

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)

A-60 Tandem Sliding Door Type GR

Issued to

**PARMARINE LTD.
LEPPÄVIRTA, Finland**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773**,

item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-02-26**.

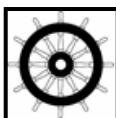
Issued at **Høvik** on **2019-02-27**

DNV GL local station:

Turku

Approval Engineer:

Tessa Biever



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

"A 60 Tandem Sliding Door Type GR"

A double leaf sliding door with door leafs constructed of 3 layers of Glasroc F Marine boards (manufactured by Saint-Gobain Ltd.), 6 mm outer boards and a 10 mm board in the middle. Between the boards the leafs were insulated with 20 mm Paroc Marine Slab 150LO, with density 150 kg/m³, and glued to the boards. A wire mesh (0.7 mm) was mounted around the outer surface of the insulation layers. Edges of the door leaf structures were frames with 2 mm steel profiles.

Total door leaf thickness: 62 mm.

One door leaf is equipped with a hose port (150 mm x 150 mm).

Door frame, guide rail, rail frame are composed from 3 mm thick steel sheets. The door frame can be bolted (M10 c/c 200 mm) or welded to the bulkhead.

For further details see drawings and test reports mentioned under Type Examination documentation below.

Application/Limitation

The door is approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum clear opening: 3500 mm x 2700 mm (W x H).

Size of each door leaf: 1842 mm x 2755 mm (W x H).

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

Type Examination documentation

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG number if applicable (see first page).