

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB00008B4
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Fire Doors

with type designation(s)
HB5000

Issued to

Baggerød AS
HORTEN, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 6,**

item No. UK/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-11-05**.

Issued at **London** on **2023-02-10**

DNV local unit:
Norway CMC, East-South



for **DNV UK Ltd.**

Approval Engineer:
Tessa Biever

Approved Body No.: **0097**

Christine Mydlak-Roeder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV UK Ltd. of any changes to the approved equipment. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Product description

'HB 5000'

The fire door HB5000 is a single leaf side hinged Class A-60 door which may be equipped with a window.

The door leaf is made of 2 mm thick steel sheets spot welded together. Along the outer edge of the door leaf, the steel sheet is bent 90 degrees towards the steel frame creating a small gap.

There are two steel stiffeners inside the door leaf made of L-profiles with the dimensions 40 x 20 x 2 mm. These are placed 464 mm from the vertical edges of the door leaf.

The doorframe may consist of 3 mm thick steel L-profiles (81 x 78 mm) or optional of 3 mm thick U-profiles (40 x 81 x 40 mm). On the exposed side of the frame there are 2 mm thick gasket frames (Z-profile 21 x 22 x 11 mm) fixed by means of screws with c-c = 250 mm. The gasket frames are fixed to the vertical edges and the top. A small piece of steel sheet is bent and welded to the frame to create space for the latch of the lock. The profiles for the door frame are all welded together.

The door was tested with the door frame fixed to the steel bulkhead using M8 x 30 mm bolts (c-c max 300 mm) and may be installed with door frame both bolted, tack- or fully welded to the bulkhead.

The door is insulated using two layers of ceramic fibre. The insulation thicknesses are 25 mm and 38 mm. The insulation is designated Firemaster Marine Plus Blanket and is produced by Morgan Thermal Ceramics with a density of 128 kg/m³.

An optional window, designated Vision Panel, is fixed to the door leaf at a height of 1600 mm measured from the bottom of the door leaf to the centre of the glass pane. The 27 mm thick glass pane is fixed to the door leaf using steel Z-profiles which are fixed using 4 pop rivets on each vertical edge and 2 pop rivets at the top and bottom. The distance between the rivets is c-c = 150 mm.

The door leaf has a single lock in stainless steel designated TrioVing 5312/8. Optional is a 3-point locking system. The handle was made of stainless steel and positioned 1200 mm above the bottom part of the doorframe.

The door is equipped with three hinges (optional 4 hinges) designated HB-5000. The hinges are welded to the doorframe and bolted to the door leaf using three bolts.

For further details refer to the documentation listed below under "Type Examination documentation".

Application/Limitation

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

Max. door leaf size: 2310 x 1310 x 64 mm (H x W x T)

Max. door clear opening: 2228 x 1205 mm (H x W)

Max. door frame size: 2407 x 1407 x 81 mm (H x W x T)

Max. window viewing area: 500 x 200 mm (H x W)

The insulation materials and adhesives and gaskets used have to be approved according to the Marine Equipment Regulation and bear the UK Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

Doors with windows shall not be fitted in the boundaries of machinery spaces of category A.

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

Type Examination documentation

Test report No. PGB10035A dated 18 September 2020 from DBI, Hvidovre, Denmark.

Assessment report No. PDH10015A dated 07 October 2020 from DBI, Hvidovre, Denmark.

Drawing No. 102819-001 Rev.01 dated 11 September 2020 from Baggerød AS.

Drawing No. 10004801 dated 18 March 2020 from Baggerød AS.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product



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The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating and the UK Mark of Conformity (see page 1).