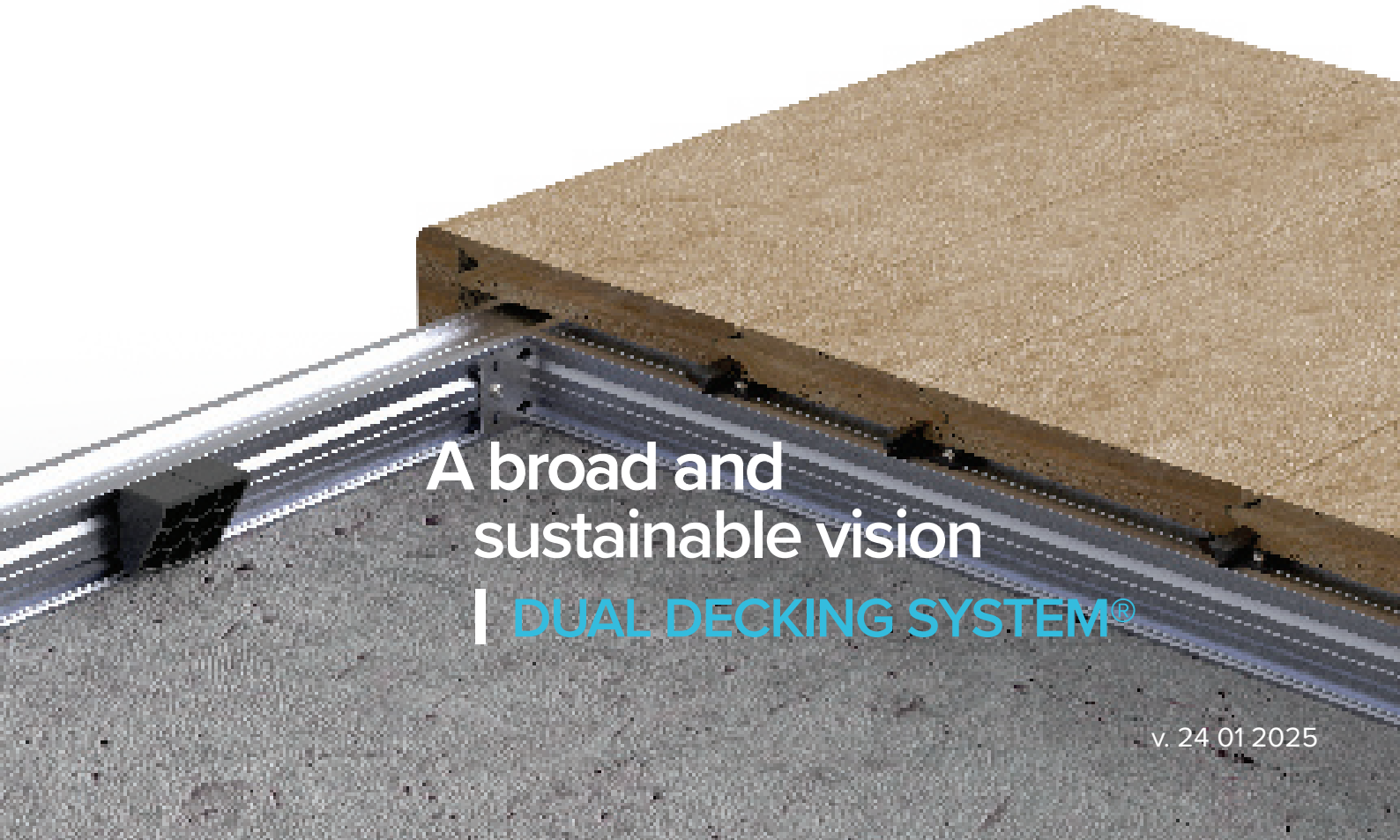
GOVA® home+ PLAST

Installation instructions
Govadeck Dual decking system

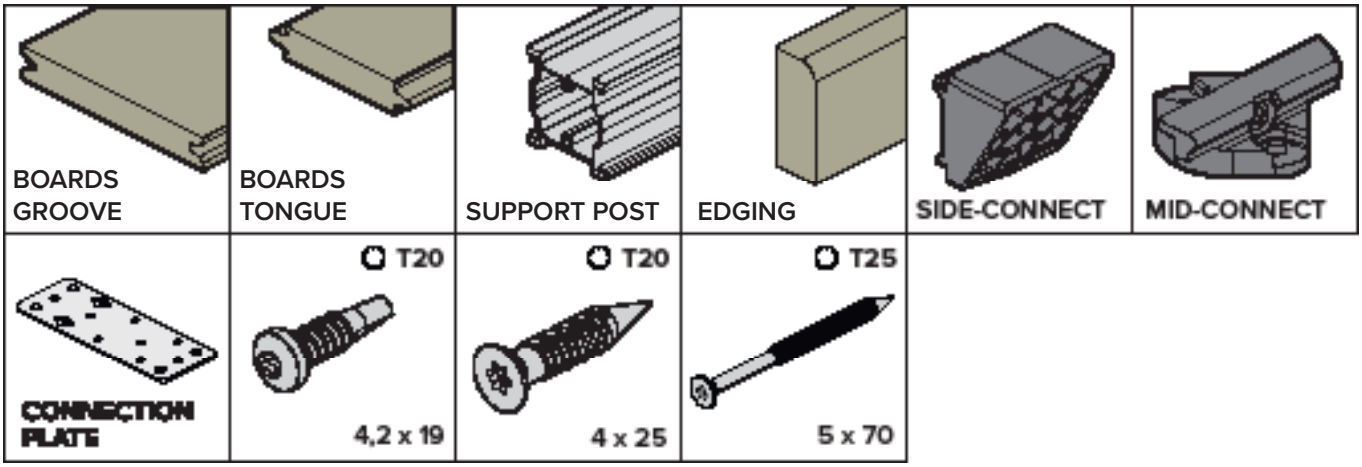
Download the latest version, instructional video, and additional chapters for special terraces at www.govaplast.com



