

## Sandwich Panel Data Sheets

### Vizyon Lite Core Heat Panel

**SIZE;** 1200 X 2480 mm

**WEIGHT** 4.85 kg/m<sup>2</sup> – 15 kg/m<sup>2</sup>

**PLYWOOD** Okoume Plywood Interior Class 1 (EN 314-2), E05 , B/BB EN 314-2, EN 636-3, KOMO 'Class A'by SKH - NL nr 3271

**CORE MATERIAL** Mycell – Maricell M048 / DNV.GL certificate no : TAK000012X

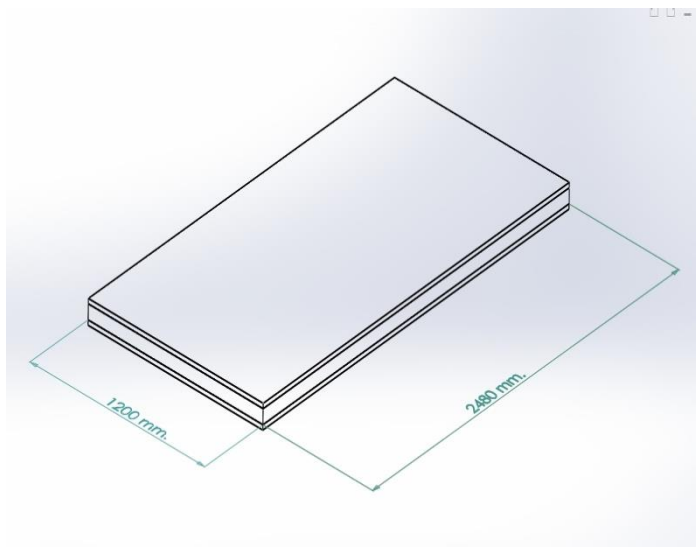
**Compressive strength** Average 0,69 Mpa ASTM D1621-10

**Tensile strength** Average 0,95 Mpa ASTM D1623

**Thermal conductivity** 0,031 W/Mk ISO 8301

**Water absorption** %1

**GLUING** Class E1 Melamine adhesive or water based adhesive



## TECHNICAL SPECIFICATIONS OF LITE CORE HEAD PANEL

THICKNESS mm	CONFIGURATION mm	WEIGHT kg/m <sup>2</sup>	SCOPE OF APPLICATION
16	3 + 10 + 3	4,85	FLOOR +WALL
21	3 + 15 + 3	5,25	FLOOR +WALL
24	4 + 20 + 4	7	WALL
36	8 + 20 + 8	12,4	WALL
50	10 + 30 + 10	15	WALL

**Extremely light, with the same thickness it offers greater rigidity and a weight saving of up to 70% compared to the Okoumè Marine Plywood commonly used for the same applications**

**Weight from 3.60 kg/m<sup>2</sup> (in 16 mm configuration)**

**Excellent durability in environments with high humidity and salinity**

**The PVC "core layer" is not hygroscopic, so it does not absorb water or environmental humidity**

**Excellent dimensional stability, maintains a remarkable degree of flatness and is not subject to torsion**

**Excellent rigidity**

**The insulating PVC core with closed cells, offers good thermal containment performance and remains unchanged over time**



## Sandwich Panel Data Sheets

### Vizyon Lite Core Heat + Noise Panel CR

**SIZE;** 1200 X 2480 mm

**WEIGHT** 10,22 kg/m<sup>2</sup> – 17,56 kg/m<sup>2</sup>

**PLYWOOD** Okoume Plywood Interior Class 1 (EN 314-2), E05 , B/BB EN 314-2, EN 636-3, KOMO 'Class A' by SKH - NL nr 3271

**CORE MATERIAL** Mycell – Maricell M048 / DNV.GL certificate no : TAK000012X

**Compressive strength** Average 0,69 Mpa ASTM D1621-10

**Tensile strength** Average 0,95 Mpa ASTM D1623

**Thermal conductivity** 0,031 W/Mk ISO 8301

**Water absorption** %1

**DAMPING MATERIAL** Cork Rubber (Fine granules of rubber and cork with PU elastomer bonding agent)

**GLUING** Class E1 Melamine adhesive or water based adhesive



#### TECHNICAL SPECIFICATIONS OF LITE CORE HEAD + NOISE PANEL CR

THICKNESS mm	CONFIGURATION mm	WEIGHT kg/m <sup>2</sup>	SCOPE OF APPLICATION
24	11 + 10 + 3	10,22	FLOOR +WALL
26	13 + 10 + 3	12,55	FLOOR +WALL
42	13 + 23 + 6	14,62	WALL
47	13 + 26 + 8	16,20	WALL
49	13 + 26 +10	17,56	WALL

