

# SAPISOL® STRUCTURAL INSULATED DECKING

A photograph showing the interior of a building. The ceiling is made of light-colored wood planks. A large window on the left side offers a view of a red brick building and some greenery outside. A white wall is visible on the right side of the frame.

THE WARMTH OF WOOD  
WITHOUT THERMAL BRIDGE

**Sapisol® structural insulated  
decking provides you with a complete,  
effective and durable solution  
to insulate your building.**

# A SIMPLE, FLEXIBLE AND DURABLE SOLUTION

The product of 25 years of knowledge and expertise in the design and manufacturing of wood components for construction, Sapisol® structural insulated decking offers a design without thermal bridge and ensures ideal insulation for buildings without esthetic constraint.

Aiming to be used as a roof deck, Sapisol® allows installation as siding. You will thus obtain high-quality insulated roof or walls and all the architectural flexibility you are looking for.

Sapisol® adapts to any environment and meets the needs of the boldest projects some in the most isolated parts of the world.



## **METICULOUS FINISH**

- Rigorous manufacturing process and refined assembly
- Fully finished wood ceiling and roof eaves
- Vast choice of species and finishes



## **UNRIVALLED SPANS**

- Up to 20 ft. (6 m\*) of span between supports
- Less structural timber needed
- Increased living space

\* 20 ft. (6 m) span with Sapisol® S 200 (based on TA n°5/15-2443) depending on the applicable loads



## **SMALL FOOTPRINT**

The Sapisol® solution contributes to reducing fees for energy consumption. Designed from sustainable and environmentally friendly materials, this product naturally integrates into an environmental approach.



## **CONSTRUCTION OR RENOVATION**

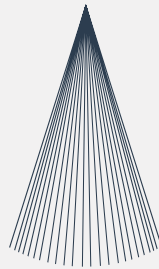
With Sapisol®, create spectacular roofs without compromising on building insulation. Ideal for new constructions, it is also a perfect fit for any renovation project.

Made up of two wood cladding panels and a graphite polystyrene (GPS) core, Sapisol® insulating decking comes in different thicknesses for all types of residential, commercial and industrial projects.

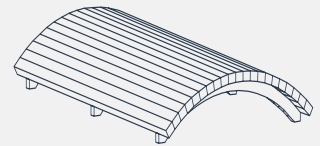


## **FLEXIBILITY OF INSTALLATION**

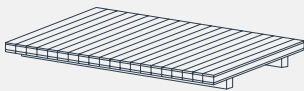
Sapisol® is easily installed with lightweight lifting equipment on all types and shapes of roofs. Fully prefabricated in the plant for quick handling and waste reduction, this insulated structural decking is ready to be installed upon delivery on site. Once assembled, it becomes a solid surface on which installers can safely move.



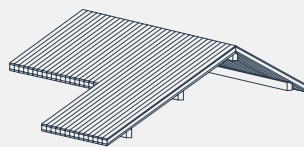
CONICAL ROOF



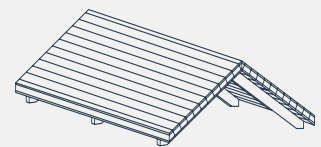
CURVED ROOF



FLAT ROOF



STEEL FRAME ROOF



LOW PITCH ROOF

## TECHNICAL SPECIFICATIONS

MODELS	S 86	S 160	S 186	S 220 f	S 174	S 200
Wood + GPS + Wood (mm)	20 + 46 + 20	20 + 120 + 20	20 + 146 + 20	20 + 180 + 20	27 + 120 + 27	27 + 146 + 27
Working width (mm)	205	205	205	205	205	205
Weight Kg/m <sup>2</sup>	18.70	20.90	21.70	22.70	26.80	27.60
Thermal resistance. theoretical R-value	10.73	25.27	30.32	36.97	25.84	30.95
R with 22 mm acoustic sub-roofing panel	13.34	27.88	32.94	39.58	28.45	33.56
R with 60 mm acoustic sub-roofing panel	18.46	32.99	38.05	44.69	33.56	38.67

## PERMISSIBLE SPANS IN LINEAR METER

INSTALLED ON  
3 SUPPORTS



INSTALLED ON  
2 SUPPORTS



DISTRIBUTED LOAD (KPA)		NUMBER OF SUPPORT	WOOD THICKNESS OF 20 MM				WOOD THICKNESS OF 27 MM	
Dead	Snow		S 86	S 160	S 186	S 220 f	S 174	S 200
0.65	0.35	3	4.56	6.98	7.50	7.50	7.50	7.50
		2	3.72	5.84	6.45	7.25	6.57	7.21
0.65	0.85	3	4.04	6.15	6.78	7.50	6.95	7.50
		2	3.35	5.23	5.78	6.50	5.93	6.49
0.65	1.35	3	3.48	5.23	5.76	6.08	5.96	6.50
		2	2.95	4.58	5.05	5.68	5.22	5.71
0.65	1.85	3	3.15	4.69	5.15	4.92	5.36	5.71
		2	2.71	4.19	4.61	5.18	4.78	5.22
1.00	2.00	3	2.77	4.07	4.47	4.19	4.68	4.86
		2	2.44	3.74	4.10	4.61	4.29	4.67
1.00	2.50	3	2.55	3.73	4.07	3.60	4.30	4.20
		2	2.29	3.48	3.82	4.29	4.01	4.36
1.50	2.50	3	2.27	3.28	3.59	3.20	3.79	3.73
		2	2.08	3.13	3.43	3.85	3.62	3.93
1.50	3.50	3	1.99	2.85	2.90	2.57	3.08	3.00
		2	1.87	2.79	3.05	3.21	3.24	3.50
2.00	4.00	3	1.71	2.42	2.44	2.16	2.60	2.53
		2	1.65	2.44	2.66	2.70	2.85	3.07
2.00	5.00	3	1.52	2.13	2.09	1.85	2.23	2.17
		2	1.52	2.23	2.42	2.32	2.61	2.71
2.00	5.50	3	1.42	1.99	1.95	1.73	2.08	2.03
		2	1.46	2.14	2.32	2.16	2.50	2.53

WITH ASSUMPTIONS

1. Dry service condition
2. L/Snow load = 300 and L/Total load = 250

## BUILDING DIFFERENTLY

Structure Fusion specializes in the design, manufacture, and installation of mass timber and hybrid structures. Whether for commercial, industrial, institutional, or multi-family residential buildings, our team of experts will provide you with premium construction solutions and innovations adapted to your project and needs.

**STRUCTURE FUSION**

INTELLIGENT WOOD CONSTRUCTION

structurefusion.com | 1.844.907.9713

All rights reserved © Structure Fusion inc. 2017 Printed in Canada  
Sapisol® is a registered trademark of Simonin SAS in Canada.