

INSTALLATION, CARE AND TECHNICAL GUIDE

Durable, Low Maintenance Thermowood Composite Decking



Contents

Environment	2
LunaComp Deck	3
Storage and transport	4
Tools	5
Installation	6
Gaps and Heat Expansion	8
Accessories	8
Installation Pack	8
Safety	9
Deck Care	10
Basic Information	10
Mould	11
Physical and Mechanical Properties	12
Colour	13
Technical Details and Available Profiles	13



PEFC Certified

LunaComp is manufactured using recycled wood fibre, which is PEFC certified.

We revise these installation instructions periodically. Please check on www.lunacomp.fi that you have the latest instructions.

Updated 4/1/2013

LunaComp Deck

Thank you for choosing LunaComp decking. We are confident that you will enjoy your sustainable, ecological and low maintenance deck.

LunaComp Deck is a thermowood composite designed and manufactured in Finland. This innovative product is made using a patented production method using by-products of thermal wood manufacturing and plastic polymers.

LunaComp Deck boards are easy to care for, requiring no specialist maintenance, simply clean the deck when necessary. LunaComp is sustainable, ecological and trouble free for people who want to enjoy life.

LunaComp has been awarded the Key Flag mark of Origin in Finland. This recognises LunaComp's commitment to high quality, health and safety, and the company's commitment to corporate responsibility.



Why choose a LunaComp Deck?

- Sustainable and ecological choice containing 100 % recycled materials
- Attractive and contemporary appearance
- Long lasting and hard wearing
- Low maintenance
- Toxin-free
- PVC free
- Splinter free
- Recyclable
- Low Slip
- Tested and Approved for strength *
- Quick and simple installation

