

TYPE APPROVAL CERTIFICATE**This is to certify:****That the Sandwich Core Materials**with type designation(s)
PVC Mycell H - Series

Issued to

MARICELL S.R.L.
Longarone, Italy

is found to comply with

DNV GL class programme DNVGL-CP-0084 – Type approval – Sandwich core materials**Application :****Manufacturing of sandwich-structured composite.**Issued at **Hamburg** on **2020-12-22**This Certificate is valid until **2025-12-21**.DNV GL local station: **Venice**Approval Engineer: **Joachim Rehbein**for **DNV GL****Thorsten Lohmann**
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: **262.1-026077-4**
Certificate No: **TAK000012Y**
Revision No: **6**

Product description

A cross-linked, closed-cell PVC (Polyvinyl Chloride)-foam core material for sandwich construction.

Approved variants

- Mycell H060
- Mycell H080
- Mycell H100
- Mycell H130

Material Properties

Variant	Nominal Density (1)	Density Range (1)	Compr. Strength (2)	Compr. Modulus (2)	Shear Strength (3)	Shear Modulus (3)	Shear Elongation (4)	Tensile Strength (5)	Tensile Modulus (5)	HRT (6)
H060	60	54 - 69	1.01 (0.84)	65 (50)	0.86 (0.73)	21 (17)	29	1.98 (1.15)	97 (22)	-
H080	80	72 - 92	1.63 (1.44)	96 (74)	1.26 (1.09)	29 (24)	32	2.84 (1.91)	138 (58)	47
H100	100	90 - 115	2,40 (1.70)	160 (100)	1.73 (1.30)	46 (30)	29	3.23 (2.30)	133 (86)	-
H130	130	120 - 150	2.94 (2.50)	207 (150)	2.32 (2.00)	59 (45)	24	3.85 (3.20)	166 (130)	47

- (1) Density according to ISO 845 in kg/m³
(2) Compressive properties according to ISO 844:2014, procedure B in MPa.
(3) Shear properties according to ISO 1922 in MPa.
(4) Shear elongation at break according to ISO 1922 in %.
(5) Tensile properties according to ASTM D 1623 in MPa.
(6) Heat Resistance temperature (HRT) in °C where the shear strength is > 80% of the shear at RT.

All values are average values and verified by testing. The values within brackets are manufacturer specified minimum values(msmv).

Limitation

The foam complies with the applicable requirements of DNV GL and is compatible to the laminating resin and/or adhesive.

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

Type Approval documentation

- Technical Data Sheet MYcell-TDS1 20200123;
- Test Report No.11226, issued by DNV GL accepted testing laboratory (Approval No. GL-LZ 2312 HH) of Gurit Americas, dated 2017-11-24;
- Workshop Inspection Report issued by DNV GL Venice, dated 2020-05-05;
- Test Report No. 1536-20 with annex, issued by Linset & Co. S.r.l., and based on tests witnessed by DNV GL, dated 2020-02-12;
- Quality documentation
- Reports for renewal testing issued by Maricell S.l.r., Longarone, conducted 2020, witnessed by DNVGL, dated 2020-10-13.

Assessed production site

Maricell S.r.l.
Via Villanova 15
32013 Longarone
Italy

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Periodical assessment

A production site with a valid Approval of Manufacturer (AoM) certificate for material in question is exempted from the obligation concerning retention and renewal assessments.
For manufacturer without a valid AoM a periodical assessment after 2.5 years and at renewal after 5 years is required.

Remarks

ASTM D 1621-73 procedure B and ISO 844:2014 procedure B work on the same technical principle and provide comparable test results.

ASTM C 273 and ISO 1922 work on the same technical principle and provide comparable test results.

END OF CERTIFICATE