

LIGHTWEIGHT CABIN FURNITURE SYSTEMS

SIPA
LIGHTWEIGHT

POWERED BY STANDARD AND PLAAT DETAIL
PRESENTED BY OTTOMAR TAMM AND KARMO LOMP



LIGHTWEIGHT CABIN FURNITURE SYSTEMS FOR CRUISE SHIPS

- ▶ Standard and Plaatdetail developed a new generation of lightweight cabin furniture systems.
- ▶ Scalable for series production.
- ▶ Designed for marine industry needs.
- ▶ Certified and tested.



THE PROBLEM WE ARE SOLVING

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- ▶ **WEIGHT ISSUES:** Conventional cruise ship cabin furniture is unnecessarily heavy
- ▶ **ENVIRONMENTAL ASPECT:** Cruise operators face increasing pressure to reduce lifecycle emissions



WHY SIPA?



**LIGHTER, MORE DURABLE,
MOISTURE/WATER-RESISTANT
FURNITURE CORES WITH LOWER
ENVIRONMENTAL IMPACT.**

APPLICATIONS AND VERSATILITY

Cabin Interiors

Beds, wardrobes, and shelving units built with PET foam core.

Bathroom Cabinetry

Water-resistant solutions ideal for high-humidity environments.

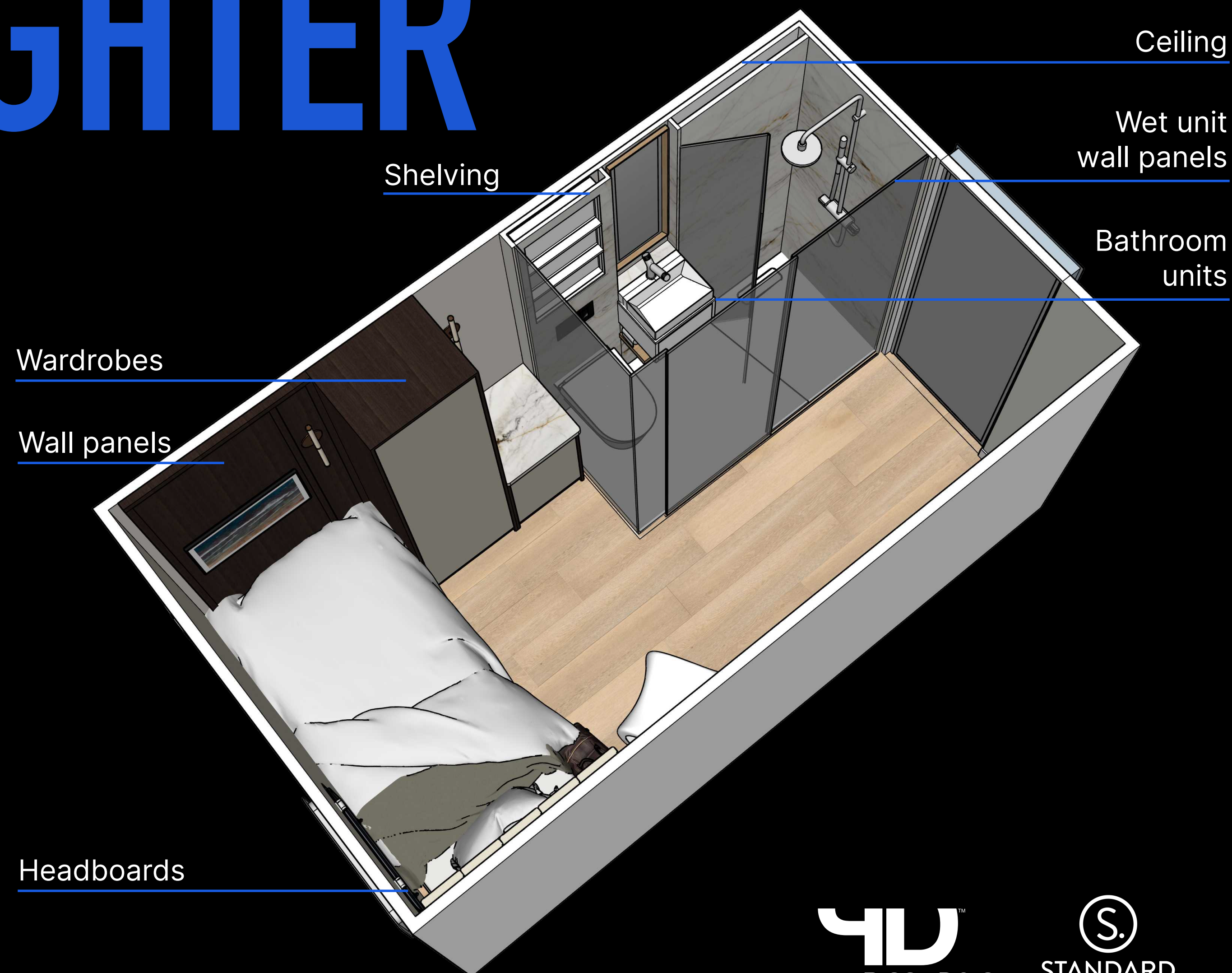
Wall Panels

Custom sizing from 20–100 mm thickness and variable density options for extreme moist conditions.

UP TO 5X LIGHTER

Standard x Plaat Detail partner up with Delade Maritiem reducing the cabin weight up to 5x by using SIPA Lightweight system

Delade
Maritiem
X



WHY SIPA?

Property	SIPA	Poplar	Chipboard
Density (kg/m ³)	60-250	450-600	680-780
Water Absorption (%)	1	12-15	8-10
Fire Performance	N/A	IMO	N/A

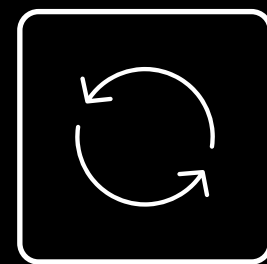
- ▶ **RESULT:** lighter, more durable, and moisture/water-resistant furniture cores with lower environmental impact.

