



THERMORY
Excellence in Wood

INSTALLATION GUIDE

THERMORY[®] DECKING



Thermory Ash deck - aged, unoiled
Private house, Beverly Hills, CA, USA

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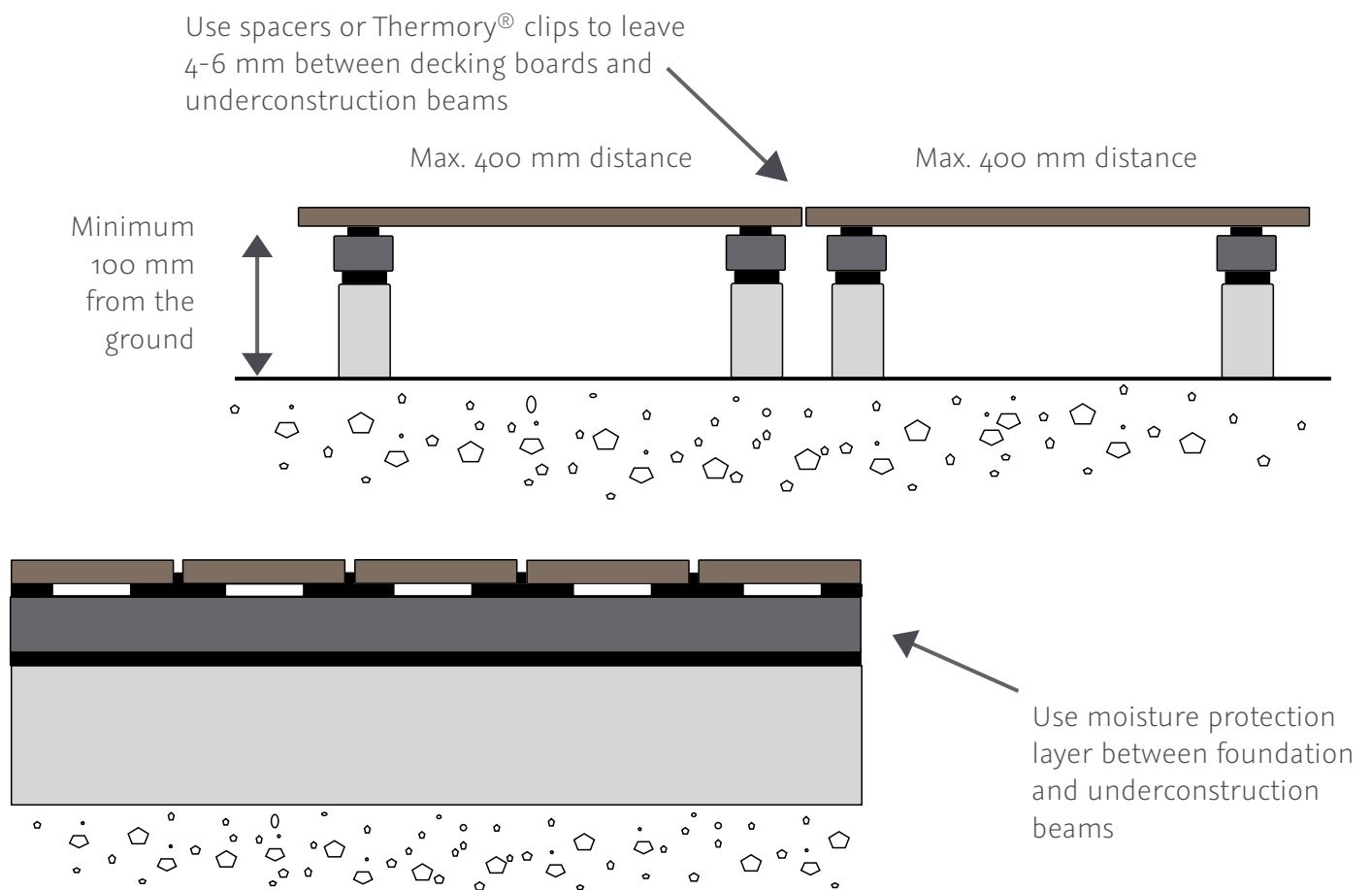
To ensure the most beautiful and truly long-lasting Thermory® decking please follow the installation recommendations below.

