

verando[®]

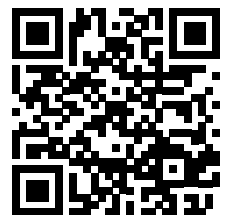
made of
Resysta[®]



verando[®]

INSTALLATION GUIDE

www.verando.de/en



ENGLISH | CONTENTS

1. Basics	2
2. Range	3
3. General advice	4
4. Surface and colour treatment	5
4.1 General	5
4.2 verando [®] natural (untreated)	5
4.3. verando [®] stain (RCL)	5
5. Installation	5
5.1. General assembly instructions	5
5.2. Expansion of material	5
5.3 Installation methods	7
5.4 Substructure	7
5.5 Laying the first board	8
5.5.A Variant 1: visible screw connection	8
5.5.B Variant 2: invisible screw connection	8
5.6. Installation of decking boards with rear decking board connectors	9
5.7. Installation with rear decking board connectors (decking pattern)	10
5.8 End sections	10
Contact	11

1. BASICS

GENERAL OVERVIEW OF THE KEY INFORMATION TO BE OBSERVED

- 1. Underlying surface:** When the decking boards are being laid it must be ensured that the underlying surface is firm and that water can run off and drain away.
- 2. Joists:** The substructure must be firmly attached to the ground, whereby the recommended clearances must be adhered to. (See 5.4. Substructure) The substructure must be well ventilated, whereby the expansion joints must be of the specified size. This applies to the areas between the longitudinal sides of the board as well as the areas between the board ends. Adequate preparation of the underlying surface is essential for a successful building project.

3. **Expansion joints** must be of the specified size between the boards, at the edges (e.g. next to walls), and next to possible obstacles (e.g. posts) or other objects (e.g. permanent flower pots). Please follow the instructions in 5.1. General assembly instructions.
4. **Minimum supporting surface** of 30 to 35 mm of the ends of the decking boards on the joists.
5. **Maximum lateral projection** of 25 mm.
6. **The decking pattern** must be determined in advance, since the substructure has to be installed accordingly.
7. **The decking board connectors** are screwed to the reverse side of the boards and slid underneath the previous board and fastened to the opposite side of the substructure.



2. RANGE

Decking board 42001
(W×H×L) 140×20×2400 mm



End board 42003
(W×H×L) 64×20×2400 mm

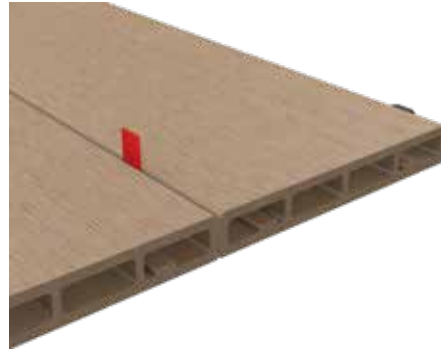


Joist 42002
(W×H×L) 70×38×2400 mm



clipmaster-Pack for 4 m² including clips,
screws and spacers in 3 sizes 42018





Colouring Stain, 1,0 litre C 08	Burma	42500
Colouring Stain, 1,0 litre C 14	Siam	42501
Colouring Stain, 1,0 litre C 23	Aged teak	42502
Colouring Stain, 1,0 litre C 42	Cape Cod	42503
Colouring Stain, 1,0 litre C 00	Transparent	42504
Colouring Stain, 1,0 litre C 51	Walnut	42505
Colouring Stain, 1,0 litre C 7016	Anthracite	42506
Primer, 1,0 litre	Neutral	42507

3. GENERAL ADVICE

We recommend that only a specialist or an experienced handyman installs **verando**® decking.

- Do not cover the boards with plastic film or other airtight materials as waterlogging and condensation can cause stains to appear on the boards surface.
- Normal commercially available woodworking tools are suitable for laying the boards.
- For sanding the surfaces use sandpaper with a grain size between 24 and max. 60.
- Sand in longitudinal direction only.

