

# hanit® DECKING

Thank you for choosing **hanit®** decking boards.

In the following, you will find important processing instructions that must be taken into account during installation. We would like to point out that failure to observe these instructions will invalidate the guarantee and warranty.

## GENERAL NOTES

- The information in these processing instructions is based on an installation temperature of 20° C.
- These instructions can be adapted to technical changes and new findings at any time and without notice.
- **hanit®** profiles are made of recycled plastic. Slight differences in colour and surface structure are possible and no reason for complaint.
- Deviations in dimensions (+/- 3 %) are possible due to the material.
- To avoid material warping, do not store unassembled profiles in direct sunlight and only on level surfaces.
- The decking boards and the substructure do not have a national technical approval. Use as a load-bearing, safety-relevant component is prohibited.

## PROCESSING



### **Screwing:**

Stainless steel chipboard screws with countersunk heads are recommended. Use V2A, 4.5 x 60 mm for the screw connection to the substructure.



### **Pre-drilling:**

Pre-drill and countersink at least nominal diameter of the screw. A twist drill for steel with a point angle of 118° is recommended.



### **Cutting:**

Please note our general processing instructions under <https://www.hahnkunststoffe.de/en/downloads/processing-instructions/>.



### **Chamfering:**

Edges can be chamfered with an angle grinder.



### **Aligning:**

Check the correct offset at regular intervals and correct if necessary.

You can find further information and tips on the processing of recycling profiles in the download area of our homepage [www.hahnkunststoffe.de](http://www.hahnkunststoffe.de).

### TECHNICAL DETAILS

Item	Thick-ness	Breite	Lenght <sup>1</sup>	Weight	Weight	Colour
	cm	cm	cm	kg/ m <sup>2</sup>	kg/m	
Decking Board	2.8	19.5	300	26.0	5.1	brown / black
Substructure <sup>2</sup>	4.5	10.5	280	42.0	3.0	grey / brown

<sup>1</sup>Maximum length

<sup>2</sup> Other dimensions on request

### BENDING TEST RESULTS

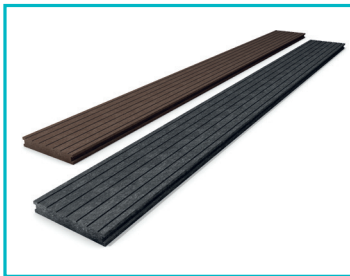
Load	kg	50.0	75.0	100.0	125.0	150.0
Bending	mm	0.4	1.0	1.6	2.2	3.0

### EXPERIMENT DESCRIPTION

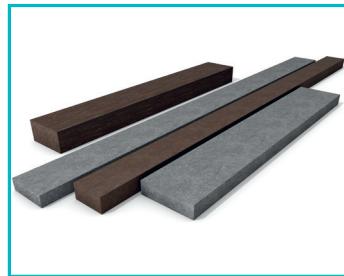
Two decking boards screwed to a support (distance 30 cm) were simultaneously loaded over the complete width of the boards with a test punch of 10 cm width. The bending values were determined as the mean value of a test series. The test took place at an ambient temperature of approx. 16° Celsius. With increasing temperatures, a greater deflection must be assumed.

### COMPONENTS

#### DECKING BOARD



#### SUBSTRUCTURE



### PREPARATION

Before installing the decking boards, the supporting surface must be prepared. Make sure that it is load-bearing and frost-proof. If drainage is required, it is advisable to plan for a slope of 1.5 % - 2.0 % leading away from buildings.

Perhaps the most important point for a successful patio project is a level and stable substrate. If the terrace is to be built on a lawn, careful preparation of the subsoil is necessary to ensure that the terrace will stand securely for a long time. An inexpensive and easy-to-implement substructure is the classic chippings bed. If the terrace is to be built on an existing concrete base, or if an old stable terrace is available as a starting point, this work step is of course not necessary.



