

Heat treatment of wood to protect it from rot has been known for thousands of years. Industrial heat treatment became possible just a couple of decades ago.

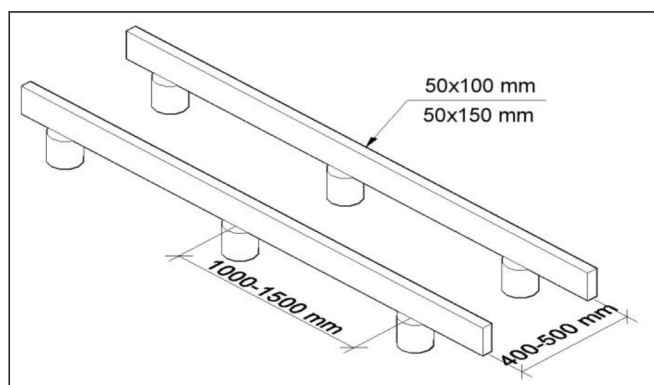
Heat treated terrace boards are environmentally friendly, as the process uses only high temperatures and steam. Heat treatment does not use chemicals.

Heat treated wood acquires a beautiful brownish colour, the intensity of which depends on the duration of the process and temperature. Wood develops a characteristic smoky smell that diminishes over time. Due to the fact that the heat treatment reduces the density of wood, it will become lighter in weight. Water absorption is reduced. When compared to untreated timber the moisture content of heat-treated wood is reduced almost to a half. The reduced moisture content improves resistance to weather conditions and fungal damage. Due to reduced moisture content the measures of the treated wood are more stable, which means that the boarding will bend less.

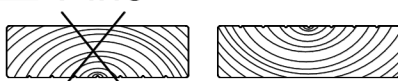
1 Base construction

The terrace's main construction is made of 50x100 or 50x150 mm cross-section beams. Depending on the cross-section of the chosen beams, they need supports after each metre (smaller cross-section) or 1.5 metres (larger cross-section). If supports are placed at a bigger distance, the terrace may start bending through.

The distance between beams should be around 400-450 mm in case of heat treated decking boards and around 400-500 mm with larch boards. The ground level around the base construction must be slightly sloping, so that water under the terrace could flow away. Water that remains under the terrace damages the base construction and the decking.

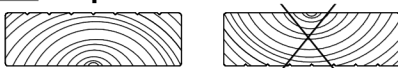


2 Pine



When installing pine terrace decking make sure that the core side remains upwards. Upon drying, the boarding bends crosswise, with the bend facing upwards.

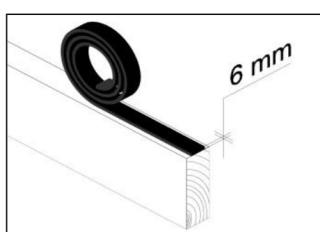
3 Spruce



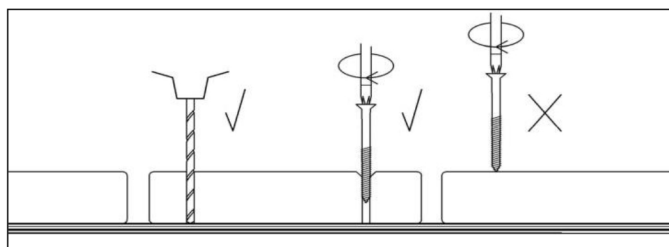
The situation is the opposite with spruce decking boards. Make sure that the core side remains facing downwards.

4 Decking board installation

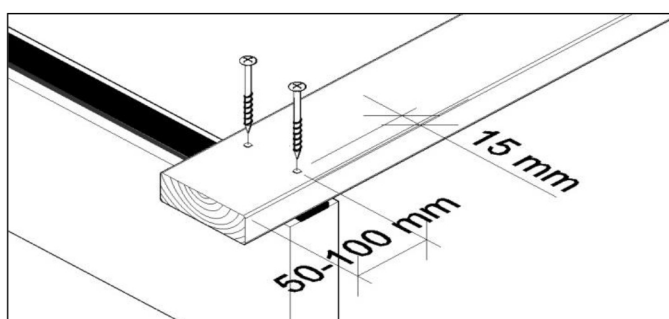
It is recommended that you use a 6 mm rubber strip for decking installation between the decking and base construction, which allows for the wood to dry better and prevents moisture damage in the future. The rubber strip helps to compensate for the damage caused by the expanding and shrinking of the wood, as well as helps prevent the cutting of screws on the contact surface between the decking and base construction.



