TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB00008GZ
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)
HB-S76

Issued to
Baggerød AS
HORTEN, **Norway**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **MSN 1874 Amendment 7,**
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 **2028-07-20**.

Issued at **London** on **2023-07-21**

for **DNV UK Ltd.**

DNV local unit:
Norway Fleet in Service, East-South

Approved Body No.: **0097**

Approval Engineer:
Tessa Biever

Christine Mydlak-Roeder
MER Service Responsible

Maritime & Coastguard Agency
UK Approved Body Authorised by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.
During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.
"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. In case limitations of use apply, these should be indicated in the Annex.

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

"A-60 Sliding Door HB-S76"
is a single leaf sliding door with door leaf composed of a core of insulating material of two layers of each 38 mm thick ceramic fibre of type 'FireMaster Marine Plus' (manufactured by Morgan Thermal Ceramics with density 128 kg/m^3) with on each side 1.5 mm thick stainless-steel sheets.

Thickness door leaf: 79 mm

The door leaf is fitted with two stiffeners made of L-shaped stainless steel profiles having dimensions of 20 x 40 mm and a thickness of 2 mm.

The upper part of the door leaf is fitted with a 27 mm thick glass window of type type 'Pyrostop 60-201' (manufactured by Modum Glassindustri).

The window's frame, composed of stainless-steel profiles 2 mm thick (inside frame and outside frame), is completed with strips of 'Insulfrax Board 110LD' (manufactured by Unifrax with density 270 kg/m^3) having thickness of 5 or 3 mm. The window's frame is insulated by a layer of 'Promatect H' (manufactured by Promat with density 870 kg/m^3) having dimensions of 20 x 30 mm. The window's frame is fixed to the door leaf by means of screws type M5x35. The window frame may also be welded.

The door leaf is fitted with a locking system with lock type Stuv 100, a handle type Glutz, a self-closing hose port and a stainless-steel sliding guide.

In correspondence to the five suspension elements, the sliding guide is fixed to the bulkhead by means of five 3 mm thick stainless-steel brackets with c/c 564 mm. The sliding guide is covered by a stainless-steel front cover of 1.5 mm thick.

The door frame, composed of 3 mm thick steel profiles that form the roller guides and the labyrinths on the edges of the leaf, is fixed to the bulkhead by means of screws M8x30 mm with pitch of 300 mm.

For further details, see Type Examination documentation below.

Application/Limitation

The door is 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. clear opening:	2420 x 2580 mm (W x H)
Max. size of door leaf:	2659 x 2880 mm (W x H)
Max. size of window:	200 x 500 mm (W x H)
Max. size of hose port:	150 x 150 mm (W x H)

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

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

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

Type Examination documentation

Test report No. 2017CS012749/2 dated 17 May 2018 from RINA Services Spa, Genova, Italy.
Test report No. 2017CS012749/3 dated 17 May 2018 from RINA Services Spa, Genova, Italy.

Drawing No. PD0113-101, Rev.3 dated 11 October 2017 from manufacturer.
Drawing No. PD0113-102, Rev.3 dated 11 October 2017 from manufacturer.
Drawing No. PD0113-002, Rev.2 dated 19 April 2018 from manufacturer.
Drawing No. PD0113-002_930, Rev.2 dated 16 April 2015 from manufacturer.
Drawing No. PD0113-003, Rev.3 dated 19 April 2018 from manufacturer.
Drawing No. PD0113-004, Rev.3 dated 19 April 2018 from manufacturer.
Drawing No. PD0113-200, Rev.2 dated 02 January 2018 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The door has been successfully tested for extended test period of 68 minutes.

Marking of product

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