



Marine & Offshore

Certificate number: 21589/C0 BV File number: ACI1000/177/066 Product code: 5030H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to BIP INDUSTRIES CO., LTD. GOSEONG

Gyeongsangnam-do - KOREA (REPUBLIC OF)

for the type of product B15 CLASS BULKHEADS B-15 Class bulkhead, type "BIP W-351"

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships Part C, Chapter 4 SOLAS 74 Convention as amended, Regulations II-2/9, II-2/3.4 IMO Res. MSC.61(67)-(FTP Code) with IMO Res. MSC.307(88) (2010 FTP Code) article 8 IMO MSC/Circ.1120

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above. This certificate is a renewal of certificate N° 21589/B0 BV expiring on 14/03/2021

This certificate will expire on: 14 Mar 2026

For Bureau Veritas Marine & Offshore, At BV PUSAN, on 15 Feb 2021, Chang-Uk HONG

VERITAS MARINE & OR RANATIONAL REGI

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

<u>1. PRODUCT DESCRIPTION:</u>

B-15 Class bulkhead, type "BIP W-351"

The 25 mm bulkhead panels are composed of:

- 0.6 mm thick galvanised steel sheet,
- "Mineral Wool Board" (nominal density 140 kg/m3; manufactured by KCC Corporation, Korea),
- 0.6 mm thick galvanised steel sheet.

The steel sheets are glued to mineral wool board with adhesive "OCUA-1000RC" (manufactured by DAE HAN POLYMER Ind. Co., Ltd.) or adhesive "BNUR-1000" (manufactured by BN Chemical Co., Ltd.) with a maximum application rate 200 g/m².

Panels are connected together with a removable steel cap profiles joints fitted on one side. On the opposite side, an angle profile closes the gap at panel's junction.

Maximum length of panels: 2480 mm Maximum width of panels: 590 mm Total thickness of panels: 25 mm

2. DOCUMENTS AND DRAWINGS:

As per the Manufacturer's drawing N° F05-W-351-R2 dated 25/11/2005.

3. TEST REPORTS:

Test report N° 0602-0114 dated 02/02/2006, as per IMO FTP Code Annex 1 Part 3 [testing standard: IMO Resolution A.754(18)], from KICT, Korea.

4. APPLICATION / LIMITATION:

4.1 - The fitting aboard to be the same as used for the test.

- 4.2 The following components shall comply with the requirements of the relevant Bureau Veritas rules and be type approved: - the insulating material "**Mineral Wool Board**" (nominal density 140 kg/m³),
 - the adhesive materials "OCUA-1000RC" and "BNUR-1000",
 - any added finish surface material(s).

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **B-15 Class bulkhead, type "BIP W-351**" is to be supplied by **BIP INDUSTRIES Co., Ltd. (Goseong)** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **BIP INDUSTRIES Co., Ltd. (Goseong)** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

6. MARKING OF PRODUCT:

The product or packing is to be marked with Manufacturer name, type, designation and fire-technical rating.

7. OTHERS:

7.1 - It is **BIP INDUSTRIES Co., Ltd. (Goseong)**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This Certificate supersedes the Type Approval Certificate N° 21589/B0 BV issued on 14/03/2016 by the Society.

*** END OF CERTIFICATE ***