



Deck Installation

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Deck Installation Instructions

Getting started

1. Prior to installation, store on a flat surface and cover with non-translucent material.
2. When carrying **fiberon®** boards, carry on edge for better support. Never dump fiberon materials when unloading
3. **fiberon®** planks are specifically made for decking projects and are not intended for structural applications
4. For all **fiberon®** materials, standard woodworking tools may be used, as per applicable manufacturer's instructions.
5. Scrap can be discarded with normal construction debris.
6. Consult local building codes prior to installation.

Joists spacing

When installing deck boards perpendicular to the joists in residential applications, spacing is 40cm on-center (**figure a**).

Commercial applications 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**).

Joists spacing

	Angle 90°	Angle 45°
Commercial	30cm	20cm
Residential	40cm	30cm

Residential joist spacing

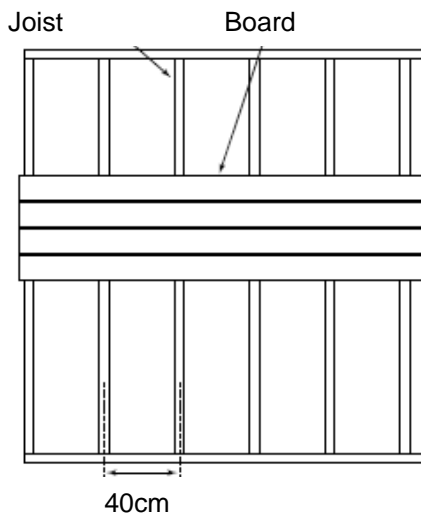


Figure a

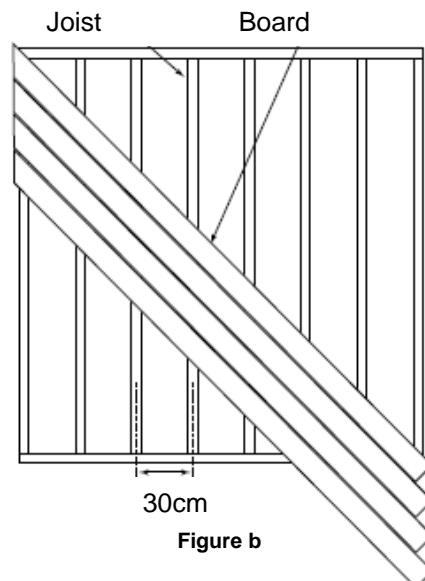


Figure b

Board spacing

All decking materials, whether wood, composite or metal, undergo some degree of linear expansion with the changes of weather and the season. To compensate for the effects of contraction and expansion, the following installation standards must be maintained:

- Side to side spacing between the boards : 5mm (**Figure c**)
- Between the deck board and any solid structure such as a wall or a post : 6mm (**Figure c**)
- Between board ends : See the table below *

Difference between the highest temperature and the day installation temperature		10°C	20°C	30°C	40°C	50°C
Total length of the boards	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

* In case of any doubt, leave a spacing of 3mm (**Figure d**)

Adhering to these spacing parameters will:

- Promote proper drainage and ventilation.
- Help in the removal of organic debris.
- Meet the requirements of the **fiberon®** warranty.

Fasteners

We recommend the use of **Fiberdeck®** composite screws. These screws are engineered specifically to work with composite decking and prevent mushrooming, resulting in better looking finished projects.

