

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00004XN
Revision No:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)
Class A-15 steel bulkhead, general application

Issued to

SAINT-GOBAIN ISOVER G+H AG
Ludwigshafen am Rhein, Rheinland-Pfalz, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2019/1397**,

item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1435.

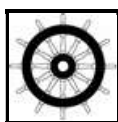
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-01-28**.

Issued at **Hamburg** on **2020-06-25**

DNV GL local station:
Augsburg

Approval Engineer:
Timo Linn



Notified Body
No.: **0098**



for **DNV GL SE**
Digitally Signed By: Mydlak-Röder, Christine
Location: DNV GL Hamburg, Germany
on behalf of

Gerhard Aulbert
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004, and amended by Decision No 1/2018 dated February 18th, 2019.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-008935-2**
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Product description

"Class A-15 steel bulkhead, general application"

Steel bulkheads with different insulation construction are listed in enclosed appendix A.

Application/Limitation

Approved for use as vertical fire retarding division of class A-15.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

Type Examination documentation

Test report no. PGA11200A dated 8th of March 2018 issued by Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark.

Supplement to test report PGA11200A dated 03rd of september 2019.

Test Report. No. PGA10476 dated 25th of July 2014 from Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark.

Supplement to test report PGA10476 dated 29th of November 2019.

Assessments nos.:

PHA10498d dated 27th of March 2020 issued by Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark,

PHA10498c (minimum thickness and density) dated 16 December 2019,

PHA10498f dated 16th of December 2019 issued by Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark,

PHA10498g dated 15th of Januar 2020 issued by Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark,

PHA11121B dated 8th of October 2018 issued by Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark,

PHA10498a (Revision no.: 2) dated 15th of January 2020, all issued by Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark.

Drawing no. AK2402 1/1 dated 23rd of February 2018 from Saint-Gobain Isover G+H AG.

Drawing no. AK2433 rev2. (2 pages) dated 23 Oktober 2019 from SAINT-GOBAIN ISOVER G+H AG.

Drawing no. AK2308 (2 pages) dated 3 December 2014 from SAINT-GOBAIN ISOVER G+H AG.

Drawing no. AK2435 dated 23rd of November 2019 from SAINT-GOBAIN ISOVER G+H AG

Tests carried out

Tested according to IMO Resolution MSC.307(88) – 2010 FTP Code Annex 1, Part 3

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, MED Mark of Conformity (see page 1) and USCG approval number, if applicable.

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.108/EC0098 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27th, 2004 and amended by Decision No.1/2018 dated February 18th, 2019.

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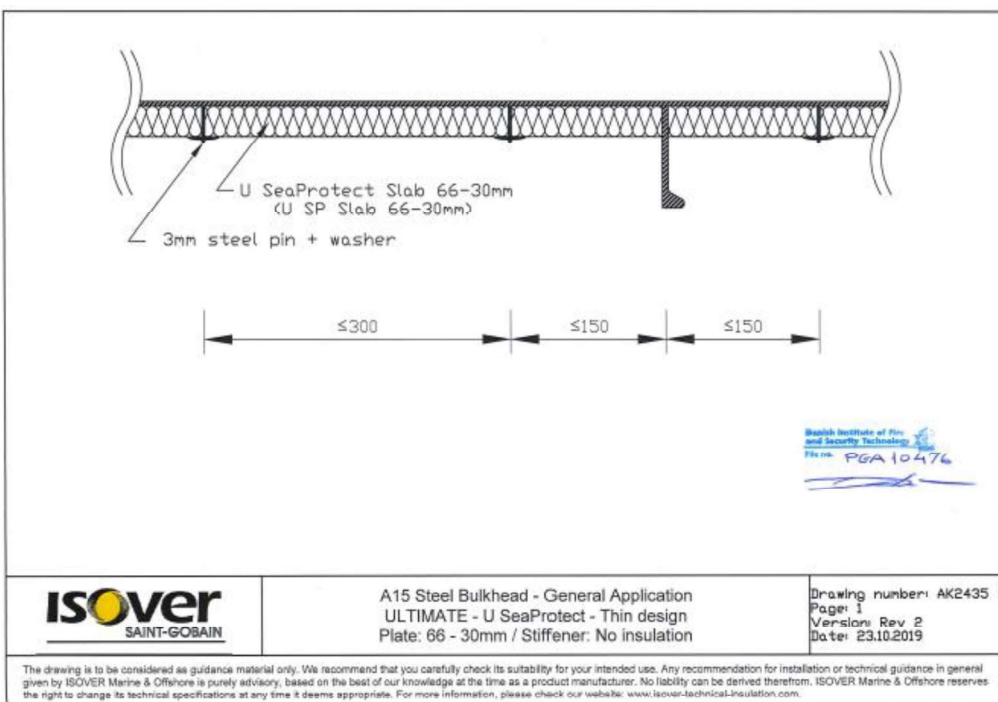
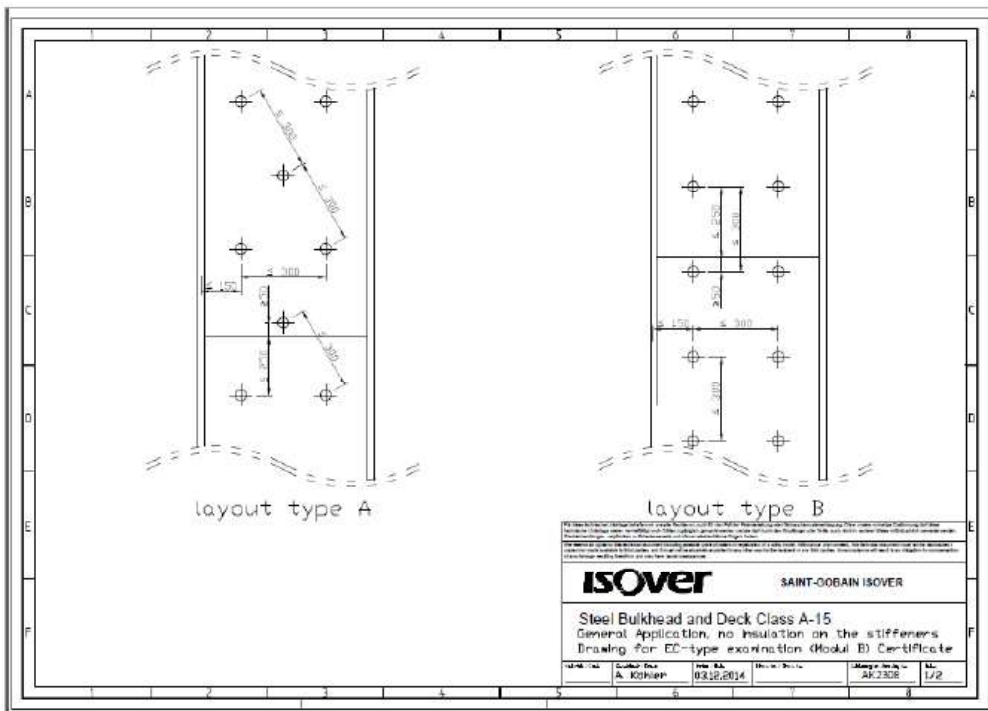
Appendix A Rev. No. 1 to MEDB00004XN

