



# 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 2008/67/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-5635**

This is to certify that the  
**Fire Doors**

with type designation(s)  
**ALVEDOOR A-60**

Manufacturer

**Alvedoor International 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/and IMO FTP Code**

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

**Høvik, 2009-10-22**  
for **Det Norske Veritas AS**

**Eivind Mykland**  
Head of Department



Notified Body No.: **0575**

DNV local office:  
**DNV Gothenburg**

This certificate is valid until  
**2011-12-12**

**Rolf Emilsen**  
Surveyor



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.



Certificate No.: MED-B-5635  
Item No.: A.1/3.16  
Job Id.: 344.1-000658-8

## 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/m<sup>3</sup>, on each side of 38 mm thick "Paroc Slab 337-00" of density 140 kg/m<sup>3</sup>. 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.

The following alternative insulation may be used:

20 mm ABM-SR, of density 150 kg/m<sup>3</sup> + 10 mm fire proof board TCJM-B-1 of density 1200 kg/m<sup>3</sup> + 20 mm ABM-SR. The adhesive UK 8103(B30)/UK 5430 is used to fasten the insulation to the door structure.

The 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).

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

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

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.

Test report No. FT09116 dated 9 July 2009 from Far East Fire Testing Centre, Shanghai, China.

Drawings:

D 202037 dated 7 November 2007 (single door)

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).

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 if applicable (see page 3).





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Job Id.: 344.1-000658-8

### 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 shall 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 of Certificate 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 equipment" signed 17 October 2005.

