

EC-TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

DBI Certification did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

Manufacturer Address	Sika Services AG, Tüffenwies 16, CH-8048, Zurich, Switzerland
Directive Reference	MED Directive 2014/90/EU , Regulation as amended by MED (EU) 2020/1170.
Regulation Item	MED/3.11a "A" &"B" Class divisions fire integrity, (a) "A" class division
Product Type	Class A-60 deck
Product Description	Class A-60 deck with Floating floor designated Sikafloor®Marine Litosilo X.
Specified Standards	IMO Res.MSC.307(88)-(2010 FTP Code), as amended, IMO MSC.1/Circ.1435

The attached (*schedule of approval*) forms part of this certificate.

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.


Date of issue	2021-01-28	Issued by DBI Certification Notified Body No. 2531
Expiry date	2026-01-28	

*The certificate supersedes the certificate version issued:2016-01-28 by NB no. 2531
This certificate was first issued 2016-01-28 by NB no.2531.*


This equipment is covered by the scope of " Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 18th, 2019" According to U.S. Coast Guard Approval Category No.:164.107. 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 Mutual Recognition Agreement.

Signed

Name


Allan Laursen
Responsible for evaluation

/


Thomas Wilson Jr
Responsible for certification decision

Notes:

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the notified body named on this certificate.

Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

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-control phase module (D, E, or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

In case limitations of use apply, these should be indicated in the Annex of this certificate.

This certificate is issued under the authority of the Danish Maritime Authority.

(Annex)

Schedule of Approval

Place of Production

Sika Italia S.p.a, Via Radici in Piano 558, 41049 Sassuolo (MO), Italy.

Product Description

The test specimen consisted of the components described in the following.

The test specimen consisted of a structural steel core with the following deck construction on top (starting from the steel deck and upwards):

20 mm mineral wool, ISOVER ULTIMATE Marine Slab, U SeaProtect Slab 90. (layer No. 1), mounted on top of the steel deck, see the sponsors drawing.

A layer of 25 mm thick Sikafloor® Marine Litosilo X (layer No. 2) applied on the top of the mineral wool (layer No. 1).

Each sack with Litosilo X were mixed with water (20 kg sack mixed with approx. 5 litre water) during the mounting.

Principal components

- Structural steel core
- Mineral wool, ISOVER ULTIMATE Marine Slab, U SeaProtect Slab 90
- Sikafloor® Marine Litosilo X

Insulation materials

Manufacturer:	Saint-Gobain Isover G+H, Germany	
Trade name:	ISOVER ULTIMATE Marine Slab, U SeaProtect Slab 90	Sikafloor® Marine Litosilo X
Nominal density:	95 kg/m ³	1550 kg/m ³
Heat capacity:	Approx. 1.0 kJ/(kg·K)	0.84 kJ/(kg·K)
Thermal conductivity:	0.031 W/(m·K)	0.035 W/(m·K)
Equilibrium moisture content:	Not stated	Not stated
Organic content:	3.2 %	2.1 %
Combustibility:	Non-combustible	Non-combustible
Nominal thickness:	20 mm	25 mm

Measured by DBI

Density:	94 kg/m ³	1443 kg/m ³
Moisture content:	0.13 %	8.5 %
Organic content:	3.4 %	2.48 %

To certify the non-combustibility of the mineral wool the following documentation was provided:

- ISOVER ULTIMATE Marine Slab, U SeaProtect Slab 90, 95 kg/m³: The non-combustibility of this material is covered by MED Certificate No. 114.477 from DGUV certificate are valid until 15-02-2023.
- Litosilo X, 1550 kg/m³: Test report No. 766.4IM0070/15, testing date 15-06-2015 issued by LAPI LABORATORIOPREVENZIONE INCENDI S.p.A., Italy according to 2010 Resolution MSC.307(88), 2010 FTP Code Annex 1 Part 1.

Product Classification

The deck designated Class A-60 deck with with Floating floor designated Sikafloor® Marine Litosilo X fulfils the critia in IMO Res. MSC.307(88)-(2010) FTP code Annex 1 Part 3 and IMO MSC/Circ. 1435 and is therefore considered to meet the requirement for A-60 class deck, restricted application according to part 3 of annex 1 in the 2010 FTP code, if all the materials comply with paragraph 3.5.1 of part 3 of annex 1 to the 2010 FTP code.

Application / Limitation of Product

The test results relate only to the behavior of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The insulation materials 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.

Type Approval Documentation

Test report no. PGA10768A dated 2015-12-08 from DBI.

Tested according to IMO 2010 FTP Code, Annex 1 Part 3, Test for "A", "B" and "F" Class Divisions.

Test report No. 766.4IM0070/15 testing date 15-06-2015 issued by LAPI LABORATORIO PREVENZIONE INCENDI S.p.A., Italy.

Tested according to IMO 2010 FTP code Annex 1 Part 1: Non-combustibility test.

EC type-examination certificate No. 2531-MED-CMC10145 from DBI Certification A/S, dated 2020-02-03, valid for Sikafloor Marine Litosilo X. The product meets the provisions of the MED that apply to non-combustible materials used in "A", "B" and "C" class divisions.

Marking of Product

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

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-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

End of Certificate