STORAGE

- Please store **verando**® boards and joists on a flat and even surface.
- If the boards are stored resting on supports or posts, the distance between the supports/posts must not be more than 30cm.

LEGAL ADVICE

verando® decking boards and substructure were especially developed for terrace decking. The items have no general technical approval and are therefore not suitable for supportive construction applications. Local building regulations have to be observed as well as the installation instructions and technical information.

WARRANTY

It is not permissible to fit damaged boards. If these instructions regarding installation, storage and surface treatment are not complied with, all claims under the warranty are forfeited.

4. SURFACE AND COLOUR TREATMENT

4.1. GENERAL

In order to achieve a perfect, uniform colour finish, the coating application must be carried out under constant external conditions. We recommend that the boards should be coloured individually before they are laid. The temperature of the material should be between 5°C and 25°C, the relative humidity should be 50 – 60%. The colour treatment of the boards should not be done in direct sunlight or when it is raining.

N.B.

To ensure that all the colour pigments are distributed uniformly, the paint or oil must first be shaken carefully. We recommend that the surfaces of the board should be treated before the patio decking is laid. If the surface treatment is carried out only after the boards have been laid, please take note of the above instructions/information and apply paint to a maximum area of 4 – 5 m² at a time. The surface treatment should be carried out by a qualified person.

The right brush: A brush that is at least as wide as the board must be used to apply the stain.

4.2. verando® NATURAL (UNTREATED)

Cleaning: Dirt can be cleaned with a water jet: either with a garden hose or with a high-pressure cleaner. Stubborn dirt can be removed with a soft brush. For stubborn stains, we recommend sanding off the affected areas with a sanding paper (grain size 120), then if necessary, varnish again.

Care: No special cleaning is necessary.

4.3. verando® STAIN (RCL)

There's a wide colour range to choose from but in the course of time each colour shade changes mainly due to UV (ultraviolet) light. This change will depend on the amount of sunlight exposure.

Cleaning: Dirt can be removed with a water hose or a brush (N.B. Do not use a high-pressure cleaning device). For heavier dirt (grease, wine, etc.), the material can be sanded (grain size 100-120). After this, a light colour coat should be applied.

Care: No special cleaning is necessary. Depending on use and where the boards are laid, the colour can fade slightly in the course of time. You can refresh the colour by applying slightly diluted colouring stain (3 parts water, 1 part stain). Before this is done, the entire patio decking must be cleaned. Marks and impurities can be sanded and stained as necessary.

Removing the coloured stain: Sand away the coloured surfaces with sandpaper in grain size 24 - 60. The original texture can be restored in this way. A new colour can now be applied depending on requirements.

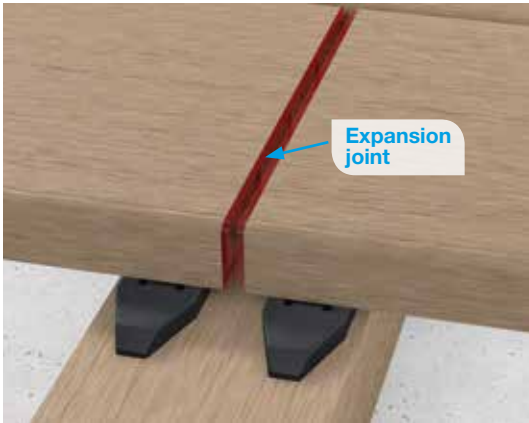
5. INSTALLATION

5.1. GENERAL ASSEMBLY INSTRUCTIONS

- While installing ensure a slope of approx. 2 % for adequate water drainage. Water lying in the recesses can cause damage in the event of frost. This can be avoided by closing the ends with an end board.
- Only use construction fastening material and hardware suitable for outdoor use (e.g. stainless steel screws).

