



Certificate No:
TAF00001RB

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Window and Glass Partition

with type designation(s)
Window Type Bohflam A60

Issued to

BOHAMET S.A.
Białe Błota, Poland

is found to comply with

DNV offshore standards

DNV rules for classification – Ships

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021

Application :

Approved for use as an integrated part of fire resisting bulkheads of class A-60.

This certificate is recognized by Transport Canada.

Product approved by this certificate is accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2022-05-18**.

This Certificate is valid until **2027-05-17**.

for **DNV**

DNV local station: **Gdansk CMC**

Approval Engineer: **Marcin Tobiasz**

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Helene David-Andersen
Head of Section

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 300,000 USD.



Form code: TA 251

Revision: 2021-03

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Product description

"A-60 Class Bohflam Type Window"

Is a rectangular or circular window constructed of a fire resistant glass unit (8-25 mm pressure protection part, 12-24 mm air gap, BOHFLAM A60 type: 6 mm thick heat strengthened glass, 5 mm thick intumescent gel, 5 mm thick heat strengthened glass, 5 mm thick intumescent gel, 6 mm thick heat strengthened glass) and inner glass unit (13.5 mm PVB laminated glass), mounted with an air gap of approx. 12 mm in between.

Total glass composition thickness is minimum 72.5 mm.

A 5 mm thick glass retaining frame consists of stainless steel fixed to a 12 mm thick main frame with screws (M6x16, c/c max. 103 mm for the rectangular window and max. 103.5 for the round window) and is fixing the fire resistant glass unit in position. The inner glass unit is mounted to the main frame by 5 mm thick stainless steel frame with screws (M6x35, c/c max. 243 mm for the rectangular window and max. 268 for the round window).

The window main frame is insulated with two layers of 25 mm thick ceramic fibre insulation with density of 96 kg/m³ (type Insulfrax S Blanket manufactured by Unifrax) and is welded to the bulkhead.

The window assembly also includes EPDM gasket (SD-91N manufactured by Stomil SANOK), ceramic fibre insulation (Promaglaf HTI 1100 manufactured by Promat GmbH, with density 210 kg/m³), vermiculargraphit gasket (Promaseal – PL manufactured by Promat GmbH), support blocks made of calcium silicate board (Promatect-H manufactured by Promat GmbH, with density 870 kg/m³ and glass edge lining made (Firemaster 607 Paper manufactured by Thermal Ceramics, with density 210 kg/m³).

For further details, see drawings listed under Type Examination documentation below.

Application/Limitation

The window is approved for installation in steel bulkheads of class A-60. Other applications are subject to case-by-case approval.

Restricted application: fire against fire resistant glass unit (from outside).

Rectangular shape:

Maximum size of window frame: 1408 x 1088 mm (W x H)

Maximum size of glazing unit (clear view): 1340 x 1020 mm (W x H)

Circular shape:

Maximum size of window frame: Ø1068 mm

Maximum size of glazing unit (clear view): Ø1000 mm

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 authorities in each case.

Hose stream test was carried out with satisfactory results according to IMO Res. A.754(18) appendix A.1.5.

Each 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. R38540 dated 30 September 2016 from Underwriters Laboratories LLC (UL), Northbrook, Illinois, USA.

Drawing No: BOH.16691.S4, dated 12 July 2016 from Bohamet.

Drawing No: BOH.16691.S5, dated 12 July 2016 from Bohamet.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

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



Job Id: **262.1-037536-1**
Certificate No: **TAF00001RB**

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 (TP 14612)", Det Norske Veritas 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 Programme DNV-CP-0338, Section 4.