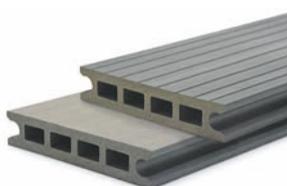


# LUNAWOOD THERMOWOOD COMPOSITE TWPC

What makes Lunawood Thermowood Composite TWPC so robust is the high-quality Thermowood fibre used in its manufacture: the product contains twice as much of this fibre as is found in a piece of solid Thermowood of similar size. The Lunawood Thermowood Composite is three times the density of Nordic Pine, and it contains 2/3 Thermowood fibre and 1/5 good-quality Fortum CIRCO® recycled polypropylene plastic, along with filler and colouring agents. The product's high Thermowood fibre content and low thermal expansion guarantee that it will retain its shape and size for decades to come.



Silver grey



Graphite grey



Mocca brown



Black

Lunawood Thermowood Composite TWPC has two kinds of face sides: a brushed one and a grooved one.

## DIMENSIONS

The standard dimensions (thickness x width) of Lunawood Thermowood Composite TWPC (trade name Luna TWPC) are 26x140 mm and 42x200 mm.

	Standard mm	Standard length	Weight	Spacing
Luna TWPC 26x140	26x140	4 m / 6 m	2,7 kg/m	450 mm
Luna TWPC 42x200	42x200	4 m	5,3 kg/m	800 mm*)

\*) Unusually high loads require smaller spacing between joists.

## DIMENSIONAL TOLERANCE

Thickness  $\pm 0,5$  mm

Width  $\pm 1,0$  mm

Length  $\pm 3$  mm

Weight  $\pm 5$  %

## DIMENSIONAL STABILITY

Lunawood Thermowood Composite TWPC decking is high-quality material, manufactured and tested in Finland. It contains wood that can cause minor variation both in the weight and the colour of the product. Dimensional changes can occur in Lunawood Thermowood Composite TWPC decking under conditions with temperature changes and considerable humidity. Minor dimensional changes in Lunawood Thermowood Composite TWPC decking are normal.

	1 m board	2 m board	3 m board	4 m board
10°C change	0,3 mm	0,6 mm	0,8 mm	1,1 mm
20°C change	0,6 mm	1,1 mm	1,7 mm	2,3 mm
30°C change	0,8 mm	1,7 mm	2,5 mm	3,4 mm
40°C change	1,1 mm	2,3 mm	3,4 mm	4,5 mm
50°C change	1,4 mm	2,8 mm	4,2 mm	5,6 mm

## EFFECT OF UV RADIATION

Due to the high Thermowood content in Lunawood Thermowood Composite TWPC, brown Thermowood fibres can appear, which will turn a beautiful grey under the influence of UV radiation after installation. The colours may differ slightly from those shown below: the image on the left shows a new product, and the product after six weeks of exposure to sunlight. The colour of the Thermowood composite changes within 6–12 weeks from installation. How long it takes for the product to reach its final colour depends on the amount of UV radiation and weather conditions. If the weather is cloudy or the product is not exposed to direct sunlight, the change can take longer. Also note that the duration of the process is also affected by external conditions, shadow, furniture and glazing. The colour might not change if the glazing has UV protection.

**Product colour samples: NEW is the original colour, and UV has been exposed to direct sunlight for about six weeks from installation. A grooved surface is shown in the left column, and a brushed one in the right column.**



## USE CLASS

Tests performed by VTT (EN 350-2, EN 15457) indicate that the use class of Lunawood Thermowood Composite TWPC is better than that of untreated pine or larch. The use class of Thermowood fibre, the main raw material in Lunawood Thermowood Composite TWPC, is 3 (BS EN 335), in 'situations in which wood or wood-based product is above ground and exposed to the weather, particularly rain'.

