

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000BYD
Revision no.:
0

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)

SD35 - Ceiling panel without/with fixtures

issued to

Rheinhold & Mahla GmbH

Schellerdamm 22-24 21079 Hamburg Germany,

is found to comply with the Implementing Regulation (EU) 2025/1533 for

Item no. **MED/3.11b** (Row 1 of 1)

according to the following requirements:

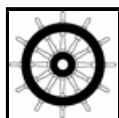
SOLAS 74 Reg. II-2/3.4, SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ.1581, IMO MSC/Circ.1120

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

Date of issue: **2026-03-10**

Expiry date: **2030-06-12**

DNV local unit:
Hamburg – CMC North/East



for **DNV SE**

Approval Engineer:
Meike Grabau

Notified Body
no.: **0098**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

“SD35 - Ceiling panel without/with fixtures”
is a suspended ceiling of class B-0.

The panels are manufactured as sandwich panels consisting of two layers of galvanized steel sheets with mineral wool glued between them. On the exposed face the galvanized steel sheet is 0.6 mm and on the unexposed face 0.5 mm. The 35 mm thick insulation of type “SeaRox SL 340” (density: 80 kg/m³) is manufactured by Rockwool, Netherlands. The mineral wool is fixed to the steel sheets with adhesive of approved type.

The ceiling panels are jointed to each other with groove and tongue. The panels are fixed with screws to the edge profiles along the short ends and clicked into the edge profiles along the longitudinal edges.

Total thickness of ceiling panel: approx. 37 mm

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

Please see Appendix: Product Description

Application/Limitation

Approved for use as a horizontal fire retarding division of class B-0.
With a minimum distance between exposed side of the ceiling and the A-Class structural steel deck of 300 mm, the whole construction may be regarded as a horizontal fire retarding division of Class A-30.

Maximum panel size: 600 mm x 3000 mm (W x L)

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

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, the Mark of Conformity and USCG Approval Number 164.110/EC0098 (see first page).

APPENDIX

Product Description

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Following optional fixtures may be installed (see test report PGA10963A):

Installation 1: Hatch 420 x 420

The hatch is made of 24 mm thick "Tizol-Flot Lamella" (200 kg/m³) with 0.6 mm galvanized steel sheets glued on both sides. On both steel sheets all four edges are bent 23 mm 90° so that the overlapping sides were closed by pop-rivets. A 1.5 mm thick Z-shaped steel profile surrounds the hatch door and is welded together at the corners. The edge of the clear opening is reinforced with an L-profile fixed with pop-rivets. The hatch is mounted with a piano hinge on one side and a pivot lock in the center of the opposite side. Dimensions of the hatch are 420 mm x 420 mm x 25 mm. Clear opening of the hatch is 400 mm x 400 mm.

Installation 2: Downlight DL52

The down light model LightPartner DL52 is mounted in the panel from the exposed side by fixing it in a circular cut-out of ø143 mm with self-tapping screws. On the unexposed side of the panel the entire downlight is covered with a cover box made of 3.5 mm thick aluminium coated needle mat VitriBond Marine. The edges of the box (20 mm) are bent 90° outwards and are fixed to the ceiling panel with 100 mm wide aluminium duct tape as well as across the cable. The dimension of the cover box is 200 mm x 400 mm x 70 mm.

Installation 3: Downlight DLT RT(M) FR

The downlight model Glamox DLT RT(M) FR is mounted in the panel in a cut-out of 277 mm x 579 mm. It is mounted by means of four suspension brackets, two along each longitudinal edge, fixed with screws. The cover plate on the exposed side is clipped on along the edges. On the unexposed side of the panel the entire downlight is covered with a cover box made of 3.5 mm thick aluminium coated needle mat VitriBond Marine. The edges of the box (20 mm) are bent 90° outwards and are fixed to the ceiling panel with 100 mm wide aluminium duct tape as well as across the cable. The dimension of the cover box is 450 mm x 700 mm x 90 mm.

Installation 4: Hatch 820 x 620

The hatch is made of 24 mm thick "Tizol-Flot Lamella" (200 kg/m³) with 0.6 mm galvanized steel sheets glued on both sides. On both steel sheets all four edges are bent 23 mm 90° so that the overlapping sides were closed by pop-rivets. A 1.5 mm thick Z-shaped steel profile is surrounding the hatch door and is welded together at the corners. The edge of the clear opening is reinforced with a U-profile fixed with pop rivets. The hatch is mounted with a piano hinge on one long side and two pivot lock on the opposite side. Dimensions of the hatch are 820 mm x 620 mm x 25 mm. Clear opening of the hatch is 800 mm x 600 mm.

Installation 5: Loudspeaker ML 16A

The loudspeaker model FUNA ML 16A is mounted in the panel in a cut-out of ø143 mm and fixed to the exposed side with self-taping screws. On the unexposed side of the panel the entire loudspeaker is covered with a cover box made of 3.5 mm thick aluminium coated needle mat VitriBond Marine. The edges of the box (20 mm) are bent 90° outwards and are fixed to the ceiling panel with 100 mm wide aluminium duct tape as well as across the cable. The dimension of the cover box is 200 mm x 200 mm x 50 mm.

Installation 6: Smoke detector RM 149

A smoke detector model Smartwares RM 149 was fixed to the ceiling panel on the exposed side by means of an adaptor fixed to the ceiling panel with self-drilling screws. The cut out in the ceiling panel is ø24 mm and solely for the cable. The hole was sealed off with Sika Firesil Marine N ending with a ø23 mm sealing O-ring, EPDM cable sleeve.

Installation 7: Cable penetration

An ø8 mm cable is mounted in a cable penetration in ceiling panel. The cut out in the ceiling panel was a ø20 mm through-going hole, where the cable was passing. The hole was sealed off with Sika Firesil Marine N ending with a ø23 mm sealing O-ring, EPDM cable sleeve.