

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000081F

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)
MI B-15 Steel door

Issued to

Marine Interiors Cabins S.p.A.
Trieste, TS, Italy

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

Regulation (EU) 2021/1158,
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

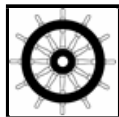
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-06-30**.

Issued at **Høvik** on **2022-07-01**

DNV local station:
Italy/Malta CMC

Approval Engineer:
Grzegorz Wolski



Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
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 1/2019 dated February 22nd, 2019.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"MI B-15 Steel door"

A single leaf hinged steel door in a steel door frame that is manufactured in three variants. The door leaf is composed from insulation core of mineral wool of type 'Paroc Marine Fire Slab 150' with nominal density of 150 kg/m³ (manufactured by Paroc Group Oy). On both sides of this core is a steel sheet glued with PROTOPUR AE 150 (manufactured by Kiilto Oy) or SikaForce 7110 (manufactured by Sika Services AG). The door frame profiles were made of 1.2 mm thick steel and the inner cavity of the frames was uninsulated

Variant I: MI-B15 2050

Door leaf main sheet metal plate thickness is 0.8 mm
Door leaf thickness 41.5 mm (with internal insulation core thickness of 40 mm)
The door leaf was equipped with Vingcard Lock
The door leaf is mounted to the frame by three stainless steel hinges.
The door frame was mounted to the bulkhead with self-drilling screws 4.2 x 13 mm, max pitch 700 mm.
The door frame may also be welded to the bulkhead.

Variant II: MI Door wet Unit

Door leaf main sheet metal plate thickness is 0.8 mm
Door leaf thickness 31.5 mm (with internal insulation core thickness of 30 mm)
The door leaf was equipped with Vingcard Lock
The door leaf is mounted to the frame by three stainless steel hinges.
The door frame was mounted to the bulkhead with self-drilling screws 4.2 x 13 mm, pitch 450 mm.
The door frame may also be welded to the bulkhead.

Variant III: B15 Technical Inspection Hatch

Door leaf main sheet metal plate thickness is 0.7 mm
Door leaf thickness 43 mm (with internal insulation core thickness of 40 mm)
The door leaf was equipped with a central lever locking device and two vertical cylindrical steel rods controlled by the central lock.
The door leaf is mounted to the frame by a piano hinge.
The door frame was mounted to the bulkhead with self-drilling screws 3.9 x 13 mm.
The door frame may also be welded to the bulkhead.

For further details, see the test report and drawings mentioned under Type Examination documentation below

Application/Limitation

The door is 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.

Variant I:

Max. clear opening: 1000 x 2050 mm (W x H)
Max. size of door leaf: 1040 x 2066 mm (W x H)

Variant II:

Max. clear opening: 900 x 2050 mm (W x H)
Max. size of door leaf: 932 x 2041 mm (W x H)

Variant III:

Max. clear opening: 850 x 1850 mm (W x H)
Max. size of door leaf: 877 x 1880 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.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover strength evaluations related to watertightness, weathertightness, etc.).

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

Type Examination documentation

Test report No. PGB10144A dated 03 February 2022 from DBI, Hvidovre, Denmark.

Test report No. PGB10150A dated 03 February 2022 from DBI, Hvidovre, Denmark.

Test report No. PGB10157A dated 03 February 2022 from DBI, Hvidovre, Denmark.

Assessment report No. PHD10065A dated 27 March 2022 from DBI, Hvidovre, Denmark.

Drawing No. +24PC00413.00 Version 0, dated 23 June 2021 from maker

Drawing No. +24PC00414.00 Version 0, dated 29 March 2021 from maker

Drawing No. +24PC00417.01 Version 0, dated 01 September 2021 from maker

Drawing No. +24PC00418.01 Version 0, dated 01 September 2021 from maker

Drawing No. +24PC00419.00 Version 0, dated 23 June 2021 from maker

Drawing No. +24PC00420.00 Version 0, dated 23 June 2021 from maker

Tests carried out

Tested according to IMO FTP Code Part 3.

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).