## FIRE RESISTANCE CLASS

The fire resistance class, according to the standard EN 13501-1, of Lunawood Thermowood Composite TWPC is E. Lunawood Thermowood Composite TWPC is capable of resisting flames without significant spreading of flames for a reasonable period of time. The material does not ignite as easily as wood, but when it burns, it produces more energy. Unlike plastic products, Lunawood Thermowood Composite TWPC does not form flaming droplets.

## PEELING COLOUR

Due to the high wood content, a small amount of coloured wood particles may peel off the product. This can be reduced by washing the deck.

## WARMING UP

Like all decking materials, Lunawood Thermowood Composite TWPC will also warm up in direct sunlight. Due to its dense structure, the surface can feel hotter than a wooden deck.

## PROPERTIES OF THE SURFACE IN USE

Lunawood Thermowood Composite TWPC is an ideal choice when exceptional durability and weather resistance are needed. However, Thermowood composite, particularly the grooved surface, is susceptible to impacts, scratching and grease smudges. Garden furniture should be equipped with furniture pads. When installing the product, avoid rubbing or scratching the surface. Experience has shown that the original colour revealed by scratching will even out over time due to UV radiation.

Avoid hard knocks and sharp, pointed loads to keep the decking surface intact. The corners are particularly susceptible to damage.

## SERVICE LIFE

Lunawood Thermowood Composite TWPC offers a long-lasting material for terraces, steps and piers. It has a good resistance to mould and decay. The manufacturer's ([www.lunawood.com](http://www.lunawood.com)) instructions and good building practices must be observed during installation to ensure appropriate drainage and sufficient ventilation around the decking boards, and to avoid areas impermeable to water. The expected service life when the product is correctly installed and maintained is several decades.

## INSTALLATION

Check the permit requirements concerning decks with the local building authorities. When building a terrace, instructions and regulations must be observed. Always use authentic Luna TWPC clips when installing Lunawood Thermowood Composite TWPC. For detailed information about clips, see the installation guide <https://lunawood.com/downloads/>

## CUTTING AND SAFETY

Normal woodworking tools, such as a saw, a circular saw and a drill, can be used to cut Lunawood Thermowood Composite TWPC boards. You should always use protective glasses when cutting Lunawood Thermowood Composite TWPC. Drilling, sawing, sanding and other ways of processing the material creates wood dust. That is why we recommend using a mask with an activated carbon filter.

## SERVICE AND MAINTENANCE

Lunawood Thermowood Composite TWPC is easy to maintain and does not require annual surface treatment. The high wood content enables treatment of the brushed surface with a suitable wood oil. This gives a deeper shade and reduces susceptibility to visible grease smudges. The treatment should be made after sufficient exposure to UV radiation. To ensure the desired result, test the oil first on one board and allow it to dry.

The board surfaces and the gaps between boards must be brushed regularly, and they can be washed with water (and a mild detergent) when necessary. In general, Lunawood Thermowood Composite TWPC tolerates pressure washing better than wood, but you should always test the correct pressure in a concealed location. As the product is not fully water-repellent, any stains, e.g. food and grease smudges, should be removed immediately to prevent them from discolouring the wood fibre. The brushed surface can be lightly sanded. Sanding brings out the original colour but it will change due to UV radiation, as described above.

## ENVIRONMENTALLY FRIENDLY

Lunawood Thermowood Composite TWPC is an ecological choice. It consists of 87% of recycled materials: It contains 2/3 PEFC-certified Thermowood fibre, derived as a side product from the planing line in our factory in Iisalmi, and 1/5 good-quality Fortum CIRCO® recycled polypropylene plastic, along with filler and colouring agents. The product contains no hazardous chemicals.

## WASTE MANAGEMENT

Lunawood Thermowood Composite TWPC remains environmentally friendly throughout its life cycle. It is a non-toxic and PVC-free product and is safe during final storage and disposal. Any leftover pieces of decking can be burned similarly to wood or disposed of with waste used for energy generation. For more details, please contact your local waste management company.

For more information about the ecological Lunawood Thermowood Composite TWPC from Finland, visit [LUNAWOOD.COM](https://www.lunawood.com)

