

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)
H051S - Single Hinged (A60)

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

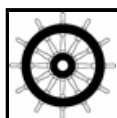
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-07-12**.

Issued at **Høvik** on **2020-07-13**

DNV GL local station:

Norway Fleet in Service, Mid-North



for **DNV GL AS**

Approval Engineer:

Helge Bjørnara

Notified Body

No.: **0575**

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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

H051S - Single Hinged (A60),

is a single leaf hinged door composed of two layers with mineral fibre blankets of type Firemaster Marine Plus (density 128 kg/m³, manufactured by Morgan Thermal Ceramics) with thickness 25 mm and 38 mm respectively, and a 6 mm calcium silicate board in the middle of type Supalux (density 950 kg/m³, manufactured by Promat). The outer layer on both sides of the door leaf is covered with 2 mm thick stiffened steel sheets. The insulation is glued to the steel sheets with adhesive. The door leaf is fixed to the door frame by three hinges.

Total door leaf thickness is 73 mm.

The door frame may be welded or bolted (M8 bolts c/c 200-270 mm) to the bulkhead. The door frame is made of 4 mm thick steel profiles. When bolted, a seal of type Sil-Tex 3 x 30 mm is fitted between frame and bulkhead. Insulation rope gaskets of type SILICA-FIB Ø20 mm is fixed by means of adhesive of type Heatex (manufactured by Engen Industrier) along the perimeter of the door leaf.

The door leaf may incorporate: window in the upper half of the door, type designation Pyrostop A60-E160 with 27 mm thickness.

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 in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum clear opening door:	900 x 2100 mm (W x H)
Maximum door leaf size:	974 x 2120 mm (W x H)
Maximum clear opening of window glazing:	200 x 500 mm (W x H)

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.

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

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

Type Examination documentation

Test report No. 150071-05A dated 30 June 2015 from SP, Trondheim, Norway.

Dwg. No. RB601994W Rev.0 (4 sheets) dated 24 April 2015 from manufacturer.

Dwg. No. RB601995W Rev.0 (2 sheets) dated 24 April 2015 from manufacturer.

Tests carried out

Tested in accordance with IMO 2010 FTP Code Part 3.

The door has been successfully tested for extended test period of 68 minutes.



Job Id: **344.1-010680-1**
Certificate No: **MEDB00006ST**

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 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.