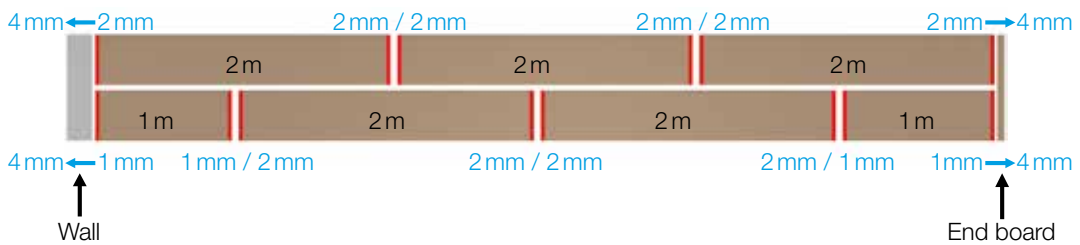
5.2. EXPANSION OF MATERIAL

Make sure to consider the thermal expansion of **verando®**. This depends on the temperature. The material should have reached ambient temperature before installation. The width of the expansion joints must be selected according to the material temperatures. The warmer the material the lower any further expansion and the colder the material the higher any further expansion will be.



Material temperature for laying	Max. expansion/ per metre in mm	Terrace width					
		1m	2,4m	3m	4m	4,8m	6m
0°C-10°C	2,5	2,5	6,0	7,5	10,0	12,0	15,0
11°C-20°C	2,0	2,0	4,8	6,0	8,0	9,6	12,0
21°C-30°C	1,5	1,5	3,6	4,5	6,0	7,2	9,0
31°C-40°C	1,0	1,0	2,4	3,0	4,0	4,8	6,0
>40°C	0,5	0,5	1,2	1,5	2,0	2,4	3,0

The expansion joints must be distributed over the entire length of the terrace: between the board joints, and between the board ends and walls or end boards. The size of the expansion joints must always be calculated starting from the respective length of the individual boards. To this end, please take note of the information regarding the maximum expansion per metre. Example: 6 m terrace, temperature of material 11°C – 20°C, max. expansion per metre in mm = 2 mm

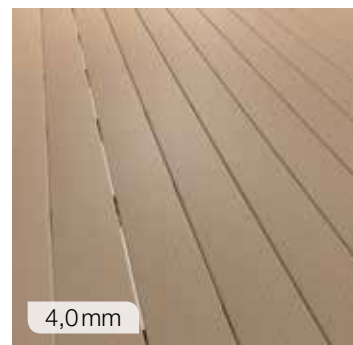
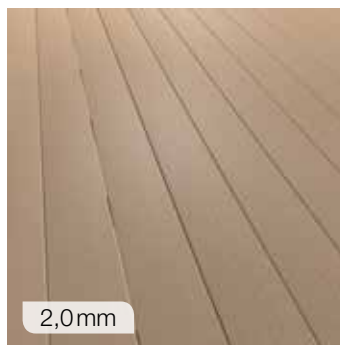
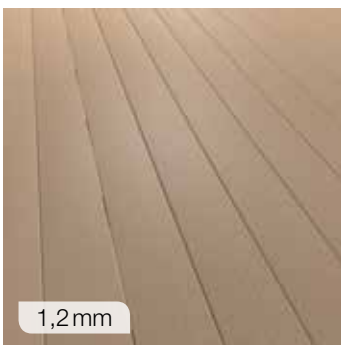


FOR A SUCCESSFUL AND APPEALING INSTALLATION

The width of the joint in the lateral direction can be freely selected: 1.2 mm, 2.0 mm, 4.0 mm. All three sizes take into account the expansion of the material due to heat and can be used irrespectively of the deck size or the temperature conditions. Please use the appropriate spacers when screwing on the decking board connectors and when fixing the decking boards in place on the substructure. In order to ensure that the width of the expansion joints at the edges of the terrace are uniform, it should always be 4 mm in relation to walls and end slats.

For other temperatures and the necessary expansion joint widths, please refer to the table above.

Please ensure a steady material temperature when cutting the boards to size, i.e. the cutting has to be performed at constant conditions, e.g. indoors or in the shade.



