

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Equivalent Class A Divisions**

with type designation(s)

**Wavy Steel Plate Bulkhead with FyreWrap-I type Marine Insulfrax Blanket (Corrugated fire wall)**

Issued to

**Unifrax(Suzhou) Co., Ltd.  
Suzhou, China**

is found to comply with

**DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations****DNV GL rules for classification – Ships****DNV GL offshore standards****Application :****Approved for use as a non-load bearing fire retarding division of class A-60.****This certificate is recognized by Transport Canada.****Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2018-04-19**for **DNV GL**This Certificate is valid until **2023-04-18**.DNV GL local station: **Shanghai**Approval Engineer: **Marius Mørner****Mårten Schei-Nilsson  
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.



Job Id: **262.1-028220-1**  
Certificate No: **TAF00000XN**

## Product description

"Corrugated fire wall (Wavy Steel Plate Bulkhead with FyreWrap-I type Marine Insulfrax Blanket)" composed of 5 mm thick corrugated steel plate insulated on one side with 50 mm thick blanket (FyreWrap-I type Marine Insulfrax Blanket) based on a calcium, magnesium, silicate chemistry with density 64 kg/m<sup>3</sup> manufactured by Unifrax (Suzhou). The insulation is fixed to the corrugated steel plate with  $\varnothing 3$  mm steel pins and  $\varnothing 30$  mm washers with maximum distance between the pins of 538 mm horizontally and 180 mm vertically.

For further details, see drawing and test report listed under Type Approval documentation below.

## Application/Limitation

Approved for use as a non-load bearing fire retarding division of class A-60.

General application: fire hazard from either side.

The use of this product shall be limited to applications specifically approved by the Administration in question, see IMO 2010 FTP Code part 3, Appendix 1, items 1.12 and 1.13. The construction shall in any case not be used as part of main fire zone bulkheads and stairways enclosures on passenger ships (see also IMO MSC/Circ.1005).

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

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 2017.

Test report no FT17298 dated 9<sup>th</sup> January 2018, from far East Fire Testing Centre Shanghai, China.

Drawing no FP-17001 edition A from the 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 products listed in this certificate 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.