

Statement of Approval



Approval No. **WP 1410003 HH**

The material described below complies with the applicable requirements as given in the Rules and Regulations of Germanischer Lloyd. On this basis the material is

approved as **Sandwich Core Material**

for the construction of components provided that the recommendations for use as specified by the producer are observed.

Type **Corecell A-Series**

Description **Closed-cell SAN Foam**

Producer **Gurit Americas Inc.
175 Peladeau
Magog (Quebec) J1X 5G9
Canada**

Normative Reference **Rules for Classification and Construction,
II - Material and Welding Technology
Part 2 Non-Metallic Materials**

Remarks **This approval is also valid for:
Gurit Tianjin Composite Material Co., Ltd.
No. 1 Hengtong Road
Tianjin 301726
China**

This document consists of this page and a one-page annex which is integral part of the approval.

This Statement of Approval is valid until 2018-04-30.

Hamburg, 2014-04-04

Germanischer Lloyd


Guido Michalek


Joachim Rehbein

Statement of Approval



ANNEX

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Date: 2014-04-04

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Reference Documents Technical specifications deposited at Germanischer Lloyd Head Office

Assessed Documentation - Technical Data Sheet
- Test report issued by Gurit, based on tests witnessed by Germanischer Lloyd.

Fields of Application Construction of FRP sandwich laminates of components, on condition that the core material comply with the applicable requirements of the Germanischer Lloyd and are compatible to the resin.

Confirmed Values For the material the following average values (minimum values within brackets) have been verified by testing:

Approved Variants

Variant	Nominal Density	Compr. Strength (1)	Compr. Modulus (1)	Shear Strength (2)	Shear Modulus (2)	Tensile Strength (3)	Tensile Modulus (3)
A400	69 (64)	0.62 (0.51)	28 (23)	0.83 (0.70)	22 (18)	1.18 (0.95)	56 (41)
A450	81 (75)	0.80 (0.67)	37 (29)	0.99 (0.83)	27 (22)	1.38 (1.12)	70 (51)
A500	92 (87)	1.01 (0.86)	46 (38)	1.14 (0.98)	32 (27)	1.58 (1.30)	84 (63)
A550	103 (98)	1.23 (1.06)	55 (46)	1.29 (1.11)	37 (31)	1.77 (1.47)	98 (74)
A600	117 (109)	1.52 (1.27)	67 (55)	1.48 (1.25)	43 (36)	2.01 (1.64)	117 (86)
A800	150 (140)	2.36 (1.97)	102 (83)	1.95 (1.64)	60 (50)	2.60 (2.11)	166 (122)
A1200	210 (200)	4.23 (3.65)	178 (149)	2.82 (2.43)	93 (80)	3.67 (3.05)	265 (200)

(1) Compressive behaviour according to ISO 844 in MPa.

(2) Shear behaviour according to ISO 1922 in MPa.

(3) Tensile behaviour according to ASTM D 1623 in MPa.

Remarks ASTM C273-11 and ISO 1922 are operating on the same technical principle and give comparable test results.

This certificate supersedes the approval WP 1110002 HH.

Limitations Any significant changes in design and/or quality of the material may render the approval invalid.

End of Annex

Germanischer Lloyd