



TYPE APPROVAL CERTIFICATE

Certificate No:
TAF00000AG
Revision No:
2

This is to certify:

That the Equivalent Class A Divisions

with type designation(s)
A-60 Corrugated Fire Wall

Issued to

Thermal Ceramics UK Ltd
Wirral, Merseyside, United Kingdom

is found to comply with

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021
DNV rules for classification – Ships
DNV offshore standards

Application :

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

General application: Fire hazard from either side

This certificate is recognized by Transport Canada

Issued at **Høvik** on **2023-05-10**

for **DNV**

This Certificate is valid until **2028-05-09**.

DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Helge Bjørnarå**

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Jowita Permoda
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.

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

A-60 Corrugated Fire Wall, composed of a minimum 1.5 mm thick stainless steel plate (alternatively 2 mm thick mild steel plate) insulated on one side with two layers of 50 mm thick FireMaster Marine Plus Blanket (manufactured by Thermal Ceramics with density 48 kg/m³). The corrugations are to be filled with FireMaster Marine Plus Blanket (density 48 kg/m³). The joints between adjacent blankets shall be offset in each layer by approximately 300 mm and no less than 150 mm.

The blankets are held in place using copper coated mild steel pins (Ø 3 mm / typically 160-180 mm long) welded to the fire wall and 38 mm friction-fit washers. The pins are to be installed with a maximum spacing of 300 mm. At the joints the blankets should be compressed. Joints between blankets can be placed a maximum of 350 mm from an anchor pin across the blanket width and a maximum of 250 mm from an anchor pin where lengths of blanket are joined together.

The installation is to be performed according to the manufacturers Fire Protection Systems Information, reference No. FM MS 01 PW and No. FM 4.105.

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., Gujarat, India
- Murugappa Morgan Thermal Ceramics, Ranipet, India
- Morgan Thermal Ceramics Korea, Daegu, Korea
- Grupo Industrial Morgan SA de CV, Pachuca de Soto, Mexico
- Morgan Advanced Materials Industries Ltd, Abu Dhabi, United Arab Emirates
- Thermal Ceramics, Inc., Augusta, USA

Application/Limitation

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

General application: Fire hazard from either side

Arrangement and fastening of the wall are subjected to approval in each case.

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 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 DNV-CP-0338, September 2021.

Test report No. AK2012-0238 dated 20 August 2012 from FILK, Gyeonggi-Do, Korea.

Test report No. KOMERI-0402-14T0719 dated 2 October 2014 from KOMERI, Busan, Korea.

Thermal Ceramics Fire Protection Systems Information, reference No. FM MS 01 PW, Rev.9 and No. FM 4.105, Rev.1.

Tests carried out

Tested according to IMO FTP Code Part 3 (IMO Res. A.754(18)) and in compliance with IMO 2010 FTP Code Ch. 8. New test 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.

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 DNV-CP-0338, Section 4.