

**READ CAREFULLY THIS INSTALLATION SHEET BEFORE STARTING YOUR DECKING PROJECT**  
**Failure to follow these instructions will void the warranty**

## Prior to installation

1. All **fiberon®** decking boards can only be used for outdoor-walking decking application.
2. Prior to installation, boards should be stored and covered from light and water. Use a waterproof opaque cover to better protect the boards.
3. When carrying **fiberon®** boards, carry on edge to have a better weight balance and store on a flat surface.
4. **fiberon®** boards are specifically made for DECKING projects and are not intended for structural applications.
5. There is +3cm tolerance on the board's length. Therefore, most of **fiberon®** boards should be cut at the end to match with the joist spacing and to have a better finishing.
6. For all materials, standard woodworking tools can be used. We advise the use of tungsten carbide saw blades.
7. Wasted materials can be rejected with normal construction debris.
8. Consult local building codes prior to installation.

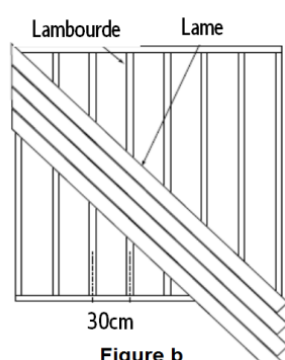
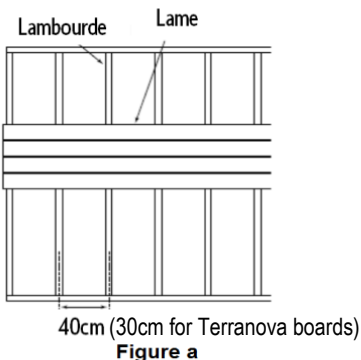
## Joists spacing

To have a better ventilation, **boards should not be laid directly on the ground.**

We recommend the use of Tanalith treated pine joists class 4 CTB-B+ or tropical hardwood joists. Joists should be protected with a cover tape.

When installing deck boards perpendicular to the joists in residential applications, **spacing is 40cm on center or 30cm for Terranova boards (Figure a).** For commercial applications, spacing should be no more than 30cm on center. When the decking is to be laid diagonally, reduce the on-center joist spacing by 10cm (**Figure b**).

### Espacement lambourdes – usage résidentiel



## Boards spacing

All composite materials undergo some degree of linear expansion due to temperature's differences. To compensate the contraction and expansion effects, following boards' spacings should be respected:

- Side to side spacing : 5mm (**Figure c**)
- Between the board side and any permanent structure such as a wall or a post : 6mm (**Figure c**)
- End to end spacing : see table below\*

Difference between the highest temperature and the day installation temperature*		10°C	20°C	30°C	40°C	50°C
		10°C	20°C	30°C	40°C	50°C
Length of the board	1m	0,4	0,7	1,1	1,5	1,8
	2m	0,7	1,5	2,2	2,9	3,6
	3m	1,1	2,2	3,3	4,4	5,5
	4m	1,4	2,9	4,4	5,8	7,3
	5m	1,8	3,7	5,5	7,3	9,1
	6m	2,2	4,4	6,6	8,8	10,9

\* Coefficient of thermal expansion per linear meter = 0,036mm/°C

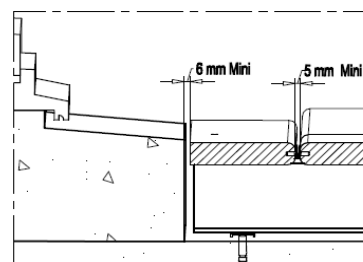
\* Spacing is given in mm

*Due to the heat, wood-plastic composite will expand (not like natural wood)*

*Example: 15°C during installation, maximal temperature around the project is 35°C. For a 3.6m board, expansion would be (35-15= 20°C = 2,5 mm maximum)*

