

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

with type designation(s)

"PAROC Marine Navis (Wired) Mat 90" - Class A-60 Aluminium 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 **2019-06-21**This Certificate is valid until **2024-06-20**.DNV GL local station: **Turku**Approval Engineer: **Nanna Martine Jacobsen**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: **262.1-030147-1**
Certificate No: **TAF000015J**

Product description

"PAROC Marine Navis (Wired) Mat 90" - Class A-60 Aluminium Bulkhead

Composed of an aluminium bulkhead with minimum thickness 4 mm, insulated on both sides with one layer of 70 mm thick "PAROC Marine Navis (Wired) Mat 90" (mineral wool with or without wire mesh/aluminium foil facing), with a nominal density of 90 kg/m³, manufactured by Paroc Group Oy. The insulation is applied on the aluminium structural core as well as on the stiffeners following their contours.

The insulation is mounted tightly together along all joints, compressed approximately 10 mm.

The mats are held in place by means of aluminium tipped steel pins (Ø 3 mm) welded to the plate and retained using steel washers (Ø 38 mm). The pins are to be installed with a maximum spacing of 300 mm (c/c) in both horizontal and diagonal direction.

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-load bearing 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. PGA11157A dated 22 December 2017 from DBI, Hvidovre, Denmark.

Dwg. No. 17020 "PAROC Marine Navis Mat 90 AluCoat thickness 70 mm" dated 19 December 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.