

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00001AH

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment (MED) as amended by directive (EU) 2015/559. This Certificate is issued by DNV GL SE based on the notification of the German Federal Ministry of Transport, Building and Urban Development.

This is to certify:

That the Fire Doors

with type designation(s)

ZMA60CG-FYQM Class A-60 Single Leaf Hinged Fire Door

Issued to

Huanan Building Materials (Shenzhen) Co., Ltd.

SHENZHEN GUANGDONG, China

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

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 **2021-07-25**.

Issued at **Hamburg** on **2016-07-26**

DNV GL local station:

China South CMC/ SIO

Approval Engineer:

Pavel Golyshhev

Notified Body

No.: **0098**

for **DNV GL SE**

Sven Dudszus

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 Council Directive 96/98/EC, as amended.

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.

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

"ZMA60CG-FYQM Class A-60 Single Leaf Hinged Fire Door".

The door leaf is composed of the following:

- Face sheet I: 1 mm thick steel plate
- Insulating board I: 10 mm thick calcium silicate panels manufactured by Suzhou City Weiyu Marine Decoration Co. Ltd., type LGB-0 (density 1100 kg/m³)
- Insulating core of 32 mm thickness consisting of type TG ceramic fibre manufactured by Dequing County Pusen Fire Resistant Material Co., Ltd. (density 170 kg/m³)
- Insulating board II: 10 mm thick calcium silicate panels manufactured by Suzhou City Weiyu Marine Decoration Co. Ltd., type LGB-0 (density 1100 kg/m³)
- Face sheet II: 1 mm thick steel plate

The door leaf is connected to the frame by 4 stainless steel hinges, the insulated door frame is bent with 3 mm thick steel plate and is provided with a fireproof expansion strip (8282 type), acc. to Drawing Q262HN39-1-2-OSY.

The door leaf may be fitted with fireproof rectangular window 400 mm x 400 mm x 32 mm (width x height x thickness) manufactured by Gallford Co. (Drawing Q262HN39-1-2-2).

Total thickness of door leaf: 54 mm.

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 clear opening: 1050 x 2400 mm (width x height).

Maximum size of window clear opening: 400 mm x 400 mm.

The insulation materials and adhesives and gaskets 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.

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

Type Examination documentation

Test report No. FT06017 dated 10th of October 2006, issued by Far East Fire Testing Centre (FEFTC), Shanghai, China.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch.8.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, MED Mark of Conformity and USCG approval number if applicable.

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.