



CERTIFICATE NUMBER  
15-GD1463344-PDA

DATE  
16 Mar 2016

ABS TECHNICAL OFFICE  
Gdynia Engineering Department

## CERTIFICATE OF DESIGN ASSESSMENT

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

### SAINT-GOBAIN ISOVER G+H AG

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: **Structural Fire Insulation**

Model: **Between stiffeners : U SeaProtect 24, U SeaProtect 76 Around stiffeners :  
U SeaProtect 66, U SeaProtect 76**

This Product Design Assessment (PDA) Certificate 15-GD1463344-PDA, dated 16/Mar/2016 remains valid until 15/Mar/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

*Andrzej Wasowski*

Andrzej Wasowski  
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 the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

**SAINT-GOBAIN ISOVER G+H AG**  
BUERGERMEISTER-GRUENZWEIG-STRASSE 1  
D- 67059 LUDWIGSHAFEN  
Germany  
Telephone: +49 621 501 435  
Fax: +49 621 501 800 435  
Email: jens.perner@saint-gobain.com  
Web: www.isover-technical-insulation.com

**Tier: 2 - PDA Issued**

**Product:** Structural Fire Insulation  
**Model:** Between stiffeners : U SeaProtect 24, U SeaProtect 76  
Around stiffeners : U SeaProtect 66, U SeaProtect 76

**Intended Service:**

A-30 fire class steel deck insulation.

**Description:**

Stiffened steel deck insulated underneath with one layer of mineral wool type U SeaProtect between the stiffeners and with one layer of U SeaProtect around the stiffeners. Insulation U SeaProtect is fitted inside the stiffeners recess when necessary. The whole insulation is affixed with use of welded  $\varnothing 3$ mm steel pins and  $\varnothing 38$ mm washers spaced 300mm apart both, along and across stiffeners.

**Application method 1**

Between stiffeners : one layer of U SeaProtect with minimum density 24 kg/m<sup>3</sup> and minimum thickness 50 mm;

Around stiffeners :

one layer of U SeaProtect with minimum density 66 kg/m<sup>3</sup> and minimum thickness 25 mm;

or

one layer of U SeaProtect with minimum density 76 kg/m<sup>3</sup> and minimum thickness 25 mm;

or

one layer of U SeaProtect with minimum density 76 kg/m<sup>3</sup> and minimum thickness 20 mm.

**Application method 2**

Between stiffeners : one layer of U SeaProtect with minimum density 76 kg/m<sup>3</sup> and minimum thickness 25 mm;

Around stiffeners :

one layer of U SeaProtect with minimum density 76 kg/m<sup>3</sup> and minimum thickness 20 mm;

or

one layer of U SeaProtect with minimum density 76 kg/m<sup>3</sup> and minimum thickness 25 mm.

**Rating:**

A-30 Fire Class steel deck insulation.

**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.

Steel deck plate is to be at least 4.5mm thick. Minimum size of stiffeners L100 x 75 x 8 mm.

This certificate may not be used for EU and US flagged vessels, if MED and/or USCG have their own specific requirements.

**Comments:**

1.) The Manufacturer has provided a declaration about the lack of Asbestos in this product.

2.) This approval is not to be misconstrued as an approval on behalf of any Maritime Administration. Validity is limited to countries where ships/facilities will be registered and which government has authorized ABS to review drawings on behalf of its Administration.

3.) Test method: APPENDIX 1 of IMO 2010 FTPC Part 3 - Test for "A", "B" and "F" class divisions - Fire resistance test procedures for "A", "B" and "F" class divisions.

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

5.) Smoke and/or flame penetration test was carried out according to the requirements of IMO Res. MSC.307(88), International Code For Application of Fire Test Procedures (FTP Code) 2010, Annex 1, Part 2.



**SAINT-GOBAIN ISOVER G+H AG**

BUERGERMEISTER-GRUENZWEIG-STRASSE 1

D- 67059 LUDWIGSHAFEN

Germany

Telephone: +49 621 501 435

Fax: +49 621 501 800 435

Email: jens.perner@saint-gobain.com

Web: www.isover-technical-insulation.com

**Tier: 2 - PDA Issued****Notes/Drawing/Documentation:**

The tests were conducted and reports issued by Danish Institute of Fire and Security Technology (DANAK), Jernholmen 12, DK-2650 Hvidovre, Denmark.

For application method 1: Test report no. PGA10289 of 06 August 2013 and drawing No. AK2283 Rev. - "Class A-30 Steel Deck/General Application" (1 sheet)

and Assessment no. PHA10498b of 15 January 2015 based on test reports no. PGA10230 of 07 May 2013

For application method 2: Test report no. PGA10230 of 07 May 2013 and drawing No. AK2275 Rev. A "Class A-30 steel deck/General Application" (2 sheets).

Document -Renaming of ISOVER ULTIMATE marine products.

**Terms of Validity:**

This Product Design Assessment (PDA) Certificate 15-GD1463344-PDA, dated 16/Mar/2016 remains valid until 15/Mar/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

**STANDARDS****ABS Rules:**

ABS Rules for Conditions of Classification (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4,

ABS Rules for Conditions of Classification (2016): Offshore Units and Structures 1-1-4/9.7, 1-1-Appendix 2 & 3,

ABS Rules for Building and Classing Steel Vessels (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/3.3, 4-8-3/9

ABS Rules for Building and Classing Steel Vessels Under 90 Meters (295 Feet) in Length (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/3.3, 4-6-3/5

ABS Rules for Building and Classing Offshore Support Vessels (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/3.3, 4-8-3/9

ABS Rules for Building and Classing Mobile Offshore Drilling Units (2016): 1-1-4/9.7, 1-1-Appendix 2 & 3, 6-1-1/9, 4-3-3/5

ABS Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways (2016): 4-5-3/5

ABS Rules for Building and Classing High-Speed Craft (2016): 1-1-4/11.9, 1-1-Appendix 2 & 3, 4-1-1/3.3, 4-6-3/5

ABS Rules for Building and Classing Steel Barges (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-3/9

**National:**

NA

**International:**

IMO Res. MSC.307(88), International Code For Application of Fire Test Procedures (FTP Code) 2010, Edition 2012, Annex 1, Part 3

International Convention for the Safety of Life at Sea (Consolidated Edition 2014) Chapter II-2, Reg. 3.2.



**SAINT-GOBAIN ISOVER G+H AG**  
BUERGERMEISTER-GRUENZWEIG-STRASSE 1  
D- 67059 LUDWIGSHAFEN  
Germany  
Telephone: +49 621 501 435  
Fax: +49 621 501 800 435  
Email: jens.perner@saint-gobain.com  
Web: www.isover-technical-insulation.com

**Tier: 2 - PDA Issued**

---

**Government:**  
NA

**EUMED:**  
NA

**OTHERS:**  
NA