

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00003E7
Revision No:
1

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 Surface materials and floor coverings with low flame-spread characteristics: decorative veneers

with type designation(s)
"Glass Fabric Type C" and "Glass Fabric Type D"

Issued to
Thermal Ceramics UK Ltd
Wirral, Merseyside, United Kingdom

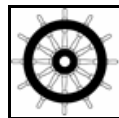
is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.18a. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code

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

This Certificate is valid until **2023-08-26**.

Issued at **Høvik** on **2019-04-17**

DNV GL local station:
Manchester



for **DNV GL AS**

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id: **344.1-007600-2**
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Product description

"Glass Fabric Type C",
0.18 mm thick glass fabric made of E-glass attached to a non-metallic, non-combustible substrate.

Thickness: 0.18 mm
Square weight: 212 g/m²
Density: 1178 kg/m³

"Glass Fabric Type D",
0.2 mm thick glass fabric made of E-glass attached to a non-metallic and non-combustible substrate.

Thickness: 0.2 mm
Square weight: 215 g/m²
Density: 1075 kg/m³

The fabric may be glued to the non-combustible insulation with FireMaster MarineFlex Adhesive.

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 decorative veneers on any non-metallic, non-combustible substrate with nominal density of at least 218 kg/m³.

"Glass Fabric Type C":
Approved Colour: White
Max. organic content: 2.5%

"Glass Fabric Type D":
Approved Colour: White
Max. organic content: 2.5%

Any adhesive used, other than FireMaster MarineFlex Adhesive, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

The product satisfies the requirement for maximum calorific value (ref. SOLAS Chapter II-2, Reg 5.3.2.2) without further testing.

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

Type Examination documentation

Test Report no. 20669855-20a, APS4-Mü/Lov dated 23 June 2017 from DMT GmbH & Co. KG, Germany.
Test Report no. 20669855-20b, APS4-Mü/Lov dated 23 June 2017 from DMT GmbH & Co. KG, Germany.
Test Report no. 8115644596-20, APS4-Hau/Wa dated 29 June 2018 from DMT GmbH & Co. KG, Germany.

Tests carried out

Tested according to IMO 2010 FTP Code part 5 and Annex 2 item 2.2 and item 2.3.

Marking of product

The product or packing is to be marked with name and address of the manufacturer, type designation, Mark of Conformity and USCG approval number if applicable (see page 1).