

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive (EU) 2015/559, 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 the Kingdom of Norway.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)
Fyrewrap® Marine Blanket Class A-60 Bulkhead (Type 2)

Issued to
Unifrax(Suzhou) Co., Ltd.
Suzhou, China

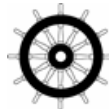
is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code.

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

This Certificate is valid until **2021-08-15**.

Issued at **Høvik** on **2016-08-16**

DNV GL local station:
Shanghai CMC



for **DNV GL AS**

Approval Engineer:
Fryderyk Hoga

Notified Body
No.: **0575**

Vidar Dolonen
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 Council Directive 96/98/EC, as amended.

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.

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: **344.1-005483-1**
Certificate No: **MEDB000012B**

Product description

"Fyrewrap® Marine Blanket Class A-60 Bulkhead (Type 2)"

Composed of a steel bulkhead insulated with a layer of 38 mm thick "Fyrewrap® Marine Blanket" of density 96 kg/m³ covers between and upon the stiffeners.

Anchoring of insulation to the bulkhead is arranged with steel pins and washers (22 set/m²).

Pins are to be installed with rectangular pattern and max. spacing of 320 mm between pins, max. 50 mm from the joints.

For further details, including spacing of welded pins and pinning in connection with joints, see test report listed under Type Approval documentation below.

Application/Limitation

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

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 use.

Type Examination documentation

Test report No. FT10124 dated 08 April 2010 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch.8.

Marking of product

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