

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)
A-60 Bulkhead, Sea-teK BD 100

Issued to
KNAUF INSULATION d.o.o.
Novi Marof, Varaždinska, Croatia

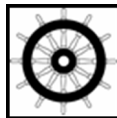
is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434

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

This Certificate is valid until **2023-07-04**.

Issued at **Høvik** on **2018-07-05**

DNV GL local station:
Rijeka



for **DNV GL AS**

Approval Engineer:
Krzysztof Kolakowski

Notified Body
No.: **0575**

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Roald Vårheim
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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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: **344.1-007966-4**
Certificate No: **MEDB0000460**

Product description

"A-60 Bulkhead, Sea-teK BD 100"

Composed of stiffened steel bulkhead insulated with one layer of 75 mm thick "Sea-teK BD 100" (name as tested "MHTB 660") with density of 100 kg/m³ (manufactured by Knauf Insulation) between stiffeners, one layer of 30 mm thick same type of insulation around stiffeners and the same type of insulation inside complete cavities of the stiffeners. The insulation is fixed on the unexposed side by Ø 3 mm copper-coated steel welding pins with galvanized steel self-locking washers.

Pins on stiffeners are positioned centrally at maximum c/c distance 300 mm. Pins between stiffeners are positioned alternately in such manner that the maximum vertical distances between pins are 400 mm, the maximum horizontal distances between pins are 350 mm and the maximum diagonal distances between pins are 265 mm. Maximum distance between insulation panels joint and pins is 100 mm.

For further details, see documentation listed under Type Examination documentation below.

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

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, use and maintenance.

Type Examination documentation

Test Report No. P 0679/17-530-3 dated 15 December 2017 from ZAG-Slovenian National Building and Civil Engineering Institute, Ljubljana, Slovenia.

Drawing No.032017 dated 7 July 2017 from KNAUF INSULATION d.o.o.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).