Alternative constructions:

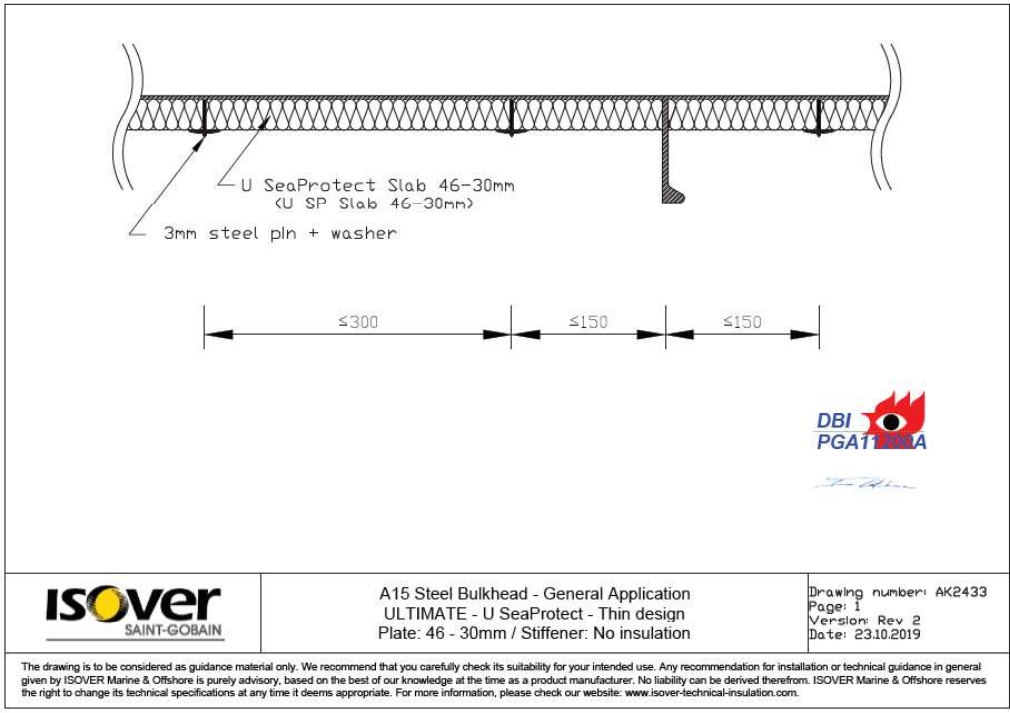
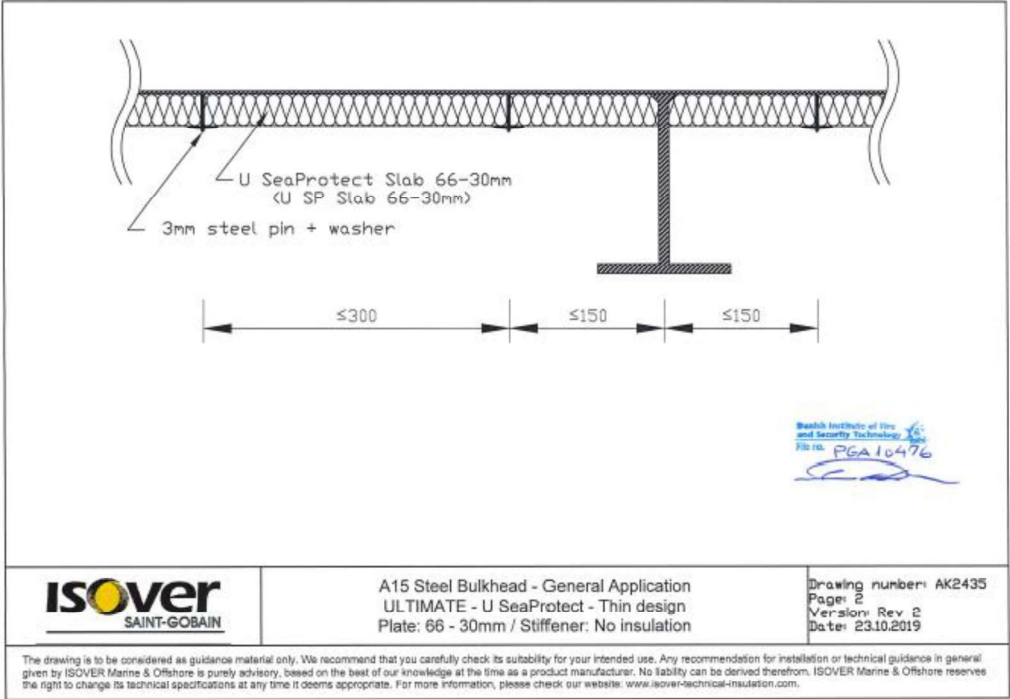
	Product Description	Application / Limitations	Type Approval Documentation
1	<p>"Class A-15 steel bulkhead, general application" is a Class A-15 bulkhead consisting of standard 4.5 mm thick steel plate suitably stiffened.</p> <p>The 30 mm thick Ultimate U SeaProtect Slab 46 is applied in one layer on the steel plate between the stiffeners which are kept uninsulated. All the insulation slabs are mounted tightly together along the joints and compressed between the stiffeners. The insulation layer is mounted without staggered joints.</p> <p>Insulation material: ISOVER U SeaProtect Slab 46 (nominal density: 46 kg/m³); Manufacturer: Saint-Gobain Isover G+H AG.</p> <p>The insulation is fasten with 3 mm steel pins and 30 or 38 mm steel washers. Distance between pins is maximum 300 mm.</p>	<p>Approved for use as a Class A-15 Bulkhead.</p> <p>General application: Fire against either side.</p> <p>Insulation material: ISOVER U SeaProtect Slab 46 (nominal density: 46 kg/m³); Manufacturer: Saint-Gobain Isover G+H AG.</p>	<p>Test report no. PGA11200A :</p> <p>ISOVER U SeaProtect Slab 46 may be applied in form of rolls instead of slabs acc. to assessment no. PHA10498a (Revision no.: 1).