



Installation Instructions

Composite decking

This installation guide must be read before starting any work. If these instructions are not followed, the warranty shall be rendered null and void.

1. All Fiberdeck® deck boards are intended for pedestrian use OUTDOORS. They are not intended for structural use.
2. Before installation, boards must be stored at the worksite in a flat position for 48 hours.
3. Avoid any impacts during unloading. Carry boards on their narrow edge for better resistance, and store them on a flat surface.
4. The lengthwise dimensional tolerance of boards is + 3 cm. Some boards may be delivered with an oversize, and their ends must be cut before installation.
5. Cuttings can be disposed of along with normal building debris.
6. As concerns making the structure, and depending on the use of your deck (residential or public), we recommend complying with the installation rules of DTU 51-4.

KEY POINTS TO FOLLOW

1. ENSURE GOOD SOIL DRAINAGE

Avoid any water stagnation under the boards, and ensure good ventilation of the structure.

2. ENSURE SUFFICIENT SUBSTRUCTURE HEIGHT

The height of the substructure must be sufficient to ensure adequate ventilation of the whole decking.

3. COMPLY WITH THE CENTRE-TO-CENTRE DISTANCES OF THE JOISTS

Maximum center to center distance (from 30cm to 40cm), defined for installation perpendicular to the boards must be as recommended in the product data sheet. For commercial or public use, reduce the centre-to-centre distance by 10 cm. When boards are installed diagonally, decrease the spacing between boards by 10 cm.

4. DOUBLE JOIST

Double joists are required to join 2 board ends to wooden joists. For installation on an aluminium structure, the double joist can be replaced by fixing a deck boards jointing square.

5. PROTECT THE JOISTS

Cover wooden joists with barrier tape, and install them on pads with a thickness of 5 mm minimum.

6. RESPECT THE EXPANSION CLEARANCE

All the expansion clearances have to be respected: between the boards, all around the decking and especially between each end board (5mm). In fact the expansion mainly occurs on the boards lengthwise.

7. USE THE RIGHT CLIP MODEL

Exclusively use Cobra® clips recommended by Fiberdeck® depending on board model. Within 3 km from a sea or ocean and in compliance with DTU 51.4, we recommend use of stainless steel screws A4 – AISI 316. Contact us to order specific A4 – AISI 316 screws adapted to our Cobra 20 and Cobra 24 clips.

8. STORE ON A SUITABLE SURFACE

The boards should be stored before installation on a clean, hard and flat surface to avoid any risk of warping. For example, a grass surface is not suitable.

TOOLS:



1 - GROUND PREPARATION

The ground must be stabilised and well drained in order to prevent any risk of water stagnation under the boards. The structure must not in any case prevent rainwater drainage and free air circulation.

- **INSTALLATION ON TILES** (concrete tiles, flagstones, ceramic tiles) The tile surface must have a minimum slope of 2% in order to ensure good evacuation of water rainwater.
- **INSTALLATION ON POROUS / LOOSE SOIL** (dirt, gravel) The ground must be covered by geotextile fabric of 100 g/m² minimum to prevent weed growth. Joists may rest either:
 1. on adjustable polymer pedestals of the NIVO® type. The pedestals must be uniformly spread out under the joists. They are positioned at variable distances depending on joist thickness.
 2. on foundation screws of the NIVO® type, with cross joists.

2 - SELECTION OF JOIST and SUPPORT TYPE

The joists must have a thickness greater than 30 mm and a width greater than 50 mm to enable good ventilation and easy end-to-end jointing.

We recommend use of one of two joist types:

1. **Treated pine joists**, class 4 CTB-B+, protected by joist barrier tape of the Bitudeck® type.
2. **NIVO®** aluminium joists, 40 x 60 mm or 30 x 50 mm

Composite joists must not be used.

3 - INSTALLATION OF JOISTS

The joists must under no circumstances rest directly on the ground. They must be installed on pads with thickness of 5 mm as a minimum.

They must be installed perpendicularly to the boards, with the recommended centre-to-centre distance (30 cm, 35 cm or 40 cm) for residential use (Figure A) and 30 cm for commercial or public use.

When boards are installed diagonally, decrease the spacing between boards by 10 cm (Figure B).

