

TYPE APPROVAL CERTIFICATE

Certificate No.

: CSP00745-FP071

Initial Approval: 14th August, 2003

Product

: Fire Protection Bulkhead

Manufacturer

: BIP Industries Co., Ltd.

28, Sonam 3 Gil, Yangsan-si, Gyeongsangnam-do, Korea

Product Description : Brand : BIP W-162

- 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 and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 8, Ch. 1 of the Rules for Classification of Steel Ships and IMO 2010 FTP Code Part 3.

This Certificate is valid until 13th August, 2023 Issued at Jangsaengpo, Korea on 27th June, 2018

KOREAN REGISTER OF SHIPPING

General Manager of Jangsaengpo 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 charges 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.

Appendix 1

Product Description and/or Approval Condition

Certificate No: CSP00745-FP071 Date of Issue: 27th June, 2018

- 1_ Product Descriptions ;
- 1) The bulkhead consists of panels having 15 mm thick two layers of mineral wool insulations (15 mm + 15 mm, 200 kg/m³, KCC Corp.) covered with 0.6 mm thick galvanized steel sheets on exposed side.
- 2) The mineral wool is bonded to steel with adhesive "OCUA-1000RC" Dae Han Polymer Ind., Co. or "BNUR-1000" BN Chemical Co., Ltd.
- 3) The panels are connected each other by 1.2 mm thick steel omega profiles filled with 15 mm thick mineral wool insulation (200 kg/m³, KCC Corp.) and fitting screws on unexposed side.
- 4) All panels are secured at the ceiling using 0.6 mm thick steel corner profile and at the bottom with 2.1 mm thick steel square pipe.
- 5) Total thickness: 30 mm
- 6) Max. panel size : 600 x 2485 mm (W x H)
- 2. Approved Drawings: No. W-162-B15-RO (Total 5 Sheets with a Cover)
- 3. Approval Conditions
- 1) This approval is granted on the basis of the test report no. KOMERI-0402-12T579 dated on 05th. Sep. 2012 issued by Korea Marine Equipment Research Institute.
- 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) Individual Product Certification is not required.
- 7) This approval does not cover the airborne sound insulation properties.
- 8) Approval Certificate for Manufacturer (Cert. no. : CSP00745-PA001) is to be retained validly apart from this Approval.

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