DNV·GL

Certificate No:
**MEDB000004Z**

# EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

## This is to certify:

**That the "B" Class divisions, fire integrity**

with type designation(s)
**BIP C-512 continuous ceiling: B-0 Class**

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

is found to comply with the requirements in the following Regulations/Standards:
**Annex A.1, item No. A.1/3.11b and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2.3.4.4. and IMO 2010 FTP Code.**

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

**Høvik, 2015-09-16**
for **DNV GL AS**

This Certificate is valid until
**2019-12-11**

Notified Body No.: **0575**

**Vidar Dolonen**
**Head of Department**

DNV GL local office:
**Pusan**

**Silje Helene Waagaard**
**Surveyor**

## Product description

"BIP C-512 continuous ceiling: B-0 Class"
composed of panels suspended below the structural deck, panels consist 25 mm thick mineral wool type "Mineral Wool" (manufactured by KCC Corperation, Korea) of density 60 kg/m³, covered with 0.6 mm thick perforated or non-perforated steel sheet on exposed side.

The ceiling panels may incorporate ventilation unit (ø200 mm) and light fixture (1288 x 275 mm).

In the longitudinal direction, the following measures applies:

- Max. distance between main runners: 1400 mm
- Max. distance between hanger rods: 2500 mm
- Max. distance from bulkhead to the nearest runner: 300 mm

In the transverse direction, the following measures applies:

- Max. distance between cross runners: 2500 mm

Total ceiling thickness is 25 mm.

## Application/Limitation

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

Maximum panel size is 300 x 2240 mm (W x L).

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. AK2014-0398 dated 6th August 2014 from FILK, Korea.
Drawing no. F2014-C512F-R0 (9 pages) dated 28th April 2014 from BIP.

Test Report no. AK2014-0283R dated 26th June 2014 from FILK, Korea.
Drawing no F2014-C512-R0 (7 pages) dated 28th April 2014 from BIP Industries Co., Ltd.

## Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

## Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval number if applicable (see below ).

## Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

## USCG Approval

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.