

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 BULKHEAD (Restricted Application)
Description	Fire Resisting Steel Bulkhead, Insulated on the Stiffened Face (Fire Exposed Side) with "SeaRox SL 660 / SeaRox WM 660". Total insulation thickness: 70mm as per drawing (21) 4.005
Trade Name	SeaRox SL 660 / SeaRox WM 660
Specified Standard	IMO Res. A.754(18) – (FTP Code) Performance Criteria Hydrocarbon Time/Temperature Relationship – EN 1363-2

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. LR2012720SF

This Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal of Certificate Number SAS F150047

APPROVAL DOCUMENTATION

Danish Institute of Fire and Security Technology (DBI), Test Report No. PG11983 Serial No. 11851 dated 15th January 2009.

CONDITIONS OF CERTIFICATION

1. Insulated face of the division to be exposed to the fire risk in all cases
2. H-60 Steel Bulkhead Insulation System (Restricted Application) consisting of: 4.5mm thick steel bulkhead; insulated on the Stiffened Face (Fire Exposed Side) with one layer of "SeaRox SL 660" (30mm thick, 150kg/m³ density) and one layer of "SeaRox WM 660" (40mm thick, 150kg/m³ density) with staggered joints. The insulation was retained to the steel bulkhead with 3mm diameter welded steel pins and steel washers 28mm diameter staggered and spaced at 400mm centres on steel plate and 300mm centres on steel stiffeners. The steel stiffeners were insulated with one layer of "SeaRox WM 660" (40mm thick, 150kg/m³ density) and strips of inserts below stiffeners of one layer of "SeaRox SL 660" (50mm thick, 150kg/m³ density)
3. 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
4. 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
5. 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 Caparroso Spain
Roxul Asia Sdn. Bhd. 75450 Melaka Malaysia	Flumroc AG 8890 Flums Switzerland	Rockwool Ltd Pencoed Bridgend Wales, CF35 6NY United Kingdom
Rockwool International A/S 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).