

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB000093R

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

that the **A & B Class divisions fire integrity: B class divisions.**

with type designation(s)

T30A Type Continuous B-15 Class Ceiling with Accessories/A-30 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) 2024/1975,

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

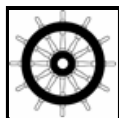
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-09-23**.

Issued at **Hamburg** on **2024-09-24**

DNV local unit:
China South NB

Approval Engineer:
Marcin Tobiasz



Notified Body
No.: **0098**

for **DNV SE**

Mydlak-Röder, Christine
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) 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 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

"T30A Type Continuous B-15 Class Ceiling with Accessories/A-30 class combined deck"

ceiling panels consisting of 28.9 mm thick rock wool type insulation from Rockwool Firesafe Insulation (Guangdong) with density 120 kg/m³, faced on both sides with 0.55 mm thick galvanized steel sheets, which are glued to the rock wool with adhesive YB2002X/YB8001. The panels are connected by wedges of 21 mm depth.

Total thickness of the panels is 30 mm.

The panels are connected longitudinally by fixed tongue and groove and fastened to the deck by T-bar hanging profiles. The panels are riveted to the hanging profile with section size 50 x 40 mm, bent by 1.2 mm and 0.55 mm thick galvanized steel plates.

The ceiling may incorporate:

- cabin light, 3.1 kg, type TD6ML (manufactured by Anhui Sunny Electric Group) or equivalent, equipped with protection cover (fixed to the ceiling by ST4.2x16 mm self-tapping screws) made of 0.55 mm thick galvanized steel plate, insulated with 30 mm rock wool and partly strengthened by aluminium foil cloth, with max opening of Ø156 mm,
- down light, 6.5 kg, type TD6MLY (manufactured by Anhui Sunny Electric Group) or equivalent, equipped with protection cover (fixed to the ceiling by ST4.2x16 mm self-tapping screws) made of 0.55 mm thick galvanized steel plate, insulated with 30 mm rock wool and partly strengthened by aluminium foil cloth, with max opening of Ø180 mm,
- rectangular lamp, 17.8 kg, type JPL11-2 (manufactured by WUHU SHIPE MACHINE) or equivalent, equipped with protection cover (fixed to the ceiling by ST4.2x16 mm self-tapping screws) made of 0.55 mm thick galvanized steel plate, insulated with 30 mm rock wool and partly strengthened by aluminium foil cloth, with max opening of 254 x 1270 mm,
- loudspeaker, 3.0 kg, type G-SPK (manufactured by Gicom Marine Communication Solutions) or equivalent, equipped with protection cover (fixed to the ceiling by ST4.2x16 mm self-tapping screws) made of 0.55 mm thick galvanized steel plate, insulated with 30 mm rock wool and partly strengthened by aluminium foil cloth, with max opening of Ø180 mm,
- camera, 3.5 kg, type DH-IPC-HDBW5241E-ZE (manufactured by ZHEJIANG DAHUA TECHNOLOGY) or equivalent, equipped with protection cover (fixed to the ceiling by ST4.2x16 mm self-tapping screws) made of 0.55 mm thick galvanized steel plate, insulated with 30 mm rock wool and partly strengthened by aluminium foil cloth, with max opening of Ø190 mm,
- plenum box, 26 kg, manufactured by HEINEN & HOPMAN Hong Kong Limited or equivalent, covered with 30 mm thick fibre blanket, strengthened by aluminium foil cloth, with max opening of 390 x 390 mm.

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

Application/Limitation

Approved for use as a horizontal, continuous fire retarding division of class B-15.

Max. panel width: 650 x 2420 mm (W x L)

Max. distance between hanger sets: 1200 mm

Max. distance from bulkhead to hanger sets along main T-bar: 600 mm

Max. distance between main T-bars: 2420 mm

With a minimum distance between exposed side of the ceiling and the A-Class structural steel deck of 380 mm, the whole construction may be regarded as a horizontal fire retarding division of Class A-30.

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. FT23413 dated 6 November 2023 from FEFTC, Shanghai, China.

Test report No. FT19010 dated 15 February 2019 from FEFTC, Shanghai, China.

Drawing No. Q354HN176-00SY (26 sheets) dated 15 June 2023 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3 and part 3 Appendix 4.



Job ID: **344.1-013582-1**
Certificate no.: **MEDB000093R**

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).