DNV·GL

Certificate No:
TAF00000G9

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Horizontal Class A Division

with type designation(s)
FyreWrap Blanket (Fiberfrax Durablanket S) - Class A-30 Aluminium Deck

Issued to
Unifrax Ltd.
ST. HELENS, United Kingdom

is found to comply with
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
DNV GL rules for classification – Ships
DNV GL offshore standards
DNV GL rules for classification – High speed and light craft

Application :

Approved for use as a fire retarding division of class A-30.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This certificate is recognized by Transport Canada.

This Certificate is valid until **2021-12-19**.

Issued at **Høvik** on **2016-12-20**

for **DNV GL**

DNV GL local station: **Manchester**

Approval Engineer: **Fryderyk Hoga**

Petter Langnes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id:
Certificate No: **TAF00000G9**

Product description

"FyreWrap Blanket (Fiberfrax Durablanket S) - Class A-30 Aluminium Deck"
composed of a structural aluminium deck insulated with one layer of 38 mm thick FyreWrap (Marine) Blanket (density 96 kg/m^3) manufactured by Unifrax, applied on the aluminium structural core as well as on the stiffeners following their contours.

The blanket width is compressed from 610 to 600 mm and to be installed in 600 mm widths to form slight compressed butted joints.

The blankets are held in place by means of bi-metallic pins (comprised of Ø 3 mm steel pins mounted in aluminium bosses or ferrules welded to the plate) and retained using Ø 38 mm steel washers. The pins are to be installed with a nominal spacing of 200 mm across the blankets and max. 360 mm along the blankets, whereas pins at the joints between blankets shall have a nominal spacing of 100 mm from the blanket edge.

This product can be manufactured at:

- Unifrax(Suzhou) Co., Ltd. – address: No. 51 Shiyang Road, New District, Suzhou City 215151, Jiangsu Province, China
- Unifrax France – address: 17 Rue Antoine Durafour, BP2, 42420 Lorette, France
- Unifrax India Private Limited – address: 99 k Stone Ahmedabad Surendrangar Hwy Lakhtar, Dist. Surendrangar, 382 775 Gujarat, India
- Unifrax Brasil Ltda – address: Avenida Independencia, 7033 Bairro Sao Matheus Vinhedo, SP13280-000, Brazil
- Unifrax Inc LLC (New Carlisle) – address: 54401 Smilax Road,New Carlisle, Indiana 46552, United States of America

Application/Limitation

Approved for use as a horizonatal fire retarding division of class A-30.

The product may also be used as fire resisting divisions on High Speed Craft.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code Annex 1 Parts 2 and 5) when required according to relevant rules.

Each product is to be supplied with its manual for installation and maintenance.

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

Test report No. FT16179 dated 24 May 2016 from Far East Fire Testing Centre, Shanghai, China.
Drawing No. 152861 rev.1 "A30 Aluminium Deck" dated 30 April 2015 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

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

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for,

Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.