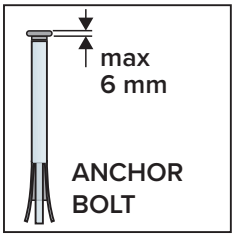
v. 24 01 2025

INDEX

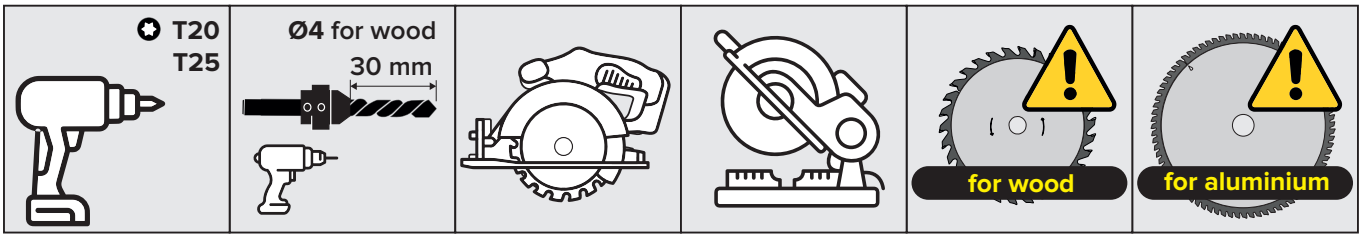
Included parts:



Fasteners to be provided by yourself:



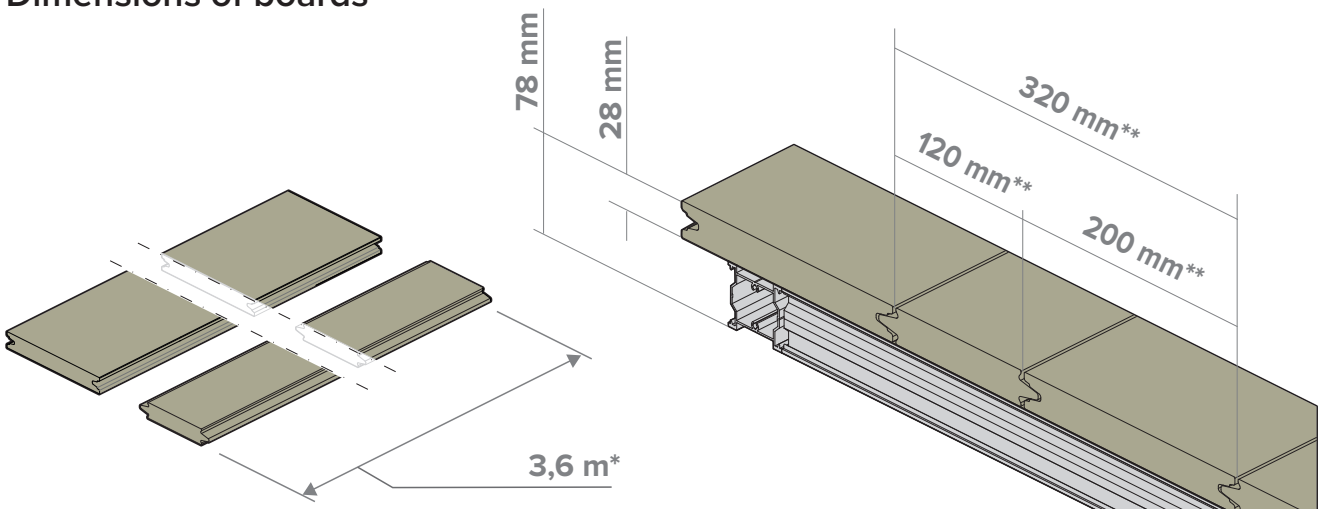
Required tools:



