



# Type Approval Certificate

[ Fire Protection Bulkhead ]

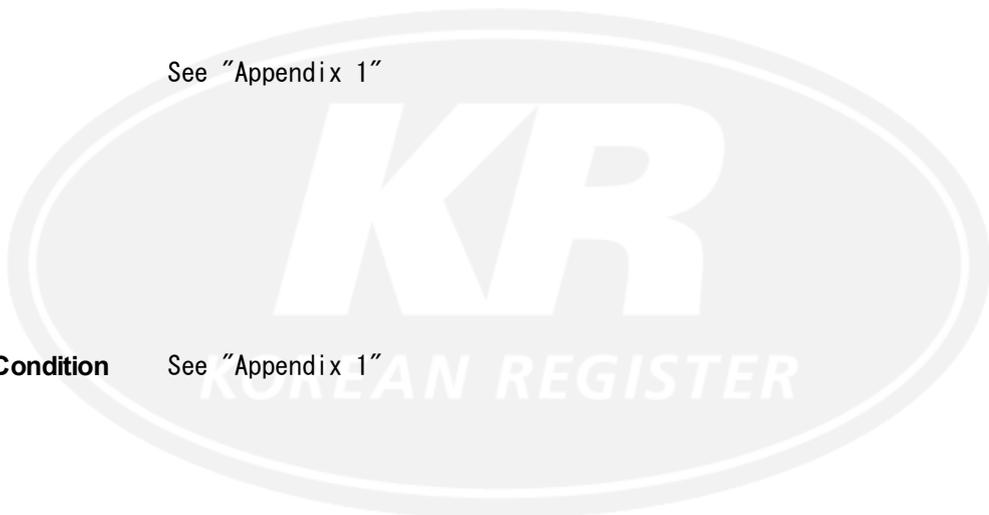
**Initial Approval** 3 November 2022

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

**Product Description** Brand : BIP W-102SH  
- 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 and IMO 2010 FTP Code Annex 1, Part 3.

This Certificate is valid until 2 November 2027

Issued at Busan, Korea on 3 November 2022



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(ME22032271408) and certificate No.(TYG00745-FP148).



**KOREAN REGISTER**

*General Manager of  
Marine & Ocean Equipment Team*

- 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 : 3 November 2022

### A. Product Description

#### 1. Product Specification

- 1) The bulkhead consists of panels having 48.5 mm thick and 2 layers of 23.5 mm thick mineral wool insulation(140 kg/m<sup>3</sup>, manufactured by KGC Corp.) covered with 0.6 mm steel sheets.
- 2) The mineral wool is bonded to steel sheets and to adjacent mineral wool with adhesives "BNUR-1000" and "OCUA-1000RC"
- 3) The panels are connected each other by M-profiles(0.5 mm thick steel, 18 mm(W) X 48.5 mm (H)) and spline joints(3 mm thick steel, 30 mm(W)).
- 4) Total thickness of panel : 50 mm
- 5) Max. panel size : 600 mm(W) x 2460 mm(L)

※ For more details, see the approved drawings and/or test report(s) listed below.

#### 2. Approved Drawings and Documents

- 1) Drawing No.F2021-W102SH-R1, Rev.No. R1 (7 sheets with a cover)

#### 3. Test Reports, etc.

- 1) Test report No. AK2022-0124 dated April 22nd, 2022 issued by Fire Insurers Laboratories of Korea(FILK).

### B. Approval Condition

#### 1. Application & Limitation

- 1) The surface materials, if applied, shall be of type approved by the Society.
- 2) 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.
- 3) In case where the bulkhead may incorporate electrical fittings, such as light fittings and/or ventilation units, a separate test(s) shall be performed apart from this Approval.
- 4) Any adhesives used in A or B Class divisions should be low flame spread.
- 5) This approval does not cover the airborne sound insulation properties.
- 6) Approval Certificate for Manufacturer (Cert. No. : TYG00745-PA001) is to be retained validly apart from this Approval.

#### 2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is not required.

#### 3. Marking

- 1) The product or packing is to be marked with manufacturer name and type designation on a suitable position.

#### 4. Others

- 1) N/A

< End of certificate >