Boards may not be fastened within 25mm of board end (**Figure e**)

Spacing side to side

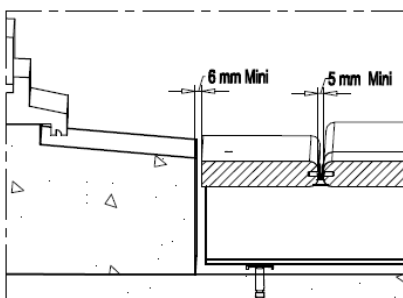


Figure c

Spacing end to end

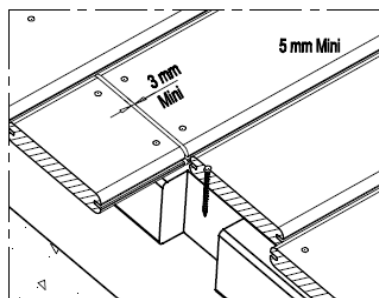


Figure d

Fasteners

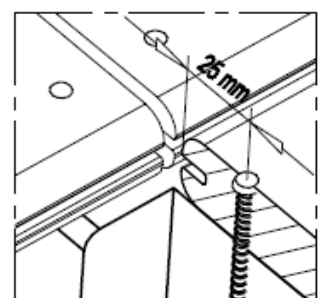


Figure e

Boards installation

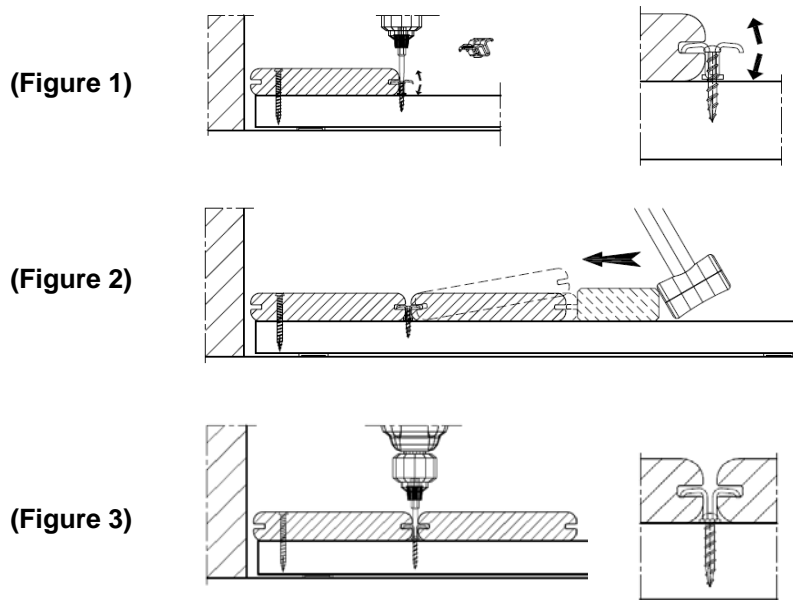
Start from the outside edge and progress to the wall or any permanent structure.

You may have to choose between two types of fastening:

Installation with hidden fasteners

Easy and quick to install, COBRA® fastener is a hidden deck fastener designed specifically to **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 Fiberdeck® composite decking screws along the outside edge. The screw placement should be at 25mm from the edge and 35mm from the end to prevent cracking of the board. Do not over-tighten the screws.
3. Insert COBRA® fastener into the groove channel of the board at every support joist. Install the screw (provided with the fasteners) and do not over-tighten yet (**Figure 1**)
4. Position the next board against the fastener. Slightly lift the outer edge of the board to ease the assembly of the board onto the fastener (**Figure 2**)
5. Tighten the COBRA® screws down. A special bit is provided (**Figure 3**)
6. Continue the same procedure till the deck is finished. Adjust the final board and fix it with Fiberdeck® composite decking screw.
7. To obtain a fascia, you can cut a board in the length direction and place it alongside your deck.