For your safety:

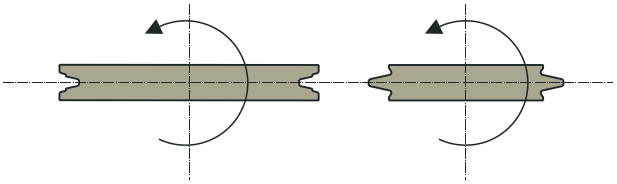
1. SHAPE

1.1 Dimensions of boards



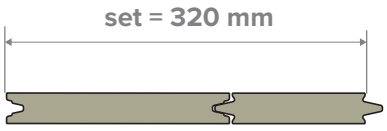
(*) The boards are 3.6 meters long after cutting off the ends.

(**) This is the centre-to-centre distance between the middle of the joint lines. The minimum height of the decking is 78 mm.



Both sides of the boards are usable

Calculation of the terrace width wise:

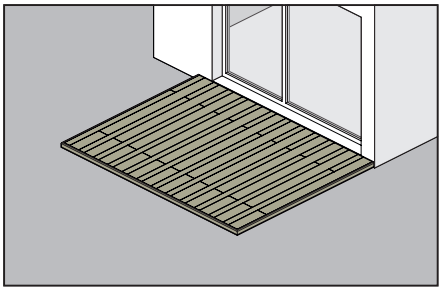


sets boards (1 groove-groove en 1 tongue-tongue)									
1	2	3	4	5	6	7	8	9	10
width decking (in meters)									
0,32	**0,64**	**0,96**	**1,28**	**1,6**	**1,92**	**2,24**	**2,56**	**2,88**	**3,2**

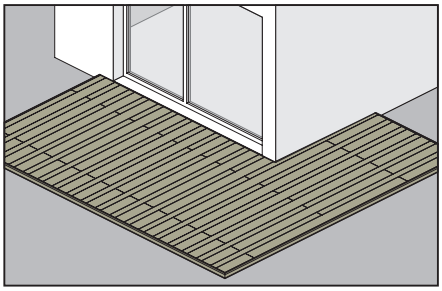
sets boards (1 groove-groove en 1 tongue-tongue)									
11	12	13	14	15	16	17	18	19	20
width decking (in meters)									
3,52	**3,84**	**4,16**	**4,48**	**4,8**	**5,12**	**5,44**	**5,76**	**6,08**	**6,4**

1.2 Possible terrace shapes

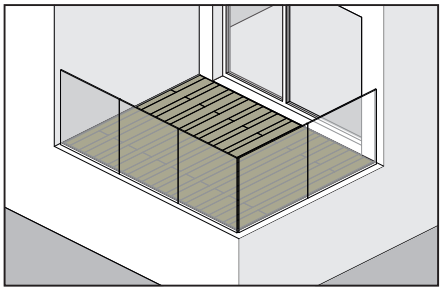
The **DUAL terrace system** is designed to achieve various terrace shapes. This guide focuses primarily on the most common terrace shapes, such as **rectangular**, **L-shaped**, **enclosed terraces** and **rooftop terraces**.



