

**TYPE APPROVAL CERTIFICATE****This is to certify:****That the Equivalent Class A Divisions**

with type designation(s)

**"PAROC Marine Fire Slab 100, 40 mm + 40 mm" - Class A-60 Corrugated steel bulkhead**

Issued to

**PAROC GROUP OY**  
**Helsinki, Finland**

is found to comply with

**DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations**  
**DNV GL rules for classification – Ships**  
**DNV GL offshore standards****Application :****Approved for use as a non-loadbearing vertical fire retarding division of class A-60.****General application: Fire against either side.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2019-05-13**for **DNV GL**This Certificate is valid until **2024-05-12**.DNV GL local station: **Turku FIS**Approval Engineer: **Nanna Martine Jacobsen**Digitally Signed By: Schei-Nilsson, Mårten  
Location: DNV GL Høvik, Norway**Mårten Schei-Nilsson**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-030156-1**  
Certificate No: **TAF000016E**

### **Product description**

"PAROC Marine Fire Slab 100, 40 mm + 40 mm" - Class A-60 Corrugated steel bulkhead  
Composed of a 2 mm thick corrugated steel bulkhead insulated on one side with two layers of 40 mm thick "PAROC Marine Fire Slab 100, 40 mm + 40 mm" mineral wool with a nominal density of 100 kg/m<sup>3</sup>, manufactured by Paroc Group Oy. The two insulation layers are to be applied horizontally (with minimum 120 mm staggered joints) on the corrugated steel surface, leaving the cavity of the corrugations uninsulated. The insulation is mounted tightly together along all joints.

The insulation sheets are held in place by means of steel pins (Ø 3 mm) with average spacing of 300 mm c/c (minimum 12 pins per m<sup>2</sup>), welded to the plate and retained using steel washers (Ø 38 mm).

For further details see drawing listed under Type Approval documentation below.

This product may be manufactured at:

- Paroc Ab, SE-53394 Hällekis, Sweden
- Paroc Polska Sp. z.o.o. Gnieznienska 4, 62-240 Trzemeszno, Poland
- Paroc Oy Ab, FI-21600, Parainen Finland

### **Application/Limitation**

Approved for use as a non-loadbearing vertical fire retarding division of class A-60.

General application: Fire against either side.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code Annex 1 Parts 2 and 5) when required according to relevant rules.

Each product is to be supplied with its manual for installation and maintenance.

### **Type Approval documentation**

Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.

Test report No. PGA11036A dated 1 May 2017 from DBI, Hvidovre, Denmark.

Test report No. PGA10999A dated 3 March 2017 from DBI, Hvidovre, Denmark.

Dwg. No. 17003:1 "PAROC Marine Fire Slab 100, 40+40 mm" dated 14 March 2017 from manufacturer.

Dwg. No. 17003:2 "PAROC Marine Fire Slab 100, 40+40 mm" dated 7 April 2017 from manufacturer.

### **Tests carried out**

Tested according to IMO 2010 FTP Code Part 3.

### **Marking of product**

The product or packing is to be marked with name of manufacturer, type designation and fire technical rating.

### **Transport Canada Approval**

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product listed in this certificate is in accordance with Transport Canada's requirements.

### **Periodical assessment**

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.