

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 DECK
Equipment Description	Steel Deck insulated on the underside with "FyreWrap® Blanket" (88mm thick, 96 kg/m ³ density)
Specified Standard	Department of Energy Test Specification - Issue 1: January 1990, Time/Temperature Relationship and IMO Resolution A.754(18)

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	23 August 2017	Expiry date	25 July 2021
Certificate No.	SAS F160265/M1	Signed	 <small>Regional Office Lloyd's Register EMEA</small>
Sheet No	1 of 3	Name	B. McDonald 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 F160265/M1
Issue number	1

DESIGN APPRAISAL DOCUMENT

Date 23 August 2017	Quote this reference on all future communications SOUTSO/SFS/TA/BM/WP30296596
------------------------	--

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F160265/M1

This Design Appraisal Document forms part of the Certificate

APPROVAL DOCUMENTATION

BRE Certification Limited, Watford, United Kingdom, Fire Test Report No. 228884, dated 7 November 2005. Lloyd's Register Witness Statement HOU1600398/1 dated 14th July 2016

CONDITIONS OF CERTIFICATION

1. Previously known as FIBERFRAX DURABLANKET S or INSULFRAX BLANKET
2. Consisting of: a steel deck insulated on the underside with a 38mm inner layer and a 50mm outer layer of FyreWrap® Blanket of nominal density of 96 kg/m³. The joints are staggered by approximately 300mm and insulation retained to steel deck with welded steel pins 3mm diameter and steel washers 38mm diameter at a maximum spacing of 250mm and at 50mm from all edges of the top layer of insulation
3. Suitable for applications where the fire risk is only on the underside (insulated side) of the deck
4. 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

Notes

1. A specimen of this H-120 deck system covered with steel wire mesh was subjected to a blast overpressure of 1.25 Bar with a duration of 279 ms. Subsequent examination showed the insulation withstood the blast and did not show any significant delamination from the substrate.

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 Brazil
Avenida Independencia 7033
Bairro Sao Matheus
Vinhedo, SP 13280-000
Brazil

Unifrax China
59 Shiyuang Road
Xushuguan New Zone
215151 Suzhou
China



Lloyd's
Register

Lloyd's Register EMEA

71 Fenchurch Street, London, EC3M 4BS

Telephone 020 7423 2416 Fax 020 7423 2053

Email tass@lr.org

Page	3 of 3
Document number	SAS F160265/M1
Issue number	1

DESIGN APPRAISAL DOCUMENT

Date 23 August 2017	Quote this reference on all future communications SOUTSO/SFS/TA/BM/WP30296596
------------------------	--

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F160265/M1

PLACES OF PRODUCTION

Unifrax India
99k Stone
Ahmedabad Surendrangar Hwy
Lakhtar Dist. Surendrangar
382 775 Gujarat
India

Unifrax Inc. LLC
54401 Smilax Road
New Carlisle
Indiana 46552
United States of America



Bruce McDonald
TSC Manager - Americas, Marine
Lloyd's Register Americas
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).