

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00002ZK
Revision No:
4

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 AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
Double-leaf hinged marine fire door A-60

Issued to
Oy Saajos International Ltd.
Lohja, Finland

is found to comply with the requirements in the following Regulations/Standards:
Regulation (EU) 2022/1157,
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

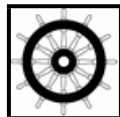
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-08-31**.

Issued at **Høvik** on **2022-09-01**

DNV local station:
Finland NB

Approval Engineer:
Tessa Bieber



Notified Body
No.: **0575**



for **DNV AS**

Digitally Signed By:
Øyvind Hoff
Location: DNV Høvik, Norway
on behalf of

Sverre Olav Bergli
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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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

"Double-leaf hinged marine fire door A-60"

consist of double door leaf (equal sized) composed of insulating core of 60.5 mm thick "Paroc PV150LO Slab", with density 150 kg/m³ (manufactured by PAROC) faced on both sides with 0.8-1.0 mm steel sheets. The insulation is glued to the steel sheets by means of adhesive. Gypsum boards are used as insulation of the lock case and the latch, inside the door blades. The door blades are fitted with 3 hinges. The door leaves are fitted with the steel reinforcements in the upper part, in thickness 2.0 mm on exposed side and 1.5 mm on unexposed side. The door is approved without the sill being part of the frame.

Total thickness of door leaf: 62 mm.

The door frame is composed of 3.0 mm thick steel and bolted to the bulkhead by M10 bolts spaced maximum 300 mm apart. The door frame may be manufactured in several alternatives as per drawing No. SA-27517A – "A60 marine fire door frame alternatives" which is part of laboratory Statement No. ST 003-17.

Intumescent Marvon in size 1.8 x 30 mm is fitted from second hinge to top edge and around the top between door blade and frame and also between both door blades down to the lock.

The door leaf may incorporate:

- In the upper half of the door leaf: Window of type "Contraflam 60-23N, A60 Fireglass" (manufactured by Vetrotech Saint Gobain), size 460 mm x 460 mm and thickness: 32 mm.
- In the lower part of the active door leaf: Hose port, size 220 mm x 152 mm (W x H), made from same composition as door leaf, fixed by means of one hinge.
- In the active door leaf: Lock case: WSS 1-136A/65.
- In the inactive door leaf: Latch: BKS with recessed handle.
- In the lower part of the door leaf: Casing tube/assembly parts for AISA (88mm from the bottom).
- A door closer Dorint 380, Geze Boxer, DormaITS 96 or of similar construction.

For further details see drawings/test report listed under Type Examination documentation below.

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.

Max. clear opening:	2740 mm x 2400 mm (W x H)
Max. size of active and inactive door leaf:	1394 mm x 2421 mm (W x H)
Max. clear opening window:	420 mm x 420 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.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the MED 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. 644-17T2MAU-IMO dated 3 May 2017 from TÜV Eesti OÜ, Maardu, Estonia.

Statement No. ST 003-17 dated 7 November 2017 from TÜV Eesti OÜ, Maardu, Estonia

Drawing No. SA-27396 B Rev.A dated 02 March 2017 from manufacturer.

Drawing No. SA-27540 dated 02 March 2017 from manufacturer.

Drawing No. SA-27581 dated 21 March 2017 from manufacturer.

Drawing No. SA-27728 dated 27 September 2017 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 70 minutes.



Job Id: **344.1-007205-7**
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Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first 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.