

Certificate Of Fire Approval

This is to certify that the product(s) detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations for use on offshore units classed with Lloyd's Register, and for use on offshore units and onshore facilities when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	Rockwool BV
Address	Attn. Rockwool Technical Insulation, P.O. Box 1160, 6040 KD, Roermond The Netherlands
Type	H-60 DECK (HYDROCARBON FIRE TEST)
Description	Fire Resisting Steel Deck Insulated on Underside (Fire Exposed Side) with "SeaRox SL 660". Total insulation thickness 100mm as per drawing (23) 4.007
Trade Name	SeaRox SL 660
Specified Standard	IMO Res. A.754(18) – (FTP Code) Performance Criteria UK Department of Energy Hydrocarbon Time/Temperature Relationship

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form 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.

71 Fenchurch Street, London, EC3M 4BS, United
Kingdom

Keith Taylor

Team Lead Fire & Safety to Lloyd's Register
EMEA
A member of the Lloyd's Register group

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2012717SF

This Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal of Certificate Number SAS F150046

APPROVAL DOCUMENTATION

RINA Fire Protection Research Laboratory, Genova, Italy; Test Report No. 2008CS016071/1 dated 9th March 2009.

CONDITIONS OF CERTIFICATION

1. H-60 Steel Deck Insulation System consisting of: 4.5mm thick steel deck; insulated on the Stiffened Underside (Fire Exposed Side) and around stiffeners with two layers of "SeaRox SL 660" (each 50mm thick, 150kg/m³ density) with staggered insulation joints and retained to the steel bulkhead with 3mm welded steel pins and steel washers spaced at 100mm up to 400mm centres, with pins spaced at 50mm centres from outer insulation joints
2. Composition and application of insulation material, including any flame retardants, to be maintained in production and use in accordance with originally tested composition formula and method of application, and Manufacturer's instructions
3. 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
4. The Certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products, whether manufactured by themselves or their licensee manufacturers, if agreed by Lloyd's Register, are fully compliant with the relevant statutory regulations and Lloyd's Register Class Rules as applicable and designed and manufactured to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties

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PLACE OF PRODUCTION

Rockwool A/S
2640 Hedehusene
Vamdrup
Doense
Denmark

Rockwool A/S
Moss
Trondheim
Norway

Rockwool Adriatic d.o.o.
52 333 Potpičan
Croatia

Rockwool Polska Sp. z.o.o.
66-131 Cigacicie
Poland

Deutsche Rockwool GmbH & Co. OHG
Flechtingen
Neuburg
Gladbeck
Germany

Rockwool Hungary
8300 Tapolca
Hungary
Poland

Rockwool BV
NL-6045 JG Roermond
The Netherlands

Rockwool France
63700 Saint Eloy Les Mines
France

Rockwool Peninsular S.A.U.
E-31380 Caparros
Spain

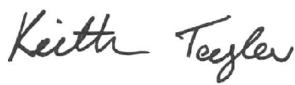
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75450 Melaka
Malaysia

Flumroc AG
8890 Flums
Switzerland

Rockwool Ltd
Pencoed
Bridgend
Wales, CF35 6NY
United Kingdom

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Hovedgaden 501
2640 Hedehusene
Denmark

Roxul Rockwool Insulation India Pvt. Ltd.
Plot No. Z/4, Dahej SEZ
Dahej, District Bharuch
India



Keith Taylor
Team Lead, Fire & Safety
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
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).