1. Storage

Whenever possible, Thermory® decking boards should be stored inside, out of the sun, rain and other elements. When this is not possible, boards need to be elevated off the ground, stacked uniformly and covered with a waterproof tarp. Leave the ends of the tarp open so moisture is not trapped inside, making certain the stored wood is not subjected to the elements or sun as UV rays will fade the material. Under no circumstances should Thermory® boards, even in original packaging, be subjected to rain or any moisture as they cannot dry properly when stacked and/or packaged.

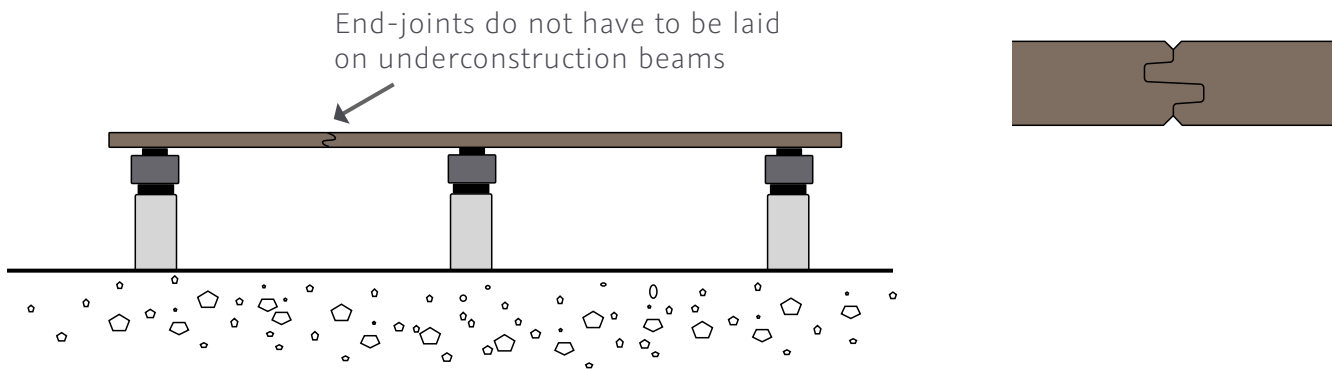
2. Building a proper foundation

- Thermory® decking must be laid on even, flat ground.
- Good drainage is essential for directing water away from the structure.
- Wood must not be directly connected to wood. When using screws, leave about 4-6 mm between decking boards and underconstruction beams by using spacers. Thermory® clips achieve the same effect.
- Deck should lay at least 100 mm above ground as underconstruction beams must never be in contact with ground water.
- Recommended distance for underconstruction beams to support the decking is max. 400 mm.



- **END-MATCHING**

Most profiles can be produced with end-matching, which enables falling lengths to be installed efficiently. Thermory® end-matching is tested for load bearing and do not have to be laid on the underconstruction.



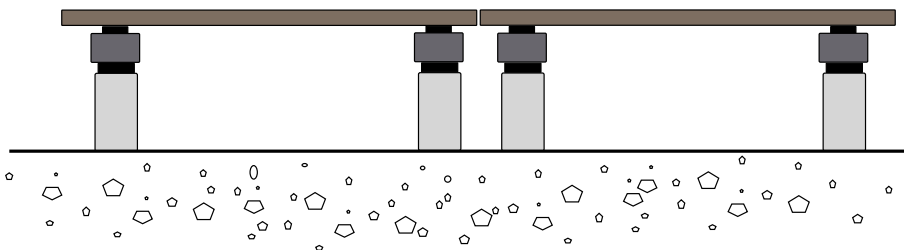
3. Avoiding moisture damages

- **LEAVE SUFFICIENT AIR GAP BETWEEN DECKING BOARDS**

Leaving a sufficient air gap between the decking boards helps to prevent water causing swelling.

Formula for calculating necessary space: width of decking board divided by 18.

When installing straight cut (no end-matching) Thermory® decking boards in length, leave about 5 mm space between boards for air circulation in order to prevent swelling from trapped moisture.

