

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Fire Doors

with type designation(s)
A60 Door Type S1

Issued to

LETHE Exterior Doors GmbH
Schwanewede, Niedersachsen, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

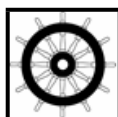
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-02-21**.

Issued at **Hamburg** on **2019-02-22**

DNV GL local station:
Bremerhaven

Approval Engineer:
Timo Linn



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

A60 Door Type S1 with a max. clear opening size of 1950mm x 970mm (width x height) acc. to drwgs. in annex 1.0 - 1.3 attached to the test report.

The door leaf [total thickness: 80mm] consists inside of five layers "PROMAXON - Fireboard, Type A" covered on the side exposed to fire with a stainless steel plate of 1.5 mm and on the unexposed side with an aluminium plate of 1.5mm with round corners.

The layers are affixed with an approved adhesive. The door leaf is connected to the door frame by two stainless steel hinges. The door was tested with the door frame fixed to the bulkhead with bolts and is also approved for use with door frames both bolted, tack- and fully welded to the bulkhead. The door frame is constructed of stainless steel of 1.5mm and fixed to the bulkhead by M10 bolts and sealed with an approved adhesive or alternatively fixed by welding. The door locking mechanism consists of a stainless steel mortise latch and two additional latches (top and bottom) connected via a stainless steel rod.

The door may be fitted with:

A window of type "HERO-FIRE A-60", dimensions: 570mm x 890mm x 41.5mm (width x height x thickness) may be fitted in the door leaf acc. to drwgs. in annex 1.0 - 1.3 attached to the test report.

The window is composed of (from the side exposed to fire):

6mm toughened safety glass "ESG HW6" + 22mm fireproof gel + 2mm x 6mm toughened safety glass "ESG HW6" with 1.5mm foil "PVB 1,52 clear" in between.

The window is retained on the exposed side to fire by a stainless steel frame and on the unexposed side by an aluminium cover plate of the door which are connected to each other by means of M6 screws.

Within the window frame assembly "PROMAXON - Fireboard, Type A" and "Promatect - H" are used as fire insulation. The window is sealed with "PROMASEAL LW", on the unexposed side with "Terostat 8590".

Insulation materials, adhesives and seals

- "PROMAXON - Fireboard, Type A", manufactured by Promat GmbH [density: 850 kg/m³]
- "PROMATECT - H" board, manufactured by Promat GmbH [density: 870 kg/m³]
- "Promat-Kleber K84", adhesive, manufactured by Promat GmbH
- "Rotabond 2000", adhesive, manufactured by Kent Deutschland GmbH
- "PROMASEAL LW", window seal, manufactured by Promat GmbH
- "Terostat 8590", window seal, manufactured by Henkel AG & Co. KGaA
- "EPDM", seal for gas-, water- and weather-tight doors, manufactured by FRANSKA GmbH
- "PROMASEAL - PL", seal for gas-, water- and weather-tight doors, manufactured by Promat GmbH

For further details see documents under 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.

Maximum size of door leaf: 2130mm x 1150mm (width x height)

Maximum clear opening size: 1950mm x 970mm (width x height).

Maximum clear view opening size of window: 570mm x 890mm (width x height).

Tested with 1.5 mm thick steel plate of the door leaf and window retaining steel frame facing the side exposed to fire.

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

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.



Job Id: **344.1-008734-1**
Certificate No: **MEDB00004NX**

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

Type Examination documentation

Test report no.: DMT-DO-53-007 dated 2013-08-27, issued by DMT GmbH & Co. Kg, Dortmund, Germany.

Tests carried out

Tested according to IMO Resolution MSC.307(88) – 2010 FTP Code Annex 1, Part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire-technical rating, 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. Doors with a window area exceeding 645 cm² are not part of this certificate and need direct USCG approval.