



Certificate no.:  
**TAF0000224**

# TYPE APPROVAL CERTIFICATE

---

## This is to certify:

that the **Class A Door**

with type designation(s)  
**A-60 double leaf hinged door**

issued to

**Saajos Oy**  
**Lohja, Finland**

is found to comply with

**DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021**  
**DNV rules for classification – Ships**  
**DNV offshore standards**

## Application:

**Approved for use as an integrated part of fire retarding division of class A-60.**

**This certificate is recognized by Transport Canada.**

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.**

Issued at **Høvik** on **2025-12-10**

This Certificate is valid until **2030-12-09**.

for **DNV**

DNV local unit: **Finland CMC**

Approval Engineer: **Meike Grabau**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.  
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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 USD 300 000.

## Product description

"A-60 double leaf hinged door"

consisting of double door leaf (equal sized) composed of 60.5 mm thick insulation type "SeaRox SL980" with density 150 kg/m<sup>3</sup> (manufactured by Rockwool) faced on both sides with 0.8 mm - 1.0 mm thick steel sheets. The insulation is glued to the steel sheets by means of approved adhesive. Gypsum boards are used as insulation of the lock case and the latch, inside the door blades. Each door blade is fitted with 3 hinges. The door leaves are fitted with the steel reinforcements in the upper part, in thickness 2 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 mm thick steel and either welded or bolted (M10) to the bulkhead, spaced maximum 300 mm apart.

In the upper half of the door leaf a window is fitted of type "El60", size 460 mm x 460 mm and thickness 25 (+/-2) mm. Intumescent gasket of size 2 mm x 30 mm is fitted at the top edge. The door frame may be manufactured in several alternatives (see "Statement no. 005-25"). The door leaf may incorporate a door closer type "AISA".

The door leaf may incorporate:

- in the lower corner 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.

For further details see documents listed under Type Examination documentation below.

## Application/Limitation

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 door leaf size, each: 1396 mm x 2412 mm (W x H)

Maximum clear door opening: 2740 mm x 2400 mm (W x H)

Maximum clear window opening: 420 mm x 420 mm (W x H)

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code Part 5.

External windows to comply with DNV rules or a recognized national or international standard (Ref. DNV Rules for classification: Ships, Pt. 3, Ch. 12, Sec. 6 [1.1.3]).

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

## Type Approval documentation

Certification in accordance with Class Program DNV-CP-0338, September 2021.

Test report no. 022-25T2MAU-IMO dated 14 February 2025 from TÜV Eesti OÜ, Maardu, Estonia.

Statement 005-25 "alternative frame design" dated 2 May 2025 from TÜV Eesti OÜ, Maardu, Estonia.

Statement 006-25 "extended frame flange" dated 2 May 2025 from TÜV Eesti OÜ, Maardu, Estonia.

Statement 007-25 "gap tolerances" dated 2 May 2025 from TÜV Eesti OÜ, Maardu, Estonia.

## Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

The doors have been successfully tested for extended test period of 68 minutes.

## Marking of product

The product is to be marked with name of manufacturer, type designation and fire technical rating.



Job ID: **262.1-045277-1**  
Certificate no.: **TAF0000224**

### **Transport Canada Approval**

Based on the procedures laid down in the Transport Canada publication entitled "Procedures for Approval of Life-Saving Appliances, Fire Safety Systems, Equipment and Products (TP14612)", DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

### **Periodical assessment**

DNV's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Program DNV-CP-0338, Section 4.

### **Manufactured by:**

**Saajos Oy**, Lohja, Finland.