Comply with the maximum centre-to-centre distance of **X cm (according to the product data sheet) between the joists (X-10cm in commercial installation).**

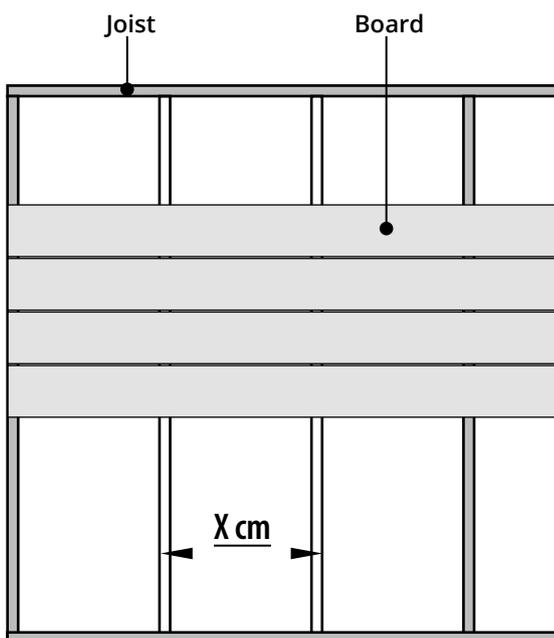


Figure A

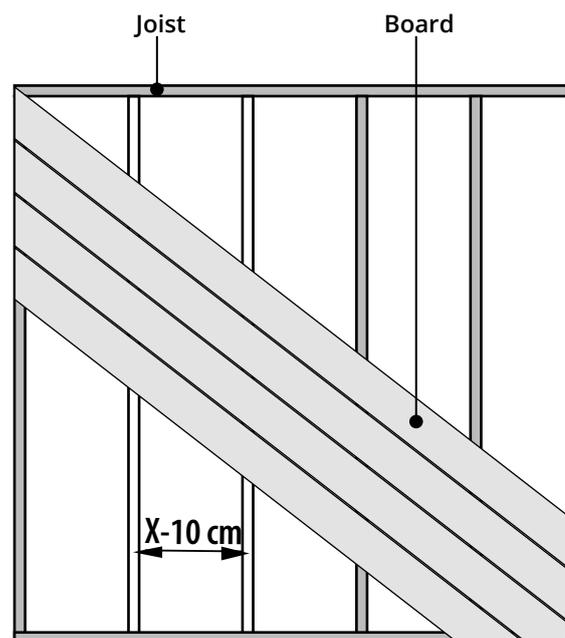
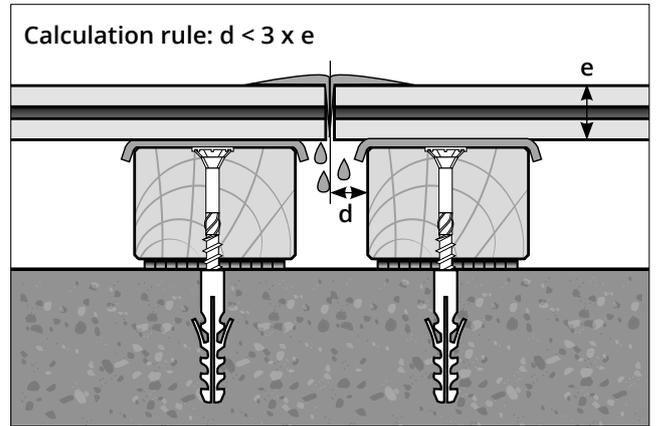
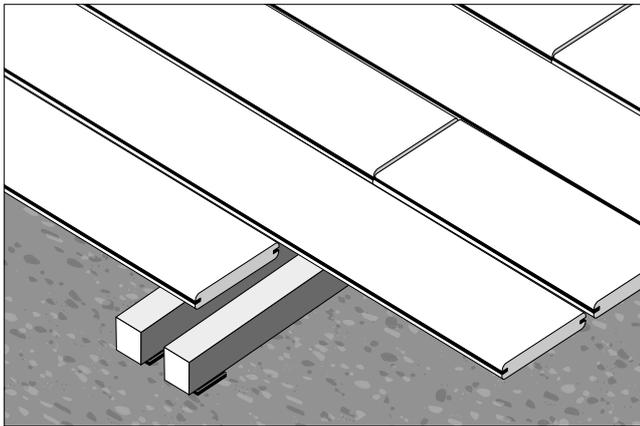