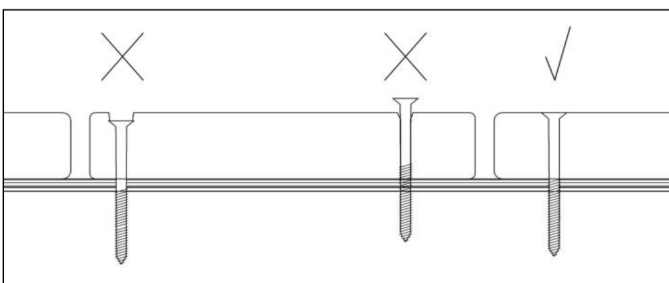
Upon fastening a decking board with screws, holes matching the diameter of the screws must be drilled in the heat treated terrace decking. Upon using heat treated ash or decking boards made of broadleaf noble wood, the diameter of the drill must be 1 mm bigger than that of the screw. Drilling is necessary to prevent screws from splitting the wood. We recommend using a stainless steel drill. Terrace decking must not be installed without drilling or using self drilling screws.



Decking boards are fastened to each beam with two screws. A screw hole should be drilled at least 15 mm from the side edge of the board. The screw hole must be drilled at least 50 mm from the shorter end of the board but not further than 100 mm. The decking must be fastened using stainless steel screws (Type A2 or A4). The length of the screws must be 2.5 - 3 times the thickness of the board. For example, a 5x70 mm screw fits a 26 mm decking board.

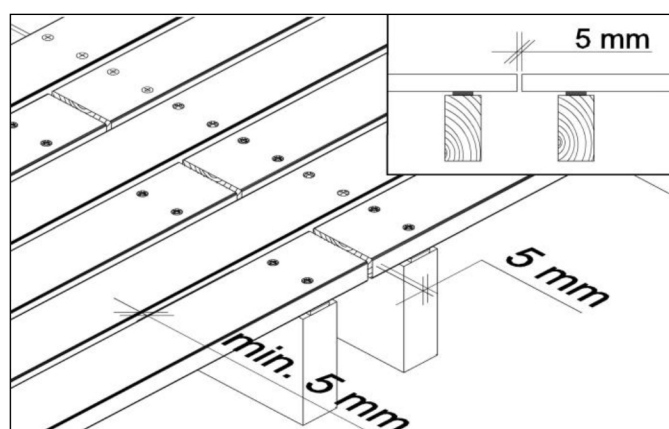


When fastening the decking it has to be ensured that the screws are not inserted too deep since otherwise water and dirt may enter in the openings above the screw heads. If the screws remain higher than the decking surface, the decking is not properly fixed to the bottom beams and the screws may cause injury.

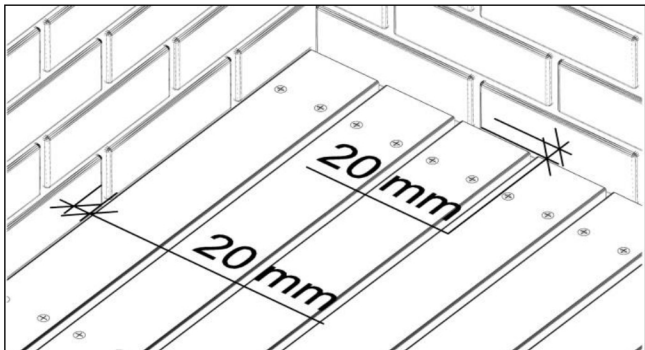


Upon installing decking boards, leave at least 5 mm expansion gap between the boards. We recommend using suitable distance holders to ensure that the spaces in the boarding are even.

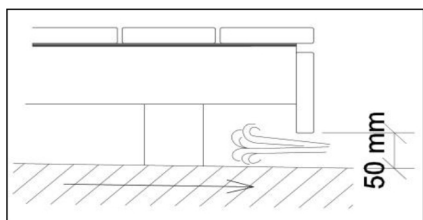
When making terrace board joints, the shorter ends of the boards must not touch. Please make sure a gap of at least 5 mm is left between the shorter ends. Without the gaps, the board end cannot dry and the wood is damaged. When making joints, please take into account the additional construction, otherwise it is impossible to fasten the boarding correctly.



It is important to guarantee ventilation between the terrace and the adjacent walls. There should be air gaps with the minimal width of 20 mm both between the long and short ends and the wall.



When installing edge boards make sure that there is an air gap of at least 50 mm between the board and the ground level, so that the terrace base construction could be ventilated.



5 Installation with clips

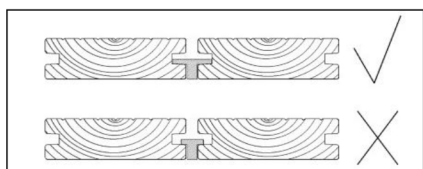
Decking boards should be fastened with clips when you prefer to leave the fastenings of the decking hidden. Depending on clip type, a special groove has been cut on the edge of the board, with the help of which the clip attaches the decking to the base construction. In Ha Serv's product range, the terrace profiles with side groove are marked with "sg".

