DNV·GL

Certificate No:
TAF0000099

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class H Door

with type designation(s)
SM-H120-WS

Issued to
Sung Mi Co., Ltd.
Gimhae-si Gyeongsangnam-do, Republic of Korea

is found to comply with
DNV GL offshore standards

Application :

Approved for use as an integrated part of fire retarding divisions of class H-120.

Max. clear door opening: 1765x 2500 mm (width x height).

This Certificate is valid until **2021-06-07**.

Issued at **Høvik** on **2016-06-08**

for **DNV GL**

DNV GL local station: **Gimhae MC & FIS**

Approval Engineer: **Synnøve Bolstad Eri**

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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Product description

"SM-H120-WS"
is a one leaf sliding door. The door leaf is composed of a 120 mm thick insulation core of type "KCC bio cerakwool" with density 96 kg/m^3 (manufacturered by KCC Corporation), covered with 3 mm thick steel panels on each side. The door leaf is internally strengthened with two vertical and one horizontal stiffeners. The grooves along frame and door edges are fitted with ceramic packing.

Hanger rollers and rail are fitted on the top side of the door leaf, connected to steel L-profile rail brackets (max. spacing 1000 mm) which are welded to the bulkhead. Two guide rollers are fitted at the lower part of the door leaf.

The door frame is made from 4 mm thick steel, and may be fixed by M10 bolts and nuts (max. spacing 250-300 mm) or welded to the bulkhead.

The door may be fitted with a window with 111 mm thick fire glass (61+Gap 5+45mm), type Contraflam marine H120, manufactured by Vetrotech Saint-Gobain, using 1.5 mm thick steel window frame and ceramic gasket.

Total door thickness: 120 mm

For further details see approved drawing listed under Type Approval documentation.

Application/Limitation

The door is approved for installation in steel bulkheads of class H-120. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Max. size of door leaf:	1988 x 2616 mm (Width x Height)
Max. clear opening of the window:	300 x 500 mm (Width x Height)

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 (or IMO FTPC Part 2 and 5 when in compliance with the IMO 2010 FTP Code Ch. 5.2 and 8)) when required according to relevant rules.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

Test report No. KOMERI-0402-15T2026 dated 29 October 2015 from Korea Marine Equipment Research Institute, Busan, Korea.

Drawing No. SMD-150422-001 dated 22 April 2015 from the manufacturer.

Tests carried out

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

Marking of product

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

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 Standard for certification No. 1.2 Type Approval Item 4.