

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 Merseyside, WA11 8LP United Kingdom (UK)
Type	A-60 DECK
Description	Fire Resisting 'A' Class Deck - Type: "FyreWrap LT Blanket insulated A60 Steel Deck"
Specified Standard	IMO Res. MSC.61(67) - (FTP Code) Annex 1, Part 3 IMO MSC/Circ 1120

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 12 August 2013

Expiry date 11 August 2018

Certificate No. SAS F130155

Signed



Lloyd's Register EMEA
A subsidiary of Lloyd's Register Group Limited
12 Aug 2013
Quality Support, London Office

Sheet No 1 of 2

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.

DESIGN APPRAISAL DOCUMENT

Date 12 August 2013	Quote this reference on all future communications LDSO/SFS/TA/JE
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F130155

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Exova Warringtonfire, Cheshire, United Kingdom, Fire Test Report No. 325436 dated 25 March 2013.

CONDITIONS OF CERTIFICATION

1. A-60 deck consisting of 5mm thick steel deck insulated on underside side with one layer of (45mm thick, density 64 kg/m³) wool insulation type 'FyreWrap LT Blanket' manufactured by Unifrax Ltd, fitted to plate and around stiffeners.
2. Insulation retained to the steel deck and stiffeners with welded steel pins and steel washers, fitted at a maximum spacing of 330mm centres and 50mm from all insulation butt joints.
3. Maximum width of panels: 600mm
4. Composition and application of insulation material to be maintained in production and use in accordance with originally tested composition formula and method of application, and manufacturer's instructions.
5. 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.

PLACE OF PRODUCTION

Unifrax Limited
Mill Lane
Rainford
St Helens
Merseyside, WA11 8LP
United Kingdom (UK)

Unifrax France
17 Rue Antoine Durafour
42420 Lorette
France


Lloyd's Register EMEA
A subsidiary of Lloyd's Register Group Limited
12 Aug 2013
Design Support London Office

Bruce McDonald
Technical Manager
Statutory Fire and Safety
London Design Support Office
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).

EC TYPE EXAMINATION (MODULE B) CERTIFICATE



This is to certify that :

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), specified as a "notified body" under the terms of The Merchant Shipping (Marine Equipment) Regulations S.I. 1999 No. 1957, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Fire protection requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Commission Directives 98/85/EC, 2001/53/EC, 2002/75/EC, 2002/84/EC, 2008/67/EC, 2009/26/EC, 2010/68/EU, 2011/75/EU and 2012/32/EU subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer	Unifrax Limited
Address	Mill Lane Rainford St. Helens Merseyside, WA11 8LP United Kingdom (UK)
Annex A1 Item USCG Category Number	A.1/3.11 - 'A' AND 'B' CLASS DIVISION, FIRE INTEGRITY (a) - 'A' CLASS DIVISIONS 164.105 - 'A' AND 'B' CLASS DIVISION, FIRE INTEGRITY (Deck Assembly)
Type	A-60 DECK
Description	Fire Resisting 'A' Class Deck - Type: "FyreWrap LT Blanket insulated A60 Steel Deck"
Specified Standard	IMO Res. MSC.61(67) - (FTP Code) Annex 1, Part 3 IMO MSC/Circ 1120

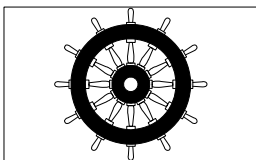
The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue	12 August 2013	Expiry date	11 August 2018
Certificate No.	MED 1350108	Signed	 
Sheet No	1 of 2	Name	B. McDonald For and on behalf of Lloyd's Register Verification LRV EC Distinguishing No. 0038

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 the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.



0038/yy

Subject to compliance with the conditions in the attached Design Appraisal Document (schedule), which forms part of this certificate, and those of Articles 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.

yy = Last two digits of year mark affixed.

This product has been assigned a U.S. Coast Guard Module B number:

USCG Module B number: 164.105/EC0038

USCG-EU MRA

to note type approval to Module B only as it pertains to obtaining U. S. Coast Guard approval as allowed by the "Corrigendum to Council Decision 2004/425/EC of 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on the mutual recognition of certificates of conformity for marine equipment."

This certificate is issued under the authority of the MCA.

Lloyd's Register Verification Limited (Reg. no. 4929226) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK. A subsidiary of Lloyd's Register Group Limited.

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.

DESIGN APPRAISAL DOCUMENT

Date 12 August 2013	Quote this reference on all future communications LDSO/SFS/TA/JE
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No.MED 1350108

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 DOCUMENTATION

Exova Warringtonfire, Cheshire, United Kingdom, Fire Test Report No. 325436 dated 25 March 2013.

CONDITIONS OF CERTIFICATION

1. A-60 deck consisting of 5mm thick steel deck insulated on underside side with one layer of (45mm thick, density 64 kg/m³) wool insulation type 'FyreWrap LT Blanket' manufactured by Unifrax Ltd, fitted to plate and around stiffeners.
2. Insulation retained to the steel deck and stiffeners with welded steel pins and steel washers, fitted at a maximum spacing of 330mm centres and 50mm from all insulation butt joints.
3. Maximum width of panels: 600mm
4. Composition and application of insulation material to be maintained in production and use in accordance with originally tested composition formula and method of application, and manufacturer's instructions.
5. 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.
6. This product has been assigned a **U.S. Coast Guard Module B number USCG Approval Category 164.105/EC0038** to note type approval to Module B only as it pertains to obtaining U. S. Coast Guard approval as allowed by the "Corrigendum to Council Decision 2004/425/EC of 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on the mutual recognition of certificates of conformity for marine equipment".

In those instances where the Notified Body conducting the conformity assessment in accordance with either Module D, E or F of the Marine Equipment Directive is not Lloyd's Register Verification Ltd., such Notified Body would use the above U.S. Coast Guard Module B number to provide the manufacturer with the U.S. Coast Guard approval number by noting it on the Certificate of Conformity, thereby authorizing the manufacturer to mark the product accordingly.

Note: For products placed on board U.S. flagged ships there is no declaration of conformity required to meet U.S. Coast Guard requirements.

7. 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.

PLACE OF PRODUCTION

Unifrax Limited Mill Lane Rainford St Helens Merseyside, WA11 8LP United Kingdom (UK)	Unifrax France 17 Rue Antoine Durafour 42420 Lorette France
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Bruce McDonald
 Technical Manager
 For and on behalf of Lloyd's Register Verification
 LRV EC Distinguishing No. 0038