# Wooden decking - installation guide

## Decking storage before and during installation

When storing wooden decking, make sure that the wood is not exposed to direct sunlight, rain, snow and other external influences. It was well covered or best stored in roofed unheated areas, with relative humidity values equal to the outdoor humidity. Place the terrace boards on the prisms or pallets so that they are not in direct contact with the ground, to ensure sufficient lining of the wood spacers, allowing ventilationair and to prevent the formation of mold. Failure to follow these instructions may result in twisting, deformation or other changes to the wood during storage.

## Substrate preparation for wooden terraces

Make sure that the ground is firm, does not collapse and is level. Plan the height of your terrace so that there is enough space under the terrace for air ventilation, drying and the terrace is above the surrounding terrain. Ensure free drainage of water under the terrace so that water does not remain under the floorboards or grate. This could result in troughs or other deformation of your terrace wood. Avoid direct installation of floorboards to the base without the use of base grates. Do not place absorbent geotextiles under the terrace. Absorbent geotextiles cause water retention and high humidity, which acts on the wood of your terrace from the bottom, while the sun and high temperature will act on the top. Installation on absorbent geotextiles causes troughing and deflection of terrace boards. Do not use softwood support prisms to install hard tropical wood terraces. Plan the slope of the terrace surface away from the house so that water can drain from the surface of the terrace boards and not remain on their surface. This would result in accelerated weathering of the wood and the formation of dirt stains. If you are accompanying the installation on balconies, secure the rainwater drainage system or water drainage system so that the plaster or other parts of the house are not stained with natural dye, which most tropical woods contain.

## Avoid building terraces at ground level

Plan your terrace project over the surrounding terrain. The higher the wood is placed above the surrounding terrain, the better the natural drying and ventilation of the air will take place. Wood, including the substructure, which is placed at or below ground level, is exposed to adverse humidity conditions that affect its properties, increase the risk of deformation, cracking, reduce its life and are a breeding ground for mold or rot. Plan the project of your terrace with the possibility of side ventilation and sufficient drying and air circulation under the terrace. In this case, the expansion gaps between the boards are not able to ensure sufficient air ventilation and drying of the space under the terrace. In projects built at the level of the surrounding terrain, we may encounter the effects of high ground moisture, which increase the humidity of the wood, cause the effects of transverse deflection, expansion of the wood, deformation and do not allow sufficient saturation of coatings. The oil is forced out of the wood, quickly dusting the paint, which reduces its life. This method of installing terraces is generally not recommended also due to other negative effects and the associated lower wood life.

## Soil base

If you decide to build on the ground for your terrace project, prepare a solid compact, level gravel or stone base with sufficient drainage. To prevent weeds from growing later, cover the surface with a special non-absorbent foil. Do not use absorbent geotextiles. If you use ducks as a base, make sure that it is sufficiently compacted, they have reached the ideal level and do not fall. Do not place the prisms directly on the ground. Place the base prisms on tiles or rectifying targets. This will ensure drying and the possibility of wood ventilation. Never backfill the base prisms.

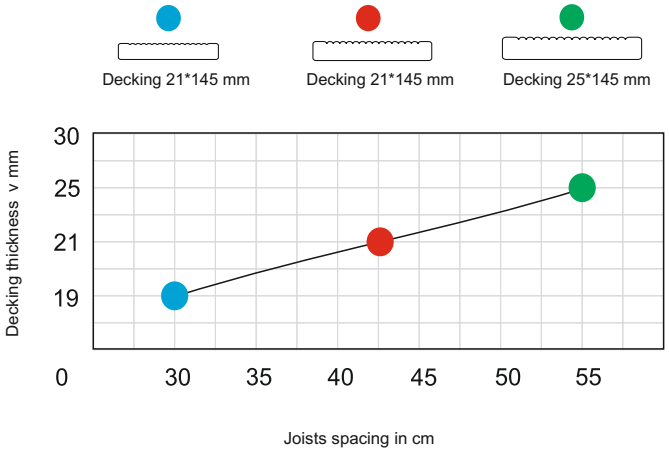
## Concrete base

Do not place the load-bearing prisms directly on the ground. Support grids should be placed on water-resistant pads or targets. Rectifying targets ensure free drainage of water under the grates in the rain and allow to compensate for height differences. The distance between the targets should be about 50 cm apart, for normal terrace loading. Plan the slope of the terrace in the longitudinal direction away from the house so that water can flow freely from the surface. Supporting prisms for wooden terraces should be made of a material as hard and durable as walkable terraces to avoid the need to replace them due to rot. To increase the durability of the underlying prisms, use the protective strip of prisms from our offer, thus increasing their durability. Do not use softwood support prisms to install hard tropical wood terraces.