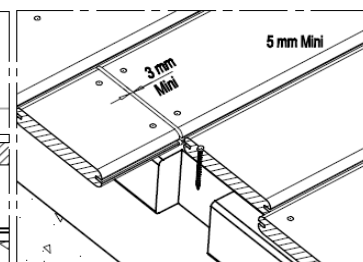
In general, and in case of any doubt, **we recommend leaving a 3mm gap end-to-end.**

**Side to side spacing**



**Figure c**

**End to end spacing**



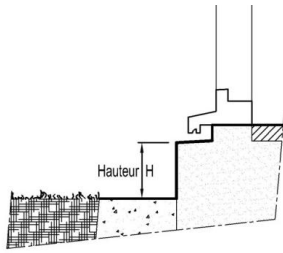
**Figure d**

Respecting these spacing requirements will:

- Allows good ventilation
- Helps to remove organic debris
- Corresponds to **fiberon®** warranty terms

## Installing on concrete ground

Attention : do not use wood plastic composite joists !  
Joists should have a minimum of 28mm thickness to allow a better ventilation.



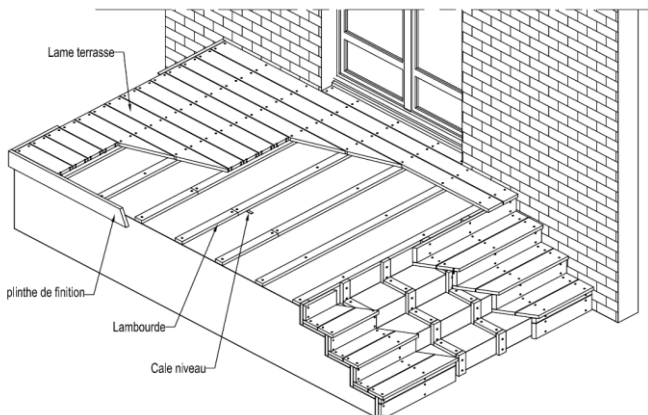
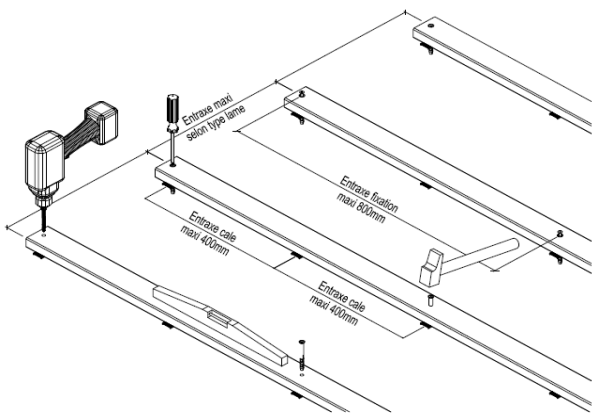
The minimum height H (between the ground level, and the top level of the deck) should be more than 6cm.

Joists should be fixed to the ground with nylon anchors screws. Screws dimensions can vary depending on the joist thickness. In general, the screw length should be 2.5 times the joist thickness.

Nylon anchors screws spacing should be 80cm maximum.  
Plastic pads should be put under the joists and spaced each 40cm. This will allow water circulation and insure good ventilation under the joists.

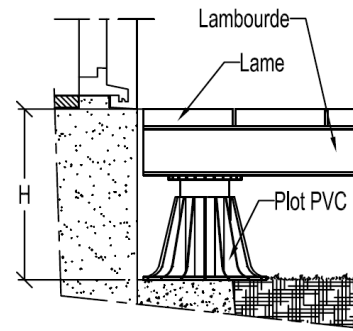
We recommend the use of **Bitudeck® cover tape** on the joists. It reduces walking sound effect and protects the joists from water (rain).

Unobstructed air flow is required below deck. **Promote proper drainage and ventilation.** Insufficient ventilation will void the warranty.