**Extremely light, with the same thickness it offers greater rigidity and a weight saving of up to 70% compared to the Okoumè Marine Plywood commonly used for the same applications**

**Weight from 3.60 kg/m<sup>2</sup> (in 16 mm configuration)**

**Excellent durability in environments with high humidity and salinity**

**The PVC "core layer" is not hygroscopic, so it does not absorb water or environmental humidity**

**Excellent dimensional stability, maintains a remarkable degree of flatness and is not subject to torsion**

**Excellent rigidity**

**The insulating PVC core with closed cells, offers good thermal containment performance and remains unchanged over time**

## Sandwich Strip Pads Data Sheets

### Floor and Wall Strip Isolation Pads

**LENGTH** : 2480 mm

**WEIGHT** : 0,72 kg/m<sup>2</sup> – 1,78 kg/m<sup>2</sup>

**WIDTH** : 50 mm

**PLYWOOD** : Okoume Plywood Interior Class 1 (EN 314-2), E05 , B/BB EN 314-2, EN 636-3, KOMO 'Class A' by SKH - NL nr 3271

**DAMPING MATERIAL** VIBRAFOAM SD 65 (PU elastomer )



#### TECHNICAL SPECIFICATIONS OF SANDWICH STRIP PADS

THICKNESS mm	CONFIGURATION mm	WEIGHT kg/m2	SCOPE OF APPLICATION
28,5	8 + 12,5 + 8	1,78	FLOOR
28,5	8 + 12,5 + 8	0,72	WALL

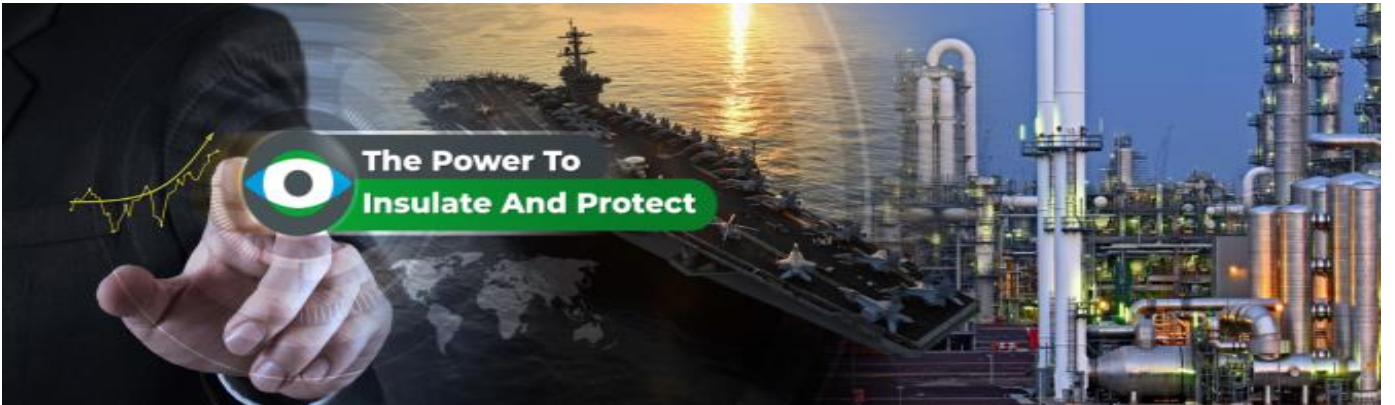
#### Production and General Center

#### Vizyon İnovatif Yalıtım Enerji Müh. Ltd. Şti.

Postane Mah. Yalıboyu Cad. No: 81/A  
Tuzla İstanbul / TÜRKİYE

Telefon: +90 216 446 00 04  
E-mail: info@vizyonendustriyelyalitim.com

#### SILENCE FOR SAFETY AND COMFORT



# Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>F.A.MOURIKIS</b>	
<b>Address</b>	Kalamki, Corinth, Postal code 20 003, Greece	
<b>Type</b>	Plywood And Other Wood Boards	
<b>Description</b>	Marine plywood constructed from Okoume and/or Sapelli, with or without decorative outer veneers bonded with melamine urea formaldehyde (MUF) adhesive	
<b>Trade Name</b>	Mourikis Okoume Marine Plywood & Mourikis Sapelli Marine Plywood	
<b>Application</b>	Marine, offshore and industrial use for the construction of pleasure craft, small craft and other constructions	
<b>Specified Standard</b>	BS 1088:2018 BS EN 310:1993 BS EN 314-1:2004 BS EN 314-2:2004 BS EN 1246-3:2016	
<b>Ratings</b>	Durability of Okoume (to BS1088:2003) Panel thickness (mm):  Veneer thickness (mm):	Non-durable 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 18, 20, 22, 25, 30, 35, 40, & 45 1.1, 1.5, 2.2, & 3.0

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

**Mayur Jogia**

Lead Specialist - Non-Metallics to Lloyd's Register EMEA  
A member of the Lloyd's Register group

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## Type Approval Certificate

Durability of Sapelli (to BS 1088:2003)	Moderately-durable