Figure B



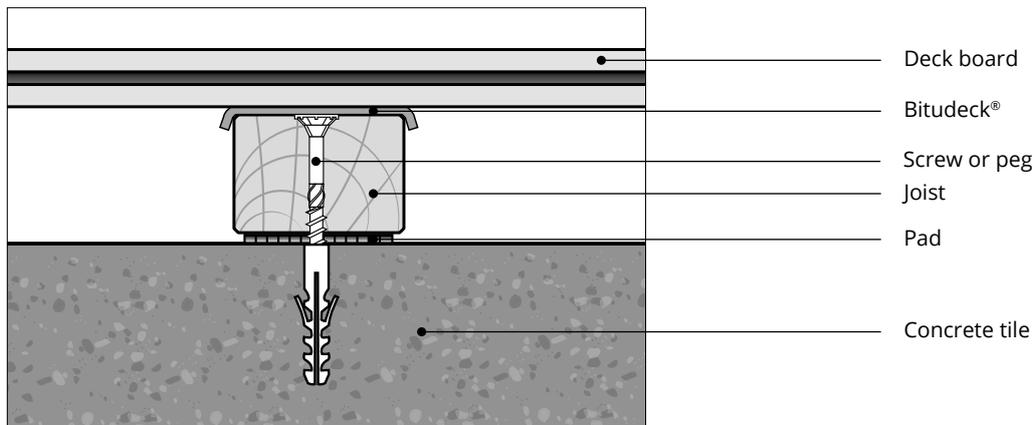
**Do not block air circulation under the board.
Avoid any and all condensation. Insufficient ventilation renders the warranty null and void.**

INSTALLATION ON TILE SURFACES

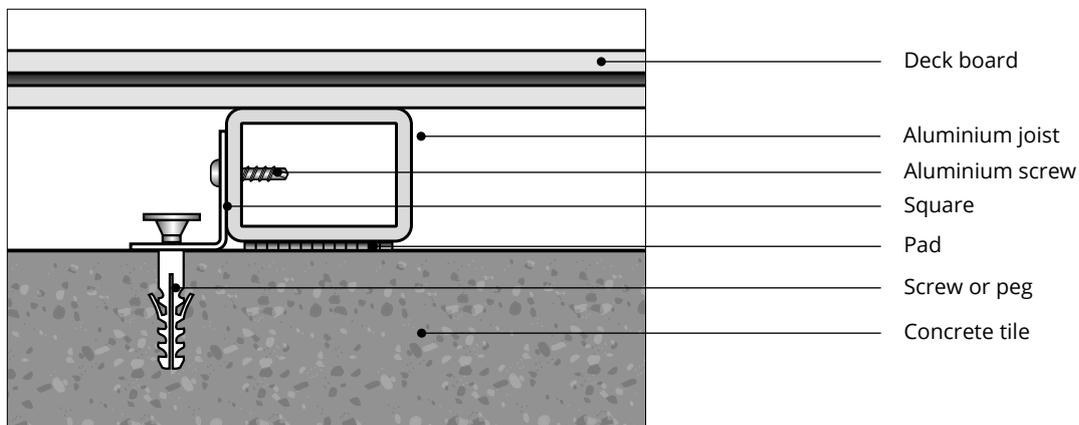
Joists must be fastened to hard ground with pegs. Peg size varies depending on joist height. As a general rule, peg length must be 2.5 times the height of the joist.

Pegs must be spaced no more than 80 cm apart.

Situation 1: Wooden joist on concrete slab



Situation 2: Aluminium joist on concrete slab

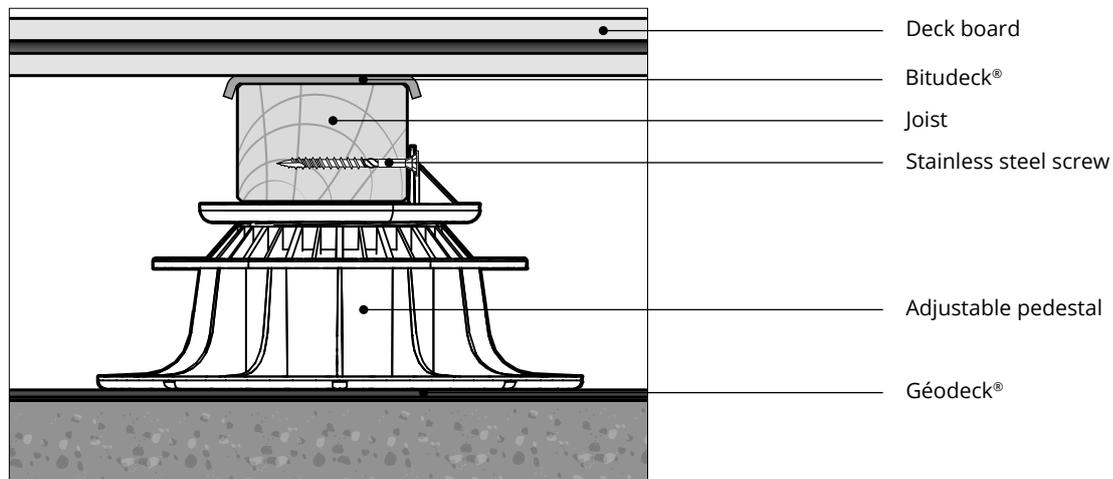


INSTALLATION ON PEDESTALS

Adjustable pedestals must be placed on stable ground. On unstable ground, it is preferable to install on foundation screws.

