



Certificate no.:
TAF00001ZZ

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Class B Bulkhead**

with type designation(s)

Extended wall with combustible pipe penetrations

issued to

SAINT-GOBAIN ISOVER G+H AG

Ludwigshafen am Rhein, Rheinland-Pfalz, Germany

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:

Extended wall approved for use as class B-15 fire retarding division.

May only be installed in concealed and inaccessible spaces.

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

Issued at **Høvik** on **2025-05-19**

This Certificate is valid until **2030-05-18**.

for **DNV**

DNV local unit: **Augsburg**

Approval Engineer: **Kristin Grønnæss Hovden**

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

"B-15 extended wall with combustible pipe penetration"

The extended wall is composed of one layer of 50 mm thick mineral wool of type "Isover U SeaProtect Slab 66 (density 66 kg/m³, manufactured by Saint-Gobain Isover G+H AG). The insulation slabs are connected by means of steel connecting bridges with max. spacing of approx. 200 mm. The connecting bridges are used for both vertical and horizontal joints and consist of steel pins, washers and 12 mm wide perforated steel strips mounted on each side of the wall extension.

At the bottom and at the top of the wall extension, the insulation slabs are fixed to 1 mm thick perforated steel L-profiles by means of steel pins and washers (c-c max. 300 mm). The steel profiles are fixed to the supporting structure by self-cutting screws.

The extended wall may be fitted with the following pipe penetrations:

Single pipe penetration Roxtec Sleev-it (size 18 – 42 mm, manufactured by Roxtec) with pipe material PE-AL-PE (size 16 mm to 40 mm (OD)) inserted into the extended wall and fixed by means of a pin and washers. The flange may be positioned on either side.

Single pipe penetration with pipe material PE-AL-PE (size 16 mm to 40 mm (OD)) inserted into the extended wall and sealed with 2 layers of Kaiflex Pyrostar wrapped around the pipe (length 125 mm, manufactured by Kaimann Saint-Gobain). The penetration is additionally insulated of type "Isover U SeaProtect Roll 46 Alu 1" (density 46 kg/m³, manufactured by Saint-Gobain Isover G+H AG) 150 mm along the pipe on both sides of the wall extension. The sealing and insulation are secured with galvanized winding wire.

Single pipe penetration with pipe material PB (size 20 mm to 110 mm (OD)) inserted into the extended wall and sealed with 2 layers of Kaiflex Pyrostar wrapped around the pipe (length 125 mm, manufactured by Kaimann Saint-Gobain). The penetration is additionally insulated of type "Isover U SeaProtect Roll 46 Alu 1" (density 46 kg/m³, manufactured by Saint-Gobain Isover G+H AG) 150 mm along the pipe on both sides of the wall extension. The sealing and insulation are secured with galvanized winding wire.

Single pipe penetration with pipe material GRP (size 48 mm to 168 mm (OD)) inserted into the extended wall and sealed with 2 layers of Kaiflex Pyrostar wrapped around the pipe (length 125 mm, manufactured by Kaimann Saint-Gobain). The penetration is additionally insulated of type "Isover U SeaProtect Roll 46 Alu 1" (density 46 kg/m³, manufactured by Saint-Gobain Isover G+H AG) 150 mm along the pipe on both sides of the wall extension. The sealing and insulation are secured with galvanized winding wire.

The installation is to be performed according to the manufacturer's installation manuals.

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

Application/Limitation

Extended wall approved for use as of class B-15 fire retarding division.

Max. size of individual wool slab: 1200 mm x 600 mm (H x W)

Approved with maximum of two slabs in the vertical direction.

The wall extension may only be installed in concealed and inaccessible spaces.

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.

Each product is to be supplied with its manual for installation and maintenance.

Type Approval documentation

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

Test report PGB10105A dated 25 May 2021 from DBI, Hvidovre, Denmark.
Test report PGB10320A dated 10 June 2024 from DBI, Hvidovre, Denmark.
Test report PGB10351A dated 9 May 2024 from DBI, Hvidovre, Denmark.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3

Marking of product

The product or packing 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.

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:

SAINT-GOBAIN ISOVER G+H AG, Bürgermeister-Grünzweig-Str. 1 67059 Ludwigshafen am Rhein Germany.