



Marine & Offshore

Certificate number: 70473/A0 BV

File number: AC11000/353/044

Product code: 5080H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Rockwool International A/S**

Hedehusene - DENMARK

*for the type of product*

**A60 CLASS DECKS**

A-60 Class Steel Deck insulated with SeaRox SL 620

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships Part C, Chapter 4

SOLAS 74 Convention as amended, Regulations II-2/9, II-2/3.4

IMO Resolution MSC.307(88) - (2010 FTP Code)

IMO MSC/Circ.1120, IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1435 and IMO MSC.1/Circ.1616

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 28 Jul 2027**

**For Bureau Veritas Marine & Offshore,**

At BV FREDERICIA, on 28 Jul 2022,

Jesper JENSEN

***This certificate was created electronically and is valid without signature***



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

#### **A-60 Class Steel Deck insulated with SeaRox SL 620**

Composed of a structural steel deck insulated on the side exposed to fire (underside of the deck) with mineral wool type "SeaRox SL 620" (density 100-130 kg/m<sup>3</sup>, see §3.2.1) as follows:

- between stiffeners: a minimum thickness of 40 mm (see §3.2.1),
- around and upon stiffeners: a minimum thickness of 25 mm (see §3.2.1).

Alternative stiffener shapes and different mounting methods for the insulation are also approved (see §3.2.2 and §3.2.3).

The insulation is fixed to the bulkhead by means of standard Ø3 mm steel pins in combination with Ø30~38 mm diameter steel spring washers (see §3.2.4).

Maximal distance between pins on the stiffeners:	300 mm
Maximal distance between pins on the plate (between stiffeners):	300 mm
Maximal distance from the joints to the pins:	150 mm

Alternative pin pattern is also approved (see §3.2.5).

### 2. DOCUMENTS AND DRAWINGS:

As per the Manufacturer's drawings N° 2017003 dated 09/01/2017 and N° 440-1 to N° 440-4 dated 09/02/2017.

### 3. TEST REPORTS:

3.1 - Test report N° PGA10982A dated 27/01/2017, as per IMO 2010 FTP Code Annex 1 Part 3, from DBI, Denmark.

#### 3.2 - Technical assessments from DBI, Denmark:

- 3.2.1 - N° PHA10906A dated 22/02/2017 (insulation with greater thickness and/or density),
- 3.2.2 - N° PHA10906B dated 22/02/2017 (alternative steel stiffeners and mounting methods for the insulation),
- 3.2.3 - N° PHA10906C dated 22/02/2017 (pre-cut insulation to the shape of the stiffener/bulb for the insulation around stiffeners),
- 3.2.4 - N° PHA10906D dated 22/02/2017 (steel washer with diameter from 30 mm up to 38 mm),
- 3.2.5 - N° PHA10906E dated 22/02/2017 (rectangular pin pattern instead of triangular pin pattern).

### 4. APPLICATION / LIMITATION:

4.1 - The fitting aboard should be the same as used for the test or as per referenced technical assessments (see §3.2) for approved alternatives.

4.2 - The following components have to be covered by a valid type approval certificate, issued by the Society:

- the insulating material "SeaRox SL 620",
- any added finish surface material(s).

### 5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **A-60 Class Steel Bulkhead insulated with SeaRox SL 620** is to be supplied by **Rockwool International A/S** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **Rockwool International A/S** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **Rockwool International A/S** has declared to Bureau Veritas the following production sites:

<b>Rockwool International A/S</b> <b>Hovedgade 584</b> <b>Hedehusene</b> <b>DENMARK</b>	<b>Rockwool A/S</b> <b>Industrivej 9</b> <b>6580 Vamdrup</b> <b>DENMARK</b>	<b>Rockwool Peninsular SAU</b> <b>Pol. Industrial de Caparroso</b> <b>Ctra. De Zaragoza</b> <b>Caparroso</b> <b>SPAIN</b>	<b>Roxul Rockwool Insulation</b> <b>India Pvt. Ltd.</b> <b>Plot No.- Z/4 - Dahej SEZ</b> <b>District Bharuch - Dahej</b> <b>INDIA</b>
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### 6. MARKING OF PRODUCT:

The product or packing is to be marked with Manufacturer name, type, designation and fire-technical rating.

**7. OTHERS:**

It is **Rockwool International A/S**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

**\*\*\* END OF CERTIFICATE \*\*\***