



BUNDESAMT FÜR
SCHIFFFAHRT
UND
HYDROGRAPHIE

Notified Body authorised by
BSH 0800-S23/4822:013

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Certificate No: LR23362937MB

Issue Date: 25/10/2023

Expiry Date: 24/10/2028

EC Type Examination (Module B) Certificate

USCG-EU MRA

This is to certify that:

LLOYD'S REGISTER Marine Deutschland GmbH (LRMD), designated as a "notified body" based on the notification of the Federal Maritime and Hydrographic Agency of Germany, did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU and the valid Commission Implementing Regulation (EU) in force indicating design, construction and performance requirements and testing standards for marine equipment, subject to the conditions below and the attached Schedule which also forms part of this Certificate.

Manufacturer	Unifrax Limited
Address	Mill Lane, Rainford, St Helens, WA11 8LP, United Kingdom
Reference	Marine Equipment Directive (MED) 2014/90/EU, Regulation (EU) 2023/1667
Regulation Item (No. & Item Designation)	MED/3.11a 'A' And 'B' Class Division Fire Integrity: 'A' Class Divisions
Product Type	A-60 BULKHEAD (STANDARD FIRE TEST)
Product Description	Steel Bulkhead Insulated on one side with Type: A-60 Class "FyreWrap LT Blanket" AES wool insulation system for restricted Applications
Specified Standard	IMO Res. A.754(18) - (FTP Code) Annex 1, Part 3 IMO Res. MSC.307(88) - (2010 FTP Code), Section 8 IMO MSC.1/Circ.1435
Trade Name	FyreWrap LT (Marine) Blanket - A60 Class Steel Bulkhead for restricted application

The attached Design Appraisal Document (schedule) forms part of this certificate. This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to and agreed with the notified body named on this certificate. The manufacturer should notify LRMD of any modification or changes to the equipment in order to obtain a valid Certificate.

Lloyd's Register Marine Deutschland
GmbH, Überseeallee 10, D-20457
Hamburg, Germany.
A member of the Lloyd's Register group

Marta Walk

Fire & Safety - Senior Specialist
For and on behalf of Lloyd's Register Marine
Deutschland GmbH (2923)

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This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed on 27 February 2004 and amended by Decision No.1/2018 dated 18 February 2019 according to U.S. Coast Guard approval category USCG Module B number:

164.107/EC2923

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).

Should the specified regulations or standards be amended during the period of validity of this certificate, the product is to be re-approved prior being placed on the market and on board vessels to which the amended regulations or standards apply.

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-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

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Reference: UKITSO/FIRE/TA/ MW/WP50714336/PRJ11100414290

ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR23362937MB

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

This Certificate is a Renewal of Certificate Number 0525-MED-DE-MED 1850134.

Approval Documentation

Exova Warringtonfire, Warrington, United Kingdom, Fire Test Report No. WF 327448, dated 22 May 2013

Drawing No. 1344-R3-03, rev.0

Conditions of Certification

1. When applied to the fire exposed stiffened side of a steel bulkhead, the "FyreWrap LT Blanket" AES wool insulation system described below, may be considered as an A-60 Bulkhead Restricted to fire risks on the insulated side of the bulkhead.
2. Consisting of: one layer of "FyreWrap LT Blanket" AES wool insulation (45mm thick, 64kg/m³ density), applied vertically on the plate between stiffeners and a strip layer of same insulation (45mm thick, 64kg/m³ density) applied over stiffeners and overlapping the plate insulation, all retained with 3mm diameter welded steel pins and spring washers. Pins spaced at 450mm on panels and 150mm over stiffeners horizontally to retain both layers, and 350mm vertically and at 50mm from all insulation joints and boundaries.
3. Application in each case to be approved by Lloyd's Register at the design stage.
4. Composition and application of insulation material, including any flame retardants, to be maintained in production and use in accordance with originally tested composition formula and method of application, and Manufacturer's instruction.
5. The Certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products are fully compliant with the relevant statutory regulations as applicable and are designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.
6. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place.
7. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place.
8. The manufacturer shall keep a copy of the EC type-examination certificate, its annexes and additions together with the technical documentation at the disposal of the national authorities for at least 10 years after the wheel mark has been affixed on the last product manufactured and in no case for a period shorter than the expected life of the marine equipment concerned.

Note

When requested for applications of the insulation system on the flat side (non-stiffened face) of a bulkhead, the fixing arrangements shall be separately appraised by Lloyd's Register for fire aspects at on a project specific case-by-case basis.

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TA144-145 1.0.0 DAD-DAD MRA Rev00



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Places of Production

Unifrax Limited

Mill Lane,
Rainford,
St. Helens,
Merseyside, WA11 8LP,
United Kingdom

Unifrax France

17 Rue Antoine Durafour,
F-42420 Lorette,
France

Unifrax I LLC

54401 Smilax Road,
New Carlisle,
Indiana 46552,
USA

Luyang Energy-saving Materials Co., Ltd.

Plant#1, No.11, Yihe Road,
Yiyuan Country,
Zibo, Shandong,
China

M. Walk

Marta Walk

Senior Specialist, Fire & Safety

Statutory Discipline Team, Marine & Offshore

Lloyd's Register EMEA

For and on behalf of Lloyd's Register Marine Deutschland

LRMD EC Distinguishing No. 2923

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