

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00005TE
Revision no.:
3

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 **A' & 'B' Class divisions fire integrity: - 'B' class division**

with type designation(s)
MSW50-M - Multi layer wall panel

issued to

R & M International GmbH
Hamburg, Germany

is found to comply with the Implementing Regulation (EU) 2024/1975 for
Item no. **MED/3.11b (Row 1 of 1)**
according to the following requirements:
SOLAS 74 Reg. II-2/3.4, SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ.1581, IMO MSC/Circ.1120

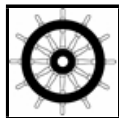
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-07-21**

Expiry date: **2029-05-23**

DNV local unit:
Hamburg – CMC North/East

Approval Engineer:
Meike Grabau



Notified Body
no.: **0098**



for **DNV SE**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment, signed February 27th, 2004, and amended by Decision No 1/2023 dated May 26th, 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 USD 300 000.

Product description

“MSW50-M - Multi layer wall panel”

is a class B-15 bulkhead, fitted with a groove on both sides and jointed together with a tongue.

The bulkhead panels are made of 0.6 mm galvanized steel sheets as outer shells with a 0.5 mm thick steel inlay glued to 16 mm mineral wool with approved adhesive. In the middle of the construction is an air gap of 16 mm. The exposed side and the unexposed side are constructed identically.

Each panel is manufactured with approx. 21 mm deep and 42 mm wide groove along the vertical edges of the panel. The grooves are reinforced with 19 mm x 46 mm x 19 mm x 1 mm galvanized steel profiles and backed with mineral wool.

Tongues for connecting two panels were manufactured from two half shells measuring 16 mm x 39 mm x 16 mm with mineral wool in between. Self-drilling screws 4.2 mm x 16 mm were installed on each panel on both the fire exposed and unexposed side, at a height of 2200 mm, fixing the panels to the connecting tongues.

For the insulation material, one of the following mineral wool types may be used:

- Tizol-Flot 200 (200 kg/m³) from Joint Stock Company “Tizol” Nizhnyaya Tura, Russia. The insulation material used for the tongue is Tizol-Flot 150 (150 kg/m³) from same company (see test report PGA11494A).
- ABM-SR 200 (200 kg/m³) from Shanghai ABM Rock Wool. The insulation material used for the tongue is ABM-SR 150 (150 kg/m³) from same company (see test report PGB10364A).
- SeaRox SL 480 (200 kg/m³) from Rockwool Denmark. The insulation material used for the tongue is SeaRox SL 440 (150 kg/m³) from same company (see test report P000458307/01).

Total panel thickness: 50 mm.

For further details, see documents listed below under “Type Examination documentation”.

Application/Limitation

Approved for use as a vertical fire retarding division of class B-15.

Maximum panel size: 1000 mm x 2475 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.

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

Type Examination documentation

Document No.	Rev.	Title
PGA11494A	0	Test Report dated 24 June 2019 from DBI Hvidovre, Denmark
PGB10364A	0	Test Report dated 29 February 2024 from DBI Hvidovre, Denmark
P000458307/01		Test Report dated 20 February 2025 from Kiwa MPA Dresden, Freiberg, Germany

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.



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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).