

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)

A-60 Steel Deck - FireMaster Marine Plus Blanket 45 mm x 64 kg/m³

Issued to

Thermal Ceramics UK Ltd
WIRRAL MERSEYSIDE, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code.

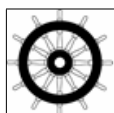
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-11-03**.

Issued at **Høvik** on **2017-01-08**

DNV GL local station:
Manchester

Approval Engineer:
Helge Bjørnara



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

Job Id:
Certificate No: **MEDB00001NR**

Product description

A-60 Steel Deck - FireMaster Marine Plus Blanket 45 mm x 64 kg/m³
composed of a structural steel deck insulated on the exposed side (underside deck) with a single layer of 45 to 68 mm thick FireMaster Marine Plus Blanket (density 64-128 kg/m³) applied across the tops of stiffeners following their contours.

The nominal blanket width is 610 mm and is to be compressed to a width of 600 mm to ensure compression at joints.

The blankets are held in place using steel pins (Ø 3 mm / typically 50 mm long) welded to the bulkhead and 38 mm friction-fit washers. The pins are to be installed with an average spacing of 300 mm across the blankets and on average 300 mm (maximum 350 mm) along the blankets, whereas pins at the joints between blankets shall have a nominal spacing of 150 mm (maximum 170 mm) from the blanket edge. Maximum pin distance to lengthways joint is 200 mm.

The installation is to be performed according to the manufacturers Fire Protection Systems Information No. FM-MS 01 PW and No. FM 4.71.

Application/Limitation

Approved for use as a horizontal fire retarding division of class A-60.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

Each product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Assessment No. P105762-1002B, Issue 1, dated 08 December 2016 from BRE Global, Watford, UK.

Test report No. KOMERI-0402-15T4080 dated 01 July 2016 from Korea Marine Equipment Research Institute, Busan, Korea.

Test report No. KOMERI-0402-15T3831 dated 26 February 2016 from Korea Marine Equipment Research Institute, Busan, Korea.

Thermal Ceramics Fire Protection Systems Information, reference No. FM-MS 01 PW and No. FM 4.71 Rev. 2.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval number if applicable (see page 1).