EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00006Z3
Revision no.:
1

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 AS under the authority of the Government of Norway.

This is to certify:

that the **Fire resisting divisions for high-speed craft**

with type designation(s)
Rapid Access Composite plus light (RAC+ light) - 60 minutes deckhead

issued to
CBG Systems International Pty Ltd
DERWENT PARK, **Australia**

is found to comply with the Implementing Regulation **(EU) 2025/1533** for
Item no. **MED/3.34** (Row **1 of 1**)
according to the following requirements:
IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO MSC.1/Circ.1457, SOLAS 74 Reg. X/3

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

Date of issue: **2025-11-07**

Expiry date: **2030-11-06**

DNV local unit:
Australia NB

Approval Engineer:
Tessa Biever

Notified Body
no.: **0575**

for **DNV AS**

Digitally Signed By:
Permoda, Jowita
on behalf of

Christine Mydlak-Röder
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, and amended by Decision No 1/2023 dated August 21st, 2023.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

Product description

'Rapid Access Composite plus light (RAC+ light) - 60 minutes deckhead'
Is a lightweight composite fire resisting division consisting of non-homogenous composite panels and light gauge stainless steel supporting structure, mounted so that a minimum 350 mm air gap is maintained between the back (non-fire side) of the panels and the aluminium deckhead plate.

Aluminium deck
Aluminium deckhead consists of a 1.9 mm plate with T shaped 1.9 mm thick stiffeners of dimensions 30.2 mm x 15 mm with pitch of 106 mm. The deck is also fitted with two T shaped stiffeners having height of 120 mm and composed of 6 mm thick web and flange having width of 100 mm. These stiffeners are welded, perpendicularly to the other, with pitch of 1200 mm.

Composite panels
The RAC+ light panel consist of a 20 mm (nominal) thick non-combustible material Marine Panel (density of 160 kg/m3, manufactured by Unifrax) faced on both sides by means of HIPS (Hybrid Inorganic Polymer System) impregnated in a fiberglass cloth and covered by a veneer named VentureClad-1577CW-WML (on fire exposed side) and an aluminium foil lining (on the unexposed side). The VentureClad-1577CW-WML on fire exposed side may be substituted by an aluminium foil lining named RAC-2 Alu foil facing.

The panels have nominal maximum dimensions of 2382 mm x 1182 mm and are typically 20 mm thick.

Supporting infrastructure and installation
The panels are mounted on a stainless-steel framework suspended below the aluminium deck using eye bolt, hanging rod and clips. An air gap of 350 mm is to be maintained between the aluminium shell plating and the non-fire side of the panels. Suspension rods are to be installed at 1500 mm nominal maximum centres in the longitudinal and transverse directions.

Joints between the panels are covered with stainless steel cover strips which are insulated with 6 mm thick Superwool Paper (density of 230 kg/m3, manufactured by Morgan Thermal Ceramics) and screwed to the framework at nominal 600 mm spacing. Each intersection of 4 panels is supported by a stainless-steel corner support bracket and a locking disc, covered with a pressed stainless-steel cover plate insulated with 6 mm thick Superwool Paper (density of 230 kg/m3, manufactured by Morgan Thermal Ceramics).

For further details see documentation under Type Examination documentation.

Application/Limitation

Approved for use as a horizontal, non load bearing, fire-resisting division in light crafts, meeting for a period of 60 minutes the requirements to stability, integrity and insulation for class A divisions.

During fire test the average temperature of aluminium deck structural core did not exceeded 140 degrees C.

Restricted application: Fire hazard shall be on the stiffened insulated side.

Max. nominal panel size: 2382 mm x 1182 mm (L x W)

Only the combined product (composite panels, stainless steel supporting structure, air gap and aluminium structure) is approved as a fire resisting division. Maker is to ensure that the product is manufactured and installed as tested (see Type Examination documentation), the main issues are listed below. The system in general is only approved for use on vessels built according to the 2000 HSC Code or rules based on this Code.

Materials used in fire resisting divisions shall be non-combustible or fire-restricting and 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.

Vessel operators shall ensure that the fire resisting division system is maintained as per the Original Equipment Manufacturers requirements.

Type Examination documentation

Please see Appendix: Type Examination Documentation

Tests carried out

Tested according to IMO 2010 FTP Code part 11.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire-technical rating, the Mark of Conformity and the USCG number if applicable (see first page).

APPENDIX

Type Examination documentation

Certificate no.:
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Document No.	Rev.	Title
CBG-RAC-PLUS-DECK-A		Drawing RAC-PLUS Deck INSTALLATION DRAWING - Annotated dated 12 March 2019 from manufacturer.
RAC-PLUS-COV		Drawing RAC-PLUS-COVERPLATE dated 4 April 2019 from manufacturer.
RAC-CHL	E	Drawing RAC-CHANNEL-LONG dated 18 September 2017 from manufacturer.
RAC-CHS	E	Drawing RAC-CHANNEL-SHORT dated 18 September 2017 from manufacturer.
RAC-PLUS-CSL-24		Drawing RAC-PLUS-COVERSTRIP LONG 2400 dated 4 April 2019 from manufacturer.
RAC-PLUS-CSL		Drwing RAC-PLUS-COVERSTRIP-LONG dated 4 April 2019 from manufacturer.
RAC-PLUS-CSS		Drawing RAC-PLUS-COVERSTRIP-SHORT dated 4 April 2019 from manufacturer.
RAC-CSB		Drawing RAC-CORNER-SUPPORT-BRACKET dated 15 June 2020 from manufacturer.
RAC-CLIP	C	Drawing RAC-CLIP-SS-SPECIAL-4H24 dated 10 November 2016 from manufacturer.
RAC-CLIP	C	Drawing RAC-CLIP-SS-SPECIAL-4H58 dated 10 November 2016 from manufacturer.
RAC-CLIP		Drawing RAC-CLIP-SS-SPECIAL-4H912 dated 10 November 2016 from manufacturer.
2020CS01313-1		Test report dated 25 May 2020 from Test Laboratory of RINA services, Genova, Italy.
103603859SAT-002		Test report dated 27 July 2018 from Intertek, Texas, USA.
RAC-PLUS-DECK-SIDEVIEW	A	Drawing RAC-PLUS-DECK-SIDEVIEW dated 17 December 2019 from manufacturer.
RAC-PLUS-PAS		Drawing RAC-PLUS-PANEL dated 4 April 2019 from manufacturer.