

# 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 "B" Class divisions, fire integrity**

with type designation(s)  
**B30A type B-15 Class Bulkhead Panel**

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) 2019/1397**,  
**item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP**  
**Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581**

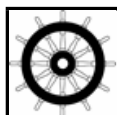
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-03-16**.

Issued at **Hamburg** on **2020-03-17**

DNV GL local station:  
**China South NB**

Approval Engineer:  
**Timo Linn**



Notified Body  
No.: **0098**

for **DNV GL SE**

**Gerhard Aulbert**  
**Head of Notified Body**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



## Product description

### "B30A type B-15 Class Bulkhead Panel"

The B class bulkhead specimen is 3020mm wide x 3000mm high in external size, assembled by five 2970mm high x 30mm thick compound rock wool plates in wedge joint. This bulkhead includes panels of 575mm, 600mm and one 650mm width. The bulkhead panels are mounted in the enclosed frame made by angle steel of L63mm x 63mm x 6mm and fastened by angle steel of L63mm x 63mm x 5mm. The wedge cut at joint was 18.5mm deep.

The compound rock wool plate is totally 30mm thick, which is composed, from the unexposed side, of 0.55mm thick galvanized steel plate + rock wool + 0.55mm thick galvanized steel plate.

An adhesive of approved type was used in between the galvanized steel plate and rock wool for bonding.

The panels are connected to each other by means of wedge structure.

Total panel thickness is 30 mm.

#### Insulation material

Rock wool plate produced by ROCKWOOL FIRESAFE INSULATION (GUANGZHOU) CO., LTD., with a nominal thickness of 50mm and nominal density of 120kg/m<sup>3</sup>, ≤0.5% in moisture content and ≤4% in nominal organic content.

For further details see drawing listed under Type Approval documentation below.

## Application/Limitation

Approved for use as a vertical fire retarding division of Class B-15.

Maximum size of bulkhead panels: 650 mm x 2970 mm (W x H).

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code parts 2 and 5) when required according to relevant rules and regulations.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5.

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

## Type Examination documentation

Test report No. FT19003 dated 14<sup>th</sup> of January 2019 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing No. Q354HN140-00SY page 1 to 6, Rev. A, dated 1 August 2018 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. (see first page).