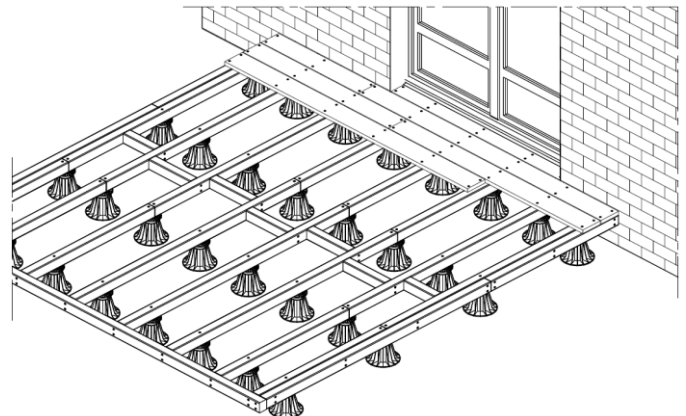
## Installing on wooden joists + pedestals

In case your deck will lay over a non-concrete ground (gravels, sand...), we recommend the use of adjusted pedestals.



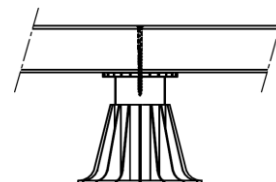
Pedestals should be uniformly positioned under the joists. Spacing will vary depending on the joist thickness.  
For residential use, spacing should be as follow:

Joists of 30 – 40 mm thickness = 1 pedestal every 40cm  
Joists of 40 – 50 mm thickness = 1 pedestal every 50cm  
Joists of 50 – 60 mm thickness = 1 pedestal every 60cm  
Joists of 60 – 70 mm thickness = 1 pedestal every 75cm  
Joists of 70 – 80 mm thickness = 1 pedestal every 90cm



If the ground is not flat, we recommend making a weak mortar to have a stable structure. Before installing the pedestals, spread a **weed control film** of 100gr/m<sup>2</sup> minimum, to prevent growing weeds.

Use long screws to fix the joists on the pedestals.



If joists are more than 3m length, we recommend fixing wooden spacers in between to avoid twisting. Therefore, joists are perfectly parallel to each others.

## Fiberon® boards installation with COBRA® hidden fasteners

Easy and quick to install, COBRA® fastener is a hidden deck fastener designed specifically for **fiberon®** decking boards. COBRA® fasteners allow an exceptional hold-down power thanks to the claws located on the tabs. The result is a stable and smooth deck surface.

1. Position the first deck board and leave a 6mm gap from any permanent structure.
2. Pre-drill the first deck board with a 3mm drill. Use Cobra® composite decking screws along the outside edge. The screw placement should be at 25mm from the edge of the board. Do not over-tighten the screws.
3. Insert COBRA® fasteners into the groove channel of the 1<sup>st</sup> board at every support joist (**Figure 1**).
4. Position the 2<sup>nd</sup> board against the fasteners. Slightly lift the outer edge of the 2<sup>nd</sup> board to ease the assembly (**Figure 1 bis**). COBRA® fasteners allow a 5-6mm board spacing.
5. Once 1<sup>st</sup> and 2<sup>nd</sup> boards are positioned, tighten the COBRA® screws down. A special bit is provided. Do not over tighten the screws (**Figure 2**). Use a plastic hammer to tighten the 2<sup>nd</sup> board to the 1<sup>st</sup> one (**Figure 3**). Repeat the same steps for next boards.
6. Adjust the last board width with a circular saw, and fix it with Cobra® composite decking screws along the outside edge
7. To obtain a fascia, you can cut a board in the length direction and place it alongside your deck.

