

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)

H050DT - Double Hinged w/Top Panel (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

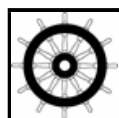
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-11-06.**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

H050DT - Double Hinged w/Top Panel (A-60),
is a double leaved hinged door with hinged top panel. The door leaves and top panel are composed of 25 mm and 38 mm "Firemaster Marine Plus" (density 128 kg/m³, manufactured by Thermal Ceramics on each side of 9 mm "Supalux Board" (density 950 kg/m³, from Promat UK Limited), covered with 2 mm thick steel plates with 30 x 30 x 3 mm (hinged side) and 25 x 25 x 3 (opposite hinged side) internal stiffeners. Insulation material is fixed by means of adhesive.

Total door leaf thickness is 76 mm.

Top panel is fixed to the steel frame with 4 hinges on the top and with two toggles on left/right side and one on lower part. A Ø20 mm gasket type "Silica fibre" and an intumescent seal type "Intumex" are used around the perimeter of the door leaves on all sides and at lower edge of the top panel.

Both door leaves are equipped with three hinges. The primary leaf is fitted with lock type "TrioVing 5316" and secondary leaf is fitted with handlebar connected to the latches in top and bottom of the leaf.

The door frame is made of 4 mm thick Z-profile and bolted to the bulkhead (M8 bolts c/c 300 mm). The door frame may be also welded to the bulkhead. The seal type Sil-Tex with dimensions 2 x 30 mm is used between the door frame and bulkhead.

The door may be fitted with two glass observation windows (one on each door leaf, manufactured by Pyrostop 60-201, A60-EI60) with total thickness of 27 mm in the upper part of the door leaves.

For further details, see the 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.

Restricted application: Fire from rail mount side only.

Maximum size of clear opening:	1800 x 2755 mm (W x H)
Maximum size of left door leaf (primary):	1007 x 2120 mm (W x H)
Maximum size of right door leaf (secondary):	936 x 2120 mm (W x H)
Maximum size of the top panel:	1876 x 647 mm (W x H)
Maximum clear opening of window:	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. 150071-26 dated 8 August 2017 from RISE, Trondheim, Norway.

Dwg No. RB602650W Rev.0 (29 pages) dated 29 March 2017 from manufacturer.

Dwg No. RB602651W Rev.0 (8 pages) dated 30 March 2017 from manufacturer.

Dwg No. RB305610 Rev.0 dated 23 September 2009 from manufacturer.

Tests carried out



Job Id: **344.1-010688-1**
Certificate No: **MEDB00006T3**

Tested in accordance with IMO 2010 FTP Code Part 3.

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

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 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.