DNV·GL

Certificate No:
**MEDB000049M**

# 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 Surface materials and floor coverings with low flame-spread characteristics: floor coverings**

with type designation(s)
**VS Type PVC Floor**

Issued to
**Armstrong Advanced Flooring (China) Co., Ltd.**
**Wujiang, China**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
**item No. MED/3.18c. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO 2010 FTP Code**

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

This Certificate is valid until **2023-09-12**.

Issued at **Hamburg** on **2018-09-13**

DNV GL local station:
**Shanghai**

Approval Engineer:
**Timo Linn**

Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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


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## Product description

**"VS Type PVC Floor"**
Consisting of PVC resin floor tested and glued on a 12mm calcium silicate board.

Max. applied thickness: 2.5 mm
Density : 1870- 2020 Kg/m³
Maximum organic content: 40%
Approved colour: Dark brown
Maximum weight : 4.58 Kg/m²

Adhesive:
PAPU-30 type two-component polyurethane adhesive manufactured by Jingjiang Asian-pacific Special Material Co.,Ltd.

For further details see test report as referred below.

## Application/Limitation

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

Approved for use as floor coverings on non-combustible substrate with a greater thickness than 12mm.

Several layers of floor coverings are acceptable provided that each layer is approved according to the Marine Equipment Directive and bear the mark of Conformity.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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

## Type Examination documentation

Test report No.: 399718 dated 29th of May 2018 from Exova Warringtonfire; UK
Test report No.: FT18024 dated 26th January 2018 from Far East Fire Testing Centre; China

## Tests carried out

Tested according to IMO Res. MSC.307(88) – IMO 2010 FTP Code Annex 1, Part 2 and Part 5.

## 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 approval number (see first page).