

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)

B-15 class ceiling panel type JCP-C2A

Issued to

Jiangsu Hailu Technology Incorporated Corporation
JIANGYIN, JIANGSU, 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

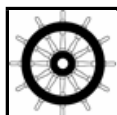
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-04-29.**

Issued at **Hamburg** on **2020-04-30**

DNV GL local station:
Jiangyin

Approval Engineer:
Karolina Kusmider



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"B-15 class ceiling panel type JCP-C2A"

is made of panels installed 375 mm (to the underside of ceiling) below an A-class deck. The panels are composed of 24 mm thick rock wool insulation covered on both sides by 0.5 mm steel sheets. Adhesive of approved type is used between the steel sheets and the rock wool insulation.

The rock wool insulation is of type "KMD-Y" with a nominal density of 120 kg/m³, manufactured by Tianchang KMD New Insulation Material Co., Ltd.

Total thickness of the ceiling is 25 mm.

On the longitudinal sides, the panels are fastened to each other by means of wedges, with 28 mm deep wedge cuts.

The ceiling panels may incorporate:

- Ceiling Light: with dimension of 674 mm x 254 mm (W X L) consists of seat and lampshade. Seat is made of 1 mm steel and lampshade is made by organic glass and installed from exposed side.
- Downlight: with dimension of ø 180 mm consists of seat and lamp

For more details about the ceiling and fittings please see drawings listed under Type Examination documentation below.

Application/Limitation

Ceiling panels are approved for use as a fire retarding division of class B-15.

Maximum size of panels: 600 x 3090 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, use and maintenance.

Type Examination documentation

Test Report No. FT14129 dated 05 June 2014 issued by Far East Fire Testing Centre, Shanghai, China.

Test Report No. FT18171 dated 23 August 2018 issued by Far East Fire Testing Centre, Shanghai, China.

Statement dated 26 December 2019 from Jiangsu Hailu Technology Inc. Co.

Tests carried out

Tested according to IMO Resolution MSC.307(88) - IMO 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).