



Certificate Of Fire Approval

This is to certify that the product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	BIP Industries Co., Ltd.
Address	1817, Jungang-Daero, Geumjeong-gu, Busan, Republic of Korea
Type	B-0 Ceiling
Description	Fire Resisting B-0 Class Continuous Ceiling Panel System
Trade Name	BIP C-512
Specified Standard	IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 3

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register Asia of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form part of this Certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Kwang-Baek Kim

Fire & Safety - Senior Specialist to Lloyd's Register Asia
A member of the Lloyd's Register group

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No.LR23365367SF

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal of Certificate Number SAS F180332-M1-03.

APPROVAL DOCUMENTATION

TEST REPORTS

Fire Insurers Laboratories of Korea (FILK), 69-1 Simseok-Ri, Ganam-Myeon, Yeosu-Gun, Gyeonggi-Do, 469-881, Korea; Test Report No. AK2014-0283R dated 16th June 2014.

CONDITIONS OF CERTIFICATION

1. Ceiling panel system 'BIP C-512' consisting of: panels of 0.6mm thick perforated galvanised steel sheet panels (diameter of perforations 1.8mm, distance of centres 7mm/10mm) formed into trays 25mm deep, filled on non-exposed upper side with one sheet of (25mm thick, 60 kg/m³ density) mineral wool insulation manufactured by KCC Corporation. Width of insulation 275mm with 25mm uninsulated width at edge of panel for overlapping joint connection. Total thickness of ceiling 25mm. Note: non perforated galvanised steel sheet panels of identical dimensions may also be used.
2. Adjacent panels connected together longitudinally with overlapping joints.
3. Adjacent panels connected at ends with 'P704' connection profile and self tapping screws.
4. Panels connected to bulkhead with self tapping screws to steel profile welded to bulkhead.
5. Panels suspended by steel main runners attached to cross runners with hanger hooks. Cross runners suspended from deck with ceiling hanger rods.
6. Maximum ceiling panel width: 300mm
7. Maximum ceiling panel length: 2240mm
8. Maximum distance between ceiling hangers (along length of main runner): 2500mm
9. Maximum distance between top of ceiling and bottom of overhead deck: 275mm
10. Composition, application and installation of sub components, including any adhesives, seals and any fire retardants, to be maintained in production and use in accordance with originally tested composition formula and method of application and installation, and manufacturer's instructions.
11. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.



DESIGN APPRAISAL DOCUMENT

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Certificate No: LR23365367SF
Issue Date: 18/09/2023
Expiry Date: 17/09/2028
Reference: BTSO/F&S/TA/KBK/CHA2301989/PRJ11100416618

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12. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products, whether manufactured by themselves or their licensee manufacturers, if agreed by Lloyd's Register, are fully compliant with the relevant statutory regulations and Lloyd's Register Class rules as applicable and designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.

PLACE OF PRODUCTION

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

K B Kim

Kwang-Baek Kim
Senior Specialist, Fire & Safety to Lloyd's Register Asia
Busan Technical Support Office, Marine & Offshore
Lloyd's Register Group

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s)

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