rectangular

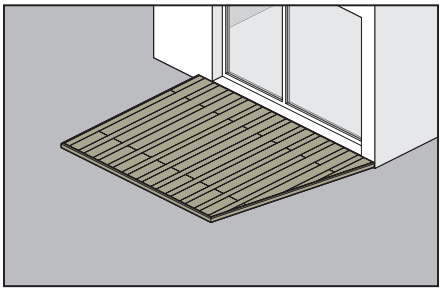


L-shaped

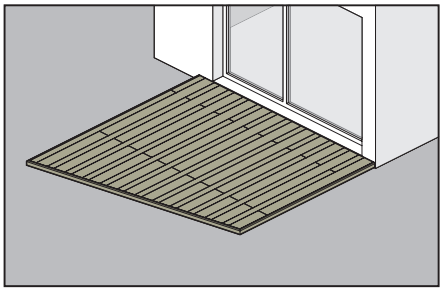


enclosed or rooftop terrace

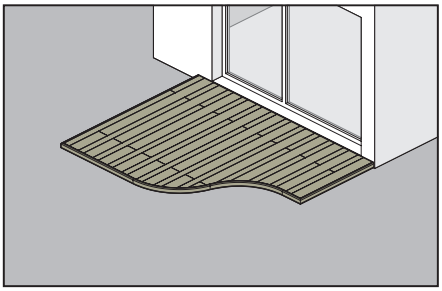
For instructions on **slanted** and **curved** terraces, we refer to the **online extension document**:
https://www.govaplast.com/en/downloads-manuals



slanted side



slanted front

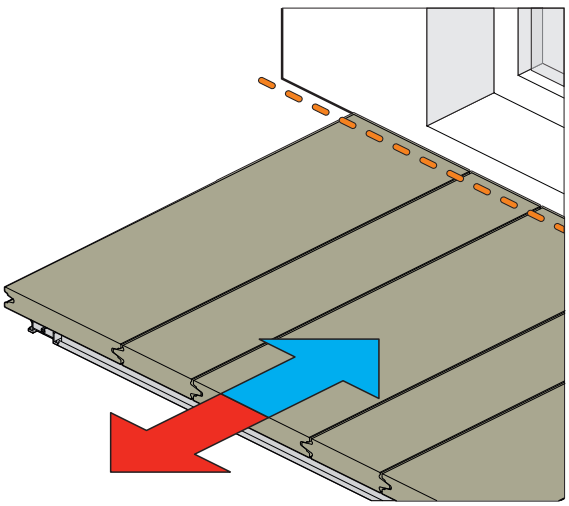


curved shape

1.3 Expansion of boards

When installing the boards, it is crucial to consider **expansion** to prevent them or the support structure from getting stuck between walls, edges, and other obstacles. Insufficient expansion space can cause damage, such as warped boards or deformations in the substructure.

In western Europe, temperatures typically range from a minimum of **-20°C** to a maximum of about **50°C** for boards located in full sunlight.
If we assume that installation normally takes place at a temperature between 10 and 20°C, then the maximum temperature difference is about 40°C upwards (expansion !) and also about 40°C downwards (contraction !)
Because of these large temperature differences, it is important to take expansion and contraction into account.



EXPANSION TABLE

max. **expansion** occurring **per running meter**
(**contraction** is also mentioned fyi)
per installation temperature

0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C
+ 5 mm (- 2 mm)	+ 4,5 mm (- 2,5 mm)	+ 4 mm (- 3 mm)	+ 3,5 mm (- 3,5 mm)	+ 3 mm (- 4 mm)	+ 2,5 mm (- 4,5 mm)	+ 2 mm (- 5 mm)	+ 1,5 mm (- 5,5 mm)	+ 1 mm (- 6 mm)

generally allow for +/- 8 mm per running metre

The **temperature at the time of installation** has a significant impact on how the boards will expand or contract. The higher the installation temperature, the more the decking will contract longitudinally at lower temperatures. Conversely, the lower the installation temperature, the more the deck will expand longitudinally at higher temperatures.
For example, a 5-metre terrace installed at 15°C will **expand** approximately **17.5mm (5 x 3.5mm)** at 50°C and contract 17.5mm at **-20°**.