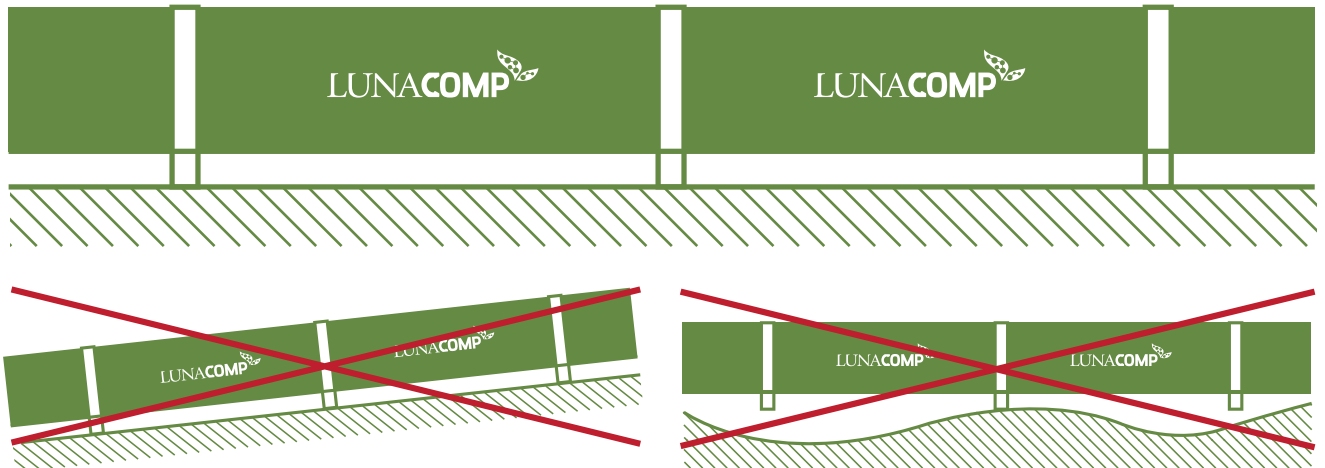
*see Napier University strength tests



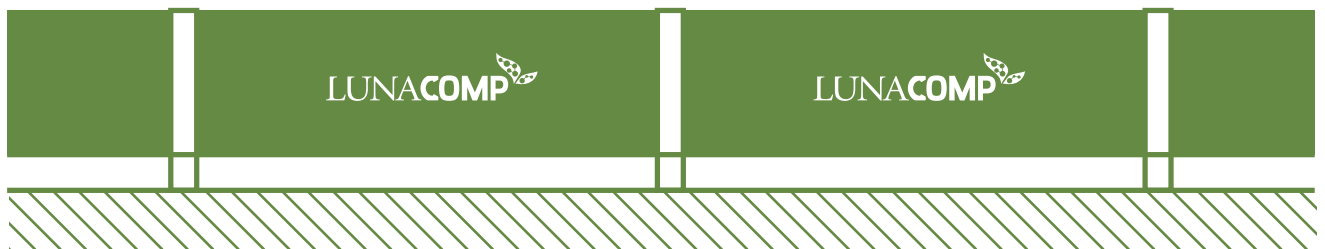
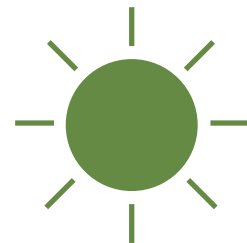
Storage and transport

Please take into account the following important issues when storing LunaComp Decking.

1. Keep on a clean, even surface in storage, on the building site and during transport.



2. Store sheltered from weather conditions until installation.



3. Ensure the storage space is well ventilated and place supporting timbers underneath the product.

4. Instructions for storage and transport:

1. When handling and storing LunaComp Deck, remember that the product is heavier than ordinary wood.
2. When transporting the product by forklift truck, please note that the packages may slide on metal surfaces.
3. Store on a clean, even surface at site and during transport.
4. Shelter from weather conditions until installation.
5. Ensure the storage space is well ventilated and place supporting timbers under the product.
6. Support packs at a maximum of 800 mm intervals to keep the boards from bending.
7. We recommend stacks of no more than 4 packages.
8. Never stack longer packs on top of shorter ones.
9. Particular care should be given to avoid damage to the edges of the boards

Tools

What kinds of tools are required?

The exact same tools may be used for the decking as for ordinary wood.

You will need an electric drill/screwdriver, a drill bit and counter-sink bit in the appropriate size, a rubber mallet, a saw and a tape measure.



What to consider when choosing tools








- LunaComp does not splinter but may break out more easily than ordinary wood. Therefore sharp tools are essential.
- Drill pilot holes when attaching screws close to the edge (less than 7 mm).
- Ensure that you have the correct size of screwdriver.
- Adjust the power of the screwdriver such that the head of the screw will not damage the board or the fixing clips. Never use a metal hammer for attaching the side strips.
- Always use a rubber hammer to attach the Side Strips and End Caps.
- When face fixing with screws, drill the pilot hole using a counter-sink bit to ensure the head of the screw will remain flush with the surface of the deck.

