DNV·GL

Certificate No:
MEDB00006SU

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 Doors

with type designation(s)
H050D - Double Hinged (A-60)

Issued to
Rapp Bomek AS
Bodø, Norway

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

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

This Certificate is valid until **2022-03-09**.
Issued at **Høvik** on **2020-07-13**

DNV GL local station:
Norway Fleet in Service, Mid-North

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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.

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Job Id: **344.1-010681-1**
Certificate No: **MEDB00006SU**

Product description

H050D - Double Hinged (A-60),
is a double leaved hinged door (marked as RB part no. RBFDS050D) with door leaf composed of two insulation layers of "FireMaster Marine Plus" with thickness 25 mm (exposed side) and 38 mm (unexposed side) respectively (density 128 kg/m^3, manufactured by Morgan Advanced Materials), on each side of a 6 mm thick "Supalux" board (density 950 kg/m^3, manufactured by Promat). The outer layer on both sides of the door leaf are covered with 2 mm thick stiffened steel sheets, bonded with adhesive. A seal of type Silica fibre (Ø20 mm) is fitted along the perimeter of the door leaf (fixed with adhesive). Each door leaf is internally stiffened in vertical direction by three L-shaped 25 x 25 x 3 mm profiles on exposed side and four 30 x 30 x 3 mm profiles on unexposed side.

Total door leaf thickness is 73 mm.

Both door leaves are fitted to the door frame by three hinges. The door frame is made from 4 mm thick steel profiles welded or bolted (M8 bolts c/c 280 mm) to the bulkhead. When bolted, a seal of type Sil-Tex (3 x 30 mm) is fitted between frame and bulkhead.

The door leaf may incorporate a window with thickness of 27 mm in the upper half of the door, type designation "Pyrostop 60-201" (manufactured by Pilkington).

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

Application/Limitation

The door is approved for installation in steel bulkheads of class A-60. Installation of the door is bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum clear opening door:	1830 mm x 2165 mm (W x H)
Maximum size of active door leaf:	1007 mm x 2220 mm (W x H)
Maximum size of passive door leaf:	966 mm x 2220 mm (W x H)
Maximum clear opening window:	200 mm x 500 mm (W x H)

Bulkhead to be additionally stiffened with transverse and horizontal stiffeners along the door.

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, use and maintenance.

Type Examination documentation

Test report No. PGA10929A dated 16 December 2016 from DBI, Hvidovre, Denmark.

Dwg. No. RB602594W Rev.A (8 sheets) dated 6 June 2016 from manufacturer.
Dwg. No. RB602482W Rev.0 (24 sheets) dated 31 August 2016 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing 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 front page).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. For larger windows, USCG shall be contacted.