

## EC-TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

DBI Certification did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

<b>Manufacturer Address</b>	UNIFRAX Ltd, Mill Lane Rainford St.Helens, WA11 8LP, Merseyside, United Kingdom
<b>Directive Reference</b>	MED Directive 2014/90/EU , Regulation as amended by MED (EU) 2017/306.
<b>Regulation Item</b>	MED/3.13 Non-combustible materials
<b>Product Type</b>	Needled blanket of calcium-magnesium silicate vitreous fibres with different facings
<b>Product Description</b>	Needled blanket of calcium-magnesium silicate vitreous fibres with facings on one or two sides designated FyreWrap <sup>®</sup> LTF Blanket, FyreWrap <sup>®</sup> LTF2 Blanket, FyreWrap <sup>®</sup> LTFR Blanket, FyreWrap <sup>®</sup> LTFR2 Blanket, FyreWrap <sup>®</sup> LTG Blanket, FyreWrap <sup>®</sup> LTG2 Blanket, FyreWrap <sup>®</sup> LTGi Blanket and Insulfrax <sup>®</sup> LTXF Blanket, Insulfrax <sup>®</sup> LTXF2 Blanket, Insulfrax <sup>®</sup> LTXFR Blanket, Insulfrax <sup>®</sup> LTXFR2 Blanket, Insulfrax <sup>®</sup> LTXG Blanket, Insulfrax <sup>®</sup> LTXG2 Blanket and Insulfrax <sup>®</sup> LTXGi Blanket
<b>Specified Standards</b>	IMO Res. MSC.307(88)-(2010 FTP Code) Annex 1 Part 1.

**The attached (*schedule of approval*) forms part of this certificate.**

**This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.**

Date of issue 2018-03-12 Issued by DBI Certification Notified Body No. **2531**  
Expiry date 2022-03-03

*The certificate supersedes the certificate version 2531-MED-CMC10005 issued:2017-07-05 by NB no. 2531  
This certificate was first issued 2014-04-23 by NB no.0845.*

This product has been assigned a USCG Approval Category No.:164.109/EC2531 to note type approval to module B only as pertains to obtaining US Coast Guard approval as allowed by the " Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27<sup>th</sup>, 2004.

Signed

Name

  
Allan Laursen  
Responsible for evaluation

/

  
Dan Bluhme  
Responsible for certification decision

### Notes:

**This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the notified body named on this certificate.**

**Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.**

**The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.**

**In case limitations of use apply, these should be indicated in the Annex of this certificate.**

**This certificate is issued under the authority of the Danish Maritime Authority**

(Annex)

## Schedule of Approval

### Place of Production

UNIFRAX Ltd, Mill Lane Rainford St.Helens, WA11 8LP, Merseyside, United Kingdom and Unifrax France, 17, rue Antoine Durafour, F-42420 Lorette, France and Unifrax I LLC., 54401 Smilax Road, New Carlisle, Indiana 46552, USA.

### Product Description

Needled blanket of calcium-magnesium silicate vitreous fibres designated FyreWrap<sup>®</sup> LTF, LTF2, LTFR, LTFR2, LTG2 and LTGi Blanket, delivered in thickness from 13 mm to 60 mm. Densities 48, 64, 70, 80, 96 and 128 kg/m<sup>3</sup>, and Insulfrax<sup>®</sup> LTXF, LTXF2, LTXFR, LTXFR2, LTXG, LTXG2 and LTGi Blanket delivered in thickness 13 mm, 25 mm, 38 mm, 50 mm. Densities 64, 96 and 128 kg/m<sup>3</sup>.

Facings:

FyreWrap<sup>®</sup> LTF Blanket and FyreWrap<sup>®</sup> LTF2 Blanket: 30 micron aluminium foil bonded to the blanket on one or two faces, respectively.

FyreWrap<sup>®</sup> LTFR Blanket and FyreWrap<sup>®</sup> LTFR2 Blanket: 30 micron aluminium foil with a square grid glass fibre mesh bonded to the blanket on one or two faces, respectively.

FyreWrap<sup>®</sup> LTG Blanket and FyreWrap<sup>®</sup> LTG2 Blanket: Glass fibre cloth, 0.2 mm thickness, 200 g/m<sup>2</sup>, bonded to the blanket on one or two faces, respectively.