Panel thickness (mm):	3, 4, 5, 6, 9, 12, 15, 18, 20, 22 & 25
Veneer thickness (mm):	1 & 1.5

### Other Conditions

Irrespective of the durability of the outer veneer, the overall classification of the panel will be that of non-durable in the case of Okoume or mix Okoume and Sapelli, and moderately durable in the case of Sapelli

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. and its supplementary Type Approval Terms and Conditions form part of this Certificate.

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Sandwich Core Materials**

with type designation(s)  
**PVC Mycell M - 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**

for **DNV GL**

This Certificate is valid until **2025-12-15**.

DNV GL local station: **Venice**

Approval Engineer: **Joachim Rehbein**

**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: **262.1-026077-3**  
Certificate No: **TAK000012X**  
Revision No: **2**

## Product description

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

## Approved variants

- Mycell M040                      - Mycell M048                      - Mycell M060  
- Mycell M080                      - Mycell M100                      - Mycell M130  
- Mycell M200                      - Mycell M250

## 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)
M040	40	35 - 47	0.52 (0.39)	37 (24)	0.47 (0.35)	15 (12)	6	0.71 (0.29)	68 (9)	--
M048	48	43 - 55	0.62 (0.49)	44 (30)	0.52 (0.44)	16 (13)	7	0.98 (0.55)	71 (13)	--
M060	60	54 - 69	0.98 (0.82)	67 (46)	0.79 (0.69)	21 (17)	18	1.82 (1.43)	100 (46)	--
M080	80	72 - 92	1.60 (1.40)	97 (80)	1.20 (1.05)	30 (26)	19	2.74 (2.22)	146 (94)	--
M100	100	90 - 115	2.05 (1.65)	121 (99)	1.48 (1.29)	36 (31)	25	3.18 (2.79)	162 (101)	--
M130	130	120 - 150	3.22 (2.83)	183 (154)	2.44 (2.17)	55 (50)	32	4.35 (3.47)	227 (133)	--
M200	200	180 - 250	5.07 (4.54)	300 (243)	3.44 (2.67)	77 (62)	35	6.26 (4.69)	358 (195)	--
M250	250	225 - 288	6.88 (5.83)	384 (330)	4.37 (3.47)	98 (79)	35	7.19 (5.53)	439 (321)	47

(1) Density according to ISO 845 in kg/m<sup>3</sup>

(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 strength 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, dated 2020-12-16
- 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 2020-09-25.
- Quality documentation
- Reports for renewal testing issued by Maricell S.l.r., Longarone, conducted 2020, witnessed by DNVGL, dated 2020-10-13;
- Summary of Maricell's proposal to DNV-GL for changing Mycell-M / Mycell-H minimum Values, Rev.1, dated 2020-12-01.



Job Id: **262.1-026077-3**  
Certificate No: **TAK000012X**  
Revision No: **2**

### **Assessed production site**

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

### **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