

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 the Kingdom of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
Fire door B-15 (DB15001)

Issued to
PANELFA, S.L.
Mos-Puxeiros Pontevedra, Spain

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2015/559**,
Annex A.1, item No. A.1/3.16 and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/and IMO 2010 FTP Code

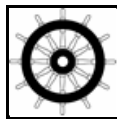
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-02-19**.

Issued at **Høvik** on **2017-02-20**

DNV GL local station:
Vigo

Approval Engineer:
Fryderyk Hoga



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Fire door B-15 (DB15001)"

Is a single leaf hinged door with door leaf composed of 0.6 mm steel sheets bonded by adhesive to an insulating core of 34 mm type "SeaRox SL 470" mineral wool from both sides. Insulation is manufactured by Rockwool with density of 180 kg/m³.

The door leaf is connected to the frame with 3 hinges and is fitted with a cylinder mortise lock type "GSV 3262 z" and handle type "GSV 4410".

Total thickness of door blade: 38 mm.

The door frame, made from external and internal frame in size 60x1.2 mm and 40x1.2 mm steel sheets respectively, is bolted to the bulkhead, by means of self-drilling flathead screws of 4.8 x 25 mm, placed every 200 mm on the upper horizontal edge and 450 mm on the vertical edges.

The door leaf may be fitted with:

- Window with pane of glass model "Pilkington Pyrostop EI 30-10" (manufactured by Fuegoglass Solution) Thickness: 15 mm, window frame is made of 1.2 mm thick steel and intumescent gasket made from rubber band.
- Internal ventilation channel with ventilation grills in size 400x200x30 mm (w x h x t), installed in the middle of height on exposed side and in the lower part on unexposed side.
- Kickout panel in size 510x470x38 mm (w x h x t) made from stainless steel, installed on the lower edge of the door by means of four rivets per lateral with spacing 135 mm.

For further details, see test report and drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of fire retarding division of class B-15.

Restricted application: Fire against the door side with upper mounted ventilation grille.

Max. size of door leaf:	1045 mm x 2120 mm (W x H)
Max. clear opening of door:	1030 mm x 2100 mm (W x H)
Max. clear opening of window:	450 mm x 450 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.

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

Type Examination documentation

Test report No. 14/9076-1359 dated 11 November 2015 from LGAI Technological Center, Barcelona, Spain.

Drawings No. B15 rev. 0 (14 sheets) dated 9 October 2015 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.



Job Id: **344.1-005863-1**
Certificate No: **MEDB00001GR**

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).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. For larger windows, USCG shall be contacted.