DNV·GL

Certificate No:
TAF000004M

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class H Lightweight Horizontal Partition and Deck

with type designation(s)
KCC CERAKWOOL New-Bio Alpha 1200 H-120 Deck

Issued to
KCC Corporation Ltd. Gimcheon Plant
Gimcheon, Gyeongsangbuk-do, Republic of Korea

is found to comply with
DNV GL offshore standards

Application :

Approved for use as a fire retarding deck of class H-120.

This Certificate is valid until **2020-12-01**.

Issued at **Høvik** on **2015-12-02**

for **DNV GL**

DNV GL local station: **Gimhae**

Approval Engineer: **Martin Gjelstad**

Petter Langnes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-018569-1**
Certificate No: **TAF000004M**

Product description

"KCC CERAKWOOL New-Bio Alpha 1200 H-120 Deck"
composed of a steel deck insulated on the underside with two layers of (50 mm + 60 mm) KCC CERAKWOOL New-Bio Alpha 1200 Blanket (70 kg/m^3). The insulation layers have staggered joints. The insulation is bent around the stiffeners. The insulation is fastened with 3 mm steel pins and 31 mm steel washers. Max. spacing between pins is 300 mm. Additional pins and washers are used on the stiffeners.

For further details see drawings mentioned under Type Approval documentation below.

Application/Limitation

Any surface materials used have to be approved for smoke and toxicity and low flame spread characteristics (IMO 2010 FTP Code part 2 and 5) when required according to relevant rules.

Each product is to be supplied with its manual for installation and maintenance.

Type Approval documentation

Certification in accordance with Standard of Certification Note No. 1.2, Type Approval, January 2013.

Test Report No. KOMERI-0402-14T2683 dated 2015-01-26 from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing No. KCC-GC-2014-06-A and No. KCC-GC-2014-06-B both dated 2014-10-20 from KCC Corporation Ltd.

Tests carried out

Tested according to IMO 2010 FTP Code part 3 using time-temperature curve specified in ISO 834-3.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Periodical assessment

DNV's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Standard for certification No. 1.2 Type Approval Item 4.