DNV·GL

Certificate No:
TAF00001GN

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Horizontal Class A Division

with type designation(s)
Sikafloor Marine® Litosilo X, A-60 U SeaProtect

Issued to
Sika Services AG
Zürich, ZH, Switzerland

is found to comply with
DNV GL rules for classification – Ships
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
DNV GL offshore standards

Application :

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

This certificate is recognized by Transport Canada.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2021-01-18**

This Certificate is valid until **2026-01-17**.
DNV GL local station: **Augsburg**

Approval Engineer: **Timo Linn**

for **DNV GL**
Digitally Signed By: Kallies, Joerg
Location: DNV GL Hamburg, Germany
Signing Date: 03.03.2021

Jörg Kallies
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 Approval Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-035039-1**
Certificate No: **TAF00001GN**

Product description

"Sikafloor Marine® Litosilo X, A-60 U SeaProtect"
Floating floor composed of a steel deck insulated on top with minimum 20 mm thick rock wool slabs designated " ISOVER ULTIMATE Marine Slab, U SeaProtect Slab 90" (density 95kg/m³) and covered with minimum 25 mm thick concrete compound designated "Sikafloor Marine Litosilo X" (density cured: 1300 kg/m³).

Principal components:

Mineral wool, ISOVER ULTIMATE Marine Slab, U SeaProtect Slab 90, manufactured by Saint-Gobain Isover G+H, Germany, Nominal density: 95 kg/m3

Sikafloor®Marine Litosilo X, manufactured by Sika Services AG, Zürich, Switzerland, Nominal density, mixed: 1550 kg/m3.

Total thickness of insulation: 45 mm

For further details, see drawing listed under Type Approval documentation below.

Application/Limitation

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

Any surface materials used have to be approved for smoke and toxicity and low flame spread characteristics (IMO 2010 FTP Code parts 2 and 5) when required according to relevant rules.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.

Test report no. PGA10768A dated 2015-12-08 from DBI, Danish Institute of Fire and Security Technology, Hvidovre, Denmark.
Test report No. 766.4IM0070/15 dated 15-06-2015 from by LAPI LABORATORIO PREVENZIONE INCENDI S.p.A., Italy.

Tests carried out

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex 1, Part 3

Marking of product

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

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "*Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)",* Det Norske Veritas confirms that the product/s listed in this certificate is in accordance with Transport Canada's requirements.

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 Class Programme DNVGL-CP-0338, Section 4.