



Lloyd's
Register

Lloyd's Register Verification Limited

71 Fenchurch Street, London, EC3M 4BS

Telephone 020 7423 2416 Fax 020 7423 2053

Email med@lr.org

Page	2 of 3
Document number	MED 1950104
Issue number	1

DESIGN APPRAISAL DOCUMENT

Date 11 July 2019	Quote this reference on all future communications UKITSO/FIRE/TA/JE/WP35813051
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1950104

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/EXAMINED DOCUMENTATION

TEST REPORTS

Warringtonfire, Holmesfield Road, Warrington, WA1 2DS, United Kingdom, Fire Test Report No. 403614 dated 5th March 2019.

CONDITIONS OF CERTIFICATION

1. Restricted Application: For applications with the fire risk on the stiffened insulated side only
2. A-30 bulkhead consisting of: 4mm thick aluminium plate with 9mm thick aluminium stiffeners insulated on stiffened side with one horizontal layer of (55mm thick, density 70 kg/m³) AES wool insulation type 'FyreWrap LT Blanket' manufactured by Unifrax Ltd, fitted to plate and around stiffeners
3. Insulation retained to the panels and stiffeners with 3mm diameter aluminium pins and washers, fitted at a maximum spacing of 300mm centres
4. Restricted Application: Minimum aluminium bulkhead plate thickness and stiffener dimensions specified in FTP Code: 6.0 ± 0.5 mm and (100 ± 5) × (75 ± 5) × (9 ± 1) mm respectively. The insulation system was tested on a 4mm aluminium bulkhead and the 200 °C criteria was not exceeded for 30 minutes, therefore it could be considered for use on aluminium bulkheads of thickness 4mm or greater (for the fire rating/duration achieved in the tests), subject to final approval by the Plan Approval Authority for the specific ship/project on a case-by-case basis
5. The core temperature of aluminium alloy shall not rise above a maximum 200°C limit above ambient temperature for 60 minute duration of test (SOLAS Chapter II-2 Regulation 11)
6. Composition, application and installation of sub components to be maintained in production and use in accordance with originally tested composition formula and method of application and installation, and manufacturer's instructions
7. 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
8. 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



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PLACE OF PRODUCTION

Unifrax Ltd 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)
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Jessica Evans
Senior Specialist
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-MED 1950104

This certificate transfers Lloyd's Register Verification Ltd. (0038)
Certificate No: MED 1950104
Issued on: 27 June 2019
to the responsibility of EU Notified Body No. 0525
(Lloyd's Register Deutschland GmbH)

Date of Original Certificate: 27 June 2019
Date of Current Certificate: 31 December 2020
Date of Certificate Expiry: 26 June 2024

Antje Herms-Bondzio
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