DNV·GL

Certificate No:
MEDB00001VX

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 Fire resisting divisions for high speed craft

with type designation(s)
30 minute HSC Aluminium Bulkhead 2 mm - FireMater Marine Plus Blanket

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.1/3.34 and Annex B, Module B in the Directive; SOLAS 74, Regulation X/3, 2000 HSC Code 7 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 **2016-11-04**

DNV GL local station:
Manchester

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id:
Certificate No: **MEDB00001VX**

Product description

30 minute HSC Aluminium Bulkhead 2 mm - FireMaster Marine Plus Blanket,
composed of a 2 mm thick aluminium bulkhead horizontally stiffened on the exposed side by 25 mm wide x 38 mm deep x 3 mm thick angle stiffeners spaced at 130 mm. The bulkhead is additionally reinforced by vertical aluminium I-section beams, 80 mm wide x 8 mm thick flanges and 215 mm high x 8 mm thick web, located (welded) across to the stiffeners and spaced at 1200 mm.

The bulkhead is insulated on the exposed side with a layer of 35 mm thick FireMaster Marine Plus Blanket (density 70 kg/m^3) applied across the stiffeners, keeping a 38 mm air gap between the bulkhead and the blanket. The I-section beams are insulated around with a layer of 35 mm thick FireMaster Marine Plus Blanket (density 70 kg/m^3) with air gap on both sides of the web (box insulation).

The nominal blanket width is 610 mm and is to be compressed to a width of 580 mm to ensure compression at joints.

The blankets are held in place using bi-metallic pins (Ø 3 mm / typically 50 & 90 mm long) welded to the angle stiffeners and 38 mm friction washers. The pins are to be installed with a maximal spacing of 300 mm, whereas pins at the joints shall have a nominal spacing of 100 mm.

The installation is to be performed according to the manufacturers Fire Protection Systems Information, reference No. FM-MS 02 PW and No. FM 4.66.

Application/Limitation

Approved for use as a non-loadbearing fire-resisting bulkhead 30.

Restricted application: Fire against insulated side

The insulation material FireMaster Marine Plus Blanket has to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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

Type Examination documentation

Test report No. 227558 dated 16 May 2006 from BRE Testing, Garston, UK.

Thermal Ceramics Fire Protection Systems Information, reference No. FM-MS 02 PW and No. FM 4.66, Rev. 2.

Tests carried out

Tested according to IMP FTP Code Part 11 (IMO Res. MSC.45(65) and IMO Res. A.754(18)) and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The installation is to be marked with name and address of manufacturer, type designation, fire-technical rating and Mark of Conformity (see page 1).