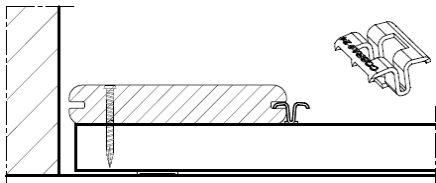


Figure 1

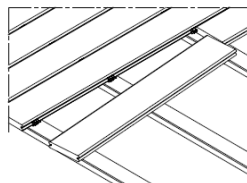


Figure 1 bis

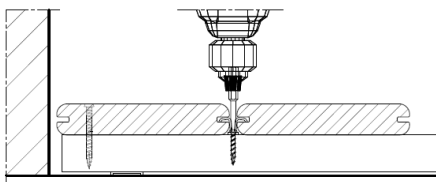


Figure 2

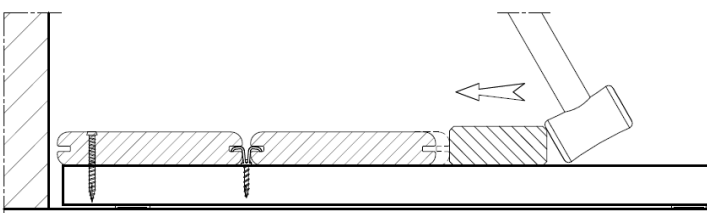
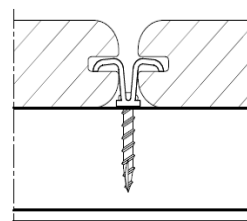


Figure 3

**TIGHTENING TORQUE:** You should carefully tighten the hidden fastener screw down. High tightening torque may break the screw head.

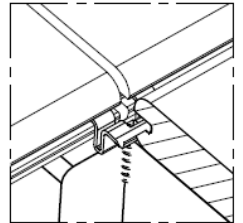
**FOR TROPICAL HARDWOOD JOISTS:** You should absolutely pre-drill before fixing the hidden fastener screw into the joist. For treated pine joists, you can screw directly (without pre-drilling).



Defected / damaged boards replacement

COBRA® hidden fasteners could fix two boards end-to-end.

This allows an easy board replacement without altering the rest of the deck.



**fiberon®** boards are 100% reversible. Both top and bottom faces are similar. It is possible to turn over the board and use the non-damaged face.

1. Unscrew COBRA® fasteners that hold the board to be turned over / replaced (including fasteners that holds boards A and B) and slide them inside the groove channel of boards A and B (**Figure 1'**)
2. Position the clean face (or new board) and slide the COBRA® fasteners back in the groove channel of the replaced board (using a screw driver) (**Figure 2'**). Tighten the screws down (a special bit is provided)

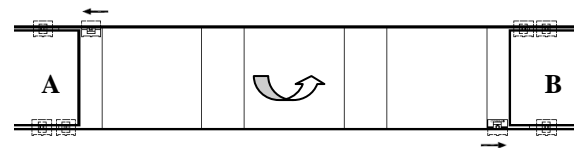


Figure 1'

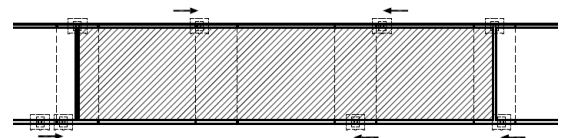
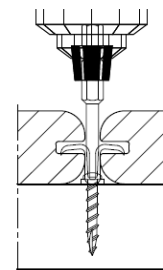


Figure 2'



A special bit is provided to allow fastening COBRA® screws between the boards

**fiberon® boards installation with COBRA® composite screws**

We strongly recommend the use of COBRA® composite screws. They have a special coating against corrosion, and are engineered specifically to match with all kind of composite decking. Galvanized screws are prohibited.

Pre-drill all screws holes at 25mm from board ends with a 3mm countersink drill bit. Even though it is not necessary, pre-drilling is recommended to have better looking finished projects.

Drive fastener perpendicular to deck surface (not at an angle) until top of screw head flush with deck surface (Figure e).

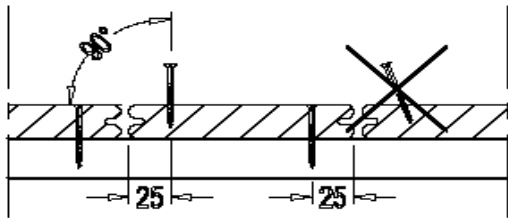


Figure e

When screwing, some mushrooming (residues) may appear around the screw head. For a clean finishing, we recommend the use of COBRA® composite screws. This will reduce the mushrooming effect. Different colors are available to match with most popular WPC decking colors. (Figure f)



Figure f

Each board requires 2 screws at each end, but only 1 screw per joist (Figure g). Designed for the professional deck builder, this installation efficiency results in a 40% reduction in screws and a 30% reduction in labor.