The spacing between 2 pedestals must not exceed 80 cm, depending on joist height. The pedestal must be properly adjusted so that it is in contact with the joist. Check that all the joists are level.

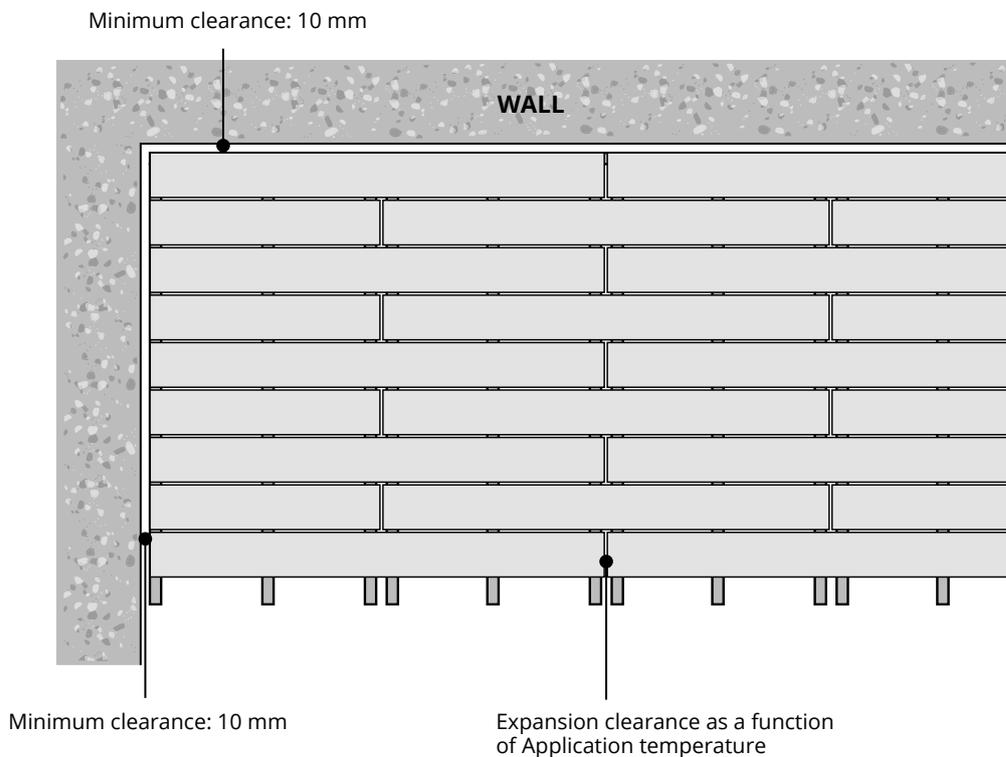
Situation 3: Wooden joist on pedestals



When wooden joists are used, it is recommended to fasten spacers when joist length is greater than 3 m. These spacers must be attached between joists to maintain them in the axis and prevent any warping.

4 - INSTALLATION OF BOARDS

It is important to note that deck boards should preferably be installed perpendicular to the walking direction, particularly in public spaces.



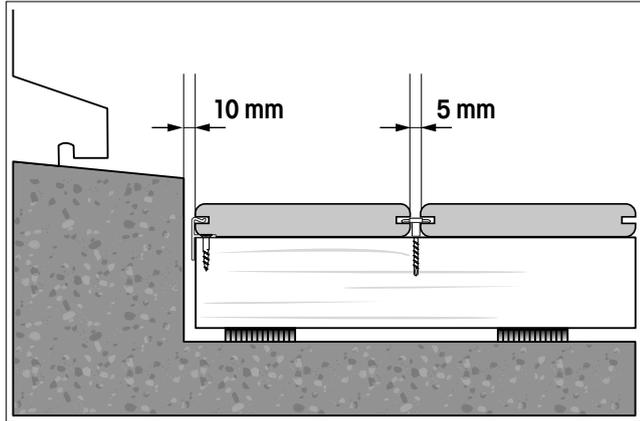
SPACING BETWEEN BOARDS

The general rule is to leave a space of 5 mm between each board and for end-to-end joints. Boards expand lengthwise only under the effect of heat. An average value of 1 mm per linear meter should be used for a temperature variation of 30°C. To maintain constant spacing of 3-4 mm between boards, it is recommended to take the following values into account:

