

TYPE APPROVAL CERTIFICATE
No. LAB312307CS/001



This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	Fire resisting bulkheads
<i>Type</i>	A60 COMPOSITE BULKHEAD - FIREMASTER MARINE PLUS BLANKET
<i>Applicant</i>	THERMAL CERAMICS ITALIANA S.R.L. VIA DELLE ROGGE 6 26841 CASALPUSTERLENGO (LO) ITALY
<i>Manufacturer</i>	THERMAL CERAMICS ITALIANA S.R.L.
<i>Place of manufacture</i>	VIA DELLE ROGGE 6 26841 CASALPUSTERLENGO (LO) ITALY
<i>Reference standards</i>	Part E - Chapter 1 of RINA Rules for the Classification of Charter Yachts

Issued in **Genoa** on **March 26, 2008**. *This Certificate is valid until* **March 25, 2013**



Massimo Dinale

RINA
Massimo Dinale

This certificate consists of this page and 1 enclosure

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A60 COMPOSITE BULKHEAD - FIREMASTER MARINE PLUS BLANKET

Product description

Bulkhead composed, moving from the external side, of five layers of insulating material named FireMaster Marine Plus Blanket (manufacturer Thermal Ceramics), 25 mm thick each and having density of 70 kg/m³ (the first three layers) and 64 kg/m³ (the other layers). The insulating material is secured to a GRP sandwich panel by means of steel pins and washers screwed to the panel with pitch ranging from 100 up to 300 mm. An aluminium foil is placed between each insulating material layer. The sandwich panel is composed of two GRP skins having thickness respectively of 2 mm (internal side) and 7 mm (external side) and, in between, a balsa wood layer, 38 mm thick and having density of 150 kg/m³.

Field of application

Bulkhead having fire resistance equivalent to A-60 Class with fire hazard on side fitted with the insulating material.

Reference documents

THERMAL CERAMICS drawing No. FM CAD 07.105a dated 4 August 2007 approved on 6 August 2007 with endorsement No. LABS-23.

Tests carried out

Tests as per RINA Test Laboratory Report No. 2007CS013123-5 dated 26 March 2008 issued according to IMO Resolution A. 754(18) with testing procedure applied to a reduced scale specimen and RINA Rules for the Classification of Charter Yachts.

Remarks

Each item of the mass production to be fitted on vessels classed by RINA is to be previously inspected at the manufacturer workshop by a RINA Surveyor and is to be marked or labelled with the trade name and the data of the Company to whom this Certificate is addressed. The validity of this Certificate ceases in the case of amendments to the rules on the basis of which the Certificate was issued.

Genoa 26/03/2008