## Underdecking constuction joists

Do not place the joists directly on the ground. Underdecking joists should be placed on water-resistant pads or height adjustable pedestals. It ensure free drainage of water under undeconstuction joists in the rain and allow to compensate for height differences. The distance between the pedestals should be about 50 cm apart, for normal terrace loading. Plan the slope of the terrace in the longitudinal direction away from the house so that water can flow freely from the surface. Wooden joists for decking should be used from material as hard and durable as decking to avoid the need to replace them due to lower durability. If you wish to increase the durability of the wooden joists use the protective bituminous tape from our offer and lay it on the joists . To enable drying the space between the board and joists use ventilation pads. Do not use softwood underdecking joists for installation of hard wood decking.

Recommended joists spacing depedning on decking size

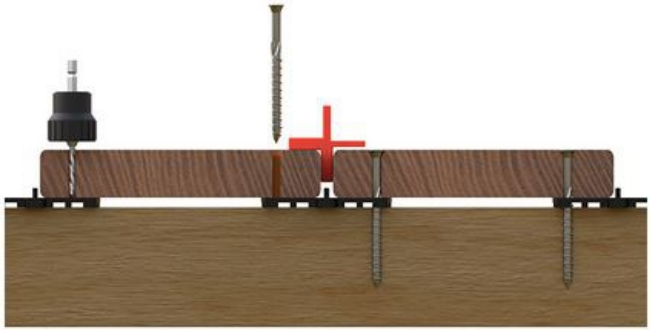



## Assembling a wooden decking

It is necessary to maintain a dilatation gap of 3-7 mm between the boards during the installation of the wooden terrace due to the possibility of swelling or drying of the wood caused by changes in climatic conditions. For this purpose, use the spacers from our offer according to the wood moisture of the local humidity conditions.

Approximate dilatation gap sizes between boards depending on the wood moisture content.

Wood moister contend 12-17% - gap 7 mm
Wood moister contend 18-22% - gap 5 mm
Wood moister contend > 23% - gap 3 mm



entilation pads can be used to prevent water and moisture from trapping between the prisms and terrace boards and the associated potential risk of rot.

Use the „board clamp" or „board straightener tool" to straighten side curved boards.


## Screwing a wooden decking

You can achieve the strongest attachment of terrace boards by mounting the screws from above. To ensure pre-drilling of straight lines of screw holes, we recommend stretching the string or using a pre-drilling template for screwing boards with supporting grids. Always pre-drill the holes for the screws, preferably with a special countersink, to prevent stress and cracking of the wood around the screws, tearing of the thread or rupture of the screw. For the best look, use a Smart-Bit or Step Drill countersink, a drill with a countersink to achieve the same drilling depth.Always connect the individual boards to the base prism and screw each board of your wooden terrace on each joint with the base prism. Always place the screws on the left and right side of the board approx. 2 cm from the edges, never place only one screw, for example in the middle of the floorboard. The overlaps of the bolted board ends should be a maximum of 5 to 10 cm to prevent the board ends from bending. Use only special high-strength stainless steel screws that are twice the thickness of the boards.

## Finishing the wooden terrace

If necessary, sand the surface of the wooden terrace with an electric grinder to achieve a higher surface smoothness. Then treat the terrace surface with a suitable protective oil.

## Surface coating

Tropical woods intended for outdoor use are very durable and do not require chemical surface treatment, however impregnation and re-treatment with a suitable treatment or oil prolongs their life, increases the quality of the surface, prolongs the natural color and delays the graying process. The new wood contains natural extractives and has a higher density, which to some extent reduces the penetration of the paint deep into the wood. When applying coatings to new wood, the durability of the coating is lower compared to painting old wood. In general, we can observe a longer durability of coatings in old wood, due to the deeper impregnation of oils into the wood. For this reason, according to the technical sheet of coatings, it is recommended to apply the coating to new wood after at least 4 weeks after installation, after weathering and release of extractive substances. Follow the product data sheet.

## Regular cleaning and care

Regularly clean the terrace from dirt, deposits and pollen. This will prevent dirt from penetrating the wood. Water and moisture settle under objects such as parasol stands, flower pots, bowls, doormats. This eliminates the possibility of fast and natural drying of the wood. Long-term moisture and dirt stains can form under these objects. Therefore, carry these objects standing on the terrace from time to time or ensure that there is natural drying and ventilation of the air under them. This will prevent the formation of dark spots on the wood.

More information can be found in the maintenance instructions instructions for wooden decking.