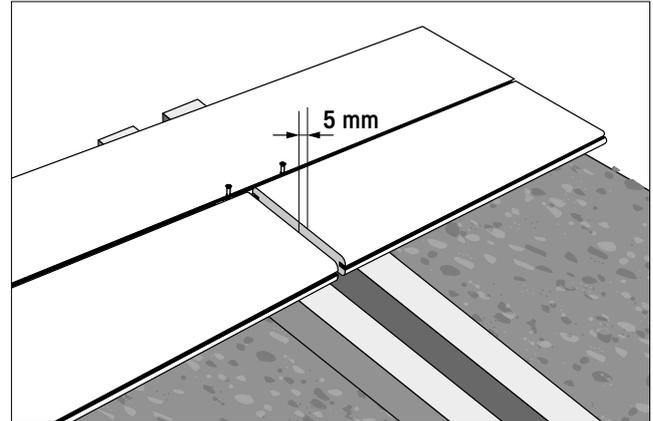
| Installation temperature | Required clearance: Board 3.6 m - Board 2.4 m |
|--------------------------|---|
| 0 à 10 °C | 7 mm / 5 mm |
| 10 à 20 °C | 6 mm / 4 mm |
| 20 à 30 °C | 5 mm / 3 mm |
| + de 30 °C | 4 mm / 2 mm |

We recommend using a Deckspacer® board spacer in order to ensure these lengthwise spacings. It is also necessary to leave a space of 10 mm minimum between the deck and any wall.

Side-to-side example

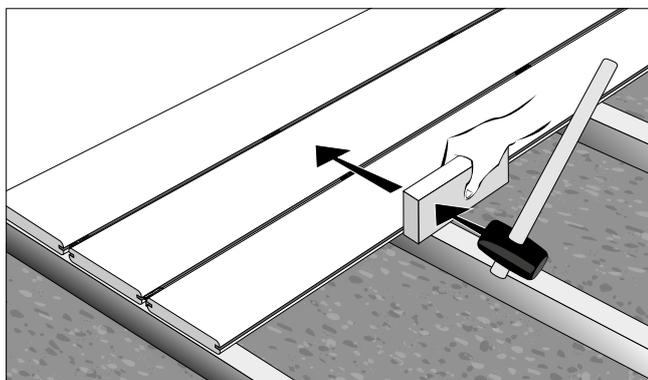
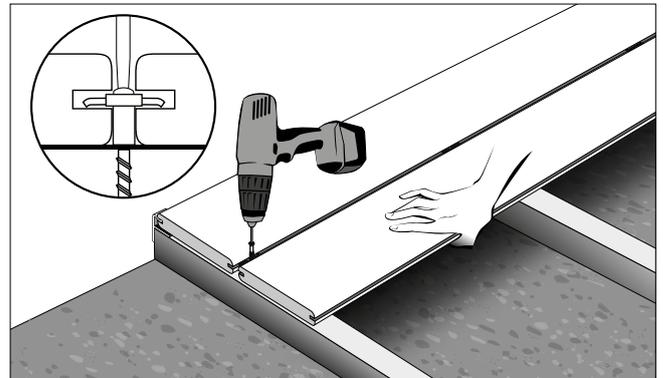
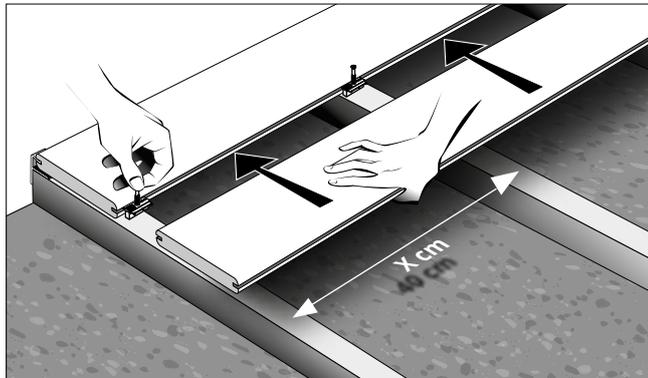


Espacement entre bout



Exclusively use Cobra® clips and screws from FIBERDECK®. This is mandatory for the warranty to remain in effect. These clips ensure good spacing between boards placed side by side.

FASTENING WITH COBRA® HYBRID 8-18



- 1 - First, fasten the starting clips on the joist, then insert the first board.
- 2 - Insert the clips in the groove of each joist.
- 3 - Position the following board.
- 4 - Screw in the clips while holding the board firmly in your hand. The clip jaws must block the board.
- 5 - Strike with a mallet to ensure that the board is stopped against the clip. Then repeat the operation.
- 6 - For the end-to-end jointing of 2 boards, use a Deckspacer® board spacer to ensure a clearance of approximately 3 to 5 mm.

