

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 584 C, Hedehusene, 2640, Denmark |
| Type | A-60 Bulkhead |
| Description | Fire-Resisting 'A' Class Bulkhead – Type "Steel Bulkhead A60 with "SeaRox SL620" |
| Trade Name | "SeaRox SL620" |
| Specified Standard | IMO Res. MSC.307(88) - (2010 FTP Code) Annex 1 Part 3 |

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.



Saji Abraham

Surveyor to Lloyd's Register EMEA
A member of the Lloyd's Register group

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

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 '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.

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F170185-02

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Design Appraisal Document forms part of the Certificate.

This Certificate is an amendment of Certificate number SAS F170185

APPROVAL DOCUMENTATION

TEST REPORTS

Danish Institute of Fire and Security Technology, Jernholmen 12, DK-2650 Hvidovre, Denmark; Test Reports No. PGA10946A dated 16th January 2017 and No. PHA109095A-E dated 23rd February 2017. Manufacturers drawings 430 1-4 dated 9th February 2017.

CONDITIONS OF CERTIFICATION

1. When used in conjunction with an approved A Class bulkhead
2. Consisting of steel bulkhead insulated with SeaRox SeaRox SL 620 (density 100kg/m³) between the stiffeners and SeaRox SL 620 (density 100kg/m³) around the stiffeners
3. Minimal thickness of the insulation on the bulkhead is 60mm. Minimal thickness of the insulation around the stiffeners is 25mm. Insulation density range on the bulkhead between the stiffeners is 100-130kg/m³ and on the stiffeners 100-130kg/m³
4. The insulation is fixed to the bulkhead by means of standard 3mm pins in combination with 30-38mm diameter steel clips (spring washers). Distance between pins on stiffeners is maximum 300mm. Distance between pins on the bulkhead (between stiffeners) is maximum 300mm. For further details about pin-setting and design see manufacturers drawings 430 1-4 dated 9th February 2017
5. 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
6. 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
7. 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

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F170185-02

PLACE OF PRODUCTION

Rockwool International A/S
Hovedgaden 501
2640 Hedehusene
Denmark

Rockwool A/S
Moss
Trondheim
Norway

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

Rockwool BV
NL-6045 JG Roermond
The Netherlands

Rockwool Hungary
8300 Tapolca
Hungary

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

Rockwool Ltd
Pencoed
Bridgend
Wales CF35 6NY
United Kingdom (UK)

Rockwool Grand Forks
6526 Industrial Park Way
PO Box 2890
Grand Forks
Canada

Roxul USA, Inc
4594 Cayve Road
Byhalia
United States of America (USA)

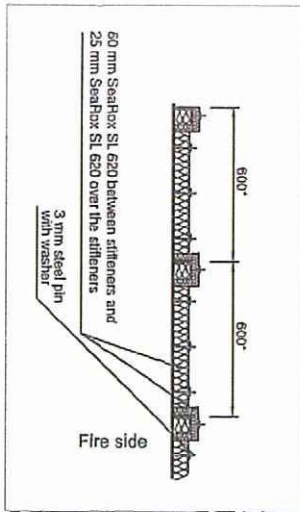
Roxul, Inc
805 Steeles Avenue West
Milton
Ontario
Canada



Saji Abraham
Senior Specialist
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).

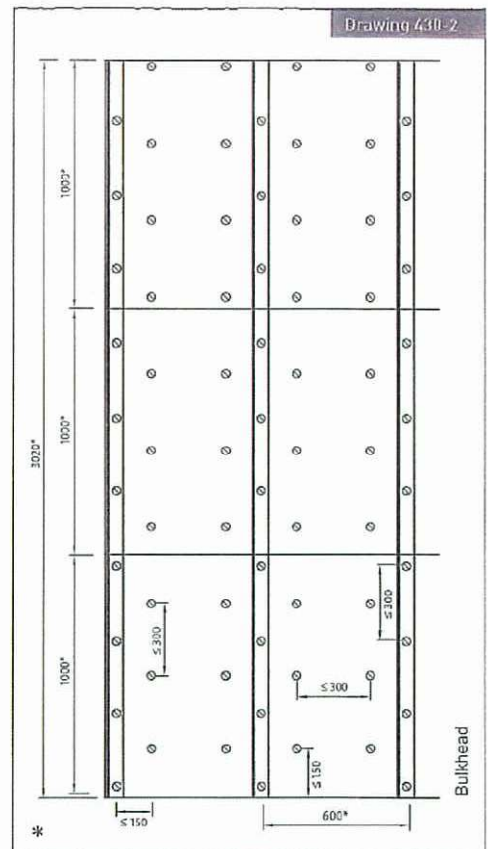
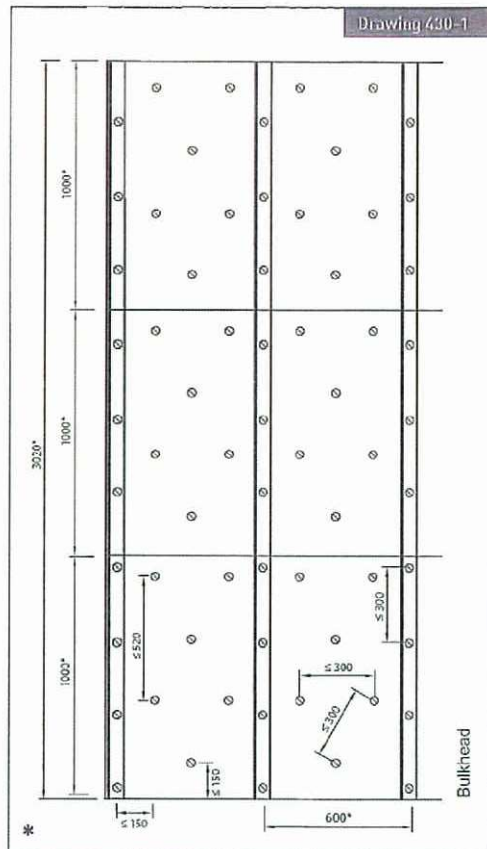


