

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL AS under the authority of the Government of Norway.

## This is to certify:

**That the "A" Class divisions, fire integrity**

with type designation(s)

**Marine Sound Floor Combi-Steel / -Concrete**

Issued to

**MARLON Tørmørtel A/S**  
**Brædstrup, Midtjylland, Denmark**

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

Regulation **(EU) 2018/773,**

**item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434**

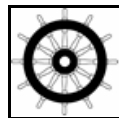
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-09-10.**

Issued at **Høvik** on **2019-09-11**

DNV GL local station:  
**Denmark CMC**

Approval Engineer:  
**Synnøve Bolstad Eri**



Notified Body  
No.: **0575**

for **DNV GL AS**

**Roald Vårheim**  
**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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



## Product description

### “Marine Sound Floor Combi-Steel”

Composed of structural steel deck covered with Sound Floor Combi-Steel. The floating floor is constructed from bottom to top as follows:

1. One layer of 1 mm thick Marine VE 1400 (density 1350 kg/m<sup>3</sup>).
2. One layer of 1.5 mm thick galvanized steel tiles with dimension 300 x 300 mm (placed with distance approx. 350 mm c-c).
3. One layer of min. 50 mm thick SeaRox SL436 mineral wool manufactured by Rockwool (density 140 kg/m<sup>3</sup>), with staggered joints.
4. One layer with 3 mm thick galvanized steel plates.
5. One layer of 1 mm thick Marine VE 1400 (density 1350 kg/m<sup>3</sup>).
6. One layer with 2 mm thick galvanized steel plates.

### “Sound Floor Combi-Concrete”

Composed of structural steel deck covered with Sound Floor Combi-Concrete. The floating floor is constructed from bottom to top as follows:

1. One layer of 1 mm. thick Marine VE 1400 (density 1350 kg/m<sup>3</sup>).
2. One layer of min. 10 mm thick Marine 1600 SL (density 1600 kg/m<sup>3</sup>).
3. One layer of min. 50 mm thick SeaRox SL436 mineral wool manufactured by Rockwool (density 140 kg/m<sup>3</sup>), with staggered joints.
4. One layer with 3 mm thick galvanized steel plates.
5. One layer of 1 mm thick Marine VE 1400 (density 1350 kg/m<sup>3</sup>).
6. One layer with 2 mm thick galvanized steel plates.

For further details, see drawings listed under Type Examination documentation below.

## Application/Limitation

Approved for use as a horizontal fire retarding division of class A-60.

The insulation materials, viscoelastic damping layer and adhesives used must 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. PGA11418A dated 24 May 2019 from DBI, Hvidovre, Denmark.

Assessment report no. PHA11219A dated 5 August 2019 from DBI, Hvidovre, Denmark.

Drawing no. 2(1 sheet): Sound Floor Combi – Steel, from manufacturer dated 5 February 2019.

Drawing no. 3(1 sheet): Sound Floor Combi – Concrete, from manufacturer dated 5 February 2019.

## Tests carried out

Tested according to IMO 2010 FTP Code part 3.

## Marking of product

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