DNV·GL

Certificate No:
**TAF00001E8**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Class H Door**

with type designation(s)
**S090S - Single Sliding (H-60)**

Issued to
**Rapp Bomek AS**
**Bodø, Norway**

is found to comply with
**DNV GL offshore standards**

## Application :

**Approved for use as an integrated part of fire retarding divisions of class H-60.**

**Restricted application: Fire from rail mount side only.**

Issued at **Høvik** on **2020-07-13**
This Certificate is valid until **2024-07-15**.
DNV GL local station: **Norway Fleet in Service, Mid-North**

for **DNV GL**

Approval Engineer: **Helge Bjørnarå**

**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



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## Product description

S090S - Single Sliding (H-60),
is a single leaf sliding door assembly built of 3 mm steel plates on both side of an insulation core made by 3 layers of 38 mm Firemaster 607 (density 128 kg/m$^3$, manufactured by Thermal Ceramics). Insulation was glued to the steel plates with adhesive of type Conlit Kleber (manufactured by Rockwool). The door leaf is fitted with vertical L type steel stiffeners 4 mm thick.

Total door leaf thickness is 120 mm.

The 5 mm thick door frame may be welded or bolted (M12 bolts c/c 225 mm) to the bulkhead. There was mounted a ceramic Sil-Tex 3x30 mm between frame profile and bulkhead and also glued a ceramic Silica fibre insulation gasket Ø30 mm around the frame profile.

Track profile was mounted on the exposed side with bolts, with the door leaf hanging from the track with two hangers. The track and railing were covered with 2.0 mm thick steel cover.

The door may be equipped with a 78 mm thick window from Pilkington Pyrostop H 120-20 OW. (glazing size, 300 x 600 x 78 mm).

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

## Application/Limitation

The door is approved for installation in steel bulkheads of class H-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Restricted application: Fire from rail mount side only.

| | |
|---|---|
| Maximum size of clear opening: | 1632 x 2315 mm (W x H) |
| Maximum size of door leaf: | 1935 x 2430 mm (W x H) |
| Maximum size of window clear opening: | 200 x 500 mm (W x H) |

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.

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, September 2018.

Test report No. 103060.46 dated 12 September 2014 from SP Fire Research, Trondheim, Norway.

Drawing No. RB601123W (41 pages) dated 14 November 2013 from the manufacturer.

## Tests carried out

Tested according to IMO 2010 FTP Code Part 3 with furnace temperature following the hydrocarbon curve according to NS-EN 1363-2.

## Marking of product

The product is to be marked with name and address 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 Class Programme DNVGL-CP-0338, Section 4.