DNV·GL

Certificate No:
MEDB000045C

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 Norway.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)
A-15 Steel Bulkhead (Fire Either Side) - FireMaster Marine Plus Blanket 25 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) 2017/306,**
item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434

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

This Certificate is valid until **2023-05-27**.

Issued at **Høvik** on **2018-05-28**

DNV GL local station:
Manchester

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

NORWEGIAN ACCREDITATION PROD 019

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Product description

A-15 Steel Bulkhead (Fire Either Side) - FireMaster Marine Plus Blanket 25 mm x 64 kg/m^3, composed of a structural steel bulkhead insulated on the stiffened side with a single layer of 25 mm thick FireMaster Marine Plus Blanket (density 64 kg/m^3) applied across the stiffeners. The stiffeners are also to be packed with the same blanket.

The blankets are held in place using copper coated mild steel pins (Ø 3 mm / typically 40-50 mm long) welded to the bulkhead and 38 mm friction-fit washers. 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 350 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 Method Statement No. FM MS 01 PW and Fire Protection Systems Information No. FM 4.103.

Application/Limitation

Approved for use as a fire retarding bulkhead of class A-15.

General application: Fire hazard from either side

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

Test report No. FT12073 dated 5 April 2012 from Far East Fire Testing Centre, Shanghai, China.

Thermal Ceramics Method Statement No. FM MS 01 PW and Fire Protection Systems Information No. FM 4.103, Rev. 1.

Tests carried out

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 front page).