FyreWrap<sup>®</sup> LTGi Blanket: Glass fibre cloth, 0.44 mm thickness, 410 g/m<sup>2</sup>, bonded to the blanket face.

Insulfrax<sup>®</sup> LTXF Blanket: 30 micron aluminium foil bonded to one surface, with a non-fuming and non-combustible inorganic adhesive.

Insulfrax<sup>®</sup> LTXFR Blanket: With a square grid glass fibre reinforcing mesh inserted between the 30 micron aluminium foil and the blanket using a non-fuming and non-combustible inorganic adhesive.

Insulfrax<sup>®</sup> LTXG Blanket: Glass fibre cloth, 0.2 mm thickness, 200 g/m<sup>2</sup>, bonded to one surface using a non-fuming and non-combustible inorganic adhesive.

Insulfrax<sup>®</sup> LTXGi Blanket: Glass fibre cloth, 0.44 mm thickness, 410 g/m<sup>2</sup>, bonded to the blanket face.

### Product Classification

The needled blanket of calcium-magnesium silicate vitreous fibres with different facings designated FyreWrap<sup>®</sup> LTF Blanket, FyreWrap<sup>®</sup> LTF2 Blanket, FyreWrap<sup>®</sup> LTFR Blanket, FyreWrap<sup>®</sup> LTFR2 Blanket, FyreWrap<sup>®</sup> LTG Blanket, FyreWrap<sup>®</sup> LTG2 and FyreWrap<sup>®</sup> LTGi Blanket and Insulfrax<sup>®</sup> LTXF Blanket, Insulfrax<sup>®</sup> LTXF2 Blanket, Insulfrax<sup>®</sup> LTXFR Blanket, Insulfrax<sup>®</sup> LTXFR2 Blanket, Insulfrax<sup>®</sup> LTXG Blanket, Insulfrax<sup>®</sup> LTXG2 and Insulfrax<sup>®</sup> LTXGi Blanket. fulfils the criteria listed in IMO Res. MSC.61(67)-(FTP Code) Annex 1 Part 1 and is therefore considered to meet the requirement for non-combustible materials

### Application / Limitation of Product

FyreWrap<sup>®</sup> LTF, LTF2, LTFR, LTFR2, LTG, LTG2 and LTGi Blanket:

With density of 48 kg/m<sup>3</sup> to 128 kg/m<sup>3</sup>

Minimum thickness of the product is 13 mm.

Insulfrax<sup>®</sup> LTXF, LTXF2, LTXFR, LTXFR2, LTXG, LTXG2 and LTXGi Blanket:

With density of 64 kg/m<sup>3</sup> to 128 kg/m<sup>3</sup>

Minimum thickness of the product is 13 mm.

## Type Approval Documentation

Test report: Test report No.PFB10019a and PFB10019b both dated 2012-02-06 valid until 2027-02-06 from DBI.  
Tested according to IMO Res. MSC.307(88)-(2010 FTP Code) Annex 1 Part 1.  
Certificate of Authority dated 26<sup>th</sup> of may 2014.

Test report No. PFB10019c dated 2012-04-23 valid until 2027-04-23 from DBI.  
Tested according to IMO Res. MSC.307(88)-(2010 FTP Code) Annex 1 Part 1

Test report No. 384161 dated 2017-06-16 valid until 2032-06-08 from Exova Warringtonfire.  
Tested according to IMO Res. MSC.307(88)-(2010 FTP Code) Annex 1 Part 1

Test report No. 384162 dated 2017-06-16 valid until 2032-06-12 from Exova Warringtonfire.  
Tested according to IMO Res. MSC.307(88)-(2010 FTP Code) Annex 1 Part 1.

Test report No. FT17282 dated 2017-12-25 valid until 2032-12-25 from Far East Fire Testing Centre.  
Tested according to IMO Res. MSC.307(88)-(2010 FTP Code) Annex 1 Part 1.

Risk Analysis Assesment dated 2017-06-19 from UNIFRAX Ltd.

Declaration of Performance concerning change of Trade name dated 2017-11-07 UNIFRAX Ltd.

## Marking of Product

The product or packing is to be marked with name of manufacturer, type designation, technical rating and Mark of Conformity.

The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

## End of Certificate