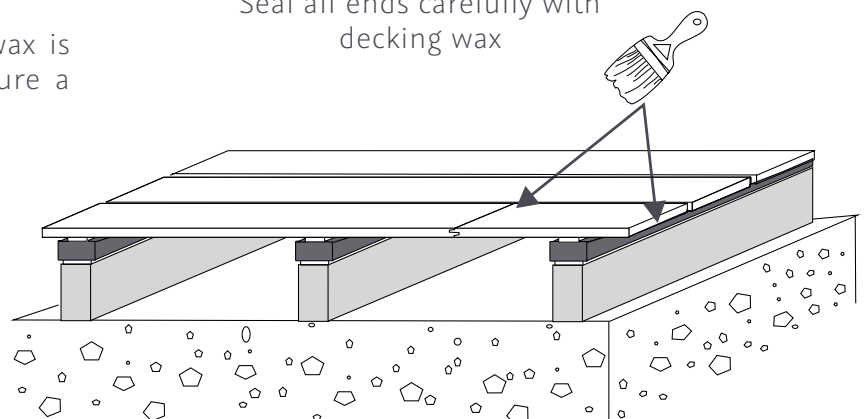


Leave some space between boards both in length and as well in width to enable proper ventilation.

- **SEAL THE ENDS WITH DECKING WAX**

Sealing the ends of the boards with wax is always recommended in order to ensure a longer lifespan for the decking.

Seal all ends carefully with decking wax



4. Wooden underconstruction

We only recommend using Thermory Ash or Thermory Spruce (both durability class 1) underconstruction. This ensures that your underconstruction lasts at least as long as your decking.



Thermory Ash



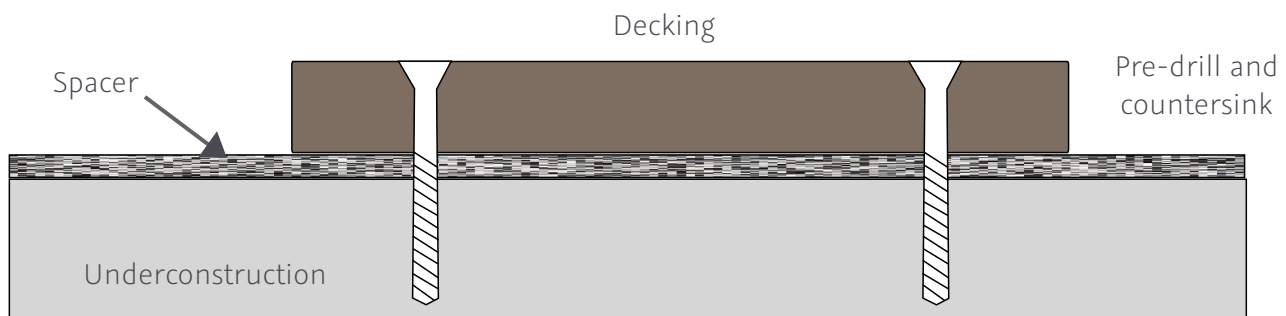
Thermory Spruce

5. Installation

Always use stainless steel screws or Thermory® fastening clips when installing Thermory® decking.

5.1 INSTALLATION WITH SCREWS:

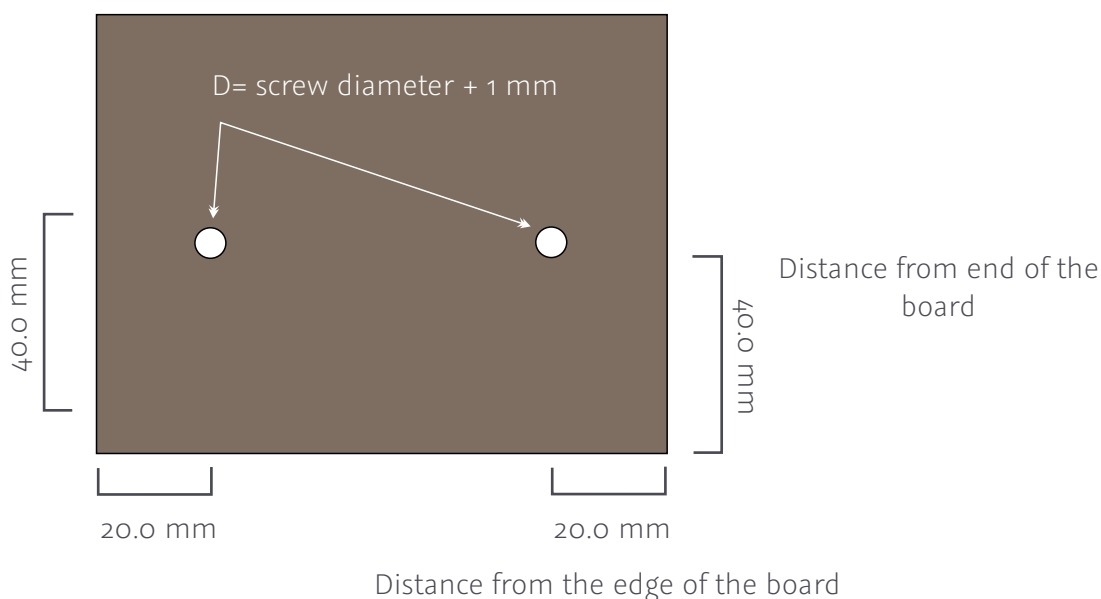
Especially for Thermory Ash, pre-drilling is needed in order to avoid cracking. The pilot hole should be minimum 1 mm larger in diameter than the screw itself, to allow necessary movement and prevent splits. Thermory Pine can be fixed using self-drilling screws.