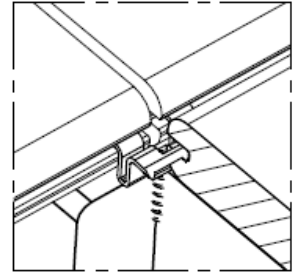




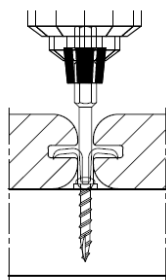
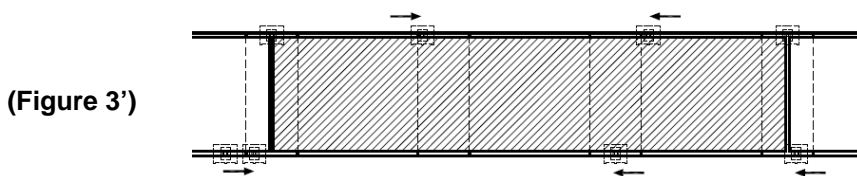
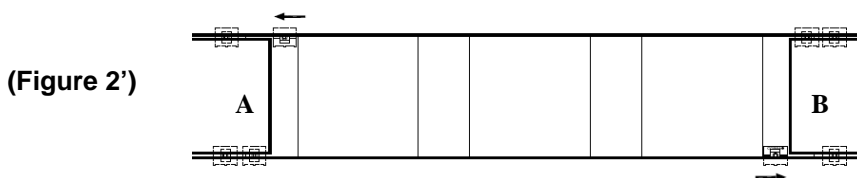
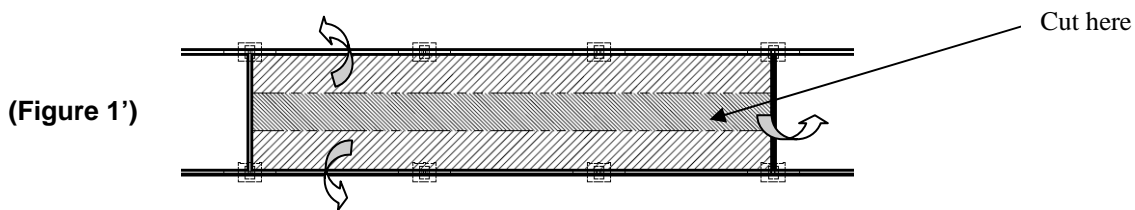
Deck board replacement

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

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



1. Make two parallel cuts down the center of the board to be replaced. Remove the center section from the board and the remaining two pieces attached to the fasteners (**Figure 1'**)
2. Unscrew the fastener used to attach the damaged board. Slide the COBRA® fasteners into the side channel of boards A and B (**Figure 2'**)
3. Position the new board and slide the COBRA® fasteners back in the side channel of the new board. Make sure that all COBRA® fasteners are on the joists and then tighten the screws down. A special bit is provided (**Figure 3'**).



A special bit is provided to allow fastening the hidden fastener screws between the boards

Installation with Fiberdeck® composite screws

- ALWAYS** Pre-drill all fastener holes at board ends prior to installation with a 3mm counter sink drill bit.
- ALWAYS** Drive fastener perpendicular to deck surface (not at an angle) into board until top of screw head is flush with deck surface. Boards may not be fastened within 25mm of board end (**Figure f**)
- NEVER** OVER TIGHTEN SCREWS! Over tightening will induce cracking at board ends.
- ALWAYS** Use fasteners designed for composite decking. This will reduce mushrooming.

