



Lloyd's  
Register

## 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 installations classed with Lloyd's Register, and for use on offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

|                           |  |
|---------------------------|--|
| <b>Manufacturer</b>       | Paroc Group Oy   |
| <b>Address</b>            | Energiakuja 3<br>P.O Box 240<br>FIN-00181 Helsinki<br>Finland  |
| <b>Type</b>               | <b>H-60 BULKHEAD</b>   |
| <b>Description</b>        | Fire Resisting Steel Bulkhead insulated on the fire exposed side with – Type: "PAROC Marine Fire Slab 100 (50+50mm)" |
| <b>Specified Standard</b> | UK Department of Energy Hydrocarbon Time/Temperature Relationship and IMO Resolution A.754(18) Performance Criteria  |

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   | 8 September 2015 | Expiry date | 7 September 2020  |
| Certificate No. | SAS F150209      | Signed      |    |
| Sheet No        | 1 of 2           | Name        | B. Geary<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 Group Limited, 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'. 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.



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| Issue number<br>1              |

**DESIGN APPRAISAL DOCUMENT**

|                          |  |
|--------------------------|--|
| Date<br>8 September 2015 | Quote this reference on all future communications<br>MTES/SFS/TA/BG/WP21017037 |
|--------------------------|--|

**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F150209**

This Design Appraisal Document forms part of the Certificate.

**APPROVAL DOCUMENTATION**

RINA Fire Protection Laboratory, Genova, Italy; Fire Test Report No. 2009CS011968/2 dated 8 June 2009.

**CONDITIONS OF CERTIFICATION**

1. Consisting of: 4.5mm thick steel bulkhead insulated on the fire exposed side with two layers of "PAROC Marine Fire Slab 100" insulation with staggered joints, each layer 50mm thick, density 100 kg/m<sup>3</sup> retained by 3mm diameter steel pins and washers at maximum spacing of 300mm and steel wire mesh. Pins to be provided within 75mm of slab edges.
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**

Paroc Oy Ab,  
Poikkitie 1,  
FIN-53500 Lappeenranta,  
Finland

Paroc Oy Ab,  
FIN-21600 Parainen,  
Finland

Paroc Oy Ab,  
Mineraalitie,  
FIN-90631 Oulu,  
Finland

Paroc Ab,  
S-53391 Hallekis,  
Sweden

Paroc Ab,  
Norra Industrigatan,  
S-28122 Hassleholm,  
Sweden

UAB Paroc,  
Savanoriu 124,  
LT-2600 Vilnius,  
Lithuania

Paroc Polska Sp.z.o.o.,  
ul.Gnieznienska 4,  
62-240 Trzemeszno,  
Poland

Paroc Ab,  
Diabasvägen 2  
SE-54186 Skövde  
Sweden



Ben Geary  
Technical Manager  
Statutory Fire & Safety  
Marine Technology and Engineering 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).*