

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB000002W Revision No:

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 & B Class divisions fire integrity: B class divisions.

with type designation(s)

BIP W-106S: B-15 Class Bulkhead

Issued to

BIP Industires Co., Ltd. Goseong Goseong-gun, Gyeongsangnam-do, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2020/1170,

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 2025-11-25.

Issued at Høvik on 2020-11-26

DNV GL local station:

Gimhae Station

Approval Engineer:

Karolina Kuśmider

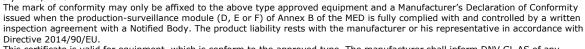


for **DNV GL AS**

Notified Body No.:

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, and amended by Decision No 1/2019 dated February 22nd, 2019.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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 300,000 USD.



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Job Id: **344.1-004804-14** Certificate No: **MEDB000002W**

Revision No: 3

Product description

"BIP W-106S: B-15 Class Bulkhead"

composed of two layers of mineral wool (manufactured by KCC Corporation) of 140 kg/m³ density, divided by 0.6 mm thick perforated steel sheet with 6 mm air space between the layers, faced on both sides with 0.6 mm steel sheet. A urethane adhesive manufactured by Dae Han polymer Co., Ltd. and BN Chemical Co., Ltd. is used for the fixation of the insulation material.

Vertical joint edges of the panel are reinforced with 0.6 mm thick galvanized steel support channel and filled with 50 mm wide mineral wool of 240 kg/m³ density.

The panels are joined together by means of spline profile joints.

Total panel thickness is 50 mm.

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

Application/Limitation

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

Maximum size of panels: 600 mm x 2500 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. AK2013-0460, dated 6 March 2014, from Fire Insurers Laboratories of Korea (FILK), Korea.

Drawing No. F2013-W106S-R0 (6 pages) dated 16 December 2013 from the manufacturer.

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).

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