

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Non-Combustible Material**

with type designation(s)

KCC Glass Wool Nature, KCC Glass Wool Nature Pipe Cover

Issued to

**KCC Corporation, Moonmak Plant
Wonju-si, Republic of Korea**

is found to comply with

DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations**DNV GL rules for classification – Ships****DNV GL offshore standards****Application :****Approved for use as non-combustible materials.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2018-12-18**This Certificate is valid until **2023-12-17**.for **DNV GL**DNV GL local station: **Seoul**Approval Engineer: **Nanna Martine Jacobsen**

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Mårten Schei-Nilsson
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.



Job Id: **262.1-018606-2**
Certificate No: **TAF000013C**

Product description

"KCC Glass Wool Nature" - composed of glass wool, nature binder, etc.
Nominal density in range of 16 - 48 kg/m³
Organic content: 7.2% - 7.5%

"KCC Glass Wool Nature Pipe Cover" - composed of glass wool, nature binder, etc.
Nominal density of approx. 60 kg/m³
Organic content: 5.3%

Application/Limitation

Approved for use as non-combustible materials.

The product may be used as an integrated part of approved fire resisting divisions only when tested as such.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.

Test Reports:

- No. A2014-0838 (total of 5 pages)
- No. A2014-0839 (total of 5 pages)
- No. A2014-0840 (total of 5 pages)
- No. A2014-0841 (total of 5 pages)

all dated 29 August 2014 and all from Fire Insurers Laboratories of Korea (FILK), Korea.

Tests carried out

Tested in accordance with IMO 2010 FTP Code part 1 (IMO Res. MSC.307(88)).

Marking of product

The product or packing is to be marked with name of manufacturer and type designation.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "*Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)*", DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL'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 Class Programme DNVGL-CP-0338, Section 4.