



CERTIFICATE OF FIRE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	Unifrax Limited
Address	Mill Lane Rainford St. Helens Merseyside, WA11 8LP United Kingdom (UK)
Type	NON-LOAD BEARING FIRE-RESISTING BULKHEAD 30
Equipment Description	Fire Resisting Non-Load Bearing Aluminium Bulkhead Insulated on the Fire Exposed Side with Type: "Non-Load Bearing Fire-Resisting Bulkhead 30" system for High-Speed Craft using "FyreWrap LT" AES wool insulation
Specified Standard	IMO Resolution MSC.45 (65) and Res.MSC.61 (67) - FTP Code, Part 11, 2000 Amendments in Res.MSC.101 (73). MSC/Circ.1120. IMO Res.MSC.307(88) - 2010 FTP Code, under Section 8

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Date of issue 25 October 2018 Expiry date 24 October 2023

Certificate No. SAS F180178 Signed 

Sheet No 1 of 3 Name B. Geary
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid Certificate.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Page	2 of 3
Document number	SAS F180178
Issue number	1

DESIGN APPRAISAL DOCUMENT

Date 27 June 2018	Quote this reference on all future communications SOUTSO/SFS/TA/BG/WP32824817
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F180178

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Exova Warringtonfire, Warrington, United Kingdom, Fire Test Report No. WF 325438, dated 9 May 2013.

CONDITIONS OF CERTIFICATION

1. When applied to an aluminium Non-Load Bearing Fire Resisting Bulkhead for High Speed Craft Code applications and moderate fire hazards, the bulkhead may be classified as a "Non-Load Bearing Fire-Resisting Bulkhead 30" restricted to applications with fire risks on the insulated side of the bulkhead
2. When applied to the fire exposed insulated and stiffened side of a non-load bearing aluminium bulkhead with the "FyreWrap LT" AES wool insulation system (both described below), this design of insulated bulkhead may be considered as a 30 minute Non-Load Bearing Fire-Resisting Bulkhead suitable for fire risks on the insulated and stiffened side of the bulkhead only
3. Aluminium structure consists of: 32mm x 32mm x 3mm channel bar stiffeners intermittently welded to one side 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
4. Insulation consists of: one layer of "FyreWrap LT" AES wool insulation (35mm thick, 70kg/m³ density), applied 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 and at 50mm from all insulation joints and boundaries. A strip layer (350mm width across T-Sections) of same insulation 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. An infill of the same insulation was also applied in air gaps between channel sections, in way of all insulation butt joints
5. "FyreWrap LT" AES wool insulation may be considered with alternative facing materials that have been tested for Low Flame Spread Characteristics
6. Application in each case to be approved by Lloyd's Register at the design stage
7. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype



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Page

3 of 3

Document number

SAS F180178

Issue number

1

DESIGN APPRAISAL DOCUMENT

Date

27 June 2018

Quote this reference on all future communications

SOUTSO/SFS/TA/BG/WP32824817

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F180178

PLACE OF PRODUCTION

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Ben Geary
Technical Manager
Statutory Fire & Safety
Southampton Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).



EC TYPE EXAMINATION (MODULE B) CERTIFICATE

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), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Fire protection equipment requirements of Marine Equipment Directive (MED) 2014/90/EU and Commission Implementing Regulation (EU) 2018/773 indicating design, construction and performance requirements and testing standards for marine equipment, 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 2018/773
Regulation Item (No & Item designation)	MED/3.34 FIRE RESTRICTING DIVISIONS FOR HIGH SPEED CRAFT
Product Type	NON-LOAD BEARING FIRE-RESISTING BULKHEAD 30
Product Description	Fire Resisting Non-Load Bearing Aluminium Bulkhead Insulated on the Fire Exposed Side with Type: "Non-Load Bearing Fire-Resisting Bulkhead 30" system for High-Speed Craft using "FyreWrap LT" AES wool insulation
Specified Standard	IMO Resolution MSC.45 (65) and Res.MSC.61 (67) – FTP Code, Part 11, 2000 Amendments in Res.MSC.101 (73). MSC/Circ.1120. IMO Res.MSC.307(88) - 2010 FTP Code, under Section 8

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue	25 October 2018	Expiry date	24 October 2023
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Certificate No.	MED 1850138	Signed	
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Sheet No.	1 of 3	Name	B. Geary For and on behalf of Lloyd's Register Verification LRV EC Distinguishing No. 0038
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Note:

This certificate is issued under the authority of the MCA.

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.

Lloyd's Register Verification Limited (Reg. no. 4929226) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK. A subsidiary of Lloyd's Register Group Limited.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



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Page 2 of 3
Document number MED 1850138
Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 27 June 2018	Quote this reference on all future communications SOUTSO/SFS/TA/BG/WP32824817
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1850138

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.

APPROVAL DOCUMENTATION

Exova Warringtonfire, Warrington, United Kingdom, Fire Test Report No. WF 325438, dated 9 May 2013.

CONDITIONS OF CERTIFICATION

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5. "FyreWrap LT" AES wool insulation may be considered with alternative facing materials that have been tested for Low Flame Spread Characteristics
6. Application in each case to be approved by Lloyd's Register at the design stage
7. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype
8. Production items are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D) or Product Quality Assurance (Module E) or Product Verification (Module F) of the Marine Equipment Directive
9. Each item, batch or lot of the equipment is to have the "Mark of Conformity" affixed and be issued with a "Declaration of Conformity"



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Page 3 of 3
Document number MED 1850138
Issue number 1

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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1850138

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