



## 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.

|                           |                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Manufacturer</b>       | <b>KCC Corporation</b>                                                                                                     |
| <b>Address</b>            | Ulsan Plant, 30, Bangeojinsunhwan-doro, Dong-gu, Ulsan, Republic of Korea                                                  |
| <b>Type</b>               | MATERIAL HAVING LOW FLAME SPREAD CHARACTERISTICS & NOT CAPABLE OF PRODUCING EXCESSIVE SMOKE & TOXIC PRODUCTS OF COMBUSTION |
| <b>Description</b>        | Fire-Resisting Material – Type: “Koramel Primer H.B. MP120” Paint System                                                   |
| <b>Trade Name</b>         | Koramel Primer H.B. MP120                                                                                                  |
| <b>Specified Standard</b> | IMO Res. MSC.307(88) – (2010 FTP Code) Annex 1 Part 5 and Annex 2                                                          |

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 North America, Inc. 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.

**Bruce McDonald**

Technical Authority - Statutory to Lloyd's Register North America, Inc.  
A member of the Lloyd's Register group

1330 Enclave Parkway, Houston, Texas, 77077,  
United States

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## DESIGN APPRAISAL DOCUMENT

|                 |                                                |
|-----------------|------------------------------------------------|
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| Certificate No: | SAS F190017-02                                 |
| Issue Date:     | 26/05/2023                                     |
| Expiry Date:    | 05/02/2024                                     |
| Reference:      | UKITSO/FIRE/TA/JG/BM/WP50270049/PRJ11100410721 |

### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F190017-02

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 Certificate Supersedes and is an Amendment of Certificate Number: SAS F190017

#### **APPROVAL DOCUMENTATION**

##### **TEST REPORTS**

Fire Insurers Laboratories of Korea (FILK), 1030 Gyeongchung-daero, Ganam-eup, Yeosu-Si, Gyeonggi-Do, 469-881, Korea; Test Report No. A2014-1111 dated 25th November 2014.

##### **CONDITIONS OF CERTIFICATION**

1. When applied to a metallic substrate.
2. Consisting of: one coat of 'Koramel Primer H.B. MP120' epoxy based paint, spray applied at a dry film thickness 71µm.
3. Smoke and toxicity criteria is satisfied by meeting the total heat release (Qt) and peak heat release rate (Qp) as stated in IMO Fire Test Procedures Code, Annex 2, Section 2.2
4. 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.
5. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products, are fully compliant with the relevant statutory regulations as applicable and are designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.

##### **Notes**

1. This paint scheme is approved for all variations of the products listed in this certificate that have an equal or lower organic content than the specimen tested. Where organic content is similar (within 5%), the paint scheme is approved for all listed products of a lighter colour than the specimen tested. Please consult the Manufacturer with regards to the approved range based upon the test reports listed and approved in this Certificate.
2. Application shall be in accordance with applicable Manufacturers Guidance.

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### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F190017-02

#### **PLACE OF PRODUCTION**

##### **KCC Corporation**

Ulsan Plant  
30, Bangeojinsunhwan-doro  
Dong-gu  
Ulsan  
Republic of Korea

##### **KUMKANGPAINT. INDUSTRY. CO., LTD.**

86-75, Chugok-gil  
Gogyeong-myeon  
Yeongcheon-si  
Gyeongsangbuk-do  
Republic of Korea

Bruce McDonald  
Technical Authority-Statutory  
Lloyd's Register Americas

#### **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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