

Approval Engineer: Helge Bjørnarå

TYPE APPROVAL CERTIFICATE

Certificate No: **TAF00000YB**Revision No:

Jowita Permoda Head of Section

This is to certify:	
That the Class H Lightweight Horizontal Partition and Deck	
with type designation(s) H-60 Steel Deck – 2 x 40 mm FireMaster Marine Plus Blanket	
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-60.	
Issued at Høvik on 2023-05-10	
This Certificate is valid until 2028-05-09 . DNV local unit: UK & Ireland CMC & VMC	for DNV

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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.



Job Id: **262.1-005937-28** Certificate No: **TAF00000YB**

Revision No: 2

Product description

H-60 Steel Deck – 2 x 40 mm FireMaster Marine Plus Blanket,

composed of a structural steel deck insulated on the underside with two layers of 40 mm thick FireMaster Marine Plus Blanket (manufactured by Thermal Ceramics with density 70 kg/m³) applied across the tops of stiffeners following their contours.

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

The blankets are held in place using steel pins (Ø 3 mm / typically 12 to 25 mm longer than the blanket thickness) welded to the deck and friction-fit steel washers. The pins are to be installed with a nominal spacing of 300 mm crosswise the blanket and maximum 350 mm lengthwise the blanket.

The installation is to be performed according to the manufacturers Fire Protection Systems Information, reference No. FM MS 01 PW and No. FM 4.90.

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 Marcelin en Forez, France
- Murugappa Morgan Thermal Ceramics Ltd., Gujarat, India
- Murugappa Morgan Thermal Ceramics, Ranipet, India
- Thermal Ceramics Korea, Daegu, Korea
- Grupo Industrial Morgan SA de CV, Pachuca de Soto, Mexico
- Morgan Advanced Materials Industries Ltd, Kizad, United Arab Emirates
- Thermal Ceramics, Augusta, United States

Application/Limitation

Approved for use as a fire retarding deck of class H-60.

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. FT07287 dated 27 December 2007 from Far East Fire Testing Centre, Shanghai, China.

Thermal Ceramics Fire Protection Systems Information, reference No. FM MS 01 PW, Rev.9 and No. FM 4.90, Rev.2.

Tests carried out

Tested according to IMO FTP Code Part 3 (IMO Res. A.754(18)) 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.

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