DNV·GL

Certificate No:
MEDB000062J

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 "B" Class divisions, fire integrity

with type designation(s)
BIP C-513 / B-15 Class Continuous ceiling

Issued to
BIP Industries Co., Ltd.
Yangsan-si, Gyeongsangnam-do, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
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 **2024-11-18**.
Issued at **Høvik** on **2019-11-19**

DNV GL local station:
Gimhae Station

Approval Engineer:
Jasna Jovovic-Lainis

Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

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Product description

"BIP C-513 / B-15 Class Continuous ceiling"
composed of panels suspended below the structural deck. From the exposed side the panels consist of 0.6 mm thick perforated or non-perforated steel sheet, "Non-woven fabric" (manufactured by Dae Kyoung Chemical Co. Ltd.) and 25 mm thick mineral wool of density 60 kg/m^3 (manufactured by KCC Corporation, Korea). In addition, 50 mm thick mineral wool of density 80 kg/m^3 (manufactured by KCC Corporation, Korea) covers the panels on the unexposed side.

In the longitudinal direction, the following measures apply:

- Max. distance between main runners: 1400 mm
- Max. distance between hanger sets: 1400 mm
- Max. distance from bulkhead to the nearest main runner: 300 mm

In the transverse direction, the following measures apply:

- Max. distance between hanger sets: 1200 mm

The cross runners are fastened to deck with P703 Hanger sets.

Total ceiling panel thickness is 75 mm.

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

Application/Limitation

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

Max. panel size is 300 mm x 2240 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. AK2014-0555, dated 5th November 2014 from FILK, Korea.

Drawing no. F2014-C513-R0 (9 pages), dated 1st September 2014 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).