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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 609-310 Republic of Korea
Type	B-15 BULKHEAD
Description	Fire-Resisting Bulkhead Panel System – Type: “BIP W-162”
Specified Standard	IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 3

The attached Design Appraisal Document forms 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.

Date of issue	17 December 2018	Expiry date	16 December 2023
Certificate No.	SAS F180336	Signed	
Sheet No	1 of 3	Name	J. M. Evans Surveyor to Lloyd's Register EMEA A Member of the Lloyd's Register Group

Note:

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 of any modification or changes to the equipment in order to obtain a valid Certificate.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



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Lloyd's Register EMEA (Southampton)

Marine & Offshore UK&I

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Issue number	1

DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
13 December 2018	UKITSO/SFS/TA.JE/WP34210240

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F180336

This Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

KOMERI, 1125-22 Dongsam-Dong, Youngdo-Gu, Busan, Republic of Korea; Fire Test Report No. KOMERI-0402-12T579 dated 5th September 2012.

CONDITIONS OF CERTIFICATION

1. Consisting of: 0.6mm thick steel sheet panel 600mm wide, bonded to one side of a 30mm thick insulation core, comprising two layers of (15mm thick, density 200kg/m³) mineral wool manufactured by KCC Corporation, using type 'OUCA-1000RC' urethane adhesive manufactured by Dae Han Polymer Ind Co to bond the insulation layers together and the insulation to the steel panel. The insulation layers inside each panel are to contain no joints
2. Adjacent panels are joined together using (10mm x 15mm x 52.4mm x 10mm x 15mm x 1.2mm thick) omega steel profiles and 4mm diameter steel screws through each panel at 300mm maximum vertical centres; one layer of the same insulation also fills the omega joint profiles
3. All panels are to be secured at the top and bottom channels and at end vertical boundaries with 4mm diameter self tapping screws at 300mm centres to prevent joint movement
4. Composition of all sub component materials, including any fire retardants and adhesives, to be maintained in production and use in accordance with originally tested composition formula and method of application, and manufacturer's instructions
5. 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

PLACE OF PRODUCTION

BIP Industries Co. Ltd.
28 Sonam 3-gil
Yangsan-si
Gyeongsangnam-do
Republic of Korea



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Lloyd's Register EMEA (Southampton)

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Date 13 December 2018	Quote this reference on all future communications UKITSO/SFS/TA.JE/WP34210240
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F180336



Jessica Evans
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

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).