CROSS SECTION VIEW

Screw heads must not penetrate too deep into the wood. Screw heads should fit snugly and be roughly level with the wood surface in order to reduce risk of water absorption.

In order to avoid splitting of timber, leave approx. 20 mm space from the edge and 40 mm from the end of the board for drilling.



TOP VIEW

5.2 THERMORY HIDDEN INSTALLATION SYSTEMS

Thermory® decking boards come in a wide range of widths and profiles and can be fixed both with visible and hidden installation systems.

5.2.1 INSTALLATION WITH T-4 AND T-6 CLIPS

Thermory® black-coated stainless steel clips “T-4” and “T-6” both create a beautiful decking surface with no visible screws.



The **T-4** clip leaves a 4 mm gap between deck boards and is suitable for widths up to 112 mm (included).

The **T-6** clip leaves a 6 mm gap between deck boards and is suitable for widths over 112 mm.

T-4 is suitable for the following Thermory Ash decking profiles: D4 sg2, D8 sg2 (widths up to 112 mm).
 T-6 clip suitable for the following Thermory Ash decking profiles: D4 sg2, D8 sg2 (width over 112 mm).

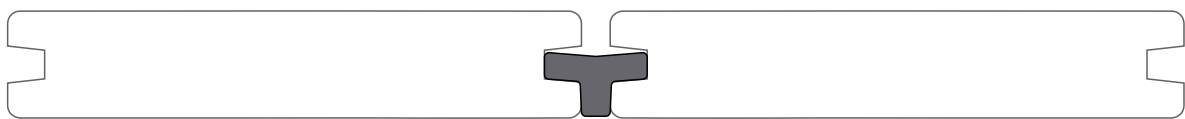


Clips T-4 and T-6 require only one screw per clip (one screw hole per clip). Both clips leave approx. 1.3 mm beneath the decking board to avoid wood-to-wood contact.

| REQUIRED AMOUNT OF FASTENERS | | |
|------------------------------|--------|--------------|
| → | pcs/rm | pcs per pack |
| T-4 clip (including screws) | 2.5 | 500 |
| T-6 clip (including screws) | 2.5 | 500 |

5.2.2 INSTALLATION WITH PC CLIPS

Thermory® black coated PC clip leaves a distance of 6 mm between the boards. PC clips are suitable for the following Thermory Pine decking profiles: D4 sg, D30 sg.

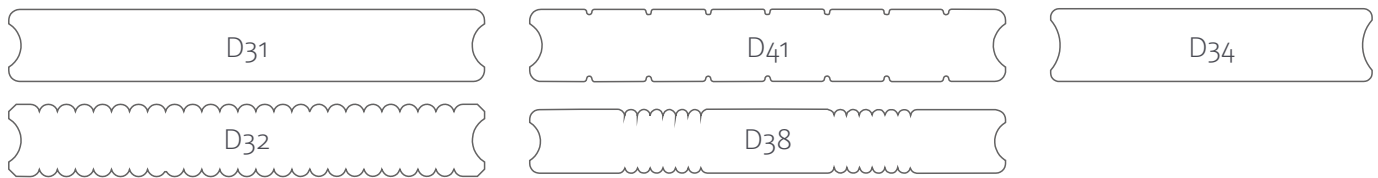


PC clip

| REQUIRED AMOUNT OF FASTENERS | | |
|------------------------------|--------|--------------|
| → | pcs/rm | pcs per pack |
| PC clip (including screws) | 2.5 | 100 |