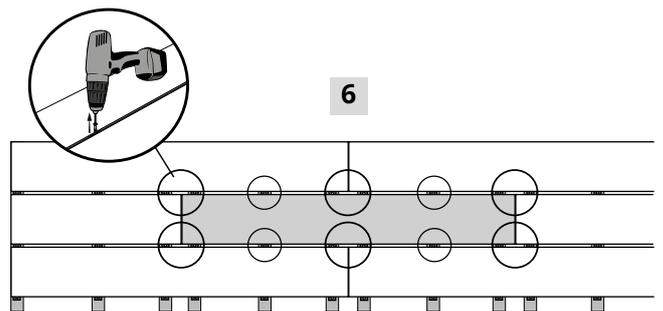
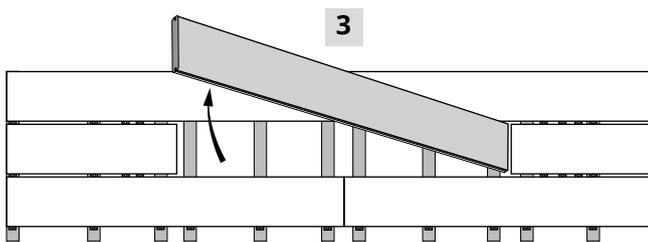
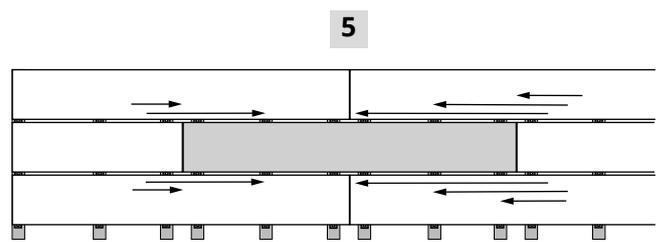
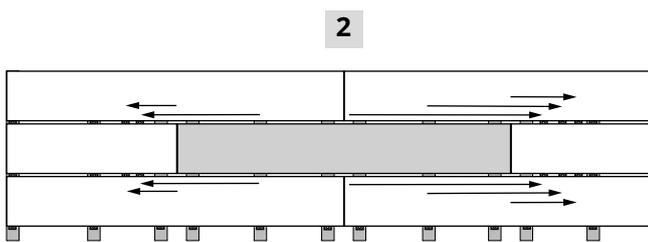
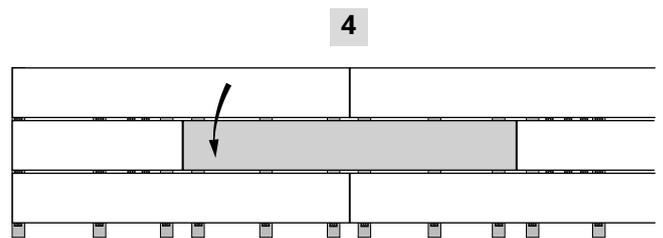
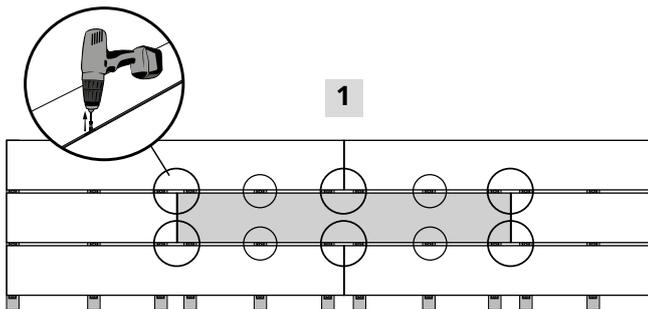
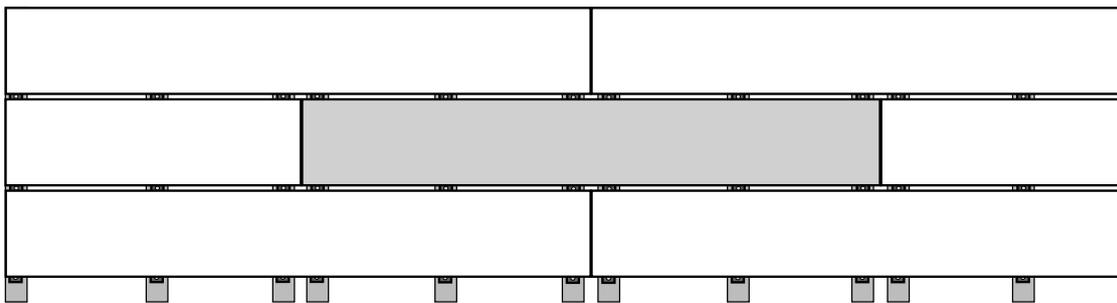


Installation video
Cobra® Hybrid 8-18

5 - REMOVING A BOARD

The Cobra® clip can be used to replace a board without having to remove the entire installed deck.