TESTED AND CERTIFIED



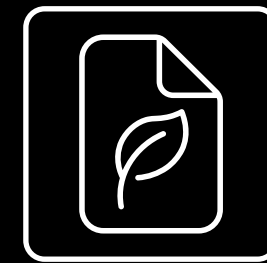
EN 16121 / EN 16122 Compliance

Independent testing by TalTech University confirms strength, stability and fatigue resistance.



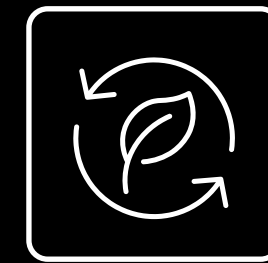
40,000+ Cycles

Opening/closing tests showed no structural failure.



Environmental Product Declaration

SIPA Lightweight offers up to 50% lower CO₂ footprint than conventional foam cores.



90% recycling rate

SIPA Lightweight components have 90 % End-of-life material recovery

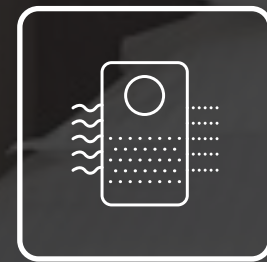
HOLISTIC CABIN EXPERIENCE

In the upcoming year we are working on redefining cabin design — from components to complete experiences.



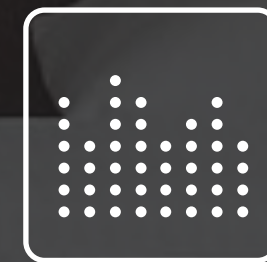
SIPA Lightweight panels

SIPA Lightweight wall and ceiling panels are moisture resistant and with a lower environmental impact.



Air purifier

Advanced ventilation for a premium cabin climate — fully controllable, always fresh.



Acoustic elements

Acoustic solutions that reduce noise transmission and enhance in-cabin serenity.



Infotainment

Integrated infotainment systems designed for seamless connectivity, comfort, and personalized content.

LET'S COLLABORATE

We're ready to show you the future of marine furniture.

JOINT DEVELOPMENT Modular cabinet systems ready for production.

Partnership

OEM collaborations and design
support

Documentation

Complete certification
package included

Prototypes

Demo units available for testing

CHALLENGE US!



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