



DET NORSKE VERITAS

EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2002/75/EC, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. MED-B-4073
This Certificate consists of 3 pages

This is to certify that the product
Fire Doors

with the type designation(s)
ALVEDOOR A-60

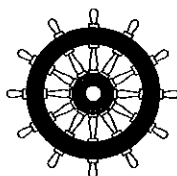
Manufactured by
Alvedoor AB
ALVESTA, Sweden

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.16 and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/9.4.1.1.2, II-2/9.4.1.2.1 & II-2/9.4.2 and IMO FTP Code

Further details of the product and conditions for certification are given overleaf.

Place and date
Høvik, 2006-12-12
for DET NORSKE VERITAS AS

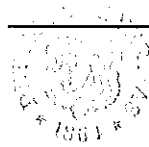
Tore Morten Wetterhus
Manager, MTPNO370
Department Systems & Components



Notified Body No. 0575

This Certificate is valid until
2011-12-12

Rolf Emilsen
Surveyor



DNV local office:
DNV Gothenburg



Notice: The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended.

The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.

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.



Cert. No.: MED-B-4073
Job Id.: 34.1-000658-1
File No.: A.1/3.16

Product description

“ALVEDOOR A-60”

single or double leaf hinged door with door blade made from 1.5 mm steel sheet, insulated with 6 mm thick “Glasroc Multiboard S GRG” of density 1000 kg/m³, on each side of 38 mm thick “Paroc Slab 337-00” of density 140 kg/m³. The door frame may be bolted (max. 300 mm apart) or welded (25 mm in length spaced max. 300 mm apart) to the bulkhead.

Total thickness of door blade is 53.5 mm.

A door may also be fitted with a:

- concealed door closer type “Geze Boxer”.
- hose port with max. clear opening 150 x 150 mm (H x W).
- window type “Contraflam 60-N2-24 Emma Boda Glas”, or Pilkington “Pyrostop 60-10 G II. Max. clear opening 390 x 390 mm (H x W).

Applications/Limitations

Approved for use as and integrated part of fire resisting division of class A-60.

Max clear opening double door: 2200 x 2700 mm (h x w).

Max clear opening single door: 1995 x 975 mm (h x w).

For double leaf door, max size of one single door leaf should not exceed 1350 mm.

The insulation and any surface materials used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Each product is to be supplied with its manual for installation and use.

Type Examination documentation

Test reports No. 94R12545 dated 14 September 1994 and No. 96R12817 dated 29 April 1996 from SP, Borås, Sweden and No. PG10818 dated 21 August 2001, No. PG11117 dated 20 March 2003 and PG 10689 dated 4 September 2000 from DIFT, Hvidovre, Denmark.

Assessment WFRC No. C118314 dated 26 March 2001, No. C122134 dated 27 November 2001 (double door clear opening) and No. C123849 dated 20 March 2002 (door looking system) from Warrington Fire Research, UK.

Drawings:

D 100764A dated 24 August 1993,

100765B dated 15 December 1993,

B200863 dated 28 March 1996,

D200897,

B201376 dated 30 March 2001 (bolted installation),

C201368 dated 14 March 2001 (bolted or welded installation),

B201658 dated 4 July 2003 (“Geze Boxer” door closer).



Auth.



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Hose-stream tested with satisfactory results in accordance with IMO Res. A.754(18), Appendix A.1, Part 5.1.


When the door is fitted with the window Pilkington "Pyrostop 60-10 G II, hose-stream test is not approved.

Tested according to IMO FTPC Part 3 (IMO Res. A.754(18)).

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire-technical rating, Mark of Conformity and USCG marking (see below).

Mark of conformity

The manufacturer is allowed to affix the Mark of Conformity  according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

- Module D: The quality system for production and testing shall be approved by the Notified Body.
- Module E: The quality system for inspection and testing shall be approved by the Notified Body.
- Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

USCG Approval

An U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of certificates of conformity for marine" signed 17 October 2005.

END OF CERTIFICATE

