

TYPE APPROVAL CERTIFICATE**This is to certify:****That the Non-Combustible Material**

with type designation(s)

PAROC Marine Slab 30-250, PAROC Marine Slab LO 150, PAROC Marine Slab VLO 150, PAROC Marine Floor Slab 140

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 non-combustible materials.****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 **2019-06-12**This Certificate is valid until **2024-06-11**.DNV GL local station: **Finland CMC**Approval Engineer: **Jasna Jovovic-Lainis**for **DNV GL**

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: **262.1-017560-5**
Certificate No: **TAF000016V**

Product description

"PAROC Marine Slab 30-250" 11 unfaced stone wool slab products, each with nominal density of approximately 30, 40, 60, 80, 130, 150, 160, 180, 200, 220 and 250 kg/m³. Nominal organic content is accordingly 1.7, 1.9, 1.7, 2.5, 1.9, 3.9, 2.0, 1.9, 1.9, 2.5 and 2.5 ± 0.3 %, respectively.

"PAROC Marine Slab LO 150" unfaced stone wool slab with nominal density of approximately 150 kg/m³. Nominal organic content is 1.2 ± 0.3 %.

"PAROC Marine Slab VLO 150" stone wool slab with nominal density of approximately 150 kg/m³. Nominal organic content is 0.7 ± 0.3 %.

"PAROC Marine Floor Slab 140" unfaced stone wool slab with nominal density of approximately 140 kg/m³. Nominal organic content is 1.6 ± 0.3 %.

The products are manufactured at the following locations:

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

Application/Limitation

Approved for use as non-combustible materials.

The product may be used as an integrated part of approved fire resisting divisions only when tested as such.

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

Type Approval documentation

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

Test report No. VTT-S-5836-13, dated 26 August 2013, from VTT, Espoo, Finland (30)
Test report No. VTT-S-5834-13, dated 26 August 2013, from VTT, Espoo, Finland (40)
Test report No. VTT-S-8354-13, dated 3 December 2013, from VTT, Espoo, Finland (60)
Test report No. VTT-S-5837-13, dated 26 August 2013, from VTT, Espoo, Finland (80)
Test report No. VTT-S-8347-13, dated 2 December 2013, from VTT, Espoo, Finland (130)
Test report No. VTT-S-5853-13, dated 26 August 2013, from VTT, Espoo, Finland (150)
Test report No. VTT-S-8349-13, dated 3 December 2013, from VTT, Espoo, Finland (160)
Test report No. VTT-S-7669-13, dated 2 December 2013, from VTT, Espoo, Finland (180)
Test report No. VTT-S-8353-13, dated 3 December 2013, from VTT, Espoo, Finland (200)
Test report No. VTT-S-7731-13, dated 2 December 2013, from VTT, Espoo, Finland (220)
Test report No. VTT-S-7732-13, dated 2 December 2013, from VTT, Espoo, Finland (250)
Test report No. VTT-S-8348-13, dated 3 December 2013, from VTT, Espoo, Finland (LO 150)
Test report No. VTT-S-5851-13, dated 26 August 2013, from VTT, Espoo, Finland (VLO 150)
Test report No. VTT-S-8344-13, dated 2 December 2013, from VTT, Espoo, Finland (Floor 140)

Tests carried out

Tested according to IMO 2010 FTP Code part 1.

Marking of product

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

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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 products listed in this certificate are 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.