

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB00007Z4

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the A & B Class divisions fire integrity: A class divisions.

with type designation(s)

Class A-60 Aluminium Bulkhead with 'SeaRox FB 6050' or 'SeaRox FM 6050'

Issued to

Rockwool International A/S Hedehusene, Denmark

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2021/1158,

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, IMO MSC.1/Circ.1435.

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

This Certificate is valid until 2027-04-07.

Issued at Høvik on 2022-04-08

DNV local station: Sweden CMC

Approval Engineer: Helge Bjørnarå



Notified Body

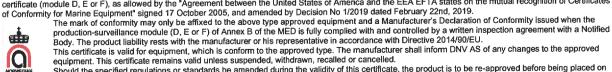
for DNV AS

Digitally Signed By: Sæle-Nilsen, Dag

Location: DNV Høvik, Norway on behalf of

Sverre Olav Bergli 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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.



equipment. This certificate remains valid unless suspended, which with revailed of cancered.

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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Form code: MED 201.NOR

Revision: 2022-02 www.dnv.com

DNV

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Job ld: Certificate No: 344.1-012073-1 MEDB00007Z4

Product description

Class A-60 Aluminium Bulkhead with 'SeaRox FB 6050' or 'SeaRox FM 6050' Composed of structural aluminium bulkhead insulated with one layer of 75 mm thick mineral wool of type 'SeaRox FB 6050' or 'SeaRox FM 6050' with nominal density 70 kg/m³ (manufactured by Rockwool) between and around the stiffeners. The cavity of the stiffeners is fully filled out with the same insulation material.

The insulation is held in place using 3 mm steel pins (ALU tipped) with Ø38 mm steel washers welded with a c/c 300 mm in both longitudinal as transversal direction.

Alternatively, the insulation material and stiffener design (ref. SOLAS II-2/9.3.4) may be in accordance with drawing no. 1000-2 as listed below.

For further details see test report and drawing listed under Type Examination documentation.

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

Restricted application: Fire from the insulated side

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the MED 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. PGB10154A dated 23 November 2021 from DBI, Hvidovre, Denmark.

Assessment report No. PHD10051A dated 23 February 2022 (valid to 28 February 2027) from DBI, Hvidovre, Denmark.

Drawing No. 2021009 dated 14 November 2021 from manufacturer. Drawing No. 1000-2 dated 30 November 2021 from manufacturer.

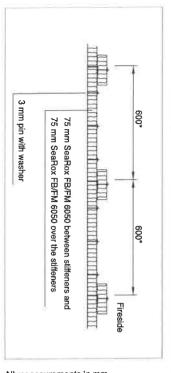
Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

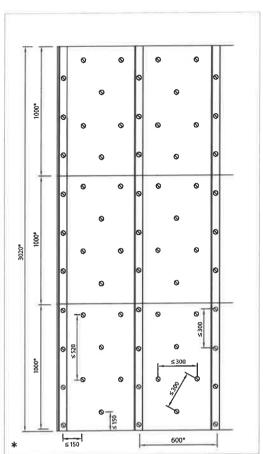
The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval if applicable (see first page).

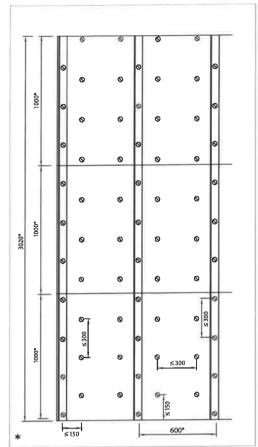
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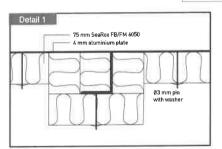


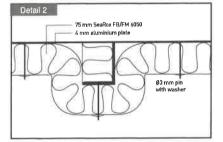
All meassurements in mm

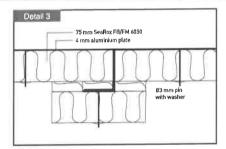
* Dimensions may vary depending on structural design and size of insulation material.

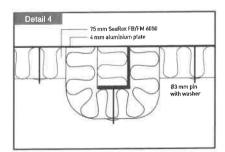


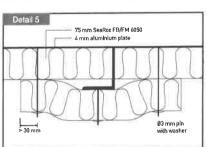


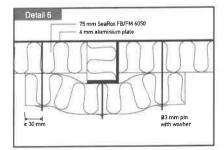


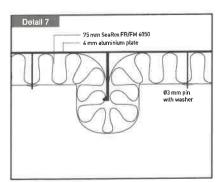


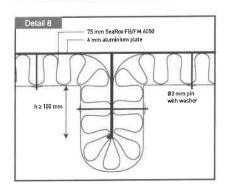


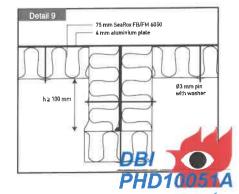














Subject: A-60 4 mm aluminium Bulkhead restricted Plate/stiffener: SeaRox FB/FM 6050, 75mm

Date: 2021/11/30

Designer: DG/JS

Drawing No. 1000-2