

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, WA11 8LP, United Kingdom
Type	A-60 Bulkhead
Description	Steel Bulkhead Insulated on one side with Type: A-60 Class "FyreWrap LT Blanket" AES wool insulation system for restricted Applications
Trade Name	FyreWrap LT (Marine) Blanket - A60 Class Steel Bulkhead for restricted application
Specified Standard	IMO Res. A.754(18) - (FTP Code) Annex 1, Part 3 IMO Res. MSC.307(88) - (2010 FTP Code) Section 8 IMO MSC.1/Circ.1435

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 Marine Polska sp. z o. o. 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.

Al Zwycięstwa 13a, Gdańsk, 80-219, Poland

Marta Walk

Fire & Safety - Senior Specialist to Lloyd's Register Marine Polska sp. z o. o.
A member of the Lloyd's Register group

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DESIGN APPRAISAL DOCUMENT

Page	2 of 3
Certificate No:	LR23374249SF
Issue Date:	25/10/2023
Expiry Date:	24/10/2028
Reference:	UKITSO/FIRE/TA/MW/WP50714336/PRJ11100414290

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR23374249SF

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal of Certificate Number SAS F180175.

APPROVAL DOCUMENTATION

Exova Warringtonfire, Warrington, United Kingdom, Fire Test Report No. WF 327448, dated 22 May 2013.

Drawing No. 1344-R3-03, rev.0

CONDITIONS OF CERTIFICATION

1. When applied to the fire exposed stiffened side of a steel bulkhead, the "FyreWrap LT Blanket" AES wool insulation system described below, may be considered as an A-60 Bulkhead Restricted to fire risks on the insulated side of the bulkhead.
2. Consisting of: one layer of "FyreWrap LT Blanket" AES wool insulation (45mm thick, 64kg/m³ density), applied vertically on the plate between stiffeners and a strip layer of same insulation (45mm thick, 64kg/m³ density) applied over stiffeners and overlapping the plate insulation, all retained with 3mm diameter welded steel pins and spring washers. Pins spaced at 450mm on panels and 150mm over stiffeners horizontally to retain both layers, and 350mm vertically and at 50mm from all insulation joints and boundaries.
3. Application in each case to be approved by Lloyd's Register at the design stage.
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. Composition and application of insulation material, including any flame retardants, to be maintained in production and use in accordance with originally tested composition formula and method of application, and Manufacturer's instruction.
6. 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.

NOTE

When requested for applications of the insulation system on the flat side (non-stiffened face) of a bulkhead, the fixing arrangements shall be separately appraised by Lloyd's Register for fire aspects at on a project specific case-by-case basis.

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PLACES OF PRODUCTION

Unifrax Limited

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

Unifrax France

17 Rue Antoine Durafour,
F-42420 Lorette,
France

Unifrax I LLC

54401 Smilax Road,
New Carlisle,
Indiana 46552,
USA

Luyang Energy-saving Materials Co., Ltd.

Plant#1, No.11, Yihe Road,
Yiyuan Country,
Zibo, Shandong,
China

M. Walk

Marta Walk
Senior Specialist, Fire & Safety
Statutory Discipline Team, 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)

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