

## CERTIFICATE OF FIRE APPROVAL

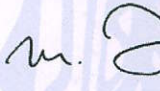

This is to certify that

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<br>2640 Hedehusene<br>Denmark   |
| Type               | A-60 BULKHEAD  |
| Description        | Steel Bulkhead insulated on the fire exposed side with "ROCKWOOL MARINE FIRE BATT 130 (50mm thick, 130kg/m <sup>3</sup> density) |
| Specified Standard | IMO Fire Test Procedures Code, Annex 1, Part 3   |

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   | 18 July 2006 | Expiry date | 17 July 2011  |
| Certificate No. | SAS F060199  | Signed      | <br> |
| Sheet No        | 1 of 2       | Name        | M. Farrier<br>Surveyor to Lloyd's Register EMEA<br>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<br>18 July 2006 | Quote this reference on all future communications<br>LDSS/PAS/FITA/MF |
|----------------------|---|

### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F060199

This Design Appraisal Document forms part of the Certificate.

#### APPROVAL DOCUMENTATION

DIFT Danish Institute of Fire Technology, Copenhagen, Denmark, Fire Test Report No. G10095, dated January 1996.

#### CONDITIONS OF CERTIFICATION

1. Insulated face of the division to be exposed to the fire risk side in all cases.
2. Application restricted to stairway enclosures, life trunks and control room boundaries, where the insulation faces the fire hazard.
3. Consisting of: one layer of "Rockwool Marine Fire Batt 130 (50mm thick, 130kg/m<sup>3</sup> density) retained to the steel bulkhead with 3mm diameter welded steel pins and steel washers 38mm diameter spaced at 250mm centres on steel plate and 300mm centres on the steel stiffeners.
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 A/S  
Industrivej 9-11  
DK-6580 Vamdrup  
Denmark

Rockwool A/S  
Øster Doense  
DK-9500 Hobro  
Denmark

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*M. Farrier*



Martin Farrier  
Lead Specialist  
Product Approval Services  
London Design Support Services  
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).*