

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)

60 minute HSC Aluminium Bulkhead 2 mm - FireMaster 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) 2017/306,**

item No. MED/3.34. SOLAS 74, Regulation X/3, 2000 HSC Code 7, IMO MSC.1/Circ.1457 and IMO 2010 FTP Code

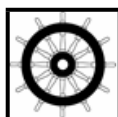
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-03-16.**

Issued at **Høvik** on **2017-03-17**

DNV GL local station:
Manchester

Approval Engineer:
Helge Bjørnara



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body



Product description

60 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 30 mm wide x 30 mm deep C-shaped stiffeners, spaced at 125 mm. The bulkhead is additionally reinforced by vertical aluminium T-sections beams, 80 mm wide x 200 mm deep x 8 mm thick, located (welded) across to the stiffeners and spaced at 1200 mm.

The bulkhead is insulated on the exposed side with an aluminium foil and a layer of 50 mm thick FireMaster Marine Plus Blanket (density 70 kg/m³) applied across the stiffeners, keeping a 30 mm air gap between the deck and the blanket. The aluminium foil is placed between the insulation blanket and the bulkhead. The T-section beams are insulated around with a layer of 50 mm thick FireMaster Marine Plus Blanket (density 70 kg/m³) 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 60 & 125 mm long) welded to the underside of T-stiffeners and 38 mm friction washers. The pins are to be installed with a maximal spacing of 250 mm, whereas pins at the joints between blankets shall have a nominal spacing of 100 mm from the blanket edge.

Application/Limitation

Approved for use as a load-bearing fire-resisting bulkhead 60.

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. 2006CS013616/4 dated 26 September 2006 from RINA, Genoa, Italy.

Thermal Ceramics Fire Protection Systems Information, reference No. FM-MS 02 PW and No. FM 4.68. Rev. 3.

Tests carried out

Tested according to IMO 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 product is to be marked with name and address of manufacturer, type designation, fire technical rating and the MED Mark of Conformity (see page 1).