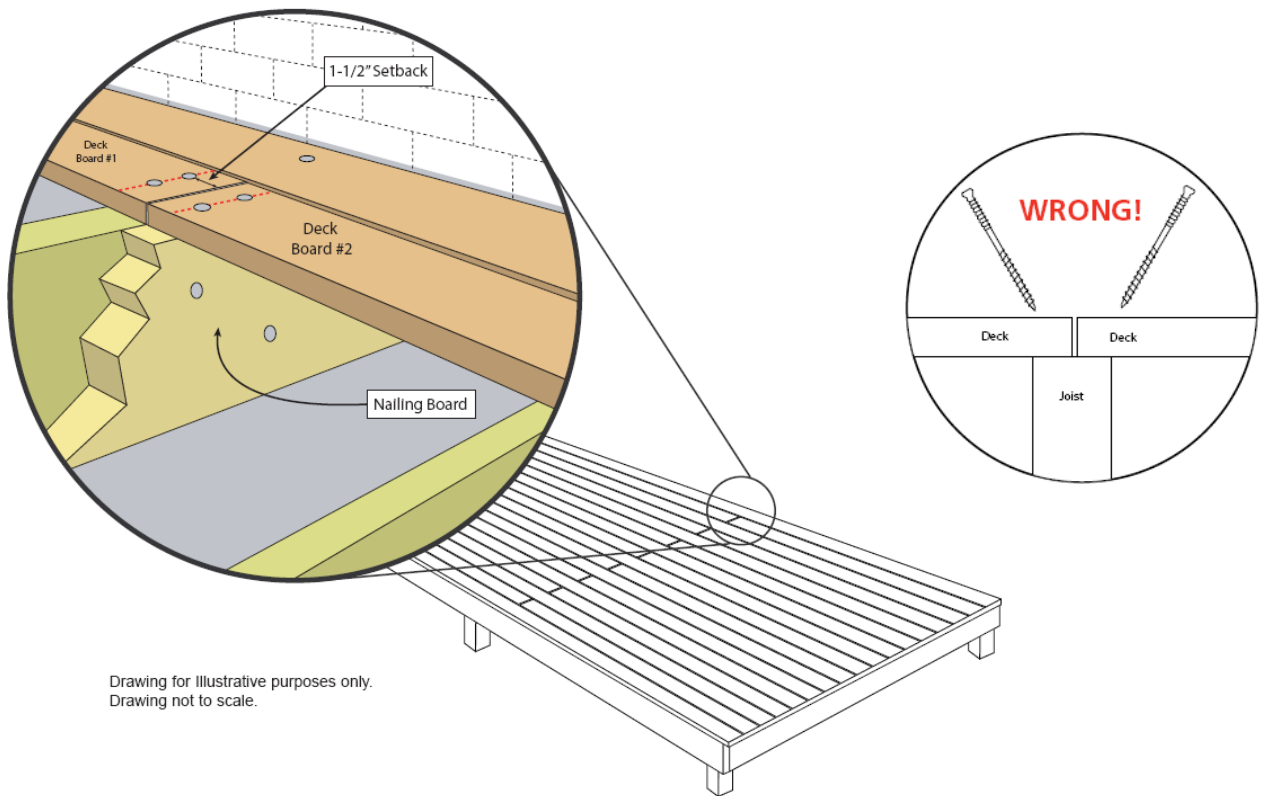


Figure f

We recommend the use of **Fiberdeck®** composite screws. These screws are engineered specifically to work with composite decking and prevent mushrooming, resulting in better looking finished projects (**Figure g**)



Figure g

This drawing illustrates our recommended fastener placement. Use two fasteners at the beginning and ending of each deck board. All other joists only require one fastener in an alternating pattern (**Figure h**).

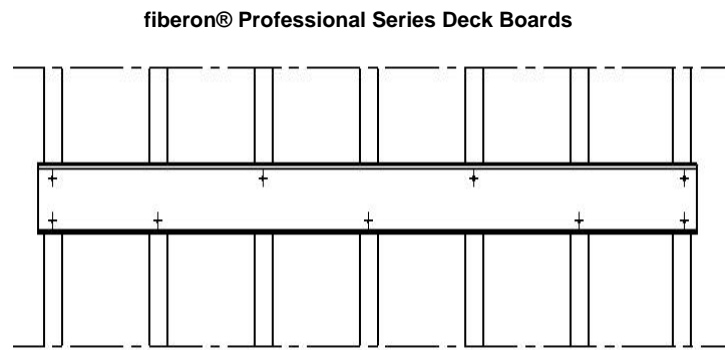


Figure h

Designed for the professional deck builder, this installation efficiency results in a 40% reduction in fasteners and a 30% reduction in labor. Since **fiberon® Professional Decking** is grained identically on both sides, two usable faces are available. This reversibility may reduce waste by 15%. While face fastening is allowed on all **fiberon®** decking products, the use of hidden fasteners is highly recommended with **fiberon® Tropics** to create a smooth, unblemished, tropical hardwood surface.

