



# Type Approval Certificate

[ Fire Protection Continuous Ceiling ]

**Initial Approval** 24 March 2000

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

**Product Description** Brand : BIP C-513  
- Perforated steel sheet type  
- Non Perforated steel sheet type  
  
- 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 23 March 2030

Issued at Tongyeong, Korea on 14 January 2025



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(ME25002177182) and certificate No.(TYG00745-FP045).



**KOREAN REGISTER**

*M. H. Lee*

*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 : 14 January 2025

### A. Product Description

#### 1. Product Specification

- 1) The ceiling consists of panels having 25 mm thick mineral wool insulations (60kg/m<sup>3</sup>, KCC Corp.) covered with 0.6 mm thick perforated or non perforated steel sheet on exposed side only and 50 mm thick mineral wool insulations (80kg/m<sup>3</sup>, KCC Corp.) overlay the panels.
- 2) For the perforated steel sheet, the diameter of sound-absorption mini holes is  $\Phi 1.8$  mm and the holes are 7.0 mm in spacing.
- 3) Total thickness : 75 mm
- 4) Max. panel size : 300 mm x 2240 mm (W x H)
- 5) The panels are connected each other by two transversal "P701" main runners with screws ( $\Phi 4$  x 20L) at grooves between each panels and longitudinally with two "P703" Hanger sets on main runner spaced of Max. 1200 mm. The ceiling panels are assembled leaving a 25 mm wide groove.
- 6) The long panels are connected with the short ones by "P704" connection profile and these are jointed by screws ( $\Phi 4$  x 20L).
- 7) The ceiling is connected to deck with Hanger sets installed on main runners.
- 8) Max. distance between main runners (longitudinal direction) : 1400 mm
- 9) Max. distance between bulkhead/connection profile and first hanger : 300 mm

#### 2. Approved Drawings and Documents

- Approved Drawings : F2014-C513-R0 1/9 to 9/9

#### 3. Test Reports, etc.

- Test report no. AK2014-0555 dated on 05th. Nov. 2014 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 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

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

#### 4. Others

- N/A

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