

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2013/52/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 W-106S: B-15 Class Bulkhead

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, 2015-07-31
for **DNV GL AS**



This Certificate is valid until
2020-06-03

Petter Langnes
Head of Department

Notified Body No.: **0575**

DNV GL local office:
Pusan

Silje Helene Waagaard
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.

Job Id: **344.1-004804-1**
Certificate No: **MEDB000002W**

Product description

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

composed of two layers of mineral wool (manufactured by KCC Corporation) of density 140 kg/m³, 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 and urethane adhesive manufactured by Dae Han polymer Co., Ltd. and BN Chemical Co., Ltd. is used for the fixation of insulation material.

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

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 fire retarding division of class B-15.

Maximum size of panels: 600 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 6th of March 2014, from Fire Insurers Laboratories of Korea (FILK), Korea.

Drawing No. F2013-W106S-R0 (6 pages) dated 16th of 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 of manufacturer, type designation, fire technical rating, MED Mark of Conformity and USCG approval number if applicable (see below).



Job Id: **344.1-004804-1**
Certificate No: **MEDB000002W**

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.

