



Certificate no.:  
**TAF00001X2**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

that the **Horizontal Class A Hatches**

with type designation(s)  
**A-60 deck hatch**

issued to

**Navalimpianti S.p.A.**  
**Ceranesi GE, GE, Italy**

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 a horizontal fire retarding division of class A-60.**

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

Issued at **Høvik** on **2024-06-06**

This Certificate is valid until **2029-06-05**.

for **DNV**

DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Helge Bjørnarå**

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: 2023-09

www.dnv.com

Page 1 of 3

## Product description

"A-60 deck hatch",  
is a single leaf hinged hatch consisting of a hatch leaf and a hatch frame.

The hatch leaf consists of an 8 mm steel plate. The structural grid of the leaf includes a steel flat bar (155x10 mm) around the perimeter. This flat bar is butt-welded to the leaf plate, positioned 93 mm from the leaf edge. Longitudinally, steel flat bars (120x8 mm) are welded to the leaf steel plate. Transversally, at a distance 933 mm from the hinges, a steel flat bar (130x15 mm) is provided. 67 mm from the 10 mm perimeter flat bar, another steel flat bar (112x8 mm) is added around the perimeter. A steel L-profile (80x40x8 mm) is welded to the stiffeners forming the seat for the 71x32 mm gasket. The hatch has two hinges composed of 15 mm thick steel plates welded to the hatch frame. Additionally, a lever mechanism operates four closure cleats, two on the side opposite the hinges and one on each vertical side.

The hatch is protected on the underside by a 2 mm steel sheet secured with Ø4 mm steel screws. The steel sheet shields the leaf plate and stiffeners which are insulated with two layers of 60 mm mineral wool SeaRox SL 620 (density 100 kg/m<sup>3</sup>, manufactured by Rockwool). Additionally, three 1 mm thick steel carters, internally insulated with 40 mm mineral wool SeaRox SL 620 (density 100 kg/m<sup>3</sup>, manufactured by Rockwool) protect the connections between the leaf cylinders and the cleats opening. These cleats are secured with Ø5 mm steel screws.

The hatch frame consists of a steel T-profile (433x10/100x20). The core is 10 mm steel plate welded 168 mm from the deck. On the inner edge of the steel plate, a stainless steel bar with 20 mm diameter is welded for the leaf gasket's rabbet. 46 mm from the bar, another steel plate (56x5 mm) forms a gorge for water collection, directing it to four steel scuppers (one at each frame corner). An 30x1.8 mm intumescent material strip is placed on the rabbet side of the steel plate, both vertically and horizontally, as well as on the edge of the leaf.

The hatch frame is insulated with a single layer of 60 mm mineral wool SeaRox SL 620 (density 100 kg/m<sup>3</sup>, manufactured by Rockwool), secured with welded pins on the vertical and horizontal sides.

For further details, see drawing listed under Type Approval documentation below.

Manufactured at the following locations:

- OFFICINE VIO, Via Meucci 50, 30016 Jesolo VE

## Application/Limitation

Approved for use as an integrated part of a horizontal fire retarding division of class A-60. Installation of the hatch in decks made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

|                           |                                          |
|---------------------------|------------------------------------------|
| Max. hatch leaf size:     | 2240 mm x 2165 mm (W x L)                |
| Max. clear hatch opening: | 2210 mm x 2135 mm (W x L)                |
| Hatch cover frame:        | 2300 mm x 2375 mm x 453.5 mm (W x L x D) |

Any surface materials used have to be approved for smoke and toxicity and low flame spread characteristics (IMO 2010 FTP Code parts 2 and 5) when required according to relevant rules and regulations.

Note that this is a fire safety certificate which only covers fire technical properties (i.e., not to cover any evaluations related to watertightness, weathertightness, etc.).

The construction and installation are to be in accordance with the type approval documents listed below and with the manufacturer's manual for installation.

## Type Approval documentation

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

Test report No. 2023CS011459 dated 21 June 2023 from RINA, Genova, Italy.

Drawing No. C6867-PORT-00-00100, Rev.6, dated 6 June 2023 from manufacturer.

## 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: **262.1-039217-1**  
Certificate no.: **TAF00001X2**

### **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 DNV-CP-0338 Section 4.