

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Class H Fire Wall and Bulkhead**

with type designation(s)

H-60/H-120 Corrugated Steel Fire Wall - fire towards either side

Issued to

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

is found to comply with

DNV GL offshore standards**Application :****Approved for use as a non-load bearing fire retarding division of class H-60/H-120.****General application: Fire against either side**Issued at **Høvik** on **2020-09-21**for **DNV GL**This Certificate is valid until **2022-12-20**.DNV GL local station: **Manchester**Approval Engineer: **Helge Bjørnarå**

**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



Job Id: **262.1-005937-23**
Certificate No: **TAF00000VG**
Revision No: **2**

Product description

"H-60/H-120 Corrugated Steel Wall – fire towards either side"
composed of 2 mm corrugated steel wall insulated on one side with FireMaster Marine Plus Blanket (density 70 kg/m³), thickness 110 mm (one layer 50 mm and one layer 60 mm) in between and over the corrugations, and with 150 mm (3 layers of 50 mm blanket) inside corrugation.

The joints 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 by steel pins (Ø 3 mm / typically 12 to 25 mm longer than the blanket length) welded to the wall and Ø 38 mm friction-fit steel washers.

The installation is to be performed according to the manufacturers Method Statement No. FM MS 01 PW and Fire Protection Systems Information No. FM 4.95.

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, Augusta, United States

Application/Limitation

Approved for use as a non-load bearing fire retarding division of class H-60/H-120.

General application: Fire against either side

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. FT09146 dated 24 July 2009 from Far East Testing Centre, Shanghai, China.

Thermal Ceramics Method Statement No. FM MS 01 PW and Fire Protection Systems Information No. FM 4.95, Rev. 3.

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 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.