



UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

Lloyd's Register Marine Limited (LRM Ltd) did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

Manufacturer	Saint-Gobain ISOVER G+H AG
Address	Buergermeister-Gruenzweig-Strasse 1, D-67059 ,Ludwigshafen, Germany
Reference	MSN1874 Amendment 7
Regulation Item (No. & Item Designation)	UK/3.11a 'A' & 'B' Class Divisions Fire Integrity: 'A' Class Divisions
Product Type	A-60 Class Bulkhead
Product Description	Fire Resisting 'A' Class Bulkhead – Type “U Seaprotect 66-70 – A-60 Aluminium Bulkhead Restricted 4MM”
Trade Name	“U Seaprotect 66-70 – A-60 Aluminium Bulkhead Restricted 4MM”
Specified Standard	IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 3/ IMO MSC.1/Circ.1435.

The attached Design Appraisal Document (schedule) forms part of this certificate. This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

This certificate is issued under the authority of the MCA. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

The "UK Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an Approved Body.

Lloyd's Register Marine Limited (Reg. no. 13281335) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK.
A member of Lloyd's Register group.

Keith Taylor

Team Lead Fire & Safety
For and on behalf of Lloyd's Register Marine Ltd. (8512)

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ATTACHMENT TO UK TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR23165695UKMB

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and the Merchant Shipping (Marine Equipment) Regulations 2016, as amended for the UK Type Examination of marine equipment for use on UK ships

This Design Appraisal Document forms part of the Certificate.

APPROVAL/EXAMINED DOCUMENTATION

TEST REPORTS

1. Danish Institute of Fire and Security Technology, DBI; Jernholmen 12, DK-2650 Hvidovre, Denmark. Fire Test Report No PGA11097A dated 11th October 2017 & Fire Test Report Supplement PGA11097A.

CONDITIONS OF CERTIFICATION

1. Bulkhead shall be constructed of aluminium insulated on the stiffened side on the plating and around stiffeners with one layer of "ISOVER U SeaProtect Slab 66" mineral wool produced by SAINT-GOBAIN ISOVER G+H AG (Nominal Thickness 70mm, Nominal Density 66kg/m³). Inside the cavity of the stiffeners two layers of "ISOVER U SeaProtect 66" mineral wool shall be applied, total thickness (70mm+20mm). The insulation was fixed to the plating 3mm aluminium-tipped steel pins & 38mm steel washers with horizontal & vertical centres not exceeding 300mm or 150mm from insulation joints. Arrangement of steel pins on the plates shall be in accordance with the referenced fire test reports and supplement to fire test report.
2. Approved for Restricted Application where the fire hazard has been identified as being from the insulated side only.
3. The insulation system was tested on a 4mm aluminium core and met all insulation and integrity criteria for a load bearing aluminium bulkhead of required fire rating; therefore, it could be considered for use as an aluminium bulkhead of a thickness of 4mm or greater.
4. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance System (Module D), a Product-Quality Assurance System (Module E) or a Product Verification Process (Module F), as applicable. The UK Conformity Mark cannot be affixed to the product until a conformity assessment module is in place.
5. Each item, batch or lot of the subject equipment is to be issued with a "UK Declaration of Conformity" and have the "UK Conformity Mark" affixed after a conformity assessment module is in place.
6. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products are fully compliant with the relevant statutory regulations as applicable and are designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.
7. Should a change of Place of Production from that stated below be required i.e., where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.
8. The manufacturer must keep a copy of the UK type-examination certificate, its annexes, and additions together with the technical documentation at the disposal of the national authorities for a period of at least 10 years after the UK Conformity Mark has been affixed on the last product manufactured and, in no case for a period shorter than the expected life of the marine equipment concerned.

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Certificate No: LR23165695UKMB
Issue Date: 17/04/2023
Expiry Date: 16/04/2028
Reference: UKITSO/FIRE/TA/JG/BM/WP49019891/PRJ11100398811

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PLACE OF PRODUCTION

Saint-Gobain ISOVER G+H AG Plant Luebz
Industriestrasse 1
D-19386 Luebz
Germany

Keith Taylor
Team Lead, Fire & Safety
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
For and on behalf of Lloyd's Register Marine Ltd.
(LRM Ltd) - UK Approved Body 8512

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ATTACHMENT TO UK MODULE B CERTIFICATE - DAD Template v.0 dated 29.03.2023.