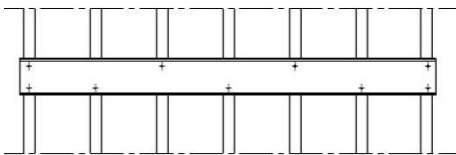


Figure g

**Wood grain patterns**

graining on fiberon® Professional is directional. Different looks can be achieved by laying the decking in the same or alternating directions (Figure h).

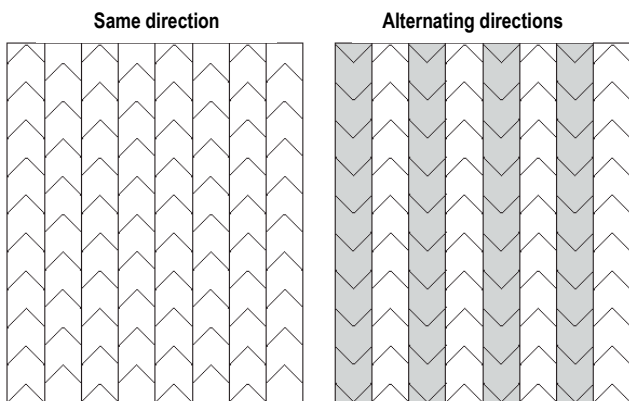


Figure h

The graining pattern repeats approximately every 90cm along the board length. To ensure you orient the boards to achieve the desired effect, a directional arrow is inked on the side of each board showing the direction of the graining.

During the planning phase of any deck project, choose the desired effect to have a homogenous look and be sure that boards are correctly oriented.

**Fascia / trims / deck finishing**

Equalize edge decking boards with a circular saw, and fasten a fascia board with COBRA® composite screws every 40cm (on each joist end). Do not forget to leave a 3mm gap between end-to-end fascia, to allow natural thermal expansion (Figure i).

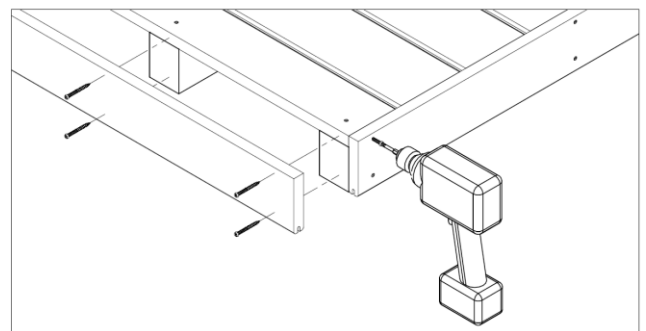
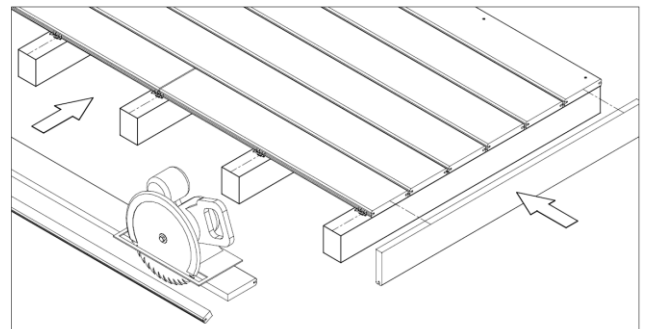


Figure i

**Important notes**

- fiberon® boards cannot be glued.
- Do not fix parts such as posts, pools covers.. directly on deck boards.
- Leave a gap for thermal expansion around parts inserted in the deck board such as posts, lights etc.
- For swimming pool shed, shed post cannot sit on non structural boards. Shed wheels should be on rails to not damage deck boards
- For swimming pools, we do not recommend the use of fiberon® boards as trims directly in contact with water. Better use a stone trim.
- Color can differ slightly from one lot to another, due to a different wood sawdust supplies. Colors are not contractual.