

EC Type Examination (Module B) Certificate

USCG-EU MRA

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No.1025), as amended, 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, subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer	Unifrax Limited
Address	Mill Lane, Rainford, St. Helens, Merseyside, WA11 8LP, United Kingdom (UK)
Reference	Regulation (EU) 2019/1397
Regulation Item (No. & Item Designation)	MED/3.34 Fire Restricting Divisions For High Speed Craft
Product Type	LOAD BEARING FIRE-RESISTING DECK 60
Product Description	Fire Resisting Load Bearing Aluminium Deck Insulated on the Under Side with Type: "Load Bearing Fire-Resisting Deck 60" system for High-Speed Craft, using "FyreWrap LT" AES wool insulation
Specified Standard	IMO Res. MSC.45(65) Res.MSC.61(67) –(FTP Code), Part 11 IMO Res.MSC.101(73) –2000, Amendments MSC/Circ.1120 IMO Res.MSC.307(88) – (2010 FTP Code), Section 8
Trade Name	Load Bearing Fire-Resisting Deck 60 - FyreWrap LT (Marine) Blanket

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 This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.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 is issued under the authority of the MCA. 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 LRV of any modification or changes to the equipment in order to obtain a valid Certificate.

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:

164.207/EC0038



Keith Taylor

Team Lead Fire & Safety to Lloyd's Register Verification Ltd
A member of the Lloyd's Register Group

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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 B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body."

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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR2004522MB

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 an amendment of previous EC Type Examination (Module B) Certificate No: MED 1850076

APPROVAL DOCUMENTATION

1. Exova Warringtonfire, Holmesfield Road, Warrington, WA1 2DS, United Kingdom; Fire Test Report No. 325729, dated 09 May 2013.
2. Far East Fire Testing Centre (FEFTC), 511 Chuhua Zhi Lu, Shanghai Chemical Industry Park, Fengxian Sub-Zone, Shanghai, People's Republic of China; Fire Test Report No. FT17206, dated 25 September 2017.

CONDITIONS OF CERTIFICATION

1. When applied to an aluminium Load Bearing Fire-Resisting Deck for High Speed Craft Code applications and major fire hazards, the deck may be classified as a "Load Bearing Fire-Resisting Deck 60" restricted to insulation being on the underside (fire exposed side) of deck
2. When applied to the fire exposed stiffened underside (fire exposed side) of a load bearing aluminium deck with the "FyreWrap LT (Marine) Blanket" AES wool insulation system (both described below), this design of insulated deck may be considered as a 60 minute Load Bearing Fire-Resisting Deck suitable for fire risks on the underside of the deck, when no floor covering is applied on the upperside of deck. Floor coverings may however be permitted as outlined in item 3 below
3. The deck was also tested, and passed, the above criteria with floor coverings applied to the upperside of the deck comprising of: one base layer of primary deck covering type "SikaFloor Marine 120 (6mm thick, 0.9kg/m³ density) manufactured by Sika Services AG Company, followed by one top layer of floor covering type "Streamo Mariner" (2mm thick, 3.3kg/m² weight/area) manufactured by Gernord Ltd Company. Final acceptance is subject to approval by the Plan Approval Authority for the specific ship/project on a case-by-case basis
4. Aluminium structure consists of: 32mm x 32mm x 3mm channel bar stiffeners intermittently welded to the underside of a 2mm thick flat plate by one flange, with stiffeners at 125mm spacing and T-Section members 150mm long x 100mm wide x 6mm web x 10mm flange, at 1200mm spacing and at 90° to the channel bars
5. Insulation consists of: one layer of "FyreWrap LT (Marine) Blanket" AES wool insulation (50mm thick, 70kg/m³ density), applied to the fire exposed stiffened underside (fire exposed side) of a load bearing aluminium deck, over the tops of channel bar stiffeners and retained by steel pins (secured in welded aluminium ferrules) and steel spring washers, attached to alternate channel flanges at 250mm spacing (creating a 32mm air gap between the plate and the layer of insulation) and spaced at 215mm between T-Sections and 250mm across stiffeners. A strip layer (350mm width across T-Sections) of same insulation type, but 35mm thick, was applied over T-Sections and overlapped the insulation layer over the channels and was retained with the same 3mm diameter steel pins and steel spring washers, and at 50mm from all insulation joints and boundaries. An infill of the same insulation was also applied in air gaps between channel sections, in way of all insulation butt joints
6. The core temperature of aluminium alloy shall not rise above a maximum 200°C limit above ambient temperature for 60 minute duration of test
7. "FyreWrap LT (Marine) Blanket" AES wool insulation may be considered with alternative facing materials that have been tested for Low Flame Spread Characteristics
8. Application in each case to be approved by Lloyd's Register at the design stage

ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR2004522MB

9. Composition and application of sub components to be maintained in production and use in accordance with originally tested composition formula and method of application, and manufacturer's instructions
10. The Certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products, whether manufactured by themselves or their licensee manufacturers, if agreed by Lloyd's Register, are fully compliant with the relevant statutory regulations and Lloyd's Register Class Rules as applicable and designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties
11. 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.
12. 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
13. 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

PLACES OF PRODUCTION

Unifrax UK
Mill Lane
Rainford
St.Helens
Merseyside
WA11 8LP
United Kingdom (UK)

Unifrax France
17 Rue Antoine
Durafour
BP2
42420 Lorette
France

Unifrax I LLC
54401 Smilax Road
New Carlisle
Indiana 46552
United States of America (USA)



Keith Taylor
Team Lead, Fire & Safety
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

**NOTIFIED BODY CERTIFICATE
TRANSFER OF RESPONSIBILITY**



Certificate No: 0525-MED-DE-LR2004522MB

This certificate transfers Lloyd's Register Verification Ltd. (0038)

Certificate No: 0525-MED-DE-LR2004522MB

Issued on: 26 June 2020

to the responsibility of EU Notified Body No. 0525
(Lloyd's Register Deutschland GmbH)

Date of Original Certificate: 26 June 2020

Date of Current Certificate: 31 December 2020

Date of Certificate Expiry: 24 April 2023

Antje Herms-Bondzio

Lloyd's Register Deutschland GmbH

Überseeallee 10, 20457 Hamburg/Germany

T +49 40 349 700 101 44

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