



CERTIFICATE OF FIRE APPROVAL

This is to certify that

The product(s) detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations for use on offshore installations classed with Lloyd's Register, and for use on 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	H-120 BULKHEAD (HYDROCARBON FIRE TEST)
Equipment Description	Steel Bulkhead Insulated on one side with Type: H-120 Class "FyreWrap LT" AES wool insulation system
Specified Standard	Testing meets the requirements of: IMO Resolution A.754 (18) incorporating the NPD Hydrocarbon Time/Temperature Relationship.

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 26 November 2018 Expiry date 25 November 2023

Certificate No. SAS F180180 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.

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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 F180180

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Exova Warringtonfire, Warrington, United Kingdom, Hydrocarbon Fire Test Report No. WF 326792, dated 22 May 2013.

CONDITIONS OF CERTIFICATION

1. When applied to the stiffened side of a steel bulkhead, the "FyreWrap LT" AES wool insulation system described below, may be considered as an "H-120 Bulkhead" for hydrocarbon fire risks from either side of the bulkhead
2. Consisting of: three layers of "FyreWrap LT" AES wool insulation (50mm thick, 70kg/m³ density), first layer applied vertically on the plate between stiffeners, second and third layers applied horizontally over plate and stiffeners, with 150mm staggered joints between layers, all retained with 3mm diameter welded steel pins and spring washers, spaced at 295mm to 305mm horizontally, 240mm vertically and at 50mm from all insulation joints and boundaries
3. For such non-combustible insulation materials the arrangements for this insulation system being fitted on the flat side of a bulkhead may also be considered for H-120 applications, subject to suitable fixing arrangements being separately approved by Lloyd's Register at the design stage
4. "FyreWrap LT" AES wool insulation may be considered with alternative facing materials that have been tested for Low Flame Spread Characteristics
5. Application in each case to be approved by Lloyd's Register at the design stage
6. 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



Lloyd's
Register

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F180180

PLACE OF PRODUCTION

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

Unifrax France
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F-42420 Lorette
France

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Indiana 46552,
USA.



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).