

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB000005S**  
Revision No:  
**2**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

## This is to certify:

**That the "A" Class divisions, fire integrity**

with type designation(s)

**Steel Deck A60 with SeaRox FB 6020/SeaRox FB 6050 or SeaRox FM 6040 ALU or SeaRox FB 6020/SeaRox FM 6040 ALU**

Issued to

**Rockwool International A/S  
HEDEHUSENE, Denmark**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

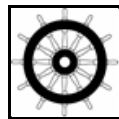
**Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code**

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

This Certificate is valid until **2020-09-28**.

Issued at **Høvik** on **2017-03-08**

DNV GL local station:  
**Copenhagen**



for **DNV GL AS**

Approval Engineer:  
**Fryderyk Hoga**

Notified Body  
No.: **0575**

**Vidar Dolonen**  
**Head of Notified Body**

A 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.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-004880-3**  
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## Product description

"Steel Deck A60 with SeaRox FB 6020/SeaRox FB 6050 or SeaRox FM 6040 ALU or SeaRox FB 6020/SeaRox FM6040 ALU"

composed of steel deck to be insulated with one of the following variants:

1. SeaRox FB 6020 (density 40 kg/m<sup>3</sup>) between the stiffeners and SeaRox FB 6050 (density 70 kg/m<sup>3</sup>) around and upon the stiffeners OR
2. SeaRox FM 6040 ALU (density 60 kg/m<sup>3</sup>) between and over the stiffeners as one layer OR
3. SeaRox FB 6020 (density 40 kg/m<sup>3</sup>) between the stiffeners and SeaRox FM 6040 ALU (density 60 kg/m<sup>3</sup>) around and upon the stiffeners.

### For variant 1:

Minimal thickness of the insulation on the deck between the stiffeners is 70 mm. Minimal thickness of the insulation around and upon the stiffeners is 30 mm. Insulation density range on the deck between the stiffeners is 40-100 kg/m<sup>3</sup> and on the stiffeners 70-100 kg/m<sup>3</sup>.

### For variant 2:

Minimal thickness of the insulation on the deck between and over the stiffeners is 50 mm. Insulation density range on the deck between stiffeners and over the stiffeners is 60-100 kg/m<sup>3</sup>.

### For variant 3:

Minimal thickness of the insulation on the deck between the stiffeners is 70 mm. Minimal thickness of the insulation around and upon the stiffeners is 35 mm. Insulation density range on the deck between the stiffeners is 40-100 kg/m<sup>3</sup> and on the stiffeners 60-100 kg/m<sup>3</sup>.

### For all variants:

- The insulation is fixed to the deck by means of standard 3 mm pins in combination with 30-38 mm diameter steel clips (spring washers).
- Distance between pins on the stiffeners is maximum 300 mm. Distance between pins on the deck (between stiffeners) is maximum 300 mm.

For further details about pin-settings and design see drawings listed under Type Examination documentation below.

## Application/Limitation

Approved for use as a horizontal fire retarding division of class A-60.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

## Type Examination documentation

Test report Nos.:

- PGA10659 dated 6 May 2015
- PGA10732 dated 21 September 2015

Both test reports from DBI (Danish Institute of Fire and Security Technology), Hvidovre, Denmark.

Assessment Report Nos.:

- PHA10629a dated 8 July 2015 (valid until 31 July 2020)
- PHA10629b dated 8 July 2015 (valid until 31 July 2020)
- PHA10629c dated 8 July 2015 (valid until 31 July 2020)
- PHA10629d dated 8 July 2015 (valid until 31 July 2020)
- PHA10629e dated 8 July 2015 (valid until 31 July 2020)
- PHA10629f dated 11 August 2016 (valid until 31 August 2021)

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- PHA10840a dated 18 August 2016 (valid until 31 August 2021)
- PHA10840b dated 22 August 2016 (valid until 31 August 2021)
- PHA10840c dated 25 August 2016 (valid until 31 August 2021)
- PHA10840d dated 29 August 2016 (valid until 31 August 2021)

All assessment reports from DBI (Danish Institute of Fire and Security Technology), Hvidovre, Denmark.

Drawing Nos. from 120-1 to 120-5 dated 2 July 2015, from 130-1 to 130-4 dated 29 July 2016 and from 330-1 to 330-4 dated 26 May 2016, all from the manufacturer.

### **Tests carried out**

Tested according to IMO 2010 FTP Code part 3.

### **Marking of product**

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval number if applicable (see first page).