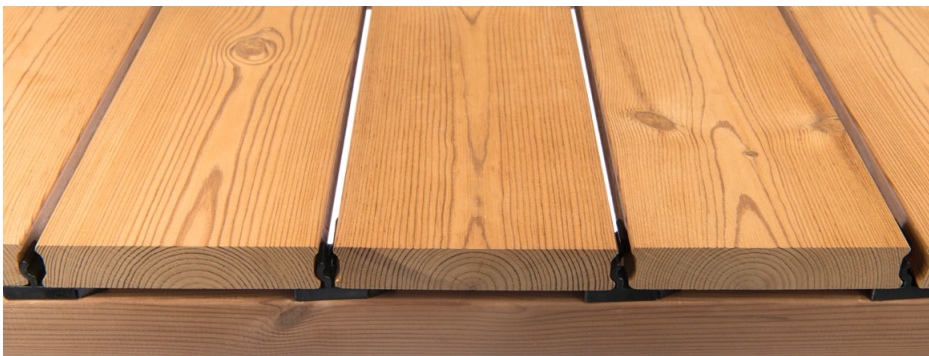
5.2.3 INSTALLATION WITH TENI® CLIPS

Thermory TENI® clip creates a beautiful screwless decking surface with a 6 mm gap between the boards and is suitable for the following Thermory Ash decking profiles: D31, D32, D34, D38, D41.



Thermory Ash, profile: D41

TENI® clip is suitable for the following Thermory Pine decking profiles: D34, D33.



Thermory Pine, profile: D34

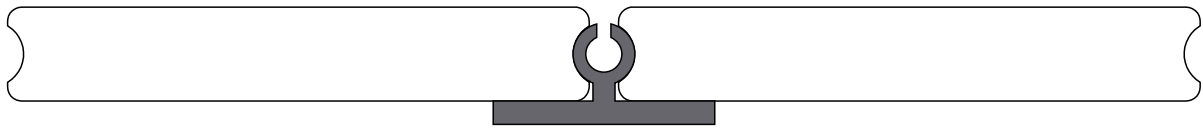


TENI® clip

TENI® clip creates a screwless decking surface with a 6 mm gap between the boards.

The 8 mm clip height guarantees good ventilation of the boards provided that the installation guide is properly followed. The TENI® clip itself is constructed from a UV resistant and weatherproof material, optimized for outdoor conditions. The 3.0 x 45 mm A2-type screw is compatible with wooden beams and the 4.0 x 25 mm screw for ALUC-L aluminum underconstruction beams.

TENI® single boards are also effortlessly easy to replace - there is no need to remove neighboring boards. The 8 mm clip height helps prevent wood-to-wood contact, ensuring proper ventilation.



The gap between the boards and the underconstruction guarantees optimal ventilation, enhances drying of the boards and prevents waterlogging.

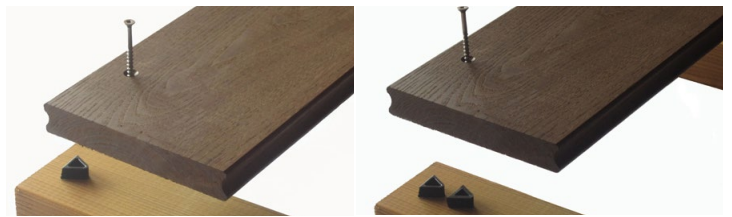
| REQUIRED AMOUNT OF FASTENERS | | |
|-------------------------------|--------|--------------|
| → | pcs/rm | pcs per pack |
| TANI® clip (including screws) | 2.5 | 100 |

TANI® CLIP INSTALLATION

Remove the triangle-shaped corner of the clip: use it to lay the first and the last board of the decking.

1

Use ONE triangle shaped corner for decking widths < 120 mm
Use TWO triangle shaped corners for decking widths > 120 mm



2

Insert the TANI® clip into the groove



3

Insert the screw into the clip, with a max. angle of 65°. Fix the screw, taking care to leave a 6 mm gap between the boards.



4

Lay the next row of boards



5

Use ONE triangle shaped corner for decking widths < 120 mm
Use TWO triangle shaped corners for decking widths > 120 mm



6

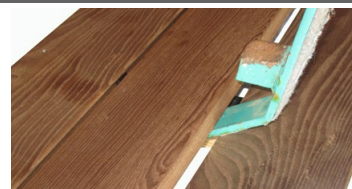
Boards that are not end-matched must have an underconstruction beam on either side of the board-to-board joint to ensure water drains away from the decking. The distance between the two underconstruction beams should be 100-150 mm.



