



EC TYPE EXAMINATION (MODULE B)

CERTIFICATE No. MED001720CS/001

This is to certify that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2019/1397.

<i>MED Item N°</i>	MED/3.11a
<i>USCG Category N°</i>	164.107
<i>Description</i>	'A' and 'B' Class divisions fire integrity: (a) 'A' Class divisions
<i>Type</i>	A60 aluminium 2 mm Bulkhead - FIREMASTER MARINE PLUS BLANKET
<i>Applicant</i>	THERMAL CERAMICS UK LTD. Merseyside Wirral UNITED KINGDOM
<i>Testing standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code)
<i>Reference standards</i>	Chap. II-2 of SOLAS 74 Convention, as amended, RINA Rules for the certification of Marine Equipment

Issued in Genoa on
February 4, 2020

This Certificate is valid until
June 9, 2024

This Certificate consists of this sheet plus an attachment

Enrico Cabella
RINA Services S.p.A.

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**ATTACHMENT TO
CERTIFICATE No. MED001720CS/001**

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Manufacturer

THERMAL CERAMICS DE FRANCE S.A.S.U

Place of Manufacturer

Allée des Plantées B.P. No:4
42680 Saint Marcellin en Forez
FRANCE

Product description

Bulkhead composed of an aluminium sheet, 2 mm thick, fitted with T stiffeners welded to the sheet and C stiffeners, fitted perpendicularly to the T stiffeners and secured to the sheet with rivets. Over the C stiffeners, an aluminium foil and an insulating material layer composed of panels named FIREMASTER MARINE PLUS BLANKET, (old trade name FIREMASTER 607 MARINE PLUS BLANKET), 50 mm thick and having density of 70 kg/m³, are fitted. Such layers are secured to the sheet by means of pins welded with pitch ranging from 100 up to 250 mm. On the T stiffeners a strip of the same insulating material, having extension of 600 mm, is fitted.

The bulkhead may also be produced by:

- Morgan Thermal Ceramics Korea, #1-31, Buk-ri, Nongong-eup, Dalsung-gun, DAEGU, Republic of Korea
- Morgan Kailong (Jingmen) Thermal Ceramics Co., Ltd., 20-1# QuanKou Road, Jingmen, China
- Murugappa Morgan Thermal Ceramics Ltd, SIPCOT Industrial Complex, Plot No. 26 & 27, Ranipet, India
- Thermal Ceramics de France S.A., Zone Industrielle Les Plantees, Saint-Marcellin-en-Forez, France
- Murugappa Morgan Thermal Ceramics Ltd., Plot No.-681, Moti Bhoyan Village, Sanand- Kalol State Highway, Taluka- Kalol, Dist.- Gandhinagar, India
- Morgan Advanced Materials Industries Ltd, Plot No : KHIA 4-07A, Khalifa Industrial Zone, Abudhabi, United Arab Emirates
- Thermal Ceramics, Inc., 2102 Old Savannah Rd, Augusta, USA

Field of application

Fire resistant A-60 Class load-bearing bulkhead with fire hazard on the insulated side.

Reference documents

Thermal Ceramic drawing No. FM CAD 06.103.FMP rev. 1 dated 22 September 2006 approved on 25 September 2006 with endorsement No. LAB-311.

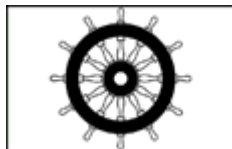
Tests carried out

Tests as per RINA Test Laboratory report No. 2006CS013616/6 dated 4 April 2007 issued according to IMO Resolution A. 754(18).

This certificate annuls and replaces the certificate No. MED264219CS/001 dated 08/05/2019 due to: Change of applicant name and list of manufacturers.

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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 control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body



XXXX/YYYY

"WHEELMARK FORMAT"

XXXX *Notified Body number undertaking surveillance module*

YY *Last two digits of year mark affixed*

USCG Approval

This product has been assigned a U.S. Coast Guard module B number (*USCG number: 164.107/EC0474*) to note type approval to Module B only as it pertains to obtaining U.S. Coast Guard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" as amended by Decision N. 1/2018 signed on 18th February 2019.

The manufacturer is allowed to affix the U.S. Coast Guard approval number to the above equipment subject to the authorization of the Notified Body undertaking the surveillance module.

General conditions for the approval

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.



Enrico Cabella

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