

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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

This is to certify:

That the "B" Class divisions, fire integrity

with type designation(s)
SW50NN - Wall panel

Issued to

R & M International GmbH
Hamburg, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2.3.4 & II-2/9 and IMO 2010 FTP Code

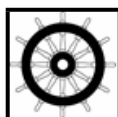
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-03-24**.

Issued at **Hamburg** on **2019-03-25**

DNV GL local station:
Hamburg

Approval Engineer:
Pavel Golyshev



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"SW50NN - Wall panel"

B-Class wall construction composed of individual panels which are joined together by means of tongue connection.

An individual panel is a sandwich construction made by 0.6 mm thick steel sheet facings and a mineral wool core. For the mineral wool, SeaRox SL 445 (lamellae) from Rockwool International A/S with nominal density of 150 kg/m³ and specifications of 48.5 mm x 84 mm (thickness x width) is used (as tested). Alternatively, insulation of type Tizol Flot Lamella from Tizol with nominal density of 150 kg/m³ and specifications of 48.5 mm x 100 mm (thickness x width) may be fitted. The arrangement (installation, orientation etc.) of the alternative insulation shall correspond to the arrangement of the originally used SeaRox SL 445 rock wool.

The mineral wool is fixed to the steel sheets by means of approved adhesive.

The panels are joined together with a 39 mm x 42 mm tongue consisting of approx. 38 mm x 41 mm mineral wool strip with two steel half shells 16 mm x 39 mm x 16 mm U-profiles made by 0.6 mm thick steel sheet and attached to the mineral wool opposite to each other. The panels are fixed together with 4.2 x 16 mm self-drilling screws at a height of 2200 mm (from the bottom of the bulkhead) along the both unexposed and exposed sides. Additional 3.0 x 10 mm steel pop-rivets are mounted in both panels at the top of the panel joints on the exposed side as well as at the bottom U-profile at each joint on the exposed side and at the bottom of the unexposed side of the bulkhead. Further fixing details acc. to the drawing no. SW50NN_FIRETEST_12.2018_02-02 included in test report.

Total panel thickness: 50 mm.

For further details, see test report and assessment (both with included drawings) listed under Type Examination documentation below.

Application/Limitation

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

Maximum size of panels: 2475 mm x 1000 mm (height x width).

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, use and maintenance.

Type Examination documentation

Test Report No. PG11337A dated 18th of December 2018 issued by DBI Danish Institute of Fire and Security Technology, Hvidovre, Denmark, and fire technical assessment No. 20181619 dated 7th of March 2019 issued by MPA Dresden (Fire Test Laboratory) Germany.

Tests carried out

Tested according to IMO Resolution MSC.307(88) – 2010 FTP Code Annex 1, Part 3.

Marking of product

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

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.108/EC0098 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval 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.