



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-4190

This Certificate consists of 5 pages

This is to certify that the
"A" Class divisions, fire integrity

with type designation(s)
A-60 Bulkhead, Aluminium

Manufacturer

Rockwool - Marine & Offshore A/S
Hedehusene, Denmark

Extended until
2012-06-30
Copenhagen
Vagn Andersen

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO FTP Code.

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

Place and date
Høvik, 2007-03-27
for DET NORSKE VERITAS AS



This Certificate is valid until
2011-12-20

Kristen Ulveseter
Manager, MTPNO370
Department Systems & Components

Notified Body No. 0575



Rolf Emilsen
Surveyor

DNV local office:
DNV Copenhagen



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-4190
Job Id.: 344.1-000237-5
Item No.: A1/3.11a

Product description

“A-60 Bulkhead, Aluminium”

Aluminium bulkheads with different insulation solutions are listed in enclosed appendix.

(For latest revision of the appendix, see <http://exchange.dnv.com/tari>).

Applications/Limitations

Approved for use as a class A-60 bulkhead. Applications/Limitations see appendix.

The insulation 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 maintenance.

Type Approval documentation

Given in enclosed appendix

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, the Mark of Conformity and USCG approval (see page 3).





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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 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.





Cert. No.: MED-B-4190
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 Item No.: A1/3.11A

Appendix Rev. No. 2 (2 pages)

QS- Certificate of Assessment-EC, MED-B-4190

Common International Solutions:

Construction	Product Description	Application / Limitations	Type Approval Documentation
Solution no. <u>1 – A60BH-Alu</u> A-60 Bulkhead, Aluminium Rockwool Marine Firebatts 130 2x30 mm / 2x30 mm Both sides	A-60 Bulkhead, Rockwool Marine Firebatts 130. Composed of Aluminium bulkhead insulated with minimum 2 x 30 mm mineral wool of type "Rockwool Marine Firebatts 130" of density 130 kg/m3 between stiffeners, and minimum 2 x 30 mm mineral wool around stiffeners. The bulkhead is to be insulated on both sides, same built-up. The bulkhead insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 / 400 mm, according to drawing.	Approved for use as a Class A-60 Bulkhead. General application. Fire against either side.	Test report PG 10699 / 7735 , 3 October 2000 , DIFT
Solution no. <u>2 – A60BH-Alu</u> A-60 Bulkhead Restricted, Aluminium Rockwool Marine Firebatts 130 2x30 mm / 2x30 mm	A-60 Bulkhead Restricted, Rockwool Marine Firebatts 130. Composed of Aluminium bulkhead insulated with minimum 2 x 30 mm mineral wool of type "Rockwool Marine Firebatts 130" of density 130 kg/m3 between stiffeners, and minimum 2 x 30 mm mineral wool around stiffeners. The bulkhead insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 / 400 mm, according to drawing.	Approved for use as a Class A-60 Bulkhead. Restricted application with fire against the insulated side.	Test report PG 10125 / 5996 , 26 January 1996 , DIFT
Solution no. <u>3 – A60BH-Alu</u> A-60 Bulkhead, Aluminium Rockwool Marine Firebatts 100 2x30 mm / 2x30 mm Both sides	A-60 Bulkhead, Rockwool Marine Firebatts 100. Composed of Aluminium bulkhead insulated on both sides with minimum 2 x 30 mm mineral wool of type "Rockwool Marine Firebatts 100" of density 100 kg/m3 and on stiffeners side between stiffeners and upon stiffeners. The bulkhead insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 / 400 mm, according to drawing.	Approved for use as a Class A-60 Bulkhead. General application. Fire against either side.	Test report 2009CS01950/3 dated 7 April 2009 from RINA, Italy.



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Appendix Rev. No. 2(2 pages)

QS- Certificate of Assessment-EC, MED-B-4190

Local National Solutions:

Construction	Product Description	Application / Limitations	Type Approval Documentation	National Country
Solution no. A – A60BH-Alu A-60 Bulkhead Restricted, Aluminium Rockwool Marine Wired Mat 125 2x30 mm / 2x30 mm	A-60 Bulkhead Restricted, Rockwool Marine Wired Mat 125 Composed of Aluminium bulkhead insulated with minimum 2 x 30 mm mineral wool of type "Rockwool Marine Wired Mat 125" of density 125 kg/m ³ between and above stiffeners. The bulkhead insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 / 400 mm, according to drawing.	Approved for use as a Class A-60 Bulkhead. Restricted application with fire against the insulated side.	Test report 103020.07 SINTEF 15.10.2001	Norway Rockwool Firemat 100 (Brannmatte)

Place and date
Høvik, 2010-06-24


Rolf Emilsen
Surveyor



END OF CERTIFICATE