



DNV

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-4186

This Certificate consists of 5 pages

This is to certify that the

"A" Class divisions, fire integrity

with type designation(s)

A-30 Deck, Steel

Manufacturer

Rockwool - Marine & Offshore A/S

Hedehusene, Denmark



Copenhagen
Vagn Andersen

Extended until
2012-06-30

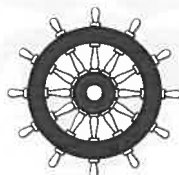
is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO FTP Code.

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

Place and date

Høvik, 2007-03-27

for DET NORSKE VERITAS AS



Notified Body No. 0575

This Certificate is valid until

2011-12-20

[Signature]
Kristen Ulveseter

Manager, MTPNO370
Department Systems & Components

[Signature]
Rolf Emilsen

Surveyor

DNV local office:



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-4186
Job Id.: 344.1-000237-5
Item No.: A1/3.11a

Product description

“A-30 Deck, Steel”

Steel deck 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-30 deck. 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-4186
 Job Id.: 344.1-000237-5/7/8
 Item No.: A1/3.11a

Appendix Rev. No. 2 (2 pages)

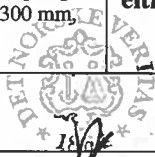
QS- Certificate of Assessment-EC, MED-B-4186

Common International Solution:

Construction	Product Description	Application / Limitations	Type Approval Documentation
Solution no <u>1 - A30DCK</u> A30- steel deck Rockwool Marine batts 45. 50 mm / 30 mm	A-30 Deck, Rockwool Marine Batt 45. Composed of steel deck insulated on the underside of the deck with minimum 50 mm mineral wool of type "Rockwool Marine Batt 45" of density 45 kg/m ³ between stiffeners, and minimum 30 mm mineral wool of type "Rockwool Marine Batt 45" around stiffeners. The deck insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 mm, according to drawing.	Approved for use as a Class A-30 Deck. General application: Fire against either side.	Test Report PG 10985 sn8431 DIFT 13.08.2002
Solution no <u>2 - A30DCK</u> A30- steel deck Rockwool Marine Wired Mat 90. 30 mm / 30 mm	A-30 Deck, Rockwool Marine Wired Mat 90. Composed of steel deck insulated on the underside of the deck with minimum 30 mm mineral wool of type "Rockwool Marine Wired Mat 90" of density 90 kg/m ³ between stiffeners, and minimum 30 mm mineral wool of type "Rockwool Marine Wired Mat 90" around stiffeners. The deck insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 mm, according to drawing.	Approved for use as a Class A-30 Deck. General application: Fire against either side.	Test Report GH95.15.1. Brandversuchshua s Hamburg 24.10.1995

Local National Solutions:

Construction	Product Description	Application / Limitations	Type Approval Documentation	National Country
Solution no. <u>A - A30DCK</u> A-30 Steel Deck Rockwool Shiprock plus 60 mm / 60 mm	A-30 Deck, Shiprock plus. Composed of steel deck insulated on the underside of the deck with minimum 60 mm mineral wool of type "Rockwool Shiprock plus" of density 27 kg/m ³ between stiffeners, and minimum 60 mm mineral wool of type "Rockwool Shiprock plus" around stiffeners. The deck insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 mm, according to drawing.	Approved for use as a Class A-30 Deck. General application: Fire against either side.	Test Report PG 11284 DIFT 12.05.2004 Assessment PG 11408 DIFT 21.03.2005	German Solution





Cert. No.: MED-B-4186
 Job Id.: 344.1-000237-5/7/8
 Item No.: A1/3.11a

Appendix Rev. No. 2 (2 pages)

QS- Certificate of Assessment-EC, MED-B-4186

Construction	Product Description	Application / Limitations	Type Approval Documentation	National Country
Solution no <u>B – A30DCK</u> A-30 Steel Deck Rockwool Marine Wired Mat 35 50 mm / 50 mm	A-30 Deck , Rockwool Marine Wired Mat 35 Composed of steel deck insulated on the underside of the deck with minimum 50 mm mineral wool of type "Rockwool Marine Wired Mat 35" of density 35 kg/m ³ between stiffeners, and minimum 50 mm mineral wool of type "Rockwool Marine Wired Mat 35" around stiffeners. The deck insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 mm, according to drawing.	Approved for use as a Class A-30 Deck. General application. Fire against either side.	Test Report 250000.42/94.387-A SINTEF 02.01.1995 and 846060/96.068 SINTEF 20.02.1996 Drawing RW-FP-M013 20.12.1994	Norwegian Solution Rockwool Marine Mat / Comfort Marine A
Solution no <u>C – A30DCK</u> A-30 Steel Deck Rockwool Marine Firebatts 100 25 mm / 25 mm	A-30 Deck , Rockwool Marine Firebatts 100 Composed of steel deck insulated on the underside of the deck with minimum 25 mm mineral wool of type "Rockwool Marine Firebatts 100" of density 100 kg/m ³ between stiffeners, and minimum 25 mm mineral wool of type "Rockwool Marine Firebatts 100" around stiffeners. The deck insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 300 mm, according to drawing.	Approved for use as a Class A-30 Deck. General application. Fire against either side.	Test Report 96-DG-348-TO/I RINA 1996-08-22	Benelux / France Solution Rockwool 759
Solution no <u>D – A30DCK</u> A-30 Steel Deck Rockwool Marine Firebatts 100 40 mm / 40 mm	A-30 Deck , Rockwool 759 Composed of steel deck insulated on the underside of the deck with minimum 40 mm mineral wool of type "Rockwool 759" of density 100 kg/m ³ between stiffeners, and minimum 40 mm mineral wool of type "Rockwool 759" around stiffeners. The deck insulation is mounted with standard 3 mm steel pins and 38 mm steel clips (spring washers) at intervals of approx 400mm, according to drawing.	Approved for use as a Class A-30 Deck. General application. Fire against either side.	Test Report G-10389 DIFT 1998-03-17	Benelux / France Solution Rockwool 759

Place and date
 Høvik, 2009-11-02

Rolf Emilsen
 Surveyor

END OF CERTIFICATE

