

TYPE EXAMINATION CERTIFICATE

This is to certify:**That the Acoustic insulation**

with type designation(s)

Marine Floating Floor - YB-A60FIII-1

Issued to

Suzhou Yibo Industry & Trade Co., Ltd.
Suzhou, China

is found to comply with

IMO Resolution MSC.337(91) Code on noise levels on board ships, Chapter 6.2.2
ISO 10140-2:2010 Measurement of airborne sound insulation**Application :****Weighted Sound Reduction Index - Rw 56dB**Issued at **Hamburg** on **2016-07-05**for **DNV GL**This Certificate is valid until **2021-07-04**.DNV GL local station: **Shanghai**Approval Engineer: **Stefan Semrau**

Olaf Doerk
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-021834-1**
Certificate No: **TAS00000J8**

Product description

Marine Floating-Floor
YB-A60FIII-1
Suzhou Yibo industry & Trade Co.,Ltd.

The test element is constructed by seven layers. The first layer is Q235B type steel plate, 2mm thickness (2mm nominal thickness) and 15,7kg/m² (7850kg/m³). The second layer is a damping layer, 1mm thickness and 1300kg/m³ density (1,5 ± 0,5mm nominal thickness and 1300kg/m³ nominal density). The third layer is Q235B type steel plate, 1,5mm thickness (1,5mm nominal thickness) and 11,8kg/m² (7850kg/m³). The fourth layer is ABM-SR type mineral wool, 50mm thickness and 140kg/m³ density (50mm nominal thickness and 140kg/m³ nominal density). The fifth layer is AC-JIII type primary deck covering, 15mm thickness and 1900kg/m³ density (15mm nominal thickness and 1700kg/m³ nominal density). The sixth layer is damping layer, 1mm thickness and 1300kg/m³ density (1,5 ± 0,5mm nominal thickness and 1300kg/m³ nominal density). The seventh layer is Q235B steel plate, 5mm thickness (5mm nominal thickness) and 39,25kg/m² (7850kg/m³). The test element is sealed by CCS. The total size of the test element is 3800mm*3000mm and the mounting boundary is 100mm width. So the valid test area is 3600mm*2800mm that is as same as the size of the test opening.

Application/Limitation

For the acoustic insulation between accommodation spaces, the airborne sound insulation properties shall be determined by laboratory tests in accordance with ISO 10140-2:2010.

Table 1 - Test Results

Frequency [Hz] (one-third octave)	Sound Reduction Index R [dB] (one-third octave)
50	-/-
63	-/-
80	-/-
100	36,6
125	39,0
160	40,3
200	42,0
250	46,9
315	48,7
400	51,3
500	53,1
630	53,0
800	52,9
1000	56,6
1250	59,6
1600	61,8
2000	60,9
2500	60,5
3150	60,3
4000	-/-
5000	-/-
Weighted Sound Reduction Index - R _w	56dB

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

Type Examination documentation

Test Report No. 2015G-010
Test Report Issue Date 2015-03-31
Drawing No. 261YB016-05-02
Issue Date Not available

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Laboratory:

TCLVN – Testing and Calibration Laboratory of Vibration and Noise of CSIC No.711 Research Institute
(Registration No. CNAS L0710)

Test Address:

No.1 Lane 357, Gongqing Road, Yangpu district (3111 Huaning Road, Minhang District, Shanghai, China)

Tests carried out

IMO Resolution MSC.337(91) Code on noise levels on board ships, Chapter 6.2.2
ISO 10140-2:2010 Measurement of airborne sound insulation

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in DNVGL-CP-0338 Section 4.