- 1 - Unscrew the Cobra® clips that fasten the board to be replaced, as well as junction clips of adjacent boards (Figure 1).
- 2 - Slide it in the board grooves (Figure 2).
- 3 - Remove the board and position the new board (Figures 3 and 4).
- 4 - Put the clips back on the joists by sliding them in the grooves with a screwdriver (Figure 5).
- 5 - Screw the clips back in with the special end-piece provided in the clip bag (Figure 6).



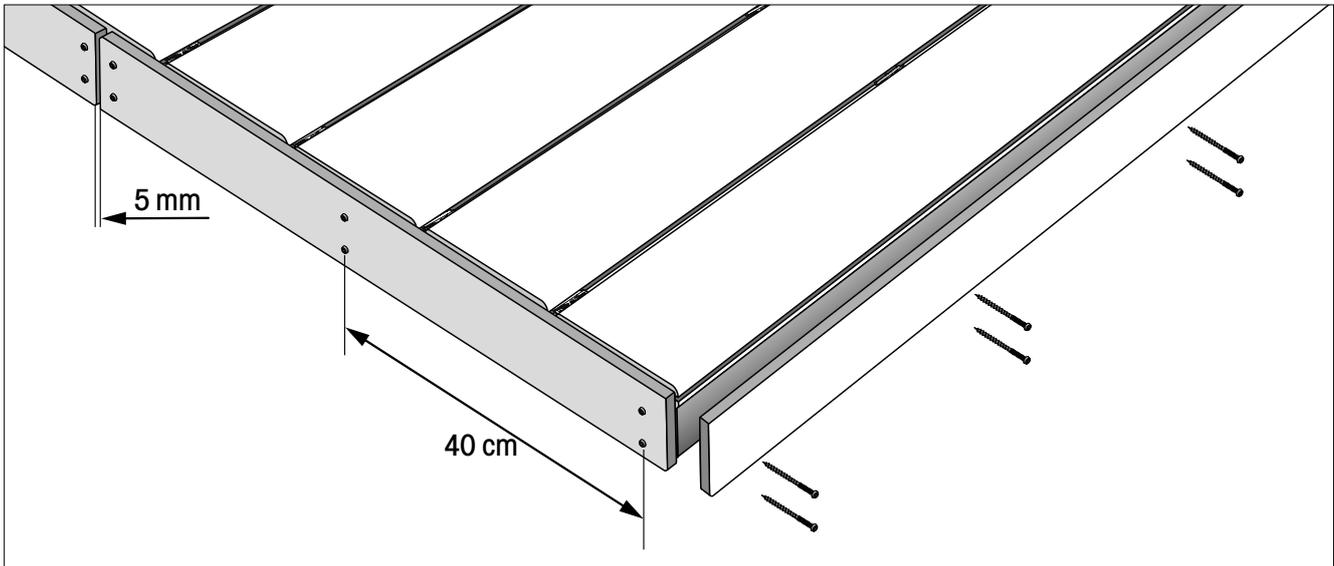
6 - FINISHING COMPONENTS

FINISHING BOARD and SKIRTING BOARD

The deck finishing strip must be made using full boards with no grooves on the sides.

These boards are fastened with Cobra composite screws WPC 5 x 63 mm or 5 x 50 mm matching the colour of the boards, for invisible fastening. Skirting boards expand just like boards. Maintain an expansion clearance of 5 mm for end-to-end jointing, in line with the figure below.

Note: Allow sufficient air entry for good ventilation of the structure.