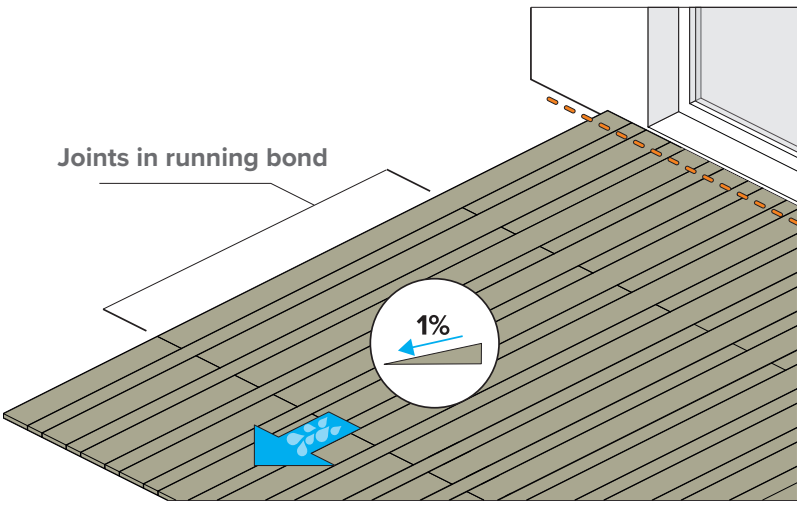
For terraces up to **5 metres long**, a **fixed expansion margin** of **+40 mm** and **-40 mm** can be applied. However, if the length exceeds 5 metres, it is advisable to consult the **table** to determine the specific expansion margin. This translates to **overhang 3** as on pages **28 and 29**.

1.4 Terrace design

It is necessary to determine the **direction of the boards** before you start designing the support structure and decking. Generally, the boards are placed perpendicular to the gable line, which is beneficial for both expansion and **drainage** of the decking.
For proper drainage, a slope of **1 centimetre per metre away from the house** is recommended.
Always make a **scale drawing** of the deck (boards, joint locations, fixed line and support structure and securing them).
Take into account the length of **3.6 metres** of the boards to make the best use of them.

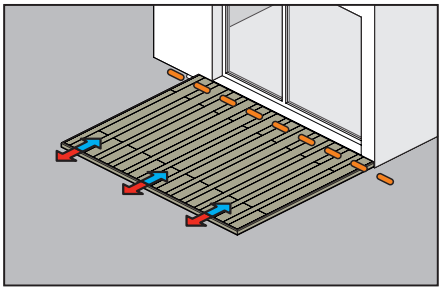
Depending on the **desired aesthetics**, boards can be chosen in **running bond** or **wild bond**. In **wild bond**, there is **less waste** and the boards are better utilised.
This sketch illustrates a terrace with boards in running bond where the saw cuts are kept aligned.

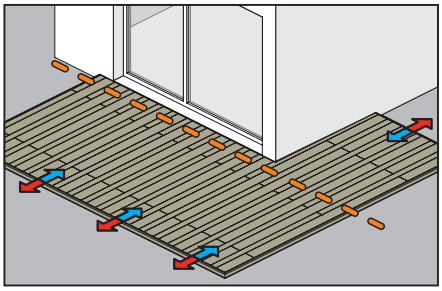
In both cases, the **position of the joints** between the boards affects the construction of the support structure and vice versa.

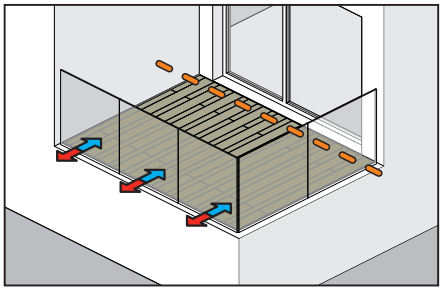


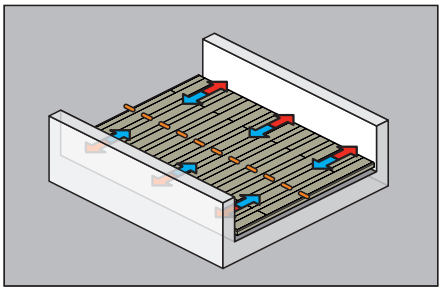
1.5 Fixed line in function of expansion

The **DUAL decking** should have the possibility to expand lengthwise without obstructions.
The **fixed line** is the line along which the boards are attached to the support structure. In most situations, the **fixed line** is along the side of the **façade**.