Wood grain patterns

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

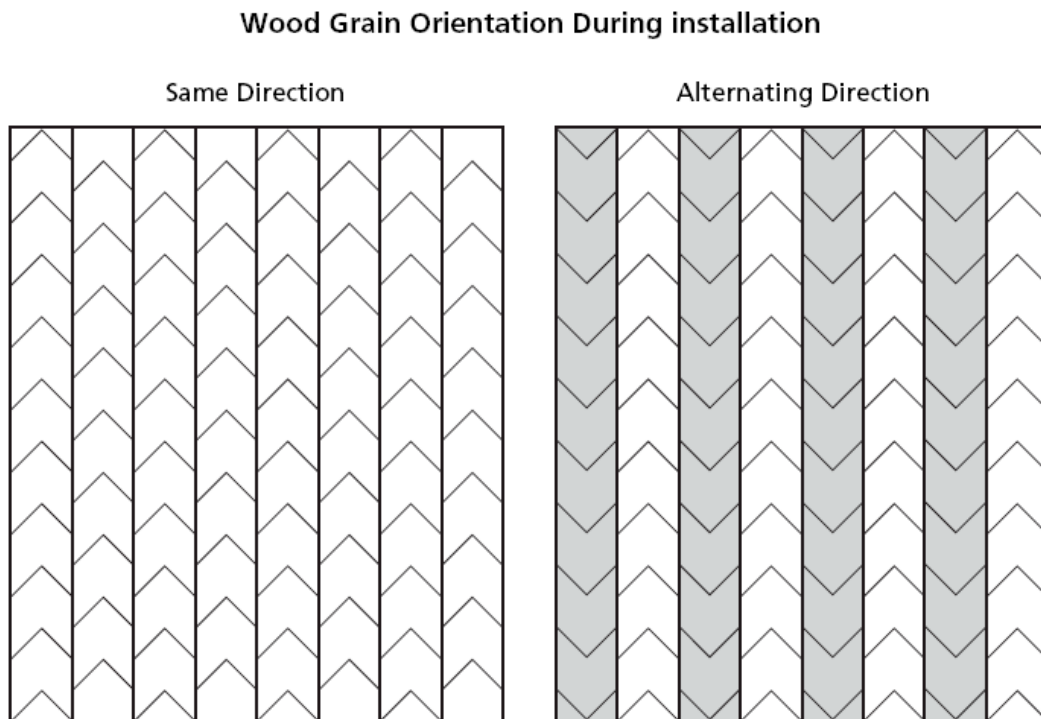


Figure i

The Graining Pattern repeats approximately every three feet along the board length. To ensure you orient the boards to achieve the desired effect, a directional label is affixed to each board showing the direction of the graining. Should this label be misplaced or discarded, you can use a key feature of the graining pattern as a reference. During the planning phase of any deck project, notations about grain direction should be made to achieve the desired effect (**figure j**)

