

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)
CGFM-1 Type Class A-60 door

Issued to

Jiangsu Hailu Technology Incorporated Corporation
JIANGYIN, JIANGSU, China

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 **2024-04-04**.

Issued at **Hamburg** on **2019-04-05**

DNV GL local station:
Jiangyin

Approval Engineer:
Pavel Golyshev



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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"CGFM-1 Type Class A-60 door"

A single leaf hinged fire door composed of door leaf and frame and various fittings. Construction and installation are illustrated in figures 1 to 7 of the test report as well as drawing 262HL-38E-02 listed under Type Examination documentation below.

The four edge door frame (i.e. sill is part of the door frame) is constructed from 1.2 mm thick steel plate, to form an L-shaped box type structure with flange arranged around its outer perimeter for bolting the frame to the bulkhead. A continuous groove 21 mm x 21 mm, in which a fireproof seal strip is bedded, is arranged around the inside perimeter of the frame. The door frame has overall dimensions of 1293 mm in width, 2493 mm in height and 110 mm in depth.

The door leaf consists of 38 mm thick inorganic light fire insulation board enclosed with 0.6 mm thick galvanised steel sheet. An approved adhesive is used to affix the fire board to the door leaf structure. The door leaf is fixed to the door frame with three stainless steel hinges mounted on the side of the door which was not exposed to the fire hazard. The door thus opens away from the fire hazard. A fireproof lock is arranged at a distance of approx. 1100 mm above the door leaf bottom edge. Door leaf construction shall be in accordance with the drawing 262HL-38E-02 dated 4th of April 2019 from manufacturer.

The door was tested with the door frame fixed to the bulkhead with M5 x 25 mm steel bolts (spacing 260 mm both vertically and horizontally) and may alternatively be tack- and fully welded to the bulkhead.

The door may be optionally fitted with rectangular glass window of specification 460 mm x 460 mm in external size (width x height), made by toughened glass and with total thickness of 32 mm, acc. to figure 7 (drawing no. 262HL-38T-01) of the test report.

The door may be also optionally fitted with self-closing (fitted with spring hinge) hose port with approx. 150 mm square clear opening (with the door closed), further details acc. to figure 6 (drawing no. 262HL-38E-02-02) of the test report.

Insulation and sealing materials:

Insulation material is inorganic light fire material of type HL-CPJK (produced by the door manufacturer itself) and with nominal thickness of 50 mm and nominal density of 220 kg/m³.

The fireproof seal strip 20 mm x 15 mm was provided by Jiangyin Lide Fittings Co., Ltd.

Total door leaf thickness: 40 mm.

For further details, see test report with included drawings and drawing listed 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:	1236 mm x 2436 mm (width x height)
Maximum clear opening door size:	1200 mm x 2400 mm (width x height)
Maximum clear view opening size of window:	400 mm x 400 mm (width x height)

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.

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

Job Id: **344.1-009192-1**
Certificate No: **MEDB000056C**

Type Examination documentation

Test report no. FT12306 dated 11th of December 2012, issued by Far East Fire Testing Centre (FEFTC), Shanghai, China.
Drawing 262HL-38E-02 dated 4th of April 2019 from manufacturer.

Tests carried out

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

This certificate is based on the previous MED Module B Certificate No. 60 580 - 13 HH.

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.