

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)
H070S - 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

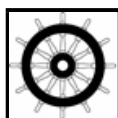
Further details of the equipment and conditions for certification are given overleaf.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

H070S - Single Hinged (A60),
is a single leaf hinged door constructed of 3 mm thick steel sheets with 4 and 3 mm thick steel stiffeners. Four of the stiffeners mounted on the exposed side and three on the unexposed side of the door leaf. The door leaf is insulated with two layers of 38 mm mineral fibre blankets of type Firemaster 607 (density 128 kg/m³, manufactured by Morgan Thermal Ceramics) and one layer of 6 mm calcium silicate board of type Supalux (density 875 kg/m³, manufactured by Promat).

Total door leaf thickness is 88 mm.

The door leaf is overlapping on the top and sides with the frame with approximately 20 mm by a 4 mm Z-frame. The Z-frame is insulated with rope gasket of type SILICA-FIB Ø30 mm, and the joint between frame and bulkhead is tightened with Ceramic Sil-Tex 3 x 30 mm bonds. The door frame may be welded or bolted (M12 bolts c/c 145-275 mm) to the bulkhead.

The door leaf has four HD-hinges and a three-point lock system. On the hinge side there is a 210 mm wide and 2 mm thick steel cover associated with the lock system.

The door leaf may be fitted with a window with glass of type Pilkington Pyrostop A60-EI60, with dimensions: 260 x 560 x 27 mm (W x H x T).

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:	1100 x 2300 mm (W x H)
Maximum size of door leaf:	1192 x 2366 mm (W x H)
Maximum clear opening of window glazing:	200 x 500 mm (W x H)

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. 20060 dated 20 February 2015 from SP, Trondheim, Norway.

Dwg. No. RB300540 Rev.C dated 24 February 2005 from manufacturer.
Dwg. No. RB305596 Rev.0 dated 10 September 2009 from manufacturer.
Dwg. No. RB600837 Rev.A dated 21 November 2013 from manufacturer.
Dwg. No. RB601678W Rev.0 (3 sheets) dated 16 April 2014 from manufacturer.
Dwg. No. RB601679W Rev.0 (2 sheets) dated 6 October 2014 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

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



Job Id: **344.1-010687-1**
Certificate No: **MEDB00006T2**

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.