



Certificate No:
TAF00001S0

TYPE APPROVAL CERTIFICATE

This is to certify:

That the **Class C Division**

with type designation(s)
ALUCORE® and ALUCORE® base

Issued to

3A Composites GmbH
Singen, Germany

is found to comply with

DNV offshore standards

DNV rules for classification – Ships

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021

Application :

Approved for use as a class C division and a non-combustible bulkhead.

This certificate is recognized by Transport Canada

Products approved by this certificate are accepted for installation on all vessels classed by DNV .

Issued at **Hamburg** on **2022-07-25**

This Certificate is valid until **2027-07-24**.

for **DNV**

DNV local station: **Augsburg**

Approval Engineer: **Timo Linn**

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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.

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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Page 1 of 2

Product description

“ALUCORE® and ALUCORE® base”

Is a panel composed of an aluminium honeycomb core covered on both sides with aluminium sheets (0.5 to 1.0mm) attached with polyethylene adhesive (A 2920M). The aluminium sheets are covered with white coil coating (L0072 and L1650).

Principle components (honeycomb):

- foil thickness: 50 µm, cell size 1/4", total thickness 4.5 to 23mm
- foil thickness: 70 µm, cell size 3/8", total thickness 4.5 to 23mm
- foil thickness: 70 µm, cell size 1/2", total thickness 4.5 to 23mm

For further details see the test reports listed under “Type approval documentation” below.

Application/Limitation

Approved for use as a class C division and a non-combustible bulkhead.

The panel is approved as a low flame spread material, not generating excessive quantities of smoke nor toxic products in fire.

Any adhesive used other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5.

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

Type Approval documentation

Certification in accordance with Class Program DNV-CP-0338, September 2021.

Test report no 20220270/03 (Part 1) dated 2022-07-13, issued by MPA Dresden, Freiberg, Germany.

Test report no 20151650 (Part 5) dated 2016-02-09, issued by MPA Dresden, Freiberg, Germany.

Tests carried out

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

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex 1, Part 5 and in compliance with Annex 2, 2.2 and 2.3

Marking of product

The product or packing shall be marked with the name of the manufacturer, type designation and fire technical rating, as applicable.

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)*”, DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV 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 Program DNV-CP-0338, Section 4.