DNV·GL

Certificate No:
TAF000016C

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Non-Combustible Material

with type designation(s)
Glass Wool board - density 22 ~ 48 kg/m3

Issued to
Byucksan Corporation (Iksan Plant)
Jeollabuk-do, Republic of Korea

is found to comply with
DNV GL rules for classification – Ships
DNV GL offshore standards
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations

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 **2019-04-02**
This Certificate is valid until **2024-04-01**.
DNV GL local station: **Mokpo**

Approval Engineer: **Tessa Biever**

for **DNV GL**

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.

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Product description
"Glass Wool board - 22 kg/m^3 ~ 48 kg/m^3"
Homogeneous product with yellow surface consisting of cullet, silica, dolomite and binder.

The glass wool board is available in the following variants:
1. 22 kg/m^3 – nominal thickness 50 mm
2. 35 kg/m^3 – nominal thickness 50 mm
3. 48 kg/m^3 – nominal thickness 50 mm

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.

Max. organic content:
1. Glass wool board 22 kg/m^3 : 7 %
2. Glass wool board 35 kg/m^3 : 6 %
3. Glass wool board 48 kg/m^3 : 5.5 %

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

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

Test report Nos.:
- A2019-0188 and A2019-0191E, both dated 2019-03-27 (Glass Wool board 22 kg /m^3)
- A2019-0189 and A2019-0192E, both dated 2019-03-27 (Glass Wool board 35 kg /m^3)
- A2019-0190 and A2019-0193E, both dated 2019-03-27 (Glass Wool board 48 kg /m^3)

All from from Fire Insurers Laboratories of Korea (FILK), Korea.

Tests carried out
Tested according to IMO 2010 FTP Code part 1.

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 product/s listed in this certificate is/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.