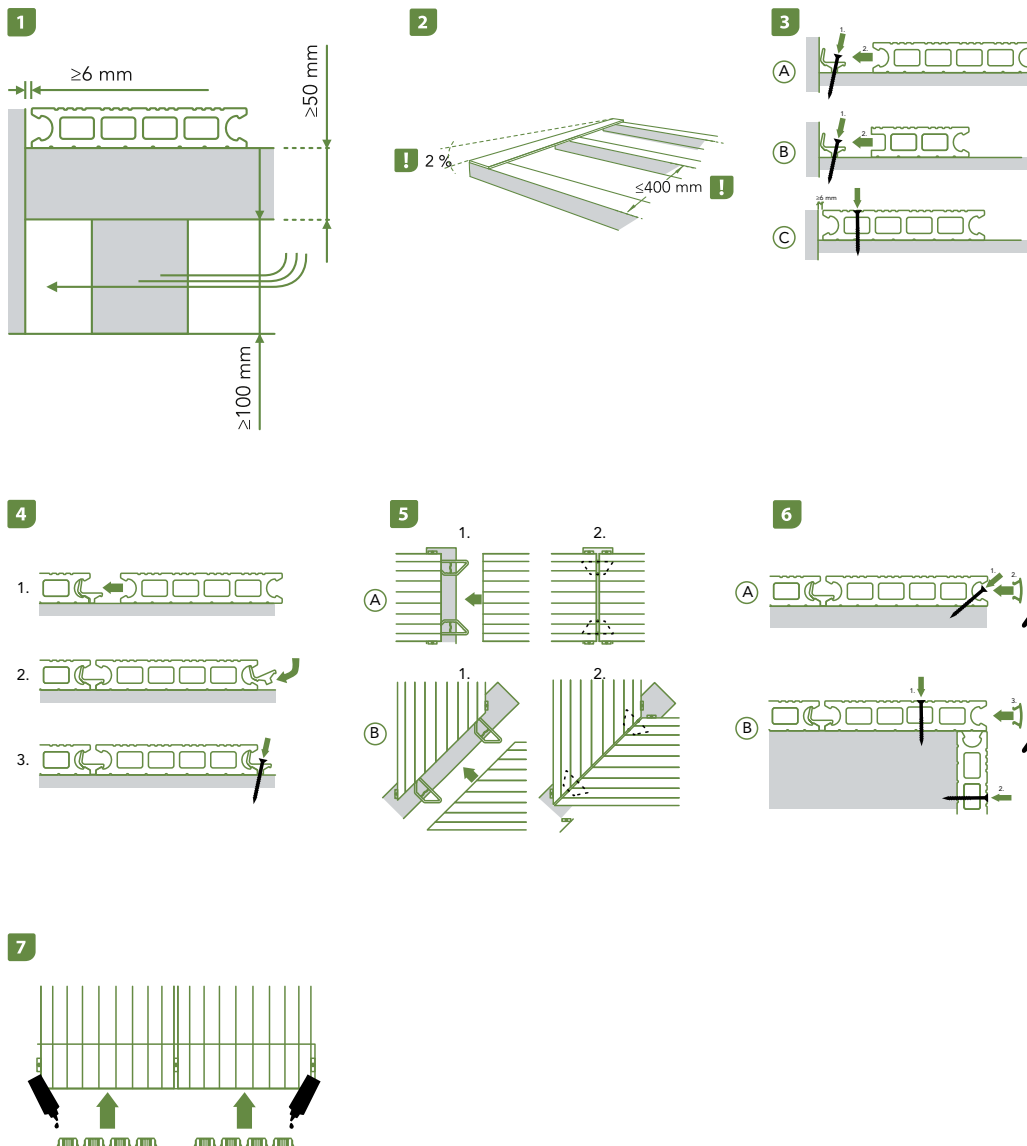
If you are unsure that your tools are suitable for the material, try working on a test piece first or ask for help from a professional decking installer.

Benefits of a deck built with LunaComp

- Quick to install; reducing labour costs.
- Low maintenance; easy to care for.
- Easy to care for, only requiring regular cleaning.
- Hollow structure; allowing hidden cabling of lighting and heating equipment.
- Extremely stable; little expansion and contraction due to heat and moisture ensuring smaller expansion gaps, resulting in a contemporary, attractive appearance.
- Choice of colour; offering a variety of design options.
- Colourfast; ensuring your deck's continued attractive appearance.
- Fast Clip fixing system; allowing swift installation and attractive appearance.

Installation

	 <p>2,5 kpl/m 2,5 pcs/m</p>	 <p>6,9 m/m²</p>
 <p>MOMENT 50%</p>		<p>RUOSTUMATON ROSTFREIER STAINLESS INOXUDABLE RUSTFRI</p>  <p>4-4,2 × 35-45 mm Ø max 8 mm</p> 

