

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

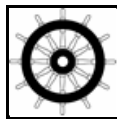
Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:**That the "B" Class divisions, fire integrity**with type designation(s)
Class B-15 Ceiling Type JCP-C2AIssued to
Jiangsu Hailu Technology Incorporated Corporation
JIANGYIN, JIANGSU, Chinais 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 **2024-10-21**.

Issued at **Hamburg** on **2019-10-22**

DNV GL local station:
JiangyinApproval Engineer:
Timo LinnNotified 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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"JCP-C2A" Type Class B-15 Ceiling 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.

Total thickness of the ceiling is 25 mm.

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

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

Maximum size of panels: 600 x 3090 mm (width x length).
Maximum length of ceiling (in panel longitudinal direction): 3090 mm.

The construction of the JCP-C2A type Class B-15 ceiling shall be in accordance with the manufacturer's drawings Nos. HL-C2A-03, HL-C2A-03-T2, HL-C2A-03-T2-01, HL-C2A-03-T2-02, HL-C2A-03-T2-03, HL-C2A-03-T4, HL-C2A-03-T4-01 and HL-C2A-03-T3 which are Included in the test report.

For further details refer to the test reports listed under Type Examination documentation below.

Application/Limitation

Approved for use as a horizontal fire retarding ceiling of B-15.

Maximum size of panels: 600 x 3090 mm (width x length).

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.

This certificate is replacing the previous MED-B 11361-14 HH issued on 2014-11-20.

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

Type Examination documentation

Test report No. FT14129 dated 2014-06-05 issued by Far East Fire Testing Centre (FEFTC), Shanghai, China.

Tests carried out

Tested according to IMO Resolution MSC.307(88) - IMO FTP Code Annex 1, Part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, Mark of Conformity and USCG marking if applicable (see first page).