

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL 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" (RAC-LD) - non-load bearing deck 60

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) 2017/306,**

item No. MED/3.34. SOLAS 74, Regulation X/3, 2000 HSC Code 7, IMO MSC.1/Circ.1457 and IMO 2010 FTP Code

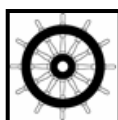
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-11-19.**

Issued at **Høvik** on **2017-11-20**

DNV GL local station:
Hobart

Approval Engineer:
Aleksandr Jegorov



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body



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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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" (RAC-LD) - non-load bearing deck 60

is a structural fire protection system consisting of 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 deck arrangement consist of minimum 3 mm aluminium plate stiffened by:

- aluminium I-beam girders with dimensions 175x5/80x8 mm fitted with pitch of 1200 mm.
- aluminium T-beam stiffeners with dimensions 34x40x3 mm fitted with pitch of 175 mm.

Equivalent stiffness could be accepted case-by-case.

Composite panels

"Rapid Access Composite" (RAC-LD) panels are composed of a 10 mm ALU COIL aluminium honeycomb "LARCORE" panel (with 0.3 mm skins) and a layer of 6.5 mm thick insulation (compressed) CBG-RAC-I-Insulation (Superwool 60981A, 9.0 intumescent mat) laminated onto the honeycomb. On an exposed side panels are lined with self-adhesive veneer type "VenturetapeClad-1577 CW-WML".

The panels have nominal maximum dimensions of 2383 x 1183 mm and are typically 16.5 mm thick.

The CBG-RAC-I-Insulation may be composed of Evanite 702 or Lauscha B-00-F or Lauscha B-02-F.

Supporting infrastructure and installation

Panels are mounted on a stainless steel framework suspended below aluminium deck using Erico Caddy M6Ti clips with a 2 mm steel leg installed on stiffener flange. Clips are fitted with M6 steel eye bolt with rubber grommet. 4.76 to 6 mm steel hanging rods are installed between the eye bolt and the framework at nominal 1500 mm centers. Hanging rods are linked to steel grid structure supporting composite panels. Additional clips are riveted to the structure where additional support is required. Joints between panels are covered with stainless steel strips, which are insulated with 6.5 mm (compressed) thick CBG-RAC-I-Insulation and screwed to the frame work at nominal 600 mm spacing. Each intersection of 4 panels is supported by a 0.55 mm stainless steel corner support bracket and locking disc and covered with a pressed stainless steel cover plate insulated with 6.5 mm (compressed) thick CBG-RAC-I-Insulation. An air gap of at least 350 mm is to be maintained between the aluminium deck plating and unexposed side of the panels.

For further details see documentation under Type Examination documentation below.

Application/Limitation

Approved for use as a non-load bearing fire-resisting deck 60.

During fire test the average temperature of aluminium deck did not exceeded 150°C.

Only the combined product (supporting infrastructure, composite panels, air gap and aluminium deck arrangement) 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 insulation material, and any surface materials and adhesive used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity

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

Type Examination documentation

Fire Test Report No. 2017CS011932/1 dated 29th June 2017 from Rina, Italy.

Tests carried out

Tested according to IMO 2010 FTP Code part 11.

Marking of product



Job Id: **344.1-007576-1**
Certificate No: **MEDB00003DA**

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