

TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.: MEDB00009AG

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 AS under the authority of the Government of Norway.

This is to certify:

that the A & B Class divisions fire integrity: B class divisions.

with type designation(s) BIP WA-451S(B-0) Class Bulkhead

issued to BIP Industries Co., Ltd. Goseong Goseong-gun, Gyeongsangnam-do, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2024/1975, item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

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

This Certificate is valid until 2030-02-10.

Issued at Høvik on 2025-02-11

DNV local unit: Gimhae Station

Approval Engineer: Marta Kropiwnicka



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Notified Body No.: 0575

for DNV AS

Digitally Signed By: Christine Mydlak-Röder Location: DNV Høvik, Norway

Mydlak-Röder, Christine 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, and amended by Decision No 1/2023 dated August 21st, 2023. 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 AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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.

Form code: MED 201.NOR



Product description

"BIP WA-451S(B-0) Class Bulkhead"

is the bulkhead composed of one layer of 23,5 mm thick mineral wool insulation of 140 kg/m³ density (produced by KCC Corporation), covered on both sides with 0.6 mm thick aluminium sheets. The insulation is glued to the aluminium sheets by means of polyurethane adhesives of BNUR-1000 and OCUA-1000RC types.

The panels are connected using 0.5 mm thick M-profile and 3 mm thick spline joint.

Total panel thickness: 25 mm

For further details see drawing listed under Type Examination documentation.

Application/Limitation

Approved for use as a vertical fire retarding division of class B-0.

Maximum panel size: 600 mm x 2460 mm (W x H)

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. KOMERI-0402-24T4353(E) dated 13 January 2025 from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing No. F2024-WA451S-R1 dated 9 December 2024 from manufacturer. (date of initial drawing: 2024-08-16)

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).