

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00008GN

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV 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)

HLMA60Z I Type Class A-60 Fire Door

issued to

Tianjin Huali Thermal Insulation Building Material Co., Ltd.
TIANJIN, China

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

Regulation (EU) 2023/1667,

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 **2029-06-30**.

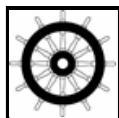
Issued at **Hamburg** on **2024-07-01**

DNV local unit:

Dalian NB & CMC

Approval Engineer:

Marcin Tobiasz



Notified Body
No.: **0098**

for **DNV SE**

Mydlak-Röder, Christine
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) 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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

"HLMA60Z I Type Class A-60 Fire Door"

is a class A-60 single-leaf fire door composed of 0.6 mm thick steel plate, 5 mm thick calcium silicate board LGB-0 (with nominal density of 1100 kg/m³, manufactured by Suzhou Youlian Marine Equipment), 33 mm thick ceramic wool THG-120 (with nominal density of 120 kg/m³, manufactured by Tianjin Huali Thermal Insulation Building Material) 5 mm thick calcium silicate board LGB-0 and 0.6 mm thick steel plate. In addition, there is one layer of 0.6 mm thick stainless steel material rimmed at the perimeter of the door leaf. The insulation material inside the door leaf is fixed by the adhesive YB20002X 8#.

The door leaf is stiffened by three horizontal and two vertical (along edge of an observation window) flat bars made of 1.5 mm thick steel plate.

Total door leaf thickness: 43 mm.

The door frame is a four-sided door frame made by steel plate of 1.5 mm and may be welded or bolted (M6x25 mm screws spaced maximum 300 mm apart) to the bulkhead. The door frame is fitted with a fireproof expansion strip F8966 (19x21 mm) manufactured by Shanghai Gallford Fire Sealing Material. The door leaf is attached to the door frame by three 5" hinges.

The door leaf may be fitted with:

- an observation window constructed from 38 mm fireproof, consisting of 6 mm tempered glass, 20 mm fire liquid and 12 mm tempered glass, produced by Qinhuangdao City Haigang District Yuehua Industrial Technical Factory.
- a fireproof door lock C-1 type from ShangHai LiYong Lock, installed at the door leaf, located 1100 mm from the bottom,
- a self-closing hose port door.

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

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. size of a door leaf: 1136 mm x 2335 mm (W x H)

Max. clear opening (W x H): 1100 mm x 2300 mm

Max. clear opening of an observation window: 400 mm x 400 mm (W x H)

Max. size of a hose port door: 150 mm x 150 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, use and maintenance.

Type Examination documentation

Test Report No. FT24111 dated 7 April 2024 from Far East Fire Testing Centre, Shanghai, China.

Drawing No. 262HL14(A60)-00 dated May 2023 from manufacturer.

Drawing No. 262HL14(A60)-01 dated May 2023 from manufacturer.

Drawing No. 262HL14(A60)-02 dated May 2023 from manufacturer.

Drawing No. 262HL14(A60)-03 dated May 2023 from manufacturer.

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).

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.