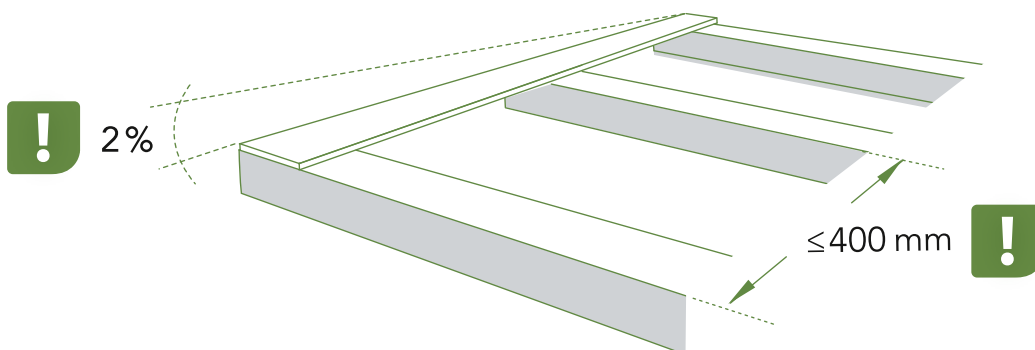


Connectors

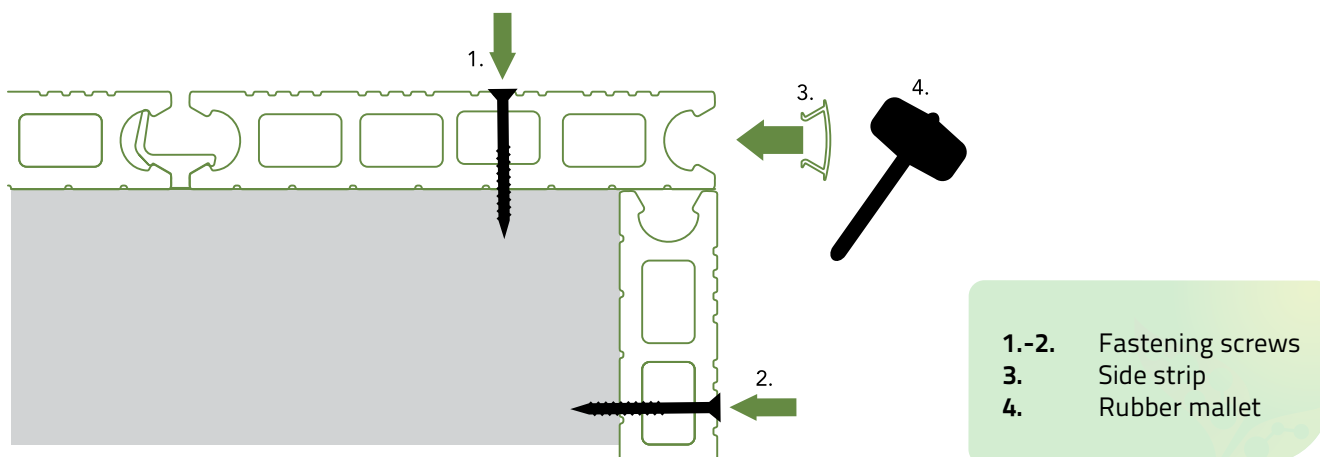


Only use the clip and connectors that are specifically designed for the decking boards. They allow for slight changes in size due to temperature. This will prevent the boards from warping.

- We recommend using metal or wood for the frame and supports.
- The supporting timbers must be at least 45 mm wide.
- In public spaces, the spacing between the supporting timbers is 30 cm.
- The spacing between the supporting timbers (i.e. between the connectors or clips) should be 40 cm for domestic installations and 30 cm for public installation.
- Allow a 2% incline to ensure water runoff along the boards.

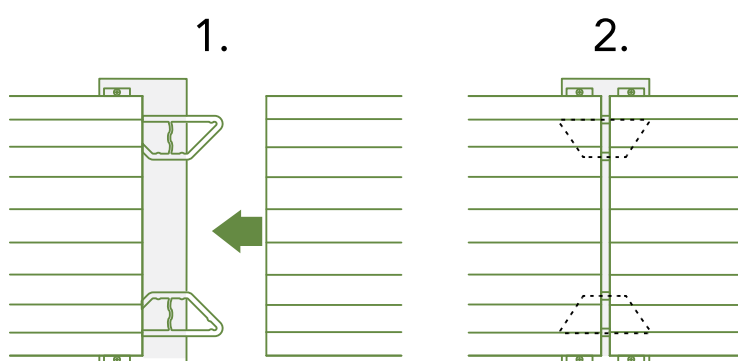


- Although the material is very stable, there will be slight changes in size due to atmospheric conditions, the Fast Clips allow for this.
- We recommend the use of stainless steel screws.
- Recommended screw size: 4-4.2 x 35-45 mm
- Only use LunaComp End Caps and Side Strips provided to finish your deck.



Gaps and heat expansion

Only use LunaComp End Connectors to join the deck boards end to end. Ensure the end connectors are sited above the frame or a supporting timber. The connectors are designed to accommodate slight changes in size due to temperature.



