

TYPE APPROVAL CERTIFICATE

Certificate no.:
TAF000018Z
Revision No:
1

This is to certify:

that the Window and Glass Partition

with type designation(s)
H-120 Window

issued to

C.C. Jensen Window A/S
Svendborg, Syddanmark, Denmark

is found to comply with
DNV offshore standards

Application:

Approved for use as an integrated part of fire retarding bulkheads of class H-120.

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

Issued at Høvik on **2025-12-28**

for DNV

This Certificate is valid until **2030-12-27**.

DNV local unit: **Denmark CMC**

Approval Engineer: **Izabela Misztal**



Digitally Signed By:

Jowita Permoda

Location: DNV Høvik, Norway

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

"H-120 rectangular window"

is a window unit composed of (starting from the exposed side):

- 8 mm toughened glass manufactured by Glaseksperten A/S,
- 8 mm spacer,
- 43 mm fire resistant glass manufactured by Vetrotech Saint-Gobain,
- 10 mm spacer,
- 71 mm fire resistant glass manufactured by Vetrotech Saint-Gobain.

Total glass thickness is 140 mm.

The frame consists of three steel profiles. On the exposed side a 100 mm wide and 8 mm thick steel profile, with Ø8 studs cc 150 on the unexposed and exposed side. The profile also has 90° extensions (towards the unexposed side) three places along the bottom length. There are also 2 extensions for lifting on the top length. A 6 mm thick steel L-profile (80 x 60 mm) is fixed to the first profile on the exposed side with nuts on Ø8 mm studs. An 8 mm thick steel L-profile (60 x 94 mm) is fixed on the unexposed side with nuts and washers on Ø8 mm studs.

Between the glazing and the steel profiles as well as between the steel profiles on the exposed side it is insulated with 50 x 3 mm strips of Fiberfrax.

It was insulated according to class H-120 outside the glazing along all edges and on top of the frame on the unexposed side, fixed with pins, washers and wire.

The 6 mm steel L-profile of the window frame was fully welded to the steel bulkhead on the exposed side.

For further details see Type Examination documentation below.

Application/Limitation

The window is approved for installation in steel bulkheads of class H-120. Other applications are subject to case-by-case approval.

Restricted application: fire against 8 mm toughened pressure glass (from outside/weather side).

Maximum size of window frame: 1400 x 1716 mm (W x H)

Maximum size of exposed fire technical glazing unit: 1200 x 1500 mm (W x H)

The window has only been evaluated with respect to fire technical properties (e.g. strength requirements have not been considered). Arrangement and location of any window is subject to approval from relevant authority in each case (Ref. DNV-OS-C301 Ch. 2 Sec. 2, 8.2).

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

Type Approval documentation

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

Test report No. PGA10528 dated 3 December 2014 from DBI, Hvidovre, Denmark.

Drawing No. VA911300102, Rev. 01 (p.1-2) dated 6 February 2014 from manufacturer.

Drawing No. VA911300102a, Rev. 01 (p.1-2) dated 5 February 2014 from manufacturer.

Drawing No. VA911300102g, Rev. 06-02-2014 dated 6 February 2014 from manufacturer.

Drawing No. VA911300102S, Rev. 01 dated 5 February 2014 from manufacturer.

Drawing No. VA911300102-1, Rev. 01 dated 5 February 2014 from manufacturer.

Drawing No. VA911300102-2, Rev. 01 dated 5 February 2014 from manufacturer.

Drawing No. VA911300102-3, Rev. 01 dated 5 February 2014 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3 and HC time-temperature curve according to ISO 834-3.

Marking of product

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

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 Programme DNV-CP-0338, Section 4.

Manufactured by:

C.C. Jensen A/S, Løvholmen 13, 5700 Svendborg, Denmark.