

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 units classed with Lloyd's Register, and for use on offshore units and onshore facilities 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
Type	H-120 Deck
Description	Steel Deck insulated on the underside with "FyreWrap® Blanket" (88mm thick, 96 kg/m ³ density)
Trade Name	FyreWrap® Blanket
Specified Standard	Department of Energy Test Specification – Issue 1: January 1990, Time/Temperature Relationship and IMO Resolution A.754(18)

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form 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.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Saji Abraham

Surveyor to Lloyd's Register EMEA
A member of the Lloyd's Register group

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 '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.

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR21310663SF-02

This Design Appraisal Document forms part of the Certificate.

This Certificate is an Amendment of Certificate Number LR21310663SF

APPROVAL DOCUMENTATION

BRE Certification Limited, Watford, United Kingdom, Fire Test Report No. 228884, dated 7 November 2005. Lloyds Register Witness Statement HOU1600398/1dated 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.
5. 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.

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.
2. Blast loadings and blast test reports were not considered in this appraisal and must be separately appraised from structural aspects by Lloyd's Register for any project approval.

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR21310663SF-02

PLACE 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 India Private Ltd.
99 KM Stone
Ahmedabad Surendranagar Highway
Dist.Surendranagar, Lakhtar
382775, Gujarat
India

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

Unifrax (Suzhou) Co. Ltd.
59 Shiyuang Road
Xushuguan New Zone
215151 Suzhou
China

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



Saji Abraham
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I 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).