EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00008V2

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 AS under the authority of the Government of Norway.

This is to certify:

that the Surface materials and floor coverings with low flame-spread characteristics: floor coverings

with type designation(s)
HBM-FRP(I) Marine Glass Fiber Reinforced Plastics Materials

issued to

Huanan Building Materials (Shenzhen) Co., Ltd.

Shenzhen, Guangdong, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2023/1667,**
item No. MED/3.18c. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

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

This Certificate is valid until **2029-02-25**.

Issued at **Høvik** on **2024-02-26**

DNV local unit:
China South NB

Approval Engineer:
Karolina Kusmider

Notified Body
No.: **0575**

for **DNV AS**

Mydlak-Röder, Christine
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, and amended by Decision No 1/2023 dated August 21st, 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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

"HBM-FRP(I) Marine Glass Fiber Reinforced Plastics Materials"
Consist of multi-layers as follows:

- flame retardant gelcoat (0.4874 kg/m^2),
- flame retardant unsaturated polyester resin (6.9132 kg/m^2),
- glass fiber cloth (1.20 kg/m^2),
- glass fiber mat (0.8997 kg/m^2).

Total product thickness: 5 mm
Density: 1.9 g/cm^3

For further details see documents under Type Examination documentation below.

Application/Limitation

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

Approved for use as floor coveringson any metallic base or non-combustible base.

Approved for all colour variations.
Maximum organic content: 27%

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

Type Examination documentation

Test report No. SDFS2305002792FF dated 10 August 2023 from SGS-CSTC Standards Technical Services, Hangzhou, China.
Test report No. SDFS2305002793FF dated 10 August 2023 from SGS-CSTC Standards Technical Services, Hangzhou, China.
Test report No. SDFS2311006539FF dated 21 November 2023 from SGS-CSTC Standards Technical Services, Hangzhou, China.

Tests carried out

Tested according to IMO 2010 FTP Code Part 5 and 2.

Marking of product

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