



dlh.

Installation

Terrace installation has to be performed in accordance with the manufacturer's manual. The following manual explains the general principles of installation of wooden terrace boards. If you have any questions or concerns, please contact DLH sales representative. Installation should be performed by a professional.

PRODUCT INFORMATION

Wood is not a uniform material and each board has its own individual features, depending on the conditions under which the given tree grows. Even in case of wood coming from the same source, there may be differences in grain and colour. Refer to the technical description of the given species of wood before installing the boards.

The material should be checked before installation. Any damage or irregularities have to be reported to the seller prior to installation. Commencement of installation means the acceptance of the technical condition and the appearance of the material.

When designing the terrace, take into account the surplus material (approx. 10%) for trimming and aligning the edge of the terrace, etc. Boards should be stored in their original packaging but if this is not possible, they should be clamped with belts or/and be put under an even load. Boards may not be stored separately as they have a tendency to warp and buckle.

GROUND PREPARATION

Ground on which the boards are to be installed should be firm and stable.

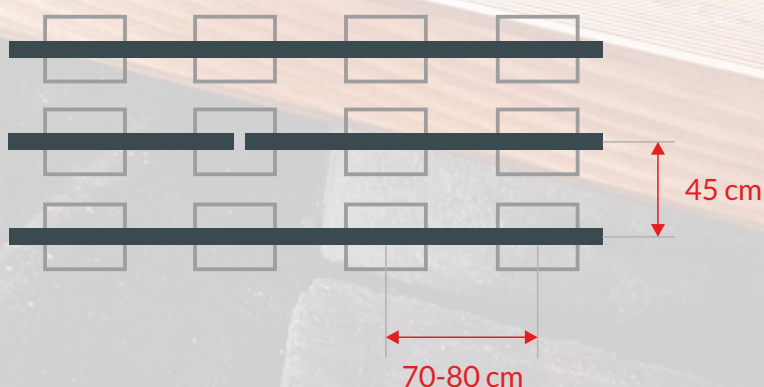
It should be permeable or have a minimal drop that allows water to drain.

When installing on concrete or non-absorbent grounds, it should be possible for the water to flow freely between the bearers - therefore bearers should be isolated from the ground through the use of pads made of a non-absorbent material (e.g. rubber).

When mounting on the soil, prepare a primer mixture consisting of gravel or small stones laid on the fleece that protects against weed growth.

Next, place concrete blocks under the bearers keeping the following distances:

- 45 cm (distance between bearers)
- 70-80 cm (in the direction of bearers installation)



BEARERS

The terrace board should be installed on bearers that have a density similar to the material of which the boards are made of. Softwood bearers cannot be used for exotic wood terrace boards as changes in temperature and moisture can result in tearing of the screws.

Bearers structure have to be installed to the ground in a way that provides a solid foundation (e.g. by means of quick mounting pins).

Bearers spacing depends on the size of the board.

SIZE OF THE DECKING BOARDS	MAXIMUM SPACING BETWEEN THE AXES OF BEARERS (DISTANCE BETWEEN THE SCREWS)
19 mm x 90 mm	25-30 cm
21/22 mm x 120 mm	35-40 cm
21 mm x 145 mm	40-45 cm
24/25 mm x 140/145 mm	45-50 cm

If the terrace is adjacent to a wall or other solid element remember to provide an expansion gap between the terrace and the wall (minimum 10 mm).

There have to be 2 bearers at the connection points of the two boards along their length (the edge of each board has to have one bearer as a support).

INSTALLATION WITH SCREWS

During installation, take into account the natural process of wood drying during hot days and wood swelling during wet days - this is why the gap between the boards should be at least 6 mm.

Boards should be screwed to each bearers with 2 screws that are two times longer than the thickness of the board. It is recommended to use stainless steel screws designed for installation of wooden terraces. Perform a preliminary drilling before screwing (4 mm drill in case of 5 mm screw).

