

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)

T25A type continuous B-0 class ceiling / A class combined deck

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

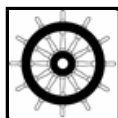
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-03-22.**

Issued at **Hamburg** on **2020-03-23**

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

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"T25A type continuous B-0 class ceiling (Extended)"

The ceiling panels (totally thickness: 25 mm) are composed from the exposed side of fire of a 0.55 mm thick galvanized steel plate + rockwool + 0.475 mm thick galvanized steel plate. The panels are connected by wedges of 21 mm depth. The long panels are connected with the short ones by T-shaped vertical beam and fixed on the T-shaped vertical beam by ST4.2 x 16 screws. The T-shaped beam is bent by 0.55 mm thick and 1.2 mm thick steel plates, 40 mm x 50 mm in section size. The ceiling is connected with the profile of B class bulkhead by ST4.2 x 16 screws.

Size of the panels:

- 2420 mm long x 540 mm wide and 25 mm in thickness
- 2420 mm long x 450 mm wide and 25 mm in thickness
- 2420 mm long x 550 mm wide and 25 mm in thickness
- 600 mm long x 540 mm wide and 25 mm in thickness
- 600 mm long x 450 mm wide and 25 mm in thickness
- 600 mm long x 550 mm wide and 25 mm in thickness

The ceiling panels are intended for hanging under an A Class deck structure. The air gap between ceiling and the deck is measured to be 350 mm thick. The ceiling hanging under the deck with L40 mm x W50 mm x 3 mm angle steels being connected with the deck bottom.

Insulation material

The insulation material used for the compound rock wool panel was the rock wool produced by ROCKWOOL FIRESAFE INSULATION (GUANGZHOU) CO., LTD. with a 30 mm nominal thick and nominal density of 120 kg/m³, ≤0.5 % in moisture content and ≤4 % in nominal organic content.

For further details, see the test report and drawing mentioned under Type Examination documentation below.

Application/Limitation

Ceiling panels are approved for use as a fire retarding division of class B-0.

Maximum panel size: 550mm x 2420 mm (W x L)

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. FT18227 dated 19th of October 2018 from FEFTC Far East Testing Centre, Shanghai, China.

Drawing No. Q354HN137-00SY (9 sheets) dated 08th of October 2018 from manufacturer.

Tests carried out

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