Leave sufficient gaps between fixed structures and deck boards to allow for heat expansion. In normal weather conditions the gap should be at least 1 mm per lineal metre of decking. Example; a maximum 4mm expansion gap for a 4 m long deck board.



Note: The gaps are also needed to allow for possible expansion and contraction of the frame and supporting materials. Follow the gap instructions to ensure your LunaComp Deck looks good for many years to come.

Accessories

The accessories available to fix and finish your deck are as follows;

- | | |
|-------------------------|---|
| ▪ FastClips | available in wholesale packs of 250 (approx 20 per m ²) |
| ▪ End caps | available in wholesale packs of 20 |
| ▪ Side strip | available in wholesale packs of 4 pieces in 3 and 4 metre lengths |
| ▪ End connectors | available in wholesale packs of 40 (2 connectors per joint) |

Exact quantities may be supplied by your local stockist.

Installation pack

A LunaComp Deck Installation Pack is available and contains sufficient FastClips, End Caps and End Connectors for a deck installation of approximately 10 m². Side strips are not included and may be purchased as required.



Design your own deck using the software on our website, www.lunacomp.fi.

Safety



We recommend that appropriate safety wear and equipment is used. Please be aware that LunaComp deck boards are heavier than softwood boards and this should be taken into account when handling and storing.



Small quantities of the product may be disposed of by burning with ordinary wood. Please be aware that when burning, the product produces more heat than ordinary wood. Larger quantities should be disposed of as with ordinary construction waste.



Static electricity may be generated when handling the product and this should be taken into account when handling and storing.

Deck care

Basic information

Regular cleaning will keep pollen, organic matter and resulting mould or lichen from embedding itself on the surface or in the gaps.

We recommend cleaning your deck twice a year with a mild soapy hot water solution, applied with a soft brush. Commercially available deck cleaners are also available. In urban environments, it may be necessary to clean your deck more frequently. This will help to keep your LunaComp Deck looking good for many years.

If using a power hose to clean your deck, test it first on a less visible area and use a low-pressure setting to avoid marking your deck.

The use of cleaning products containing bleach or acids may cause the surface of the LunaComp Deck boards to lighten in colour. Before you use your cleaning agent, test it on a non-visible area of deck.

Rubber or vinyl materials, such as door mats or plastic flower pots contain additives that could stain the deck boards over time.

Small scratches	Wax fillers meant for hardwood floors may be used to fill in small scratches and marks in the decking.
------------------------	--

Ice and snow	Take care when removing snow and ice from the deck and never use a metal shovel or implement to do so. Avoid subjecting the deck to sharp blows.
---------------------	--

Oil and fat stains	Remove as soon as possible with hot water and soap.
---------------------------	---

Sanding	LunaComp deck boards are not suitable for sanding.
----------------	--

Mould

Mould is a microscopic fungus that may settle and grow on any surface. Mould will not structurally damage LunaComp decking boards.

In order for mould to grow it needs nutrients, moisture and warmth. LunaComp Deck boards are not a source of nutrients for mould but surface contaminants on the boards may encourage mould growth, for example, running water from over-flowing gutters and flower pots. If the gaps in the LunaComp decking are too small or are blocked, the boards may also collect moisture that feeds mould. Ensure that the product is installed according to instructions. Please ensure that the gaps between the LunaComp deck boards do not become blocked as this will cause water entrapment, facilitating mould growth.

How do I remove mould from LunaComp Deck composite boards?



If mould appears, remove it and its nutrient source using a hose, warm soapy water and a soft brush. In some persistent cases, removal of all mould spores may require several rounds of cleaning with a deck cleaning agent.

Following the Deck Care guidelines will ensure the appearance of your LunaComp Deck. Should any areas develop persistent mould growth, the area should be cleaned immediately and the cause of the growth rectified.

