



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	A-60 BULKHEAD
Description	Steel Bulkhead Insulated on One Side with "ROCKWOOL MARINE FIREBATT 120 (80mm thick, 120 kg/m ³ density)
Specified Standard	IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 3 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 11 February 2010 Expiry date 10 February 2015

Certificate No. SAS F100037

Signed

The signature is handwritten in black ink. To its left is a circular red stamp containing the text "LLOYD'S REGISTER EMEA" at the top, "Lloyd's Register" in the center, and "COPENHAGEN DESIGN SURVEILLANCE" at the bottom.

Sheet No 1 of 2

Name

P. Galbraith
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 11 February 2010	Quote this reference on all future communications LDSS/TA/SFS/MHE/PG
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F100037

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Norwegian Fire Research Laboratory (SINTEF), Test Report No. 250000.42/95.233 dated 13 July 1995.

CONDITIONS OF CERTIFICATION

1. Consisting of: one layer of "Rockwool Marine Fire Batt 120 (80mm thick, 120kg/m³ density) retained to the steel bulkhead with 3mm diameter welded steel pins and steel washers 38mm diameter spaced at 300mm centres on steel plate and 300mm centres on steel stiffeners and staggered 150mm to the plating washers. The steel stiffeners were insulated with one layer of "Rockwool Firebatt 120 (30mm thick, 120kg/m³ density). Insulation to be covered with ¾" galvanised hexagonal 25mm wire mesh over the steel pins with additional washers 38mm diameter.
2. 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 A/S Vamdrup Industrivej DK-6580 Vamdrup Denmark	A/S Rockwool Vaerlegst 5 N-1501 Moss Norway	A/S Rockwool Leangenalle 1 Postbox3 903	Rockwool A/S Oster Doense 9500 Hobro Denmark	Rockwool Lapinus Productie B.V Industreweg 15 NL-6045 JG Roermond The Netherlands
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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).

Paul Galbraith
 Lead Specialist
 Statutory Fire & Safety
 London Design Support Services
 Lloyd's Register EMEA