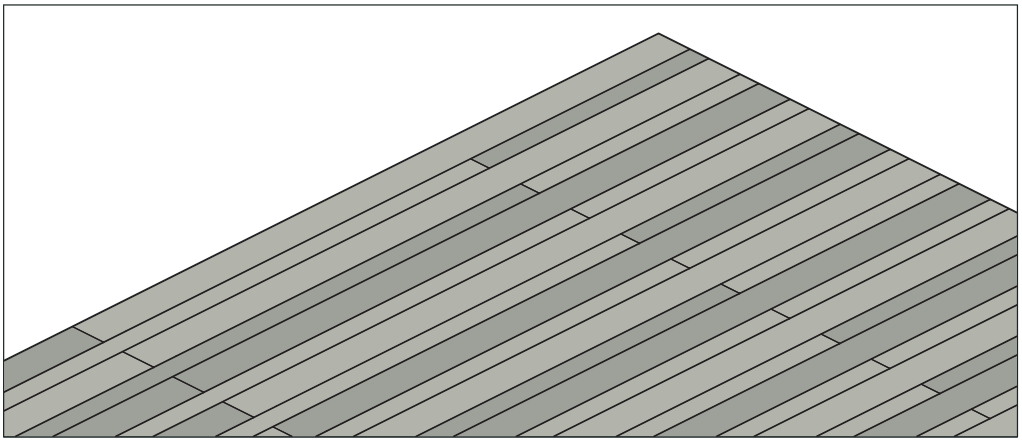
For a terrace **between two walls**, it is recommended to place the fixed line **in the middle**. This way, the expansion at both ends equally distributed.

fixed line

direction expansion/contraction

1.6 Mixing the boards

The boards may have **slight colour differences**.
By **mixing** them during installation, you get a beautiful and **natural result**.



2. SUPPORT CONSTRUCTION

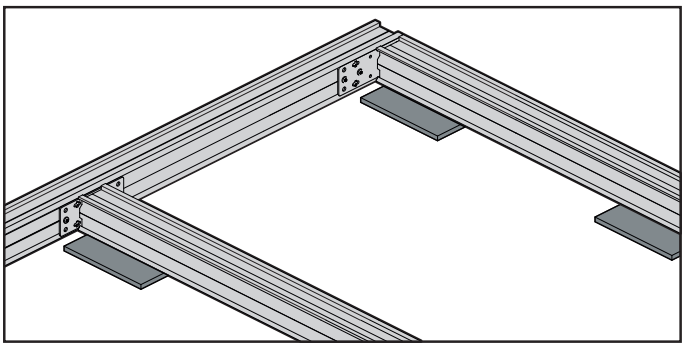
2.1 Stability of the soil

The soil acts as the robust foundation on which the final decking surface is built.
A solid, load-bearing and stable soil is essential to ensure the overall durability and lasting quality of the finished decking.

The installer is responsible for independently assessing and confirming the stability of the soil, either personally or with the help of qualified professional. It must be verified that the soil is suitable for its intended use, including compliance with technical requirements and relevant legal standards.

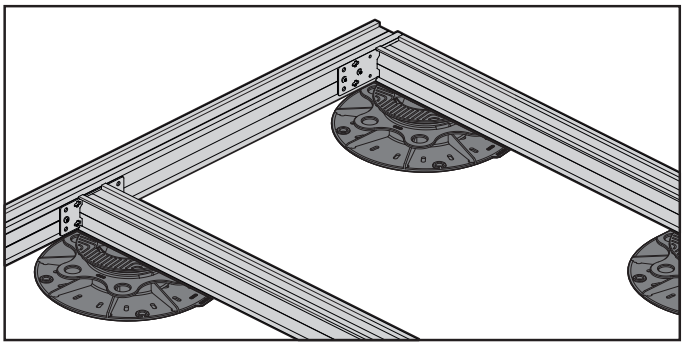
Govaerts Recycling is not liable for problems related to or arising from the soil. The company offers no guarantees regarding the performance of the soil for the final result.

Use **Gova-Pads** to absorb height differences of up to 23 mm. The Gova-Pads are also **shock-absorbent** and **soundproofing**.

