



Certificate no.:
TAF0000223

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Class A Door**

with type designation(s)
A-60 single 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 single leaf hinged door"

consists of a door leaf composed of 60.5 mm thick insulation type "SeaRox SL980" with density 150 kg/m³ (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 an approved adhesive. Gypsum boards are used as an insulation of the lock case and the latch, inside the door blades. The door leaf is attached to the door frame with 3 hinges. The upper part the door leaf is fitted with the steel reinforcements of 2 mm thickness on the exposed side and of 1.5 mm thickness on the unexposed side. The door is approved without the sill being part of the frame.

Total thickness of door leaf: 62 mm.

The frame is composed of 3 mm thick steel and is either welded or bolted (M8 x 25 mm and M12 x 25 mm) to the bulkhead, spaced maximum 300 mm apart.

Intumescent gasket type Marvon of size 1.8 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 an AISA door closer type "Saajos".

The door leaf may incorporate:

- in the upper half of the door leaf: a window of type "Contraflam 60-23N, A60 Fireglass" (manufactured by Vetrotech Saint Gobain), size 460 mm x 460 mm and thickness 32 mm, with a fireproof seal of type "Keraband", a glass list made of 1 mm steel and fixing screws of 4.2 x 13 mm
- in the lower corner of the 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
- lock case type "Ving Card" and a recessed handle
- in the lower part: 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: 1400 mm x 2403 mm (W x H)

Maximum clear door opening: 1360 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

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

The door has been successfully tested for extended test period of 72 minutes.

Marking of product

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

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.



Job ID: **262.1-045276-1**
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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.