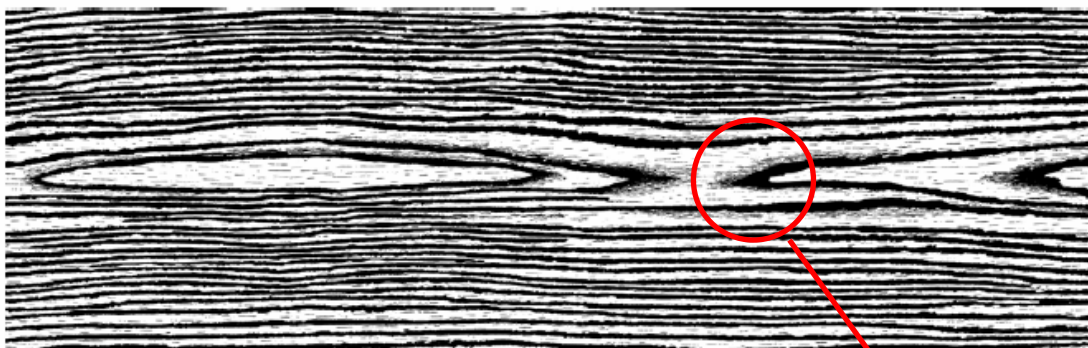


Figure j

Key feature

Fascia

fiberon® decking is complimented by a color matched fascia board. Available where **fiberon®** decking products are sold, the fascia board should be fully supported by a sub-fascia made of lumber and fastened with 3 fasteners every 40cm on-center (figure o).

Fascia may also be used for risers in the construction of stairs and completes the look. Ripped to width, **fiberon®** fascia may be used to wrap posts or stringers, but it is NOT intended for structural applications (**Figure k**)

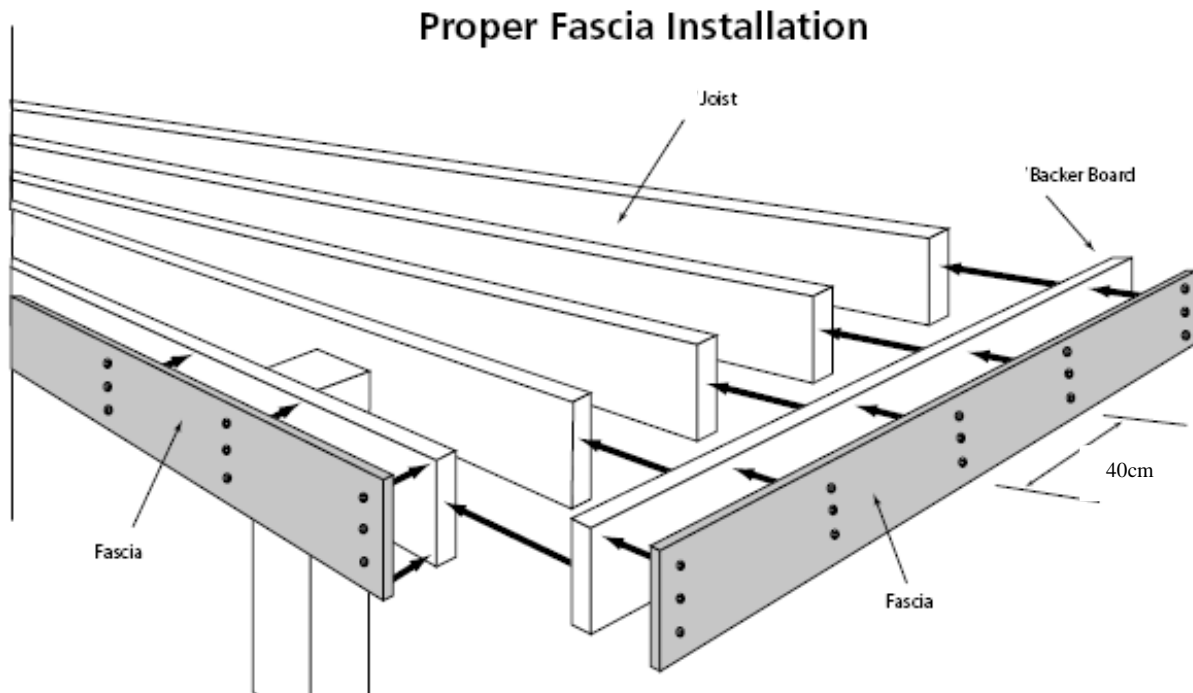


Figure k

Ventilation

To prevent excessive water absorption, an unobstructed air flow is required below deck. Flat areas where standing water may gather should be addressed by grading or improved drainage. For decks with limited ventilation, add flow through vents at various locations around rim joist.