Physical and Mechanical Properties

Material Property	Test Method	Test Value	
Density	EN ISO 1183-1	1,23 g/cm ³	
Surface hardness (Brinell)	SFS-EN 1534:2000	11 N/mm ²	
Fungal growth	EN 15457	Class 0: No growth	
Slip resistance when wet and dry	CEN/TS 15676 and BS 7976: 1- 3 2002	Low slip potential	
Breaking strength at room temperature	SFS-EN 310	Breaking strain on board with supporting timbers every 400 mm 350 kg on average Breaking strain on board with supporting timbers every 300 mm 450 kg on average	
Heat expansion	ISO 11359-2	0,022 mm per 1° C temperature change per lineal metre i.e. a change in length of 4 m board when temperature changes by 50 °C = 4.4 mm	
Load-bearing strength at room temperature		Breaking strain on edge: 180 kg/cm ² on average Breaking strain on hollow section: 350 kg/cm ² on average Breaking strain on cell wall: 700kg/cm ² on average	
Resistance to chemicals	SFS-EN 13442	Olive oil Red wine Blueberry Ethanol (90%) Ammonia (10% aqueous solution)	Class 4 Limited effect Class 5 No visible effect Class 5 No visible effect Class 5 No visible effect Class 5 No visible effect
Resistance to dry heat (momentary)	SFS-EN 12722	Temperature 100 c° Temperature 120 c° Temperature 140 c° Temperature 160 c°	Class 5, No visible effect Class 5, No visible effect Class 5, No visible effect Class 2, Significant effect
Surface wear resistance	SFS-EN ISO 11998	Nylon brush	Class 4, Limited effect on shine and/or colour, only visible from certain angles
Water absorption (24 h)	SFS-EN 317	< 1,5%	
Swelling in thickness (24 h)	SFS-EN 317	< 0,5%	
Thermal conductivity	EN12667	0,25 W/(mK)	

Note the safety coefficients for breaking strains when planning maximum loads !

Colour




There may be small differences in shine and colour tone between products. These will even out within the first year of use. Deck extensions installed at a later date may initially appear to be a different. This difference will even out over time.











Technical Details and Available Profiles

Technical details, LunaComp Deck

Product	Product picture	Color	pcs / bundle	rm	m ² / bundle	length	kg / m	Bundle weight
LC Deck 26x140		Graphite Gray	84	252	36,0	3,0 m	2,6	665
LC Deck 26x140		Graphite Gray	84	336	48,0	4,0 m	2,6	884
LC Deck 26x140		Mocca Brown	84	252	36,0	3,0 m	2,6	665
LC Deck 26x140		Mocca Brown	84	336	48,0	4,0 m	2,6	884

Special orders	Product picture	Color	pcs / bundle	rm	m ² / bundle	length	kg / m	Bundle weight
LC Deck 26x140		Project lengths 1,0 – 8,0 m		ask separate offer				
LC Premium Deck 26x140		Graphite Gray	48	192	27,4	4,0 m	3,9	759 NEW
LC Premium Deck 26x140		Mocca Brown	48	192	27,4	4,0 m	3,9	759 NEW

Technical details – LunaComp Deck, accessories

Product	Product picture	Color	pcs / bundle	length
Fast Clip THa		Graphite Gray	250 pcs / bag	
Fast Clip Ru		Mocca Brown	250 pcs / bag	
Side strip		Graphite Gray	6	3,0 m
Side strip		Graphite Gray	6	4,0 m
Side strip		Mocca Brown	6	3,0 m
Side strip		Mocca Brown	6	4,0 m
End Cap		Graphite Gray	20 pcs / bag	
End Cap		Mocca Brown	20 pcs / bag	
End Connector		Graphite Gray	40 pcs / bag	
End Connector		Mocca Brown	40 pcs / bag	
Installation Pack LC DECK		Graphite Gray	accessories to build up 10 m² ready LC Deck THa NEW	
Installation Pack LC DECK		Mocca Brown	accessories to build up 10 m² ready LC Deck THa NEW	
Sample box				

www.lunacomp.fi

Easy living – Easy care

- Quick to build due to its hidden FastClip fastening system
- Normal woodworking tools are suitable
- Low maintenance, regular cleaning is enough
- Keeps its shape year after year, does not warp
- The hollow structure allows concealed cabling for lighting and heating solutions
- Remarkably low heat and moisture expansion
- You can combine different colours and build different shapes

For more information, please visit: www.lunacomp.fi

