

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)

Class B-15 Sliding door - type HB-S-B30

Issued to

Baggerød AS
HORTEN, Norway

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

Regulation **(EU) 2019/1397,**

item No. MED/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

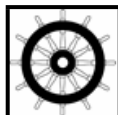
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-03-12.**

Issued at **Høvik** on **2020-03-13**

DNV GL local station:

Norway Fleet in Service, East-South



for **DNV GL AS**

Approval Engineer:

Marcin Tobiasz

Notified Body

No.: **0575**

Roald Vårheim

Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

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.



Product description

"Class B-15 Sliding door - type HB-S-B30",

is an insulated B-Class sliding door with rollers on the top (suspended) and guided at the bottom by an inverted U-profile fixed to the frame.

The door leaf consists of an insulation core with 1 mm thick steel sheets on each side. The steel sheets are folded around the corners and fixed to each other by interlocking at the vertical edges and by means of spot welding at the horizontal edges with c/c 250 mm. The door leaf insulation core consists of two types of insulation material. Two layers of 25 mm thick "FireMaster Marine Plus" of nominal density 96 kg/m³ (manufactured by Morgan Advanced Materials) is placed in the outermost 200 mm on all edges, and a 50 mm thick layer of Rockwool SeaRox SL 660 (nominal density 150 kg/m³) is placed in the centre of the door. The adjoining layers are overlapping each other to avoid any gaps.

The labyrinth is formed by asymmetrical steel U-profiles which are fixed to both the top and the leading edge of the door leaf by means of steel rivets.

The guiding profile is an inverted steel U-profile which is fixed to the bottom of the door leaf using steel rivets. This U-profile is surrounding the other U-profile fixed to the bottom of the door frame, guiding the door leaf.

The door frame consists of various steel profiles along the edges. The frame profile in the leading and top edge are the same and are made from 2 mm thick steel sheets. The profile for the trailing edge is bigger and is also made from a 2 mm steel sheet. At the side of the bulkhead a 'counter frame' made of a 2 mm thick steel L profile is used at the top end of the vertical edges.

The rail/suspension is a 3 mm thick steel L-profile and fixed to the bulkhead by screws. Three hangers (threaded at the end) HELM Agrar 334 are fixed to the L-profile. Inside the hangers a 1550 mm long steel rod HELM Profile No. 300 is placed. The door slides in the gap at the bottom of the rod. Two sets of wheels HELM 391 are fixed to the top of the door leaf.

The sill is made of a 3 mm thick steel plate in the full length of the door leaf. An inverted U-profile is screwed to this steel plate by using M5 x 25 mm screws c/c 250 mm.

Total door thickness is 50 mm, and 64 mm including U-profile for the labyrinth.

For further details see drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of fire retarding divisions of Class B-15.

Max. size of door leaf:	1287 x 2319 mm (W x H)
Max. size of door frame:	1289 x 2484 mm (W x H)
Max. clear opening of door:	1100 x 2200 mm (W x H)

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

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.



Job Id: **344.1-004796-2**
Certificate No: **MEDB000069J**

Type Examination documentation

Test report No. PG10639 dated 05 May 2015 from DBI, Hvidovre, Denmark.

Test report No. PG10666 dated 05 May 2015 from DBI, Hvidovre, Denmark.

Assessment/confirmation dated 3 June 2019 from Morgan Advanced Materials.

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, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).