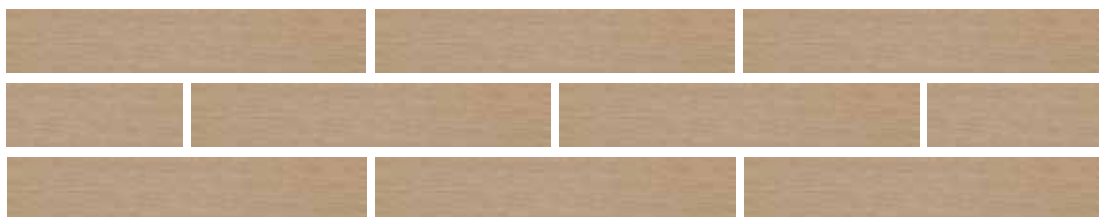
TIP

It is possible to apply a slight 45° bevel at the end of the boards. In this way, the expansion joints can be hidden for a better look.

5.3. INSTALLATION METHODS

The laying pattern must be decided on in advance as the substructure has to be laid out accordingly.

Recommended decking patterns:

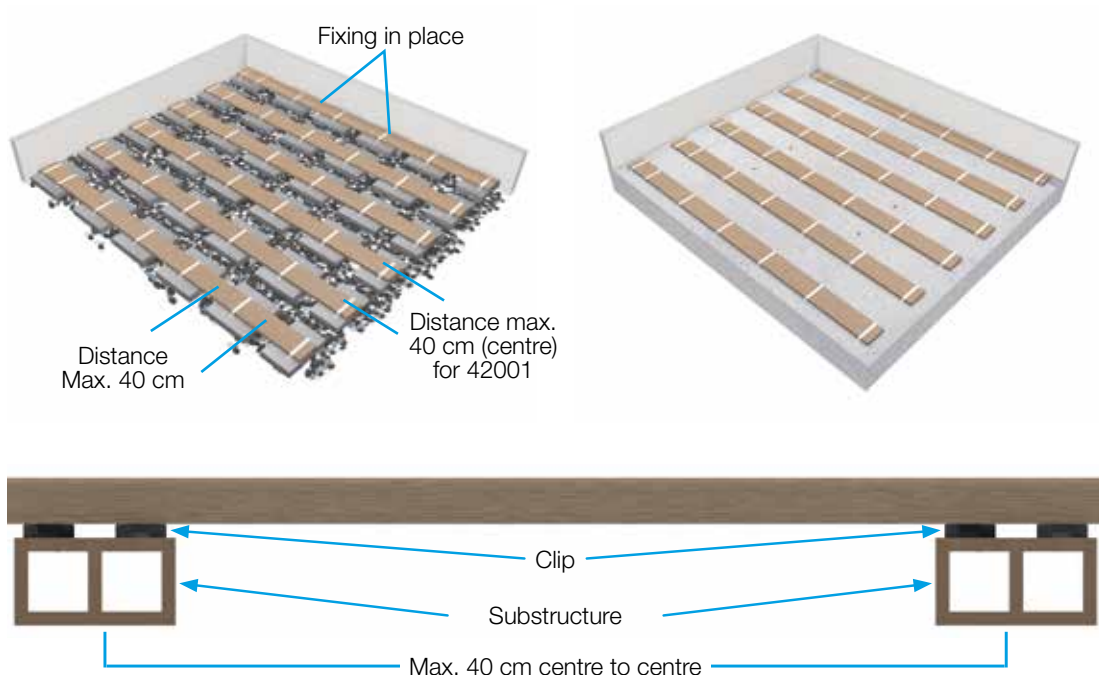


5.4. SUBSTRUCTURE

Attach the **verando**® joist to a firm underlying surface that is continuous or non-continuous (i.e. with gaps), e.g. washed concrete in a bed of gravel (please comply with the stipulations for attachment to this underlying surface). N.B.: Ensure adequate ventilation, water drainage and expansion joints (at points of connection and edges). Maximum overhang of the stone slab at the edge must not exceed 25 mm. If heavy objects are placed on the terrace (stone barbecue, heavy large flower pots, etc.) additional substructures must be installed in the area.

