

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007N1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Fire Doors

with type designation(s)
Integrated cabin / service door - Type IKT / IST

Issued to

R & M International GmbH
Hamburg, Germany

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

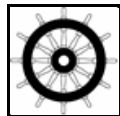
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-09-20**.

Issued at **Hamburg** on **2021-09-21**

DNV local station:
Hamburg – CMC North/East

Approval Engineer:
Roland Priebe



Notified Body
No.: **0098**

for DNV SE

Christine Mydlak-Roeder
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) 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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 SE 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

The **Integrated cabin / service door - Type IKT / IST** is a single leaf hinged fire door optional equipped with window and kick-out panel with ventilation grill.

The door leaf is composed of 0.6 mm galv. steel plate + 41 mm stone wool + 0.6 mm galv. steel plate. The insulation is glued to the steel shell with an adhesive of approved type. Along all edges of the door leaf a 25 x 41 x 25 mm C-profile is installed. An additional 25 x 30 x 25 mm C-profile is mounted as reinforcement vertically with a 61 mm gap to the lock side door leaf frame. The C-profile bars are jointed together in the corners by welding.

The insulating stone wool is Tizol-Flot 150 (nominal density 150 kg/m³, nominal organic content 2%, from Joint Stock Company "Tizol").

A lock case of 2 mm steel is mounted between the reinforcement square bar and the lock side door leaf frame.

The door frame are reinforced wall panels. The bottom part is covered with a 15 x 74 x 15 x 1 mm steel sill cover U-profile. An intumescent sealing (1.9 x 15 mm Promeseal PL) is placed between the frame profile and the U-profile.

The window is positioned in the upper half of the door leaf. The cut out in the door leaf is 445 x 445 mm and the clear opening of the glass section is 400 x 400 mm. The glass pane type "Pilkington Pyrodur M 30-203" (from Pilkington Deutschland AG, Gelsenkirchen, Germany) is 11 mm thick.

A reinforcement steel U-profile is mounted inside the door leave along the edges of the cut out for the window and is filled out with Tizol Flot 150 mineral wool.

The glazing bead mounted on both sides of the door leaf is formed from a 2 mm thick and 50 mm wide shaped steel profile and is fixed to the door leave along all four sides through the steel sheet into the reinforcement U-profile with screws.

A strip of 2 mm thick insulfrax paper is adhered inside the glazing bead between the glass pane and the glazing bead.

The door leaf is mounted with a ventilation unit (grill). Intumescent sealing (Promat Promaseal PL) is mounted all over the grill surface. The exterior dimension of the grill is 420 x 361 mm (width x height) and is fixed to the steel sheets with self-drilling screws.

The door leaf is mounted with a kick-out panel (680 x 680 mm) which is an integrated part of the door leaf. A circumference cover profile (1.5 x 40 mm steel) is fixed to the steel sheet of the door leave along all four sides with steel pop-rivets.

The door leaf is furnished with three hinges made of steel which are bolted to the door leaf and frame. The lock is placed with a handle height of 1050 mm from the bottom of the door frame.

Total door leaf thickness (excluding window fixing frame): 43 mm.

For further information please see the documents under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of fire retarding division of class B-15.

Max. door leaf size: 1081 x 2214 x 43 mm (width x height x thickness)

Max. door clear opening: 1050 x 2200 mm (width x height)

Max. window glass size: 440 x 440 x 11 mm (width x height x thickness)

Max. window clear opening: 400 x 400 mm (width x height)

Max. kick-out panel dimension: 680 x 680 mm (width x height)

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.

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

Type Examination documentation



Job Id: **344.1-011738-1**
Certificate No: **MEDB00007N1**

Test report No. PGB10136A rev.1 dated 2021-08-16 from Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark.

Tests carried out

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex1, Part 3

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval if applicable (see page 1).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. Doors with a window area exceeding 645 cm² are not part of this certificate and need direct USCG approval.