

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Class B Door**with type designation(s)
SM-B15-S1

Issued to

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

is found to comply with

DNV GL offshore standards**DNV GL rules for classification – Ships****DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations****Application :****Approved for use as an integrated part of fire retarding division of class B-15.****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 **2020-05-25**This Certificate is valid until **2025-05-24**.for **DNV GL**DNV GL local station: **Gimhae Station**Approval Engineer: **Thorvald Furuseth**

Øyvind Hoff
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.



Product description

"B-15 Class Single Door with kick-out panel (SM-B15-S1)"

composed of single leaf hinged door (3 hinges) with door leaf composed of a 34 mm thick Hi-wool insulation core (manufactured by KCC Corporation) of density 120 kg/m³, faced on both sides with 0.6 mm steel sheets.

The door frame is made of 1.2 mm thick steel sheets, with a 2 mm window reinforcement by POSCO Co., Ltd. The window glass is supported by a 3 mm cerakwool packing of density 96 kg/m³. The door frame is screwed (Ø4 mm tapping screws maximum spacing 400 mm) to the bulkhead and may also be bolted (M5 Bolt & nut maximum spacing 250 ~ 300 mm) or welded (20 mm in length spaced 300 mm apart) to the bulkhead. A 20 mm thick ceramic packing can be fitted between the door leaf and door frame (see drawings for details).

The door may be fitted with:

- Fire glass window in upper part, 440 x 440 mm (W x H) and nominal thickness 16 mm, made by Saint-Gobain Int. AG
- Escape panel in lower part of door, 420 x 520 mm (W x H), with integrated ventilation grid 410 x 450 mm (W x H), both made by SUNGMI CO. LTD.

Total thickness of door blade is 35 mm.

For further details, see drawings and test report listed under Type Approval documentation below.

This product may be manufactured at the premises of:

- SUNG MI CO., 311, Yongjeonsaneopdanji-gil, Samnangjin-eup, Miryang-si, Gyeongsangnam-do, KOREA

Application/Limitation

The door is approved for installation in fire retarding divisions of class B-15. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Any surface materials used must be approved for smoke and toxicity and low flame spread characteristics (IMO 2010 FTP Code parts 2 and 5 or IMO FTPC Parts 2 and 5 when in compliance with the 2010 FTP Code Ch. 5.2 and 8) when required according to relevant rules and regulations.

Max. size of door leaf: 1135 mm x 2213 mm (W x H)

Max. size of clear door opening: 1100 mm x 2200 mm (W x H)

Max. size of clear window opening: 400 mm x 400 mm (W x H)

Max. size of kick plate clear opening: 420 mm x 520 mm (W x H)

External windows must comply with ISO 3903, ref. DNV GL Rules for Classification: Ships, Pt.3, Ch.12, Sec.6 [1.1.4].

Note that this is a fire safety certificate which only covers fire technical properties (i.e. does not to cover strength evaluations related to watertightness, weathertightness, etc.).

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

Job Id: **262.1-029407-1**
Certificate No: **TAF000014J**

Type Approval documentation

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

Test Report No. KOMERI-0402-17T3799, dated 08 October 2018, from Korea Marine Equipment Research Institute, Korea.

Drawing No. SMD-171114-003/0 (8 pages) dated 14 November 2017 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

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

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 listed in this certificate is 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.