### STAKING OUT THE TERRACE AREA

To build a suitable substructure for a hanit® terrace, the terrace area should first be marked out. The best way to do this is to use a straightedge and tie it around stakes anchored in the ground. The string indicates the upper edge of the terrace and will later serve as a guide. Take into account a slope of at least two percent away from the house so that rainwater can drain off easily later on and waterlogging does not occur.



### EXCAVATION

In the next step, a pit should be dug within the marked-out area and then carefully compacted with a vibratory plate. How deep to dig depends, among other things, on the nature of the soil. For example, poured, cohesive soil usually requires a somewhat deeper excavation than coarse-grained, grown substrate. For a large area, a small excavator can make the work easier.

### BASE COURSE

When preparing the substrate for a hanit® terrace, several layers of gravel approximately 5-10 cm thick should be applied to the previously compacted soil. Since loosely poured ballast is not stable, the individual layers must be carefully compacted to create a load-bearing substrate. The finished ballast surface should be approx. 15 cm below the guide line. The pit is then filled with a 3 to 5 centimetre thick layer of chippings, which is smoothed out with a straightening lath or a scraping board. Make sure that no holes or unevenness remain and that a slope of at least two percent is maintained away from the house. In the last step, we recommend to cover the prepared area with a weed fleece. This will prevent weeds from growing under the terrace and protruding through the boards.



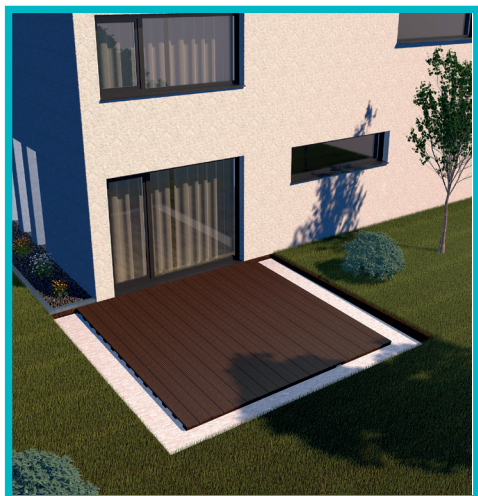
### SUBSTRUCTURE

The substructure should be of the same material as the planks and have the same material properties. We recommend recycled boards in the format 45 x 105 mm. A width of 105 mm ensures a sufficient bearing surface in the area of the butt edges. The screw connection should not be less than 20 mm from the edge.

Lay the substructure flat (not on edge) with a clear width of max. 300 mm. Make sure that an expansion gap of min. 20 mm to boundaries (wall, parapet) is maintained. Lay the butt edges of the substructure with an offset. This ensures that the profiles are connected to each other by the decking and do not shift. Choose the position of the profiles so that the boards rest on the ends and the butt edges.

The substructure lies floating (or loose) on the substructure (when screwed, it is thought to be a poured floor slab). Recycled profiles are subject to temperature-dependent length fluctuations. The planks must therefore be installed on the substructure immediately after delivery. The substructure may be installed as a unit on an area of 6.0 x 6.0 m at the most. If the area exceeds the above-mentioned dimensions, new modules must be installed that are separated by an expansion joint.





### DECKING BOARDS

Lay out the first row of planks. Here too, make sure that an expansion gap of at least 20 mm to lateral boundaries (wall, parapet) is maintained. The lateral projection of the decking boards over the substructure must not exceed 20 mm. Keep a distance of at least 6 mm at the butt edges.

Then screw the boards to the substructure. Use commercially available decking screws for this (e.g. Torx, V2A, 4.5 x 60 mm). We recommend pre-drilling the boards and countersinking the drill holes according to the head diameter. Each plank is screwed twice per joist. The other decking boards are installed accordingly. Pay attention to the installation distance between the planks here. Also keep a distance of at least 6 mm at the longitudinal edges.



### FINISH

End faces and wall connections can be faced if required.

Suitable for this purpose are:

- Recycling palisades
- Recycled curb stones
- Edge profiles that are screwed onto the floorboards

Make sure that no water can accumulate and that the expansion behaviour of the decking boards is not hindered.