcome dazzle etc provided that such screens or visors were hinged or otherwise removable.'**

Currently, there are several legislator documents which both: insist on means to allow a clear view at all times regardless of weather conditions, through a minimum of two forward facing windows and additional windows depending on the bridge configuration; AND rule out the fitting of polarised and tinted navigation bridge windows. See below:

- **The Merchant Shipping (Navigation Bridge Visibility) Regulations 1998 – Statutory Instrument No. 1419;**
- **IMO Resolution MSC.31(63) – Regulation 22 – Navigation Bridge Visibility;**
- **USCG Title 46 – Shipping Sub Part 1 Navigation Bridge Visibility;**
- **International Code of Safety for High Speed Craft – Chapter 15.7.2 & 3**
- **ISO8468:1995**

In consideration of the same, and the ever-increasing demands of the marine industry for improved mariner comfort and safety, most new builds and many vessels under refit are specifying and fitting 'retractable solar screens on the bridge windows'.



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**GUIDELINES ON ERGONOMIC CRITERIA FOR BRIDGE EQUIPMENT AND LAYOUT**

1. The Maritime Safety Committee at its seventy-third session (27 November to 6 December 2000), adopted the annexed Guidelines on Ergonomic Criteria for Bridge Equipment and layout which have been developed to assist designers in realising a sufficient ergonomic design of the bridge, with the objective of improving the reliability and efficiency of navigation.
2. These Guidelines have been prepared to support provisions of revised regulation V/15 of the SOLAS Convention – Principles relating to bridge design, design and arrangement of the navigational systems and equipment and bridge procedures, which is expected to enter into force on 1 July 2002.
3. Member Governments are invited to bring these guidelines to the attention of all parties concerned.

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**5.1.1.2.6 Removable Sunscreens**

To ensure a clear view and to avoid reflections in bright sunshine, sunscreens with minimum colour distortion should be provided at all windows. Such screens should be readily removable and not permanently installed.