Since there are several types of fastening clips, make sure to carefully follow the clip instruction manual during installation. In addition, there might be clips by different producers that fit the same terrace profile but in this case, please consult the reseller.

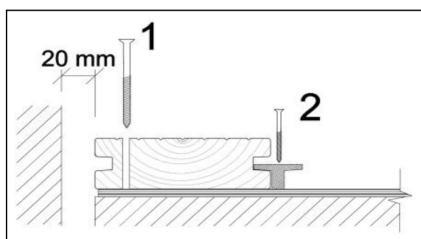
Some clip types require for the decking to be pressed together before it can be fastened. These are, for example, Sigha Senofic clips, which match the sg5 profile.

The necessity to use rubber strips between the base construction and decking boards depends on the clip type.

When matching together decking board profile and clip type, make sure the fasteners of the clip reach the bottom of the groove. Do not use deck clips that only hold on to the edge of the groove. This way, the decking is not fastened properly and the edges of the boards may be damaged, which is why the boards come loose.



When installing decking boards using clips, the first board still needs to be fastened with screws on one side (1). In order to do that, a screw-hole must be drilled on one side of the board, and a screw of suitable length must be used to fasten it. Leave a 20 mm air gap between the terrace and the adjacent wall.



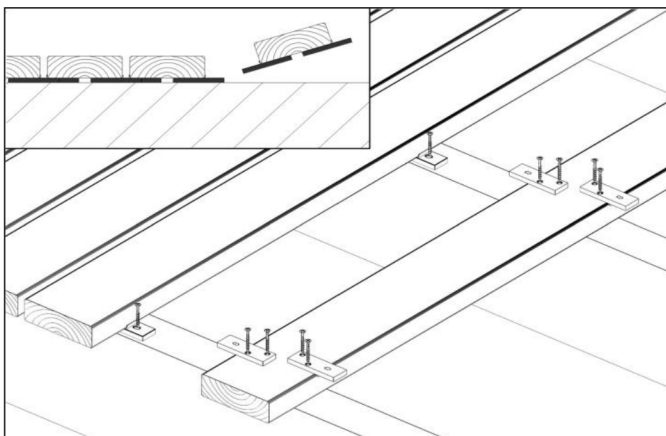
Next, a deck clip is placed in the groove on the other side of the board, and the clip is fastened to the base construction (2) with a screw. After that, the next board is fastened. Depending on clip type, the final fastening of the clip may take place only after the next board is installed. Similarly to the first board, the last decking board must also be fastened with a screw through the board on the outer edge.

6 Installation with clips from below

It is also possible to use clips attached to the decking boards from below. This method guarantees a seemingly fastener-free installation and it can be used with boards without a groove.

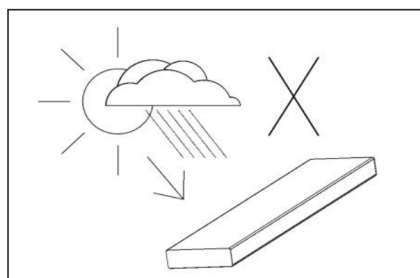
In this case, the clip is fastened with screws on the underside of the decking board. Next, the boards are turned around and put into place. Then, the clip is fastened from one side of the decking board to the base construction.

With this type of fastening, no rubber strips are needed between the base construction and decking, since ventilation is guaranteed.

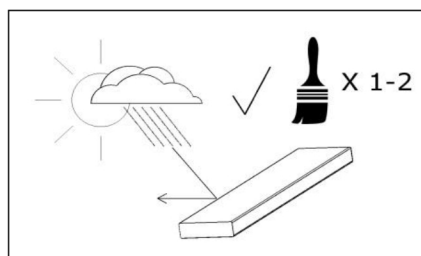


7 Maintenance

Wood not treated with wood preservatives is very sensitive to weather conditions. Wood exposed to UV-rays caused by the sun will turn greyish. In addition, rainwater will penetrate untreated wood and this may cause the cleaving of the wood. A terrace treated with wood preservatives is significantly easier to clean.



Most oil-based and solvent-borne products that contain a UV filter are suitable for decking surface treatment. We recommend the use of pigmented surface treatment products that reduce the impact of UV-rays and water absorption in wood. When choosing a surface preservative, make sure it is suitable for heat treated wood. Wood preservatives without a UV filter do not protect the wood from turning grey.



It is important that decking be treated with preservatives from all four sides just before it is installed. In order to make it last longer, decking should be cleaned and oiled regularly but no less than once a year.

Before oiling, clean the terrace surface from accumulated dirt, after which wash it with a special cleaning product; sand the terrace boards if necessary. After washing with the cleaning product, wash the terrace with plenty of water and let it dry.

Upon applying the preservative make sure the wood surface becomes saturated with the product but also avoid the excessive flooding of the material. Wipe away the excessive wood preservative.

Make sure to consult the manufacturer's instructions of the finisher product beforehand.