Danish Institute of Fire and Security Technology

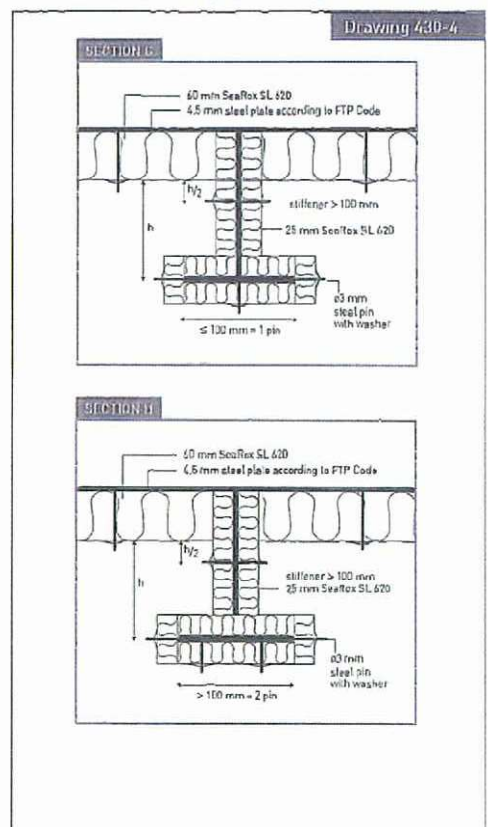
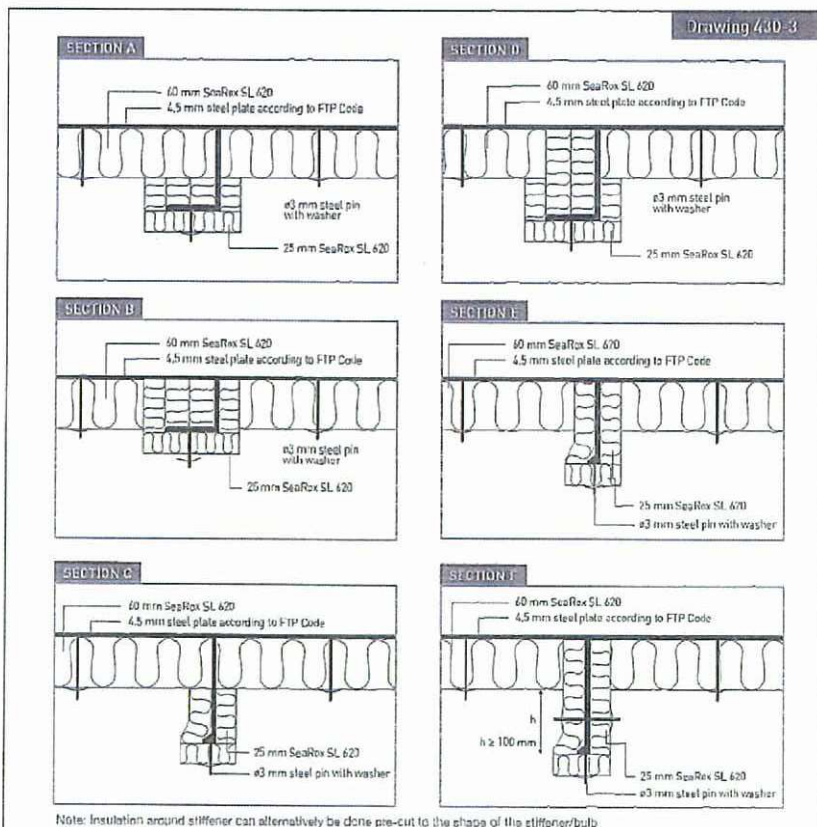
File no.

PHA10905B

[Signature]



* Dimensions may vary depending on structural design and size of insulation slab.



All measurements in mm

Date: 2017/02/09

Subject: A-60 Bulkhead SeaRox SL 620/ SeaRox SL 620

Assessment Report Nos.:

ROCKWOOL®
TECHNICAL INSULATION