Type Approval Certificate



[Fire Protection Continuous Ceiling]

1 December 2017
BIP Industries Co., Ltd.
67, Baedungongdan-gil, Hoehwa-myeon, Goseong-gun, Gyeongsangnam-do, Rep. of Korea
Brand : BIP C-643 (B-O Class Continuous Ceiling)
- Grade : B-O Class
See "Appendix 1"
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 30 November 2027

Issued at Busan, Korea on 12 October 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(ME22029425534) and certificate No.(TYG00745-FP142).



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.

Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 Show 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 validity of this certificate.

the requirements as amended

^{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.

Product Description and/or Approval Condition

Date of Issue : 12 October 2022

A. Product Description

1. Product Specification

- 1) The ceiling consists of panels having 25 mm thick mineral wool insulations(60kg/m, KCC Corp.) covered with 0.37 mm non-woven fabric(Dae Kyoung Chemical Co., Ltd.) and 0.6 mm thick perforated or non-perforated galvanized steel sheets on exposed side only.
- 2) The ceiling is suspended Min. 300 mm below the structural steel deck by 'Hanger Set' connected to 'T-Carrier' (1.0 mm thick steel) and fitted to wall panel by 'Top Profile' (1.0 mm thick steel) and screws(Max. Pitch : 300 mm/1000 mm)
- 3) The panels are connected each other by folded part of the steel sheet.
 4) The long panels are connected with the short ones by 'T-Carrier' (1.0 mm thick steel) and screws (Max. Pitch : 300 mm)
 5) Hanger sets are welded to the deck.
 6) Max. distance between Hanger Sets : 1200 mm

- 7) Max. distance between wall panel and Hanger sets : 300 mm
 8) Max. panel size : 300 mm x 2360 mm (W x L)
 9) Total thickness of panel : 25 mm

× For more details, see the approved drawings and/or test report listed below.

2. Approved Drawings and Documents

1) Drawing No.F2022-C643-R1, Rev.No.R1 (8 sheets with a cover)

3. Test Reports, etc.

1) Test report No. KOMERI-0402-22T1596(E) dated June 15th, 2022 issued by Korea Marine Equipment Research Institute (KOMERI).

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 ceiling 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

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 >