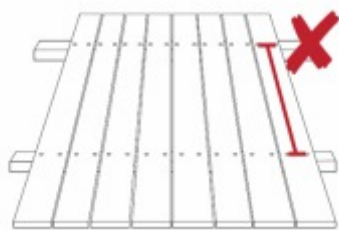
The screws should be fixed at the following distances:

- 15-20mm from the edge of the board
- 30-60 mm from the board face, so that bending of the ends is prevented

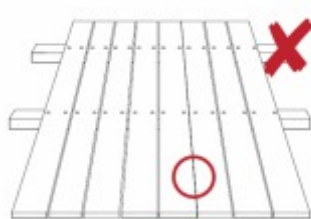
INSTALLATION WITH iCLIP AND VIVEIRO CLIPS

The first board should be fixed to the bearers with screws or special starting clips made of stainless steel. A clip has to be pushed into the milled side of the board and then screwed to the bearer. The next board should be pushed to the clip, so that the clip gets into the milled side of the board. Boards should be firmly pushed - in order to do this you can use a rubber hammer, hand screws or span sets. Continue work until the entire surface is covered. There has to be a screw clip installed on every contact point of the two boards over the bearer. The distance between the clip and the end of the board cannot be greater than 5 cm. In case of connecting boards along their length, fix each edge of the board to the bearer using a separate clip. The last board has to be fixed with stainless steel screws.

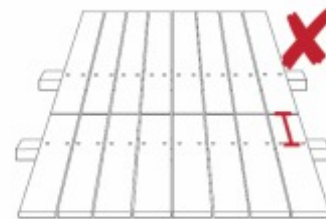
THE MOST COMMON INSTALLATION ERRORS



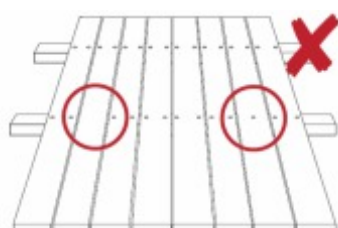
TOO BIG DISTANCE BETWEEN THE BOARDS
the recommended distance is maximum 45 cm.



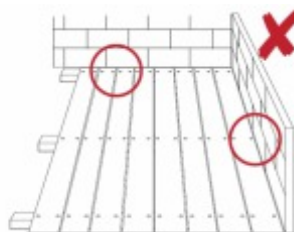
TOO SMALL DISTANCE BETWEEN THE BOARDS
the recommended distance between
the boards is minimum 6 mm.



TOO BIG DISTANCE BETWEEN THE SCREWS
AND THE EDGES OF THE BOARDS
Screws should be fixed 3-6 cm from
the edges of the boards.



INSUFFICIENT NUMBER OF SCREWS



TOO SMALL DISTANCE BETWEEN THE TERRACE END
AND THE WALLS

The recommended distance between the boards
and the walls is 10 mm.

MAINTENANCE

Constant maintenance means the removal of contamination (sand, leaves, mud) using a brush or a broom. In case of heavily contaminated surfaces, wash the boards with a stiff brush or a pressure washer (reduce the pressure when cleaning softwood). Make sure to provide appropriate ventilation of the terrace. Do not allow the dirt to accumulate around the terrace and in the gaps between the boards. In order to prevent formation of an icy layer in winter, remove snow with a brush.

Wooden boards are subject to a natural process of patination of the outer layer due to the influence of atmospheric conditions. A silver-coloured shell is formed; it has no impact on the technical parameters of the wood and the process of biological aging. In order to preserve the natural color of the wood and to provide additional protection an impregnation oil for outdoor wooden structures should be used.

It is best to oil the boards twice a year: in the spring, before the start of the season and during autumn, in order to adequately protect the wood before winter. When oiling please use the oils of reputable manufacturers of chemical products recommended by DLH and strictly adhere to the manufacturer's instructions.

Remove dirt and the remnants of the previous layer of coating before applying the oil. It is recommended to use special care products for cleaning wood effected by weather conditions. The surface of the wood has to be completely dry before applying the oil. Terraces should not be treated with oil at temperatures below +15°C and during high humidity period.

Contact between wood and metal or water may result in occurrence of black (non-removable) spots on the surface of the boards. It is important to apply a thorough protection (covering) of the terrace in case of performing work during which iron filings may be produced. Next, the terrace should be thoroughly cleaned.

