



Lloyd's
Register

CERTIFICATE OF FIRE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	Rockwool International A/S
Address	Hovedgaden 501 2640 Hedehusene Denmark
Type	A-60 DECK
Description	Fire-Resisting 'A' Class Deck - Type "Steel Deck A60 with SeaRox FB6020 / SeaRox FB6050/Searox FM6040 ALU"
Specified Standard	IMO Res. MSC.307(88) - (2010 FTP Code) Annex 1 Part 3

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Date of issue	20 March 2017	Expiry date	19 March 2022
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Certificate No.	SAS F170064
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Signed

Sheet No	1 of 3
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Name

B. McDonald
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid Certificate.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



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DESIGN APPRAISAL DOCUMENT

Date 20 March 2017	Quote this reference on all future communications SOUTSO/SFS/TA/BM/WP28748470
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F170064

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Danish Institute of Fire and Security Technology, Jernholmen 12, DK-2650 Hvidovre, Denmark; Test Report No. PGA10659 dated 6th May 2015 and PGA10732 dated 9th November 2015.

CONDITIONS OF CERTIFICATION

1. When used in conjunction with an approved A Class deck
2. Consisting of: steel deck insulated on underside with one layer of (70mm thick, 40 kg/m³ density) "SeaRox FB 6020" applied on the steel plate and retained by steel pins and washers at maximum 300mm horizontal x 250mm staggered vertical centres and 145mm from insulation joints with 2 pin rows, 100mm from insulation joints with 1 pin rows. Stiffeners insulated with three layers of (30mm thick, 70 kg/m³ density) "SeaRox FB 6050" inside stiffeners, and one layer of (30mm thick, 70 kg/m³ density) "SeaRox FB 6050" surrounding the outside of the stiffeners in 3 strips of 100mm, 100mm and 140mm width. Insulation strip mounted on external face of stiffener parallel to bulkhead face retained with steel pins and washers at 300mm centres. Steel pins 3mm diameter, steel washers 30mm diameter Or
3. One layer of 50mm thick SeaRox FM6040 Alu (density 60kg/m³) , the insulation is to be retained by steel pins and washers at 300mm centres horizontally and 500mm vertically. The insulation is to be wrapped around the deck stiffeners
4. Composition and application of insulation material to be maintained in production and use in accordance with originally tested composition formula and method of application, and manufacturer's instructions
5. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype

PLACES OF PRODUCTION

Rockwool A/S Moss Trondheim Norway	Roxul Asia Sdn. Bhd. 75450 Melaka Malaysia	Rockwool Hungary 8300 Tapolca Hungary
Rockwool BV NL-6045 JG Roermond The Netherlands	Rockwool Peninsular S.A.U. E-31380 Caparros Spain	Rockwool a.s. 735 31 Bohumin 3 Czech Republic
Rockwool Ltd Pencoed Bridgend Wales, CF35 6NY United Kingdom	Roxul Rockwool Insulation India Pvt. Ltd. Plot - Z/4, Dahej SEZ, Dahej District Bharuch - 392 130 Gujarat India	Deutsche Rockwool GmbH & Co. OHG Ruhrstrasse 13 DE-86633 Neuburg a.d. Donau Germany



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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F170064

Rockwool A/S Rockwoolvej Ø Doense DK-9500 Hobro Denmark	Rockwool A/S Industrivej DK-6580 Vamdrup Denmark
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Bruce McDonald
TSC Manager - Americas, Marine
Lloyd's Register Americas
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).

