

# DET NORSKE VERITAS

## EC TYPE-EXAMINATION CERTIFICATE

CERTIFICATE NO. RCD-B-349

This Certificate consists of 3 pages

*This is to certify that the product*

**Portlights**  
274.20

*with type designation(s)*

**Round, Oval and Elliptical Opening Portlights,  
Type LR, LO & LE**

*Manufactured by*

**Man Ship Machinery & Hardware Co. Ltd.**  
KAOHSIUNG 81245, Taiwan

*has been assessed with respect to*

the conformity assessment procedure described in Annex VII (Module B) of  
Council Directive 94/25/EC on Recreational Craft as amended by Directive 2003/44/EC,  
and found to comply with the applicable requirements

*Further details are given overleaf.*

*Place and date*


Høvik, 2008-05-05

for DET NORSKE VERITAS AS



  
Marianne Strand Valderhaug  
*Head of Section*

Notified Body No.: 0575

  
Hallgeir B. Eilertsen  
*Surveyor*



*Notice: The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product may render this certificate invalid.*

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



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Case No.:  
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## Jurisdiction

DNV is appointed by the Norwegian Ministry of Trade and Industry as a "Notified Body" under the terms of the Norwegian regulation - FOR 2004-12-20 nr. 1820 "Forskrift om produksjon og omsetning av fritidsfartøy m.v.", and - Article 9 of Council Directive 94/25/EC as amended.

## Certificate history

This is the original Certificate.

## Product description

Opening types of Portlight. Type designations are listed below.  
Frames of stainless steel (SS) 316  
Glazing of toughened glass  
Glazing attaches to opening frame by silicone sealant  
Hinges of SS 316  
Thumbturns of SS 316 and delrin  
Seal of San-Flex rubber

## Applications/Limitations

May be used on Recreational Craft subject to CE-marking under the Directive 94/25/EC, as amended, in the following, as listed, *Application Location Areas* as defined in ISO12216 on *Any* Craft Type of *Any* Design Category.

Type	Model No.	Glazing dimension (mm)	Glazing thickness (mm)	Application location Area
LR	LR-0500	Ø = 114	8	III & IV
	LR-0600	Ø = 140	8	III & IV
	LR-0700	Ø = 165	8	III & IV
	LR-0800	Ø = 191	8	III & IV
	LR-1000	Ø = 216	10	III & IV
LO	LO-0512	114 x 292	8	III & IV
	LO-0614	140 x 343	8	III & IV
	LO-0714	165 x 343	8	III & IV
	LO-0716	165 x 394	8	III & IV
	LO-0718	165 x 444	8	III & IV
	LO-0816	190 x 394	8	III & IV
	LO-0818	190 x 444	8	III & IV
LE	LE-0718	172 x 438	8	III & IV

The certificate covers products with varying dimensions within the smallest and largest dimensions listed for each type. The glazing thickness shall be increased to the thicker size listed when these products exceed the dimension of the following type: LR-0800



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### Technical documentation

Drawings:

- Round Opening Ports, LR, dated 96-12-20, rev.3
- Oval Opening Ports, LO, dated 96-12-20, rev.3
- Elliptical Opening Ports, LE, dated 96-12-20, rev.3
- Gluing Procedure

### Applied Standards/Tests carried out

Standard:

- ISO12216:2002 Small Craft – Windows, Portlights, Hatches, Deadlights and Doors- Strength and Tightness requirements

Tests:

- Test Report for CE certification of Hatch and Portlight, dated 2002-09-10
- Glue Product test report, dated February 18, 1987

### Terms and conditions

The product liability rests with the manufacturer, his representative or, in the absence of a representative, the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- Changes in the design or construction of the product
- Changes or amendments to the Directive
- Changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the Directive

### Marking of product

This Certificate is concerned with the design of the product, only. In order to fully meet with the requirements of the Directive and legally affix the CE mark, the manufacturer must also have the final product and/or production assessed according to one of the procedures listed below and finally draw up an EC declaration of conformity.

Conformity assessment procedures for production:

- Conformity to type (Annex VIII/Module C)
- Production quality assurance (Annex IX/Module D)
- Product quality assurance (Annex XVI/Module E)
- Product verification (Annex X/Module F)

Other directives, covering other phenomena, and also having requirements related to CE marking, might also apply.

END OF CERTIFICATE