

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)
HLMA60I 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) 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

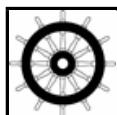
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-06-15**.

Issued at **Hamburg** on **2020-06-16**

DNV GL local station:
Tianjin

Approval Engineer:
Karolina Kusmider



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
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, and amended by Decision No 1/2018 dated February 18th, 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"HLMA60I"

is a class A-60 single-leaf fire door. Each door leaf is composed from the exposed side of 0.7 mm thick steel plate, 5 mm thick calcium silicate board, 32 mm thick ceramic wool of 170 kg/m³ nominal density, THG-170 type, manufactured by Tianjin Huali Thermal Insulation Building Material Co., Ltd, 5 mm thick calcium silicate board and 0.7 mm thick steel plate. In addition, there is one layer of 0.8 mm thick stainless steel material rimmed at the perimeter of the door leaf. Inside the door leaf there is vertical stiffener made of 1.5 mm thick steel plate. The LGB-0 type calcium silicate board produced by Suzhou Youlian Marine Equipment Co., Ltd has a nominal density of 1100 kg/m³. The insulation material inside the door leaf is fixed by the adhesive.

Total door leaf thickness: 43 mm.

The door frame is a four-sided door frame made by steel plate of 1,5 mm and is fastened to the bulkhead with screws. There is a fillet of 14 mm x 21 mm installed at one side perimeter of door frame. The door frame may be welded or bolted (M6x25 mm screws spaced maximum 300 mm apart) to the bulkhead.

The door leaf may be fitted with an observation window constructed from 38 mm fireproof glass YS-A60 type, consisting of 6 mm toughened glass, 20 mm fire liquid and 12 mm toughened glass, produced by Qinhuangdao City Haigang District Yuehua Industrial Technical Factory. Further, there is a fireproof door lock C-1 type from ShangHai LiYong Lock Co., Ltd, installed at the door leaf, located 1150 mm from the bottom and a self-closing hose port door. The door leaf is attached to the door frame by three 5" hinges.

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 (W x H): 1243 mm x 2443 mm

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

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

Max. size of a hose port door (W x H): 150 mm x 150 mm

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.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. does not cover any evaluation related to watertightness, weathertightness etc.).

Type Examination documentation

Test Report No. FT19139 dated 2019-07-02 from Far East Fire Testing Centre, Shanghai, China.

Tests carried out

Tested according to IMO Resolution MSC.307(88) - IMO 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, Mark of Conformity and USCG marking if applicable (see first page).



Job Id: **344.1-009203-1**
Certificate No: **MEDB000056R**

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.