SINGLE DECKING BOARDS ARE EASY TO REPLACE

1

To replace a single board you need only a simple prying rod



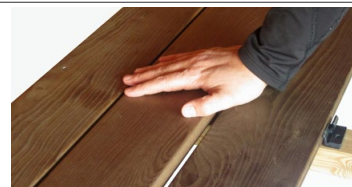
2

Insert the prying rod between the boards and lift the board to remove it



3

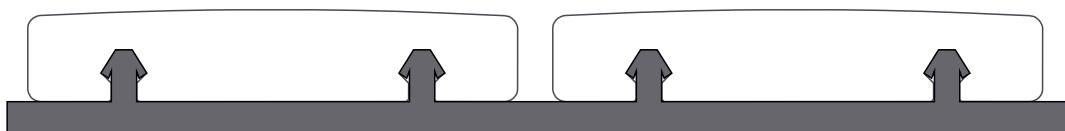
Click the replacement board directly into the space left behind.



5.2.4 INSTALLATION WITH PACS®:

Thermory PaCS® is an innovative fastening solution designed for a quick and easy installation. It consists of specially profiled Thermory boards with a groove on the back side to perfectly fit the JuAn® clips. As a result, there are no visible screw heads, boards are just pressed and clicked into place.

PACS® Powered by [grad](https://www.grad.com)



PaCS® decking is available for profile: D45J. Decking board D45J has special grooves on the back side and a slightly rounded upper face to allow water to flow away.



Thermory Ash
21 x 118



Thermory Pine
26 x 118



PaCS® Strip is a fastening solution for the PaCS® decking. PaCS® Strip is a six-clip strip that fixes three boards sideways onto one joist. The strip ends fit together and are secured to the joist. Deck boards then easily snap onto the clips. The gap between the boards is 5 mm. Stainless steel screws 4.0 x 30 mm and drill bit included with PaCS® Strip.

PACS® DECKING INSTALLATION

1. ASSEMBLY MATERIALS



You will need:

- a power drill
- wood screws
- a spirit level
- underconstruction battens
- PaCS® Strips
- laser or chalk line

2. FIXING THE PAC STRIP



After building a proper underconstruction install the PaCS® Strips on the battens.

Make sure you start all rows of clips in alignment.

3. "PRESS AND CLICK"

Simply "Press and Click" the boards into place!



REQUIRED AMOUNT OF FASTENERS

| → | pcs/rm | pcs/sqm | pcs per pack |
|--------------------------------|--------|---------|--------------|
| JuAn® single clip | 5 | x | 1000 |
| PaCS® Strip (including screws) | x | 7.5 | 300 |

6. Surface maintenance

Thermory® decking does not require surface treatment. However, as with any wood, Thermory wood will naturally age to a silver/grey over time. This process will start immediately and, depending on the amount of UV exposure, will take anywhere from several months to a year. This does not make the wood any less resistant to decay.



Regular care and maintenance will make your decking last longer. We recommend cleaning and maintaining your deck in springtime, before summer starts.

To minimize color changes or restore the dark color, Thermory® decking can be protected by applying Thermory® decking oil or any other regular UV or pigmented UV mineral oil (wax, stain, paint). Natural oils are not recommended as they contain substances that are a food source for biological organisms such as bacteria, mold, etc. Oil can only be applied to clean even dust-free surfaces. Apply a small amount of oil to a small piece of wood to test the color before coating the entire board. Oil all sides of the boards before installation for optimal protection. We recommend following the oil manufacturer's guidelines for the treatment. A light sanding will also remove the surface silvering and restore the original wood tones.

Thermory® decking may show small stress cracks. These are normally not wider than 2 mm and are not limited in length. Surface hairline cracks are a natural occurrence with wood and are no reason to file a claim. The surface of correctly installed Thermory® boards will always swell and shrink faster than its core causing the hairline cracks during the shrinking process. Due to the growing conditions of the wood, some boards will experience more surface-checking than others. Regular application of decking oils can help minimize the occurrence of surface hairline cracks. End checking can be lessened by applying a decking wax to the ends of the boards prior to installation. Use caution that excess wax is not applied to the face of the decking as this may discolor that area of the surface.

7. Additional information

These guidelines are purely informative, based on the best knowledge currently available, and should be used accordingly. Should the general recommendations of this brochure vary from the ones valid in your country, we advise you to follow your country's regulations.

Last updated: August 2018.
All previous versions are null and void.