ALUMINIUM ANGLE CORNER

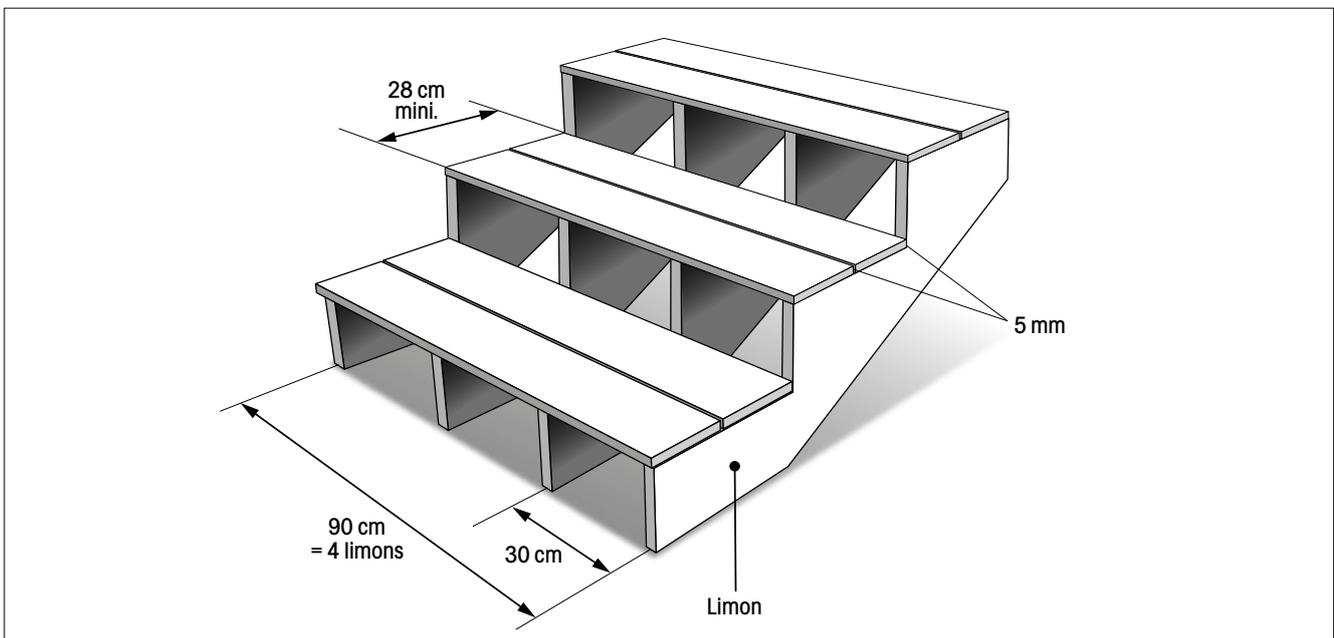
An alternative to use of skirting boards: Fiberdeck® angle corner, section 35 x 60 mm, made of brushed aluminium. It can be used to join the deck and the finishing strip with care. The angle corner must be pre-drilled and fastened with stainless steel screws.

ACCESS OPENINGS

For sealed decks, include openings in order to access and clean the sealing. This access opening must be made with a wooden or aluminium structure framework. Include an expansion clearance of 5 mm around the duckboard.

STAIRCASES AND STEPS

Fiberdeck® composite boards can be used to make stairs. In the case of a staircase on stringboards, the distance between 2 stringboards must be decreased to 30 cm in order to obtain the necessary resistance and stiffness.



7 - RECOMMENDATIONS

- ✓ Do not use FIBERDECK® boards to make anchoring points intended for fastening of swimming pool covers, lampposts or fence posts.
- ✓ Any recessed spotlights or posts require an expansion clearance.
- ✓ Swimming pool enclosure posts and guardrail posts must not rest on non-structural boards.
- ✓ Swimming pool enclosure wheels must rest on rails and not directly on deck boards.
- ✓ We do not recommend use of finishing boards around water pipes for swimming pools. Use stone curbs instead.

8 - MAINTENANCE ADVICE

DUST AND DIRT

Dirt and debris accumulating on the surface can be removed with a water jet. Use hot soapy water and a soft non-metal brush to remove mould.

SNOW AND ICE

Never use a metal shovel to remove ice or snow from a deck. It could scratch the surface. Use calcium chloride to melt snow. Accumulation of calcium chloride may leave a white residue which can easily be removed with hot soapy water and a soft non-metal brush.

GREASE STAINS

Oil / grease / food stains can be cleaned with hot soapy water and a soft non-metal brush. Use a household detergent if hot soapy water and the brush are not enough.

MOULD

Mould may appear, depending on temperatures in your region and exposure of your deck to the sun. The best cleaning method is to use hot soapy water and a soft non-metal brush. The use of a high-pressure washer is possible but only at pressures lower than 1750 psi (120 bar) and at a distance of at least 30 cm..

HEAT AND FIRE

Unusual heat sources such as braziers, grills and burning embers may damage the surface of a composite deck. Keep away from sources of heat.

SCALE

Mineral deposits from masonry work mixed with water may leave a whitish film on the surface (cement veil or laitance). Rainwater runoff from roofs or splashes from swimming pools near the deck may lead to the appearance of similar white marks (scale, pool treatment salts). We recommend using white vinegar diluted to 50% with water. Apply and allow to react for 10 minutes, then clean with hot soapy water and a soft, non-metal brush.

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