

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 A/S
Address	Hovedgaden 501 2640 Hedehusene Denmark
Type	MATERIAL HAVING LOW FLAME SPREAD CHARACTERISTICS & NOT CAPABLE OF PRODUCING EXCESSIVE QUANTITIES OF SMOKE & TOXIC PRODUCTS OF COMBUSTION
Description	Fire Resisting Material - Type: "Rockwool Marine Firebatts Insulation with type: '7628' Glass Cloth surface covering"
Specified Standard	IMO Res. MSC.61(67) - (FTP Code), Annex 1, Part 5 and Annex 2 IMO MSC/Circ 1120

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	13 July 2011	Expiry date	12 July 2016
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Certificate No.	SAS F110280
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Signed



The signature block contains a handwritten signature in black ink that reads "S. Abraham". To the right of the signature is a red rectangular stamp. The stamp contains the text "Groningen Office" in a smaller font, "Lloyd's Register EMEA" in a larger font, and the Lloyd's Register logo (a stylized 'L' inside a square) to the right.

Sheet No	1 of 3
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Name

S. Abraham
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, 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 Group'. The Lloyd's Register Group 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 Group 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."

DESIGN APPRAISAL DOCUMENT

Date 13 July 2011	Quote this reference on all future communications LDSO/SFS/TA/SA
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F110280

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Danish Institute of Fire and Security Technology Test Reports No: PF11113A and PF11113B both dated 25 September 2001 and No: PF12473a and PF12473b both dated 26 October 2006.

CONDITIONS OF CERTIFICATION

1. When applied to approved non-combustible "Rockwool wool Marine Firebatts insulation" (45kg/m³ density or higher)
2. Consisting of: (0.18mm thick, weight 213 g/m²) type: "7628" glass cloth surface covering manufactured by Porcher Industries, bonded to the insulation using type: "BASF DIOFAN 233D" adhesive or type: 'PVDC DIOFAN A050' adhesive applied at 80 g/m².
3. Smoke and toxicity criteria is satisfied by meeting the total heat release (Q_t) and peak heat release rate (q_p) as stated in IMO Fire Test Procedures Code, Annex 2, Section 2.2.
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.

PLACE OF PRODUCTION

Rockwool Technical Insulation
 P.O Box 1160
 6040 KD Roermond
 The Netherlands

Rockwool A/S
 Moss
 Trondheim
 Norway

Rockwool Polska Sp.z.o.o.ul
 Cigacice
 Poland

Deutsche Rockwool GmbH & Co OHG
 Flechtingen
 Neuburg
 Gladbeck
 Germany

Rockwool BV
 Roermond
 Netherlands

Rockwool France
 Saint Eloi Les Mines
 France

Roxul Asia Sdn. Bhd
 Melaka
 Malaysia

Flumroc AG
 Flums
 Switzerland

Rockwool Adriatic d.o.o
 Potpican
 Croatia

Rockwool Peninsular S.A.U
 Caparoso
 Spain

Rockwool Hungary
 Tapolca
 Hungary

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DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F110280



Saji Abraham
Surveyor
Statutory Fire & Safety
London Design Support Office
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).