EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00004TZ
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 A & B Class divisions fire integrity: A class divisions.

with type designation(s)
A-60 Class deck, RAC +

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) 2023/1667,**
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.1434,1435; IMO MSC.1/Circ.1616, 1621

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

This Certificate is valid until **2028-12-11**.

Issued at **Høvik** on **2023-12-12**

DNV local unit:
Australia NB

Approval Engineer:
Tessa Biever

Notified Body
No.: **0575**

for **DNV AS**

Digitally Signed By:
Kristin Grønnæss Hovden
Location: DNV AS, Høvik, Norway
on behalf of

Mydlak-Röder, Christine
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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+)"

Structural aluminium deck insulated on the stiffened side exposed to the fire with Rapid Access Composite PLUS (RAC +) deck structural fire protection system consisting of composite panels supported by a stainless-steel framework mounted with an air gap of 300 mm between the panels and the ship deck.

The RAC+ panel is composed of a layer of non-combustible material named Marine Board with nominal density of 160 kg/m^3 (manufactured by Unifrax) facing on both sides by means of Hybrid Inorganic Polymer System (HIPS) impregnated into a fiberglass cloth and covered with a self-adhesive veneer named VentureClad-1577CW-WML on either side or aluminium foil on unexposed side.

Total panel thickness: 25 mm.

The panels are mounted on a stainless-steel framework suspended below the aluminium deck using Erico Caddy M6Ti clips with a 2 mm steel leg installed onto the stiffener flange. The clips are fitted with M6 steel eye bolt with rubber grommet. Steel hanging rods (4.76 mm to 6 mm) are installed between the eye bolt and the framework at nominal 1500 mm c/c. The hanging rods are hooked into the steel grid structure which supports the panels. Additional clips are riveted to the structure where required. Joints between panels are covered with stainless steel cover strips, which are insulated with 6 mm thick Superwool Paper with density 230 kg/m^3 (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 locking discs and are covered with a pressed stainless steel cover plate insulated with 6 mm thick Superwool Paper with density 230 kg/m^3 (manufactured by Morgan Thermal Ceramics).

The three panels are fitted across the centre of the panels with a transversal cover strip profile, which is screwed to the joints and insulated with Superwool Paper with density 230 kg/m^3 (manufactured by Morgan Thermal Ceramics).

Application/Limitation

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

Only the system consisting of structural aluminium deck fitted with the ceiling panels suspended minimum 300 mm below the deckhead, is approved as an A-60 class deck.

Max. panel size: 2383 mm x 1183 mm (H x W).

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the MED 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 2018CS01482/2 dated 08 June 2018 from RINA, Genova, Italy (product is tested under the name 'RAC 2').

Drawing No. RAC-2 – Deck - G Rev. A dated 07 May 2018 from manufacturer.
Drawing No. RAC-2 – Deck - P Rev. A dated 07 May 2018 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).