



TYPE APPROVAL CERTIFICATE

Certificate No:
TAF00000VF
Revision No:
3

This is to certify:

That the Class H Lightweight Horizontal Partition and Deck

with type designation(s)
H-120 Steel Deck – 110 mm FireMaster Marine Plus Blanket

Issued to

Thermal Ceramics UK Ltd
Wirral, Merseyside, United Kingdom

is found to comply with
DNV offshore standards

Application :

Approved for use as a horizontal fire retarding division of class H-120.

Issued at **Høvik** on **2022-04-11**

for **DNV**

This Certificate is valid until **2022-12-20**.

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

Approval Engineer: **Helge Bjørnarå**

Helene David-Andersen
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

"H-120 Steel Deck – 110 mm FireMaster Marine Plus Blanket", composed of a structural steel deck insulated on the underside with 110 mm FireMaster Marine Plus Blanket (manufactured by Thermal Ceramics with density 70 kg/m³) applied in 2 layers (60 mm + 50 mm) on the deck plate and over the stiffeners. The stiffeners to be packed with same blanket.

The nominal blanket width is 610 mm and is to be compressed to a width of 600 mm to ensure compression at joints. The joints between blankets in each layer are arranged so that they do not coincide at the same location and are therefore offset by up to approximately half a blanket width.

The blankets are held in place using copper coated mild steel pins (Ø 3 mm / minimum 110 mm long) welded to the deck and 38 mm friction-fit washers. Blanket at anchor locations can be compressed by 10% of original thickness to 100 mm thickness. The pins are to be installed with a maximum spacing of 350 mm. At the joints the blankets should be compressed. Joints between blankets can be placed a maximum of 300 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 4.107.

The products may be manufactured at the premises of:

- Morgan Thermal Ceramics (Shanghai) Co., Ltd., Shanghai, China.
- Morgan Kailong (Jingmen) Thermal Ceramics Co., Ltd., China.
- Thermal Ceramics de France S.A., Saint Marcelin en Forez, France.
- Murugappa Morgan Thermal Ceramics, Ranipet, India.
- Thermal Ceramics Korea, Daegu, Korea.
- Morgan Advanced Materials Industries Ltd, Kizad, United Arab Emirates.
- Thermal Ceramics, Inc., Augusta, United States.

Application/Limitation

Approved for use as a horizontal fire retarding division of class H-120.

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. KOMERI-0402-12T1411 dated 28 February 2013 from KOMERI, Busan, Korea.

Thermal Ceramics Fire Protection Systems Information, reference No. FM MS 01 PW and No. FM 4.107, Rev.2.

Tests carried out

Tested in accordance with IMO 2010 FTP Code Part 3 with the hydrocarbon time-temperature curve specified in ISO 834-3.

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.