

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB00006Z5
Revision No:

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 Non-combustible materials

with type designation(s)

Rocterm/Ecoterme/Rocterm+ insulation type: "PI40 - PI180", "PI40AL - PI140AL", "R70 - R125", "MN70 - MN125", "MA70 - MA125", "CQ70 - CQ120", "CQ70AL - CQ120AL"

Issued to

TERMOLAN - Isolamentos Termo- Acústicos S.A. Aves, Porto, Portugal

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

item No. MED/3.13. SOLAS 74 as amended, Regulation II-2/3 II-2/5, II-2/9 & X/3, 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 2027-03-02.

Issued at Høvik on 2022-03-03

DNV local station: Lisbon FIS

Approval Engineer: **Tessa Biever**

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Notified Body

No.: 0575

for **DNV AS**

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.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Job Id: **344.1-000494-19** Certificate No: **MEDB00006Z5**

Revision No: 1

Product description

Rocterm/Ecoterme/Rocterm+ insulation types:

| Туре | Form | Composition | Nominal density [kg/m³] | Max. nominal organic content [wt%] |
|------------------|-----------------------|--|-------------------------------|------------------------------------|
| PI40 – PI180 | Slab | Stone wool | 54 - 180 | 3.5 |
| PI40AL – PI180AL | Slab | Stone wool with a facing of hot melted PE laminated glass fibre reinforced aluminium foil. | 54 - 180 | 3.5 |
| R70 – R125 | Mat | Stone wool sewn with 1.25-inch steel wire mesh on one side | 70- 125 | 1.2 |
| MN70 – MN125 | Mat | Stone wool | 65 - 128 | 2.0 |
| MA70 – MA125 | Mat | Stone wool with a facing of hot melted PE laminated glass fibre reinforced aluminium foil. | 65 - 128 | 2.0 |
| CQ70 – CQ120 | Pipe insulation shape | Stone wool | 54 - 180 | 3.5 |
| CQ70AL – CQ120AL | Pipe insulation shape | Stone wool with a facing of hot melted PE laminated glass fibre reinforced aluminium foil. | 54 - 180 | 3.5 |

Application/Limitation

Approved for use as non-combustible material.

The product may be used as an integrated part of approved fire resisting divisions only when tested as such.

The Insulation faced with hot melted PE laminated glass fibre reinforced aluminium foil have to be approved (surface flammability, smoke and toxicity) according to the Marine Equipment Directive and bear the MED Mark of Conformity.

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

Type Examination documentation

Test report No. O100352-136936-1 dated 30 April 2021 from RISE, Borås, Sweden Test report No. O100352-136936-2 dated 25 May 2021 from RISE, Borås, Sweden

Test report No. O100352-136936-3 dated 30 April 2021 from RISE, Borås, Sweden

Test report No. O100352-136936 dated 30 April 2021 from RISE, Borås, Sweden

Test report No. O100611-195226 dated 11 January 2022 from RISE, Borås, Sweden

Test report No. 5P03572 dated 28 April 2015 from SP, Sweden

Tests carried out

Tested according to IMO 2010 FTP Code Part 1

Tested according to IMO 2010 FTP Code Part 2 (for type 'PI40 AL- PI180 AL')

Marking of product

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

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