



CERTIFICATE NUMBER  
EFFECTIVE DATE  
EXPIRY DATE  
ABS TECHNICAL OFFICE

23-2403277-PDA  
17-May-2023  
16-May-2028  
Houston SED - Commercial,  
Existing Vessels

## CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

**C.C. JENSEN A/S**

located at

**LOVHOLMEN 13, DK-5700 SVENDBORG, , Denmark**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.


**Product:** Window, A-60 Fireproof  
**Model:** A-60 window size 1268 x 2268 mm (laminated glass)  
**Endorsements:**  
**Tier:** 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 16/May/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

  
Subramani Ragunathan, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

**C.C. JENSEN A/S**

LOVHOLMEN 13

DK-5700 SVENDBORG

Denmark

Telephone: +45 6321 2014

Fax:

Email: bbc@cjc.dk

Web: <https://www.cjc-windows.dk/>

**Tier: 2 - PDA Issued**

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**Product:** Window, A-60 Fireproof  
**Model:** A-60 window size 1268 x 2268 mm (laminated glass)  
**Endorsements:**

**Intended Service:**  
For use on Ships and Offshore Installations

**Description:**

- . "A-60 Window 1282 x 2282" composed of steel and aluminum frame, incorporating a glass pane. The glass pane construction consisted of the following - see from the exposed side:
  - 8 mm thick toughened glass ISO614 (marked Saint-Gobain Securit)
  - 10 mm air space with 10 mm steel distance profile
  - 3 layers of 4 mm thick glass with 4.3 mm Alkali-silicate between the glasses.
  - 5 mm thick toughened glass ISO614 with 4.3 mm Alkali-silicate between this glass and the nearest 4 mm thick glass (marking of glass: Vetrotech Saint-Gobain INT. AG – CONTRAFLAM 60 – EN ISO12543 – EN 14449 – ID:13)
- . Total window thickness is 48mm and labelled as CONTRAFLAM 60-3CLIMALIT.
- . The main frame of the window consisted of a stainless steel L-profile 63 x 75 x 5 mm fully welded into the steel bulkhead. M8 x 90 mm studs were tick welded to the 63 mm wide flange at c/c 150 mm. The inside frame (on the unexposed face) consisted of an aluminum L-profile 60 x 60 x 6 mm. The frame is manufactured with ø 9 mm holes at c/c 150 mm corresponding with the M8 x 90 mm studs tick welded to the main frame.
- . The insulation between the main frame and the inside frame consisted of 25 mm wide and 55 mm high Promarine 640 (manufactured by Promat GmbH with density 640 kg/m<sup>3</sup>), and the glass pane is supported along the bottom with two 80 x 50 x 10 mm Promarine 640 supporting blocks. The void between the Promarine 640 and the edges of the glass pane is filled out with ceramic wool type Insulfrax S (manufactured by Unifrax Ltd. with, density 128 kg/m<sup>3</sup>).
- . A silicone rubber gasket 22 x 3 mm, is mounted around all four edges of glass pane between the glass and the main frame. In addition to a Technosil fire retardant gasket 22 x 3 mm, is mounted around all four edges of glass pane between the glass and the inside frame.

**Rating:**

- . The window is approved for installation in fire rated bulkheads of class A-60.
- . The bulkhead surrounding the window are to be insulated to Class A-60 with two layers of 30 mm Rockwool SeaRox SL 640 (Manufactured by Rockwool Int. A/S with density 130 kg/m<sup>3</sup>). With an additional 30 mm thick Rockwool SeaRox SL 640 is to be mounted along the edge of the window. The width of the additional insulation is to be 600 mm along the vertical edges and the height is to be 300 mm along the top and the bottom edge.
- . Maximum window dimensions to be 1318 mm x 2318 mm (W x H) and the clear opening of the window pane not to exceed 1268 x 2268 mm. (W x H).

**Service Restriction:**

- . Unit Certification is not required for this product.
- . If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- . The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11-Dec-2006

**Comments:**

- . The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- . Our approval is based on that the above material has been tested and certified by Danish Institute of Fire and Security Technology, File No.: PGA10872A dated 19-Sept-2016 (A-60 Window 1268x2268)
- . Unless specially directed by Administration, this approval is not to be construed as a substitute for Flag Administration's approval for the purpose of SOLAS (Consolidated Edition 2020) as amended.
- . This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific/requirements).



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**Notes/Drawing/Documentation:**

Drawing No. MEDB000070K A60 Window 1268x2268mm Fire from Outside, MEDB000070K A60 Window 1268x2268mm Fire from Outside, Revision: -, Pages: -

Drawing No. PGA10872A, Test Report Class A-60, Revision: 0, Pages: -

**Terms of Validity:**

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**STANDARDS**

**ABS Rules:**

- 2023 Marine Vessel Rules: 1-1-4/7.7, 1-1-A3, 1-1-A4
- 2023 Mobile Offshore Unit Rules 1-1-4/9.7, 1-1-A2, 1-1-A3

**National:**

NA

**International:**

IMO Resolution MSC.307(88) adopted on 2010, IMO FTP Code 2010 (2012 Edition), Annex 1 Part 3, in conjunction with SOLAS (Consolidated Edition 2020), as amended. MO Resolution MSC/Circ.1120 dated June 2004

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA