

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB000082Y**

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 A & B Class divisions fire integrity: A class divisions.**

with type designation(s)  
**Rapid Access Composite PLUS (RAC+) steel deck**

Issued to  
**CBG Systems International Pty Ltd**  
**DERWENT PARK, TASMANIA, Australia**

is found to comply with the requirements in the following Regulations/Standards:  
Regulation (EU) 2021/1158,  
item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO  
MSC/Circ.1120 and IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1435.

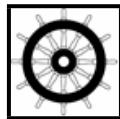
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-08-01**.

Issued at **Høvik** on **2022-08-02**

DNV local station:  
**Australia NB**

Approval Engineer:  
**Kristin Grønnæss**



Notified Body  
No.: **0575**



for **DNV AS**

Digitally Signed By:  
Øyvind Hoff  
Location: DNV Høvik, Norway  
on behalf of

**Sverre Olav Bergli**  
**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 1/2019 dated February 22nd, 2019.



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.

**LEGAL DISCLAIMER:** Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

“Rapid Access Composite PLUS (RAC+) steel deck”

composed of a structural steel deck insulated on the underside with Rapid Access Composite PLUS (RAC+) deck structural fire protection system, consisting of 22 mm thick composite panels supported by a stainless steel framework with an air gap of 250 mm between the panels and the structural steel deck.

The Rapid Access Composite PLUS (RAC+) panel is composed of 20 mm thick non-combustible material “Marine Panel” (density 160 kg/m<sup>3</sup>, manufactured by Unifrax) faced with “Hybrid Inorganic Polymer System (HIPS)” impregnated into a fiberglass cloth and covered with a self-adhesive veneer “VentureClad-1577CW-WML” on the panel side facing outwards and aluminium foil on the panel side facing the bulkhead.

The composite panels are suspended below the steel deckhead using eye bolt, hanging rod and clips. Suspension rods are installed between the eye bolt and framework at 1500 mm nominal maximum centres in the longitudinal and transverse directions. The composite panels joints are covered with stainless steel cover strips, insulated with 6 mm thick “Superwool Paper” (density 230 kg/m<sup>3</sup>, manufactured by Thermal Ceramics) and screwed to the framework with 600 mm spacing. A steel locking disk, covered by a 6 mm thick insulation slab of “Superwool Paper” and a steel cover plate, is mounted at the intersection of 4 composite panels.

The suspended composite panels can be fitted with an inspection hatch in the middle of a RAC+ panel with max. clear opening of 900 x 900 mm (W x H). The hatch leaf, having dimensions of 940 x 940 mm (W x H), is insulated with two layers of 20 mm thick “FireMaster LW Board” (density 190 kg/m<sup>3</sup>, manufactured by Thermal Ceramics), faced by “Hybrid Inorganic Polymer System (HIPS)” impregnated into a fiberglass cloth and covered with self-adhesive veneer “VentureClad-1577CW-WML”. The hatch leaf is fixed to the steel frame by a hinge mounted on the underside. Between the hatch leaf and frame, a 3 mm thick gasket of type “Intumescent Promaseal-LFC Fire protection laminate” is fitted. The hatch frame is fixed to the panel by means of twelve M5 bolts. Hatch leaf is fitted with three-point locking mechanism activated by a single handle.

For further details, see drawings listed under Type Examination documentation below.

## Application/Limitation

Approved for use as a horizontal fire retarding division class A-60.

Restricted application: fire hazard from the insulated side only.

Only the system consisting of structural steel deck fitted with the insulated composite panels suspended minimum 250 mm below the deckhead, is approved as an A-60 class deck.

Max. panel dimensions: 2383 x 1183 mm (L x W).

The insulation materials and adhesives used have to 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.

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

## Type Examination documentation

Test report No. 2021CSO14745/4 dated 21 March 2022 from RINA, Genova, Italy.

Drawing No. RAC-PLUS-STEEL-DECK-H, Rev. B, dated 9 March 2022 from manufacturer.

Drawing No. RAC-PLUS-STEEL-DECK-P, Rev. B, dated 9 March 2022 from manufacturer.

Drawing No. RAC-PLUS-HATCH, Rev. D, dated 28 February 2022 from manufacturer.

## Tests carried out

Tested in accordance with IMO 2010 FTP Code part 3.

## Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see page 1).