

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00001NR**  
Revision No:  
**1**

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/m<sup>3</sup>**

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,**

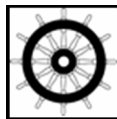
**Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code**

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

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

Issued at **Høvik** on **2017-02-28**

DNV GL local station:  
**Manchester**



for **DNV GL AS**

Approval Engineer:  
**Helge Bjørnarå**

Notified Body  
No.: **0575**

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**Vidar Dolonen**  
**Head of Notified Body**

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-000502-75**  
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## Product description

A-60 Steel Deck - FireMaster Marine Plus Blanket 45 mm x 64 kg/m<sup>3</sup>  
composed of a structural steel deck insulated on the exposed side (underside deck) with a single layer of 45 to 65 mm thick or two layers with total thickness 68 mm (30 mm + 38 mm) of FireMaster Marine Plus Blanket (density 64-128 kg/m<sup>3</sup>) 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).