



Type Approval Certificate

[Fire Protection Bulkhead]

Initial Approval 16th December, 2016

Manufacturer BIP Industries Co., Ltd.
67, Baedungongdan-gil, Hoehwa-myeon, Goseong-gun, Gyeongsangnam-do, Rep. of Korea

Product Description Brand : BIP W-106SE (A)
Grade : B-15 Class
See "Appendix 1"

Approval Condition See "Appendix 1"

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt.8, Ch.1 of the Rules for Classification of Steel Ships, IMO 2010 FTP Code -Annex 1 Part 3 and Res.307(88).

This Certificate is valid until 15th December, 2026

Issued at Tongyeong, Korea on 27th October, 2021



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME21027114214) and certificate No.(TYG00745-FP135).



KOREAN REGISTER

[Handwritten signature]

*General Manager of
Tongyeong Branch Office*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 27th October, 2021

1. Product Descriptions

- 1) The bulkhead consists of panels having 48.5 mm thick mineral wool insulation (140kg/m³, KCC Corporation, Gimcheon Plant) covered with 0.4 mm thick perforated steel sheet and 0.6 mm thick galvanized steel sheet on both sides.
- 2) The mineral wool has air gap (50 mm width x 20 mm height) at 50 mm spacing.
- 3) The mineral wool is bonded to steel sheets with adhesive "BNUR-1000" or "OCUA-1000RC".
- 4) The panels are connected each other by M-profiles (0.6 mm thick) and spline joints (3 mm thick, 30 mm width).
- 5) Max. panel size : 600 mm x 2480 mm (W x H)
- 6) Total thickness of bulkhead : 50 mm

2. Approved Drawings : No. W-106SE-R0 (6 pages including cover)

3. Approval Conditions

- 1) This approval is granted on the basis of the test report no. AK2012-0185 dated on August 20th, 2012 issued by Fire Insurers Laboratories of Korea (FILK).
- 2) The surface materials, if applied, shall be of type approved by the Society.
- 3) In case where the panel is penetrated to incorporate light fixture and similar devices, arrangement shall be made to ensure that the fire resistance is not impaired.
- 4) The product or packing is to be marked with manufacturer name and type designation on a suitable position.
- 5) Any adhesives used in A or B Class divisions should be low flame spread.
- 6) This approval does not cover the airborne sound insulation properties.
- 7) Approval Certificate for Manufacturer (Cert. no. : CSP00745-PA001) is to be retained validly apart from this Approval.
- 8) Individual Product Certification is not required.

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