

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007C3

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
ZMA60CX (I) Type Class A-60 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:

Regulation (EU) 2020/1170,
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 **2026-03-29**.

Issued at **Høvik** on **2021-03-30**

DNV local station:
China South NB

Approval Engineer:
Karolina Kuśmider



Notified Body
No.: **0575**

for **DNV AS**

Roald Vårheim
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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

“ZMA60CX (I) Type Class A-60 Fire Door”

A door construction consisting of a single leaf steel door in a steel frame.

The door leaf is composed of 1.2 mm thick steel plate + 6 mm thick calcium silicate board of 1100 kg/m³ density (manufactured by Suzhou Weiyu Marine Materials Decoration Co., Ltd.) + 39.6 mm ROCKWOOL marine rock wool of 120 kg/m³ density (manufactured by Rockwool Firesafe Insulation (Guangzhou) Co., Ltd.) + 6 mm thick calcium silicate board + 1.2 mm thick face plate.

An adhesive of YB2002X/YB8001 type, manufactured by Shanghai Ningrui Adhesives Science Technology Development Co., Ltd. is used for the fixation of the insulation material.

The door leaf is attached to the door frame with 3 hinges. The fire-resistant lock of CT-Z type is installed 1100 mm above the bottom of the door leaf. A handle is installed on the door leaf. 14 mm x 9 mm D-type seal rubber strips and 20 mm x 4 mm fire expansion strips are fitted around the three sides of the door leaf. 20 mm x 5 mm U-type seal rubber strips are fitted at the bottom of the door leaf.

The door may be fitted with a hose port and an observation window, manufactured by Huanan Building Materials (Shenzhen) Co., Ltd.) of a total thickness of 32 mm. The fireproof glass of FB-32 type is fitted in the upper part of the door leaf and is composed of 5 mm toughened glass, 22 mm fire liquid and 5 mm toughened glass.

The three-sided door frame is made of 4 mm thick steel plate and is fixed to the bulkhead with M6 mm x 25 mm screws spaced maximum 300 mm apart.

Total thickness of door leaf: 54 mm.

For further details, see the test report and drawings mentioned 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.

Max. clear opening: 1300 mm x 2300 mm (W x H)
Max. size of door leaf: 1376 mm x 2323 mm (W x H)
Max. clear opening of window: 420 mm x 420 mm (W x H)
Max. clear opening of hose port: 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.

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

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

Type Examination documentation

Test report no. FT20368 dated 30 November 2020 from Far East Fire Testing Centre, Shanghai, China.

Drawing no. Q262HN125-1-OOSY, Q262HN125-1-OSY, Q262HN125-1-OSY, Q262HN125-1-1-OSY, Q262HN125-2-OSY, Q262HN125-2-1-OSY, Q262HN125-2-2-OSY, Q262HN125-2-3-OSY, Q262HN125-2-2-1-OSY, Q262HN125-2-2-1-1SY dated 8 July 2020 from the 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 cm, or less, in each door leaf. For larger windows, USCG shall be contacted.



Job Id: **344.1-011386-1**
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