ON GRAVEL

ON CONCRETE



In principle, other materials can also be used for the substructure (e.g. solid wood). However, attention must be paid to the appropriate material suitability and an appropriate support surface for both decking board connectors. Please consult your specialist dealer for advice.

GENERAL POINTS TO BE OBSERVED FOR EACH SUBSTRUCTURE E.G. WOODEN BEAMS

- Ensure sufficient water flow and drainage. This applies to the area of the substructure and/or hollow chambers.
- Firmly connect joists to the substructure.
- In case the joists cannot be firmly screwed in (e.g. waterproof roof coverings), sufficient fixing of the entire flooring needs to be ensured (please clarify details with your architect).
- Wherever 2 boards abut, 2 substructure sections can be installed in order to provide an adequately sized supporting surface for the board connectors of the two boards.

TIP

If it is necessary to lay several substructure sections one after the other, we recommend that an expansion joint of 5 mm be provided between the ends of the sections.

5.5. LAYING THE FIRST BOARD

5.5.A. VARIANT 1: VISIBLE SCREW CONNECTION



Fasten decking board connector to the rear side. Pinch off protruding separator of the first decking board connector and screw to rear of the decking board. Screw the first board directly onto the substructure section. Drill the decking board with a 4 mm-drill. Carefully screw in the special **verando**® screw.

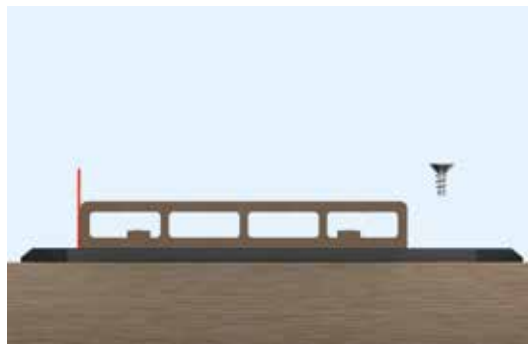


5.5.B. VARIANT 2: INVISIBLE SCREW CONNECTION

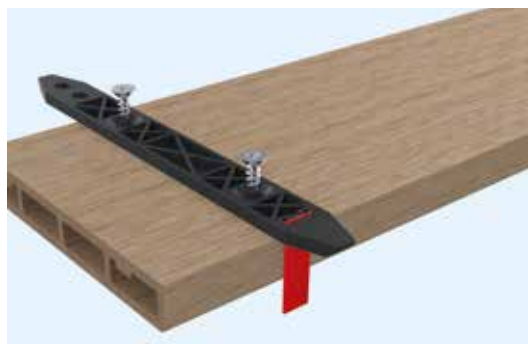


Fasten decking board connector on the rear side of the decking board level with the substructure. The connector holds the decking boards in place and prevents movement.

Firmly screw the board connectors onto the substructure.



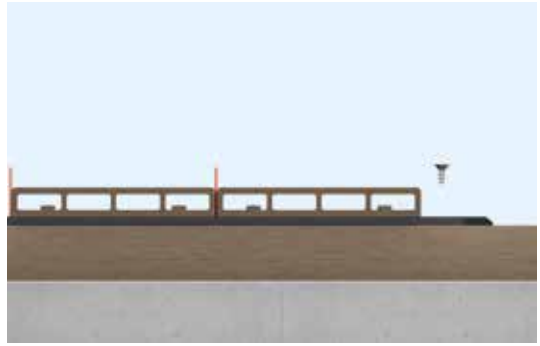
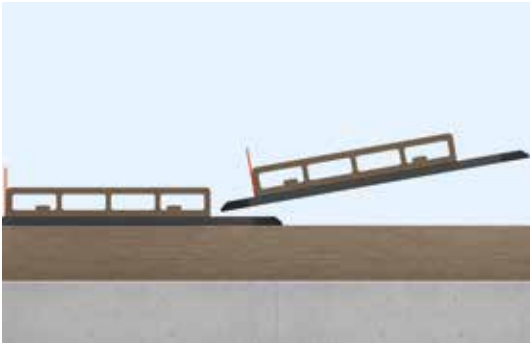
5.6. INSTALLATION OF DECKING BOARDS WITH REAR DECKING BOARD CONNECTORS



