



Certificate No:  
**TAF00001JK**

# TYPE APPROVAL CERTIFICATE

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## This is to certify:

**That the Class B Bulkhead**

with type designation(s)  
**B-15 Cabin Wall Extension**

Issued to

**Thermal Ceramics UK Ltd**  
**Wirral, Merseyside, United Kingdom**

is found to comply with

**DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations**  
**DNV GL rules for classification – Ships**

## Application :

**Cabin wall extension approved for use as class B-15 fire retarding division.**

**May only be installed in concealed and inaccessible spaces.**

**This certificate is recognized by Transport Canada.**

Issued at **Høvik** on **2021-06-04**

for **DNV**

This Certificate is valid until **2025-06-03**.

DNV local station: **Manchester**

Approval Engineer: **Helge Bjørnarå**

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**Sverre Olav Bergli**  
**Head of Section**

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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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

"B-15 Cabin Wall Extension"

composed of 30 mm FireMaster Marine Plus Blanket (manufactured by Thermal Ceramics with density 80 kg/m<sup>3</sup>) faced on both sides with aluminum foil. The blanket is to be fixed to deck above, side walls and top of B-15 divisions by pins and washers or screws.

Junctions of the Wall Extension may be arranged by:

- overlap (100 mm) of adjacent blankets fixed by Ø3 mm needles with washers (minimum distance between needles to be 150 mm for vertical Wall Extension and 100 mm in the curves
- of the Wall Extension when it is bent), or
- use of a 150 mm cover strips (same blankets) fixed by two rows (75 mm from each other) of Pig Tails or Ø3 mm needles with washers (minimum distance along the junction between Pig tails/needles to be 150 mm for straight vertical Wall Extension and 100 mm in the curves of the Wall Extension when it is bent).

All penetrations for cables, cable trays, plastic pipes up to Ø 200 mm, stiffeners, etc. have to be sealed with at least 10 mm mastic/putty on one side of the Wall Extension.

Following sealant materials may be used: ISOLFLAM X 100, ISOLFLAM X 105 and FireMaster Putty.

Pipes of diameter over 110 mm shall be insulated on a length of 100 mm on both sides of the Wall Extension with one layer of FireMaster Marine Plus Blanket (t=30 mm, density 80 kg/m<sup>3</sup>).

The insulation shall be fixed on the pipe by steel wire.

Maximum height of the Wall Extension: 2000 mm

The installation is to be performed according to the manufacturers Fire Protection Systems Information, reference No. FM MS 11 and No. FM 4.110.

The products may be manufactured at the premises of:

- Morgan Kailong (Jingmen) Thermal Ceramics Co., Ltd., Jingmen, China.
- Morgan Thermal Ceramics (Shanghai) Co., Ltd., Shanghai, China.
- Thermal Ceramics de France S.A., Saint-Marcellin-en-Forez, France.
- Murugappa Morgan Thermal Ceramics Ltd., Dist.- Gandhinagar, India.
- Murugappa Morgan Thermal Ceramics Ltd, Ranipet, India.
- Morgan Thermal Ceramics Korea, Daegu, Korea.
- Grupo Industrial Morgan SA de CV, Mineral de La Reforma, Mexico.
- Morgan Advanced Materials Industries Ltd, Abudhabi, United Arab Emirates.
- Thermal Ceramics, Inc., Augusta, USA.

## Application/Limitation

Cabin wall extension approved for use as of class B-15 fire retarding division.

The wall extension may only be installed in concealed and inaccessible spaces.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code Parts 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, September 2018.

Test report No. 13-V-806 dated 10 December 2013 from Effectis, Maizières-lès-Metz, France.

Test report No. 14-V-000430 B dated 17 September 2014 from Effectis, Maizières-lès-Metz, France.

Test report No. 14-V-000414 B dated 17 September 2014 from Effectis, Maizières-lès-Metz, France.

Test report No. 14-F-001692 dated 17 September 2014 from Effectis, Maizières-lès-Metz, France.

Technical Assessment 14/2 B dated 3 November 2014 from Effectis, Maizières-lès-Metz, France.

Thermal Ceramics Fire Protection Systems Information, reference No. FM MS 11, Rev. 1 and No. FM 4.110, Rev. 6.

## Tests carried out

Tested according to IMO 2010 FTP Code Part 3.



Job Id: **262.1-019589-2**  
Certificate No: **TAF00001JK**

### **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 confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

### **Periodical assessment**

DNV'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.