

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00001DV
Revision No:
1

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 the Kingdom of Norway.

This is to certify:

That the "B" Class divisions, fire integrity

with type designation(s)
BIP W-106SE(6)/W-106SE(A): B-15 Class Bulkhead

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

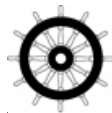
is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2015/559,**
Annex A.1, item No. A.1/3.11b and Annex B, Module B in the Directive; SOLAS 74 as amended,
Regulation II-2.3.4.4. and IMO 2010 FTP Code.

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

This Certificate is valid until **2021-09-13.**

Issued at **Høvik** on **2016-10-03**

DNV GL local station:
Busan



for **DNV GL AS**

Approval Engineer:
Fryderyk Hoga

Notified Body
No.: **0575**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id: **344.1-003907-4**
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Product description

"BIP W-106SE(6)/W-106SE(A): B-15 Class Bulkhead"

composed of 0.6 mm galvanized + 0.4 mm perforated steel sheets on each side of an insulation core. For type W-106SE(6) the insulation core consists of 2 x 21.8 mm thick mineral wool (manufactured by KCC Corporation) of density 140 kg/m³ with a 5 mm air space in between. For type W-106SE(A) the insulation core consists of 48 mm thick mineral wool (same as above) with 6 vertical air channels (50x20 mm) in the centre of each panel.

The panels are joined together by means of spline joint profiles (3 x 30 mm). The mineral wool is bonded to steel sheets with adhesive.

Panel thickness is 50 mm.

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

Application/Limitation

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

Max panel size: 600 x 2480 mm (width x height).

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 reports No. AK2012-0185 dated 20 August 2012 and A2012-0931 dated 20 February 2013 both from Fire Insurers Laboratories of Korea (FILK), Gyeonggi-Do, Korea.

Drawings No. W-106SE-R0 (5 pages) dated 21 May 2012 and W-106SE(6)-R0 (5 pages) dated 2 November 2012 both from 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 and MED Mark of Conformity (see first page).