The distances between the decking board connectors on the decking board must not exceed 40 cm. Insert the spacer for the desired joint gap width into the envisaged slot of the decking board connector. A spacer should be inserted into each connector so that it is positioned correctly in a straight position in relation to the board. The decking board connector must be at the same height as the substructure. Turn the decking board connector so that the bottom side faces upwards. The spacer serves as a stop. The decking board connectors are fastened with the latch on the level of the substructure, positioned to slide past the adjacent connector and underneath the initial decking board.*

Screw a connector, which slides underneath an already fixed decking board, in each substructure. The connectors hold the decking boards in place and prevent movement. Slide the connector underneath the previous decking board and press on the entire length of the board.



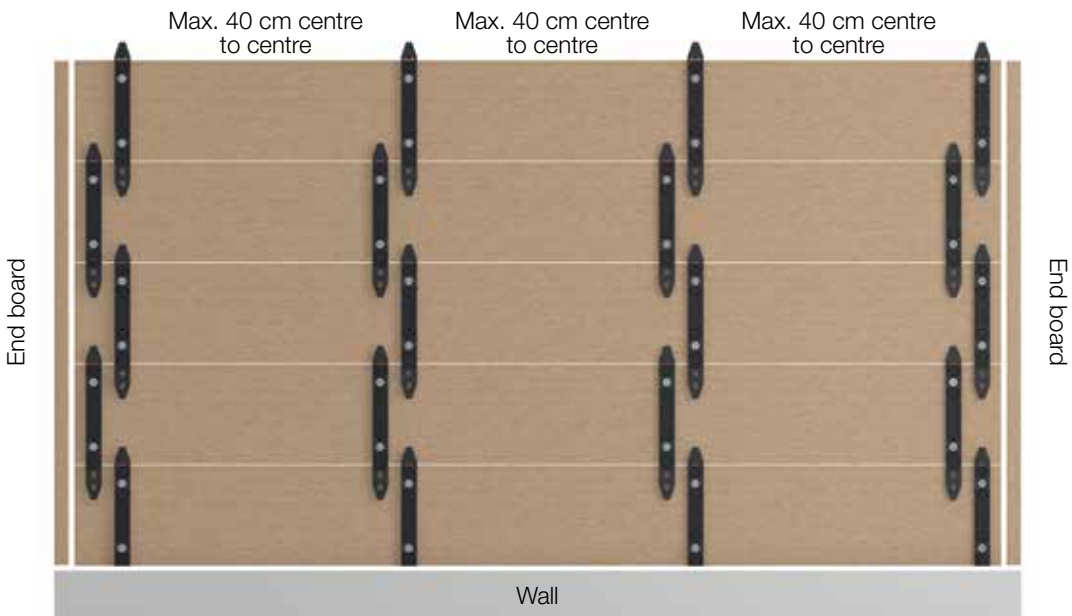


When the first board is fixed to the substructure the following board is slid in. Then, fix the free side in place on the substructure with screws and pull out the spacers. The spacers can now be used for fitting the next decking board connectors.

***IMPORTANT!**

Set the torque in such a way that the screw is NOT overtightened, or else it could cause the screw to be too loose and does not give enough hold. Recommended setting: average speed with low torque. If a screw has been overtightened, please use the second screw hole in the decking board connector.

5.7. INSTALLATION WITH REAR DECKING BOARD CONNECTORS (DECKING PATTERN)



5.8. END SECTIONS

Directly fasten the end board with the screw, or concealed, with a dowel to the substructure section. For attachment use only commercially available stainless steel deck screws.



TIP

When using the end board 42003, the visible hollow chamber in the corner area can be concealed by a mitre cut. In this case as well, an expansion joint must be provided. With regard to spacing, always consider thermal expansion (see 5.2).

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