</p> <p>Further alternative arrangements acc. to assessment no. PHA1112B. With this assessment the validity of the following technical assessments is prolonged and extended to cover test report no. PGA11200A:</p> <ul style="list-style-type: none"> - PHA10498d: distance from the pins to the joints (50 mm to 250 mm on level); - PHA10498f: washers' diameter can be changed from 38 mm to 30 mm; - PHA10498g: use of a different pin patterns than tested.
2	<p>"Steel Bulkhead A-15 Type U SeaProtect 66"</p> <p>Composed of a stiffened steel bulkhead insulated on stiffened side with min. 30 mm mineral wool of type U SeaProtect 66 (density 66 kg/m³) from SAINT-GOBAIN ISOVER G+H AG. No insulation is fitted on the stiffeners.</p> <p>The insulation is fasten with 3 mm steel pins and 30 or 38 mm steel washers. Distance between pins is maximum 300 mm.</p> <p>See drawing in appendix B for further details.</p>	<p>Approved for use as a Class A-15 Bulkhead.</p> <p>General application: Fire against either side.</p> <p>Insulation of same type (U SeaProtect from SAINT-GOBAIN ISOVER G+H AG) with density up to 86 kg/m³ may be used.</p>	<p>Test Report. No. PGA10476:</p> <p>Assessment report nos.:</p> <ul style="list-style-type: none"> - PHA10498c (minimum thickness and density), - PHA10498d distance from the pins to the joints (50 mm to 250 mm on level); - PHA10498g: use of a different pin patterns than tested. <p>Drawing no. AK2308, AK2435</p>

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Appendix B Rev. No. 2 to MEDB000004A



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