

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008R4

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 AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
FMD020 - B-15 double hinged door

Issued to

Ferramare OÜ
Lehola küla, Harjumaa, Estonia

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

Regulation **(EU) 2023/1667**,
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511,
IMO MSC.1/Circ.1319

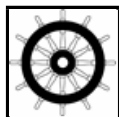
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-12-12**.

Issued at **Høvik** on **2023-12-13**

DNV local unit:
Tallinn CMC

Approval Engineer:
Helge Bjørnara



Notified Body
No.: **0575**

for **DNV AS**

Mydlak-Röder, Christine
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, and amended by Decision No 1/2023 dated August 21st, 2023.



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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

"FMD020" - B-15 double hinged door, is a double leaved hinged door with leaves composed of insulating core made of 39 mm mineral wool Paroc Marine Slab LO 150 (density 150 kg/m³, manufactured by Paroc), covered with a 0.7 mm thick steel plate on both sides. The insulation is glued to the steel sheets.

The door leaf thickness: 40 mm.

Each door leaf is fixed to the door frame with three hinges. The door frame is constructed of a 1.0 mm thick steel plate and is fixed to the bulkhead by self-drilling screws 4.8 mm x 30 mm. The door frame is sealed with vertical, and tops dies self-expanding gasket Marvon 2 x 10 mm.

The door leaf may be fitted with a symmetrical constructed fireproof window "EI30" with thickness 15 mm (manufactured by Glazeri). The glazing beads are constructed of 2 mm thick steel, fixed with nut M5 and screw M5x40 mm c/c 200 mm. The window is sealed with fire resistant seal Kerafix 2000, 2-4x17 mm (manufactured by Gluske).

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

Application/Limitation

Approved for installation in steel bulkheads of class B-15. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Max. size of door leaf: 1063.5 mm x 2111 mm (W x H)

Max. size of door clear opening: 2100 mm x 2100 mm (W x H)

Max. size of window clear opening: 420 mm x 420 mm (W x H)

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

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

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

Type Examination documentation

Test report No. 954-23T2MAU-IMO dated 11 July 2023 from TÜV EESTI OÜ, Maardu, Estonia.

Drawing No. FMD020-00-00 dated 14 July 2023 from manufacturer.

Drawing No. FMD020-00-01 dated 14 July 2023 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The door has been successfully tested for extended test period of 18 minutes for insulation and 36 minutes for integrity.

Marking of product

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

USCG Approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm, or less, in each door leaf. For larger windows, USCG shall be contacted.