DNV·GL

Certificate No:
MEDB00005XA

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)
HS-C2 type class B-15 Ceiling

Issued to
Jiangyin Haisheng Marine Outfitting & Decoraton Co., Ltd.
Jiangyin, 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 **2025-03-09**.
Issued at **Hamburg** on **2020-03-10**

DNV GL local station:
Jiangyin CMC

Approval Engineer:
Marcin Tobiasz

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

"HS-C2 type class B-15 Ceiling"
consists of ceiling panels which are hanging 450 mm underneath a structural core steel deck. The panels are composed of KMD-Y type rock wool produced by Tianchang KMD New Insulation Materials Co. Ltd. (nominal density 120 kg/m^3 and thickness 38.5 mm) covered on both sides by 0.6 mm thick galvanized steel plate. The galvanized steel plates and insulation are glued together with adhesive PAPU-30 type from Jingjiang Green Functional Material Co., Ltd.

On the longitudinal sides, the panels are fastened to each other by means of wedges, with 30 mm deep wedge cuts. The panels are joined together at shorter edge with T-profile and suspended to the deck by L30 x 30 x 3 mm hanging member (flat bar).

Total panel thickness: 30 mm

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

Application/Limitation

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

Maximum size of panels: 600 x 2400 mm (width x length).
Max. distance between T-profiles: 2400 mm
Max. distance between hanger member along cross T-profile: 600 mm

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. FT18290 dated 14 January 2019 issued by Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawings No. HS-C2-T0 from the manufacturer.
Drawings No. HS-C2-T1 from the manufacturer.
Drawings No. HS-C2-T2 from the manufacturer.
Drawings No. HS-C2-T2-1 from the manufacturer.
Drawings No. HS-C2-T3 from the manufacturer.

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).