

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 "A" Class divisions, fire integrity

with type designation(s)

ABM-FR60 FS200 Type Class A-60 floating floor

Issued to

Shanghai ABM Rock Wool Co., Ltd.
Shanghai, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773**,

item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434

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

This Certificate is valid until **2024-09-04**.

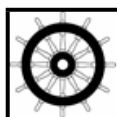
Issued at **Hamburg** on **2019-09-05**

DNV GL local station:

Nantong

Approval Engineer:

Roland Priebe



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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

ABM-FR60 FS200 is an A-60 class deck floating floor and shows increased fire resistance and sound absorbing properties.

Construction:

The deck construction is composed of a 5 mm thick core steel plate + floating part (60 mm thick rock wool) + 2 mm thick surface steel plate. Angle steel stiffeners (L100 x 70 x 8 mm) are welded to the underside of the core steel plate at intervals of 600 mm.

The bottom material of the floating deck was ABM-SR type rock wool produced by the client himself. It's nominal thickness is 60 mm (two layers of 30 mm), it's nominal density is 200 kg/m³ and it has 3 % organic content.

The deck cover consists of 3000 mm long x 2400 mm wide x 2 mm thick steel plates jointed by spot welding.

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 A-60.

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.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover strength or other evaluations related to watertightness, weathertightness, sound-absorbing, etc.).

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

Type Examination documentation

Test report No. FT18052 dated 18 April 2018 from Far East Fire Testing Centre, Shanghai, China.
Drawing No. FS200-A60-01 and FS200-A60-02 dated 7 July 2018 from the client himself.

Tests carried out

Tested according to IMO 2010 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, MED Mark of Conformity and USCG approval number (see first page).

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.105/EC0098 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval 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.