DNV·GL

Certificate No:
TAF00001E6

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class H Door

with type designation(s)
H100D - Double Hinged (H-120)

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-120.

Issued at **Høvik** on **2020-07-02**
This Certificate is valid until **2023-07-29**.
DNV GL local station: **Norway Fleet in Service, Mid-North**

Approval Engineer: **Helge Bjørnarå**

for **DNV GL**

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

H100D - Double Hinged (H-120),
is a double leaved hinged door where each door leaf is built of (from unexposed side): 3 mm thick steel plate + 38 and 25 mm Firemaster 607 (density 128 kg/m^3, manufactured by Thermal Ceramics) + 2x9 mm Supalux (density 960 kg/m^3, manufactured by Promat) + 38 mm Firemaster 607 + 3 mm steel plate. Conlit glue (manufactured by Rockwool) was used between Supalux boards. The door leaves have also internal stiffening arrangement, edge protection, 3-point latch locking arrangement, etc. and attached to the frame by 8 hinges (4 for each door).

Total door leaf thickness is 119 mm.

The 5 mm thick door frame may be welded or bolted (M12 bolts c/c 250-350 mm) to the bulkhead, incl. 3x30 mm Seal-Tek ceramic band.

Silica-Fib Ø25/30 and LIM Conlit Kleber were fitted into U-shape steel channel along the edges of the door leaf and frame for sealing of the door. The edge of the door leaf is also fitted with gasket type Intumex strips 2x20 mm.

For further details, incl. door locking system, see the 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.

Maximum size of clear opening:	2200 x 2600 mm (W x H)
Maximum primary door leaf size:	1196 x 2700 mm (W x H)
Maximum secondary door leaf size:	1092 x 2700 mm (W x H)

Any surface materials used have to be approved for smoke and toxicity and low flame spread characteristics according to 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. 103060.32 dated 26 April 2010 from SINTEF, Trondheim, Norway.

Dwg. No. RB308775W (23 pages) dated 18 February 2010 with components detail list (3 pages) dated 7 May 2010 from the manufacturer.

Tests carried out

Tested according to IMO FTP Code Part 3 (IMO Res. A.754(18)) with furnace temperature following the hydrocarbon curve according to ISO 834-3.

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.