

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 "A" Class divisions, fire integrity

with type designation(s)

Marine ZZ-C-170-A-60 Class A-60 Bulkhead

Issued to

Zhoushan Zhongzhan Fireproof Insulation Material for Ship Co., Ltd.

Zhoushan City, 130, China

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

Regulation **(EU) 2019/1397,**

item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1435.

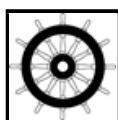
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-07-06.**

Issued at **Hamburg** on **2020-07-07**

DNV GL local station:
Ningbo FIS

Approval Engineer:
Timo Linn



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



Job Id: **344.1-010712-1**
Certificate No: **MEDB00006TW**

Product description

"Marine ZZ-C-170-A-60 Class A-60 bulkhead" consists of 5.0 mm steel plate suitable stiffened, insulated on unexposed plate surface and also around the stiffeners with two layers of 20 mm ceramic wool plate, acc. to figure 2 and 3, page 6 and 7 of test report.

Insulation material:

"ZZ-T" ceramic wool plate [nominal density: 170 kg/m³], manufactured by the applicant itself.
For further details, including handling of insulation joints, see the installation manual.

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

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.

Type Examination documentation

Test report No. FT10013 of 25.12.2009 issued by Far East Fire Testing Centre, Shanghai.

Certificate has been renewed based on the MED B Certificate 11559-10 HH

Tests carried out

Tested according to IMO Res. MSC.61(67) – FTP Code, Annex 1, Part 3 and in compliance with IMO Res. MSC.307(88) – IMO 2010 FTP Code Ch. 8

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).