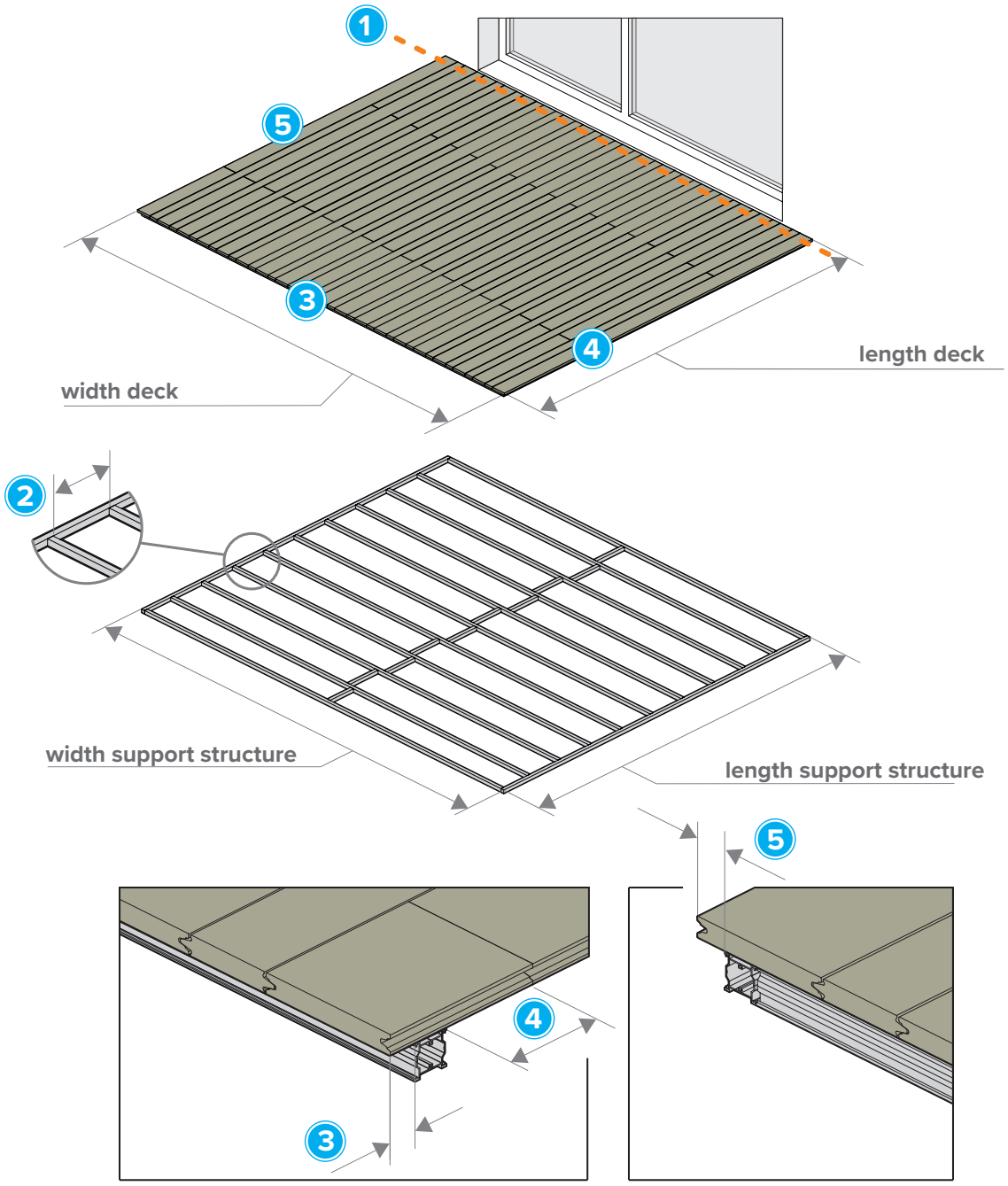


Point of attention for laying (roof) terraces on roofing :
Every 35 cm Gova-Pads must be placed under the load-bearing points of the support structure to prevent damage (risk of leaks!) to the roofing. This way, water can also drain easily under the beams.

To fill **height differences from 23 mm** upwards, always use the adjustable plastic **'Gova-Lift'** decking supports.



2.2 Design in length and width of the support structure of a **non-enclosed terrace**



1. <u>Fixed line:</u> this is where the boards are fixed to the support structure.
   The longitudinal expansion of the boards is calculated from this line.

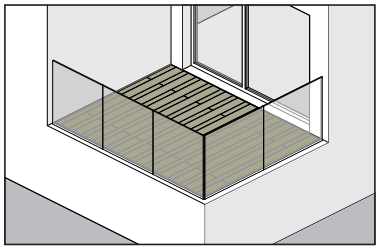
2. <u>Distance between bearing beams:</u> the distance between two beams may not exceed 500 mm

3. <u>Lengthwise, the boards have a minimum overhang of 40 mm.</u> For terraces longer than 5 metres, it is recommended to consult the expansion table for an accurate determination of the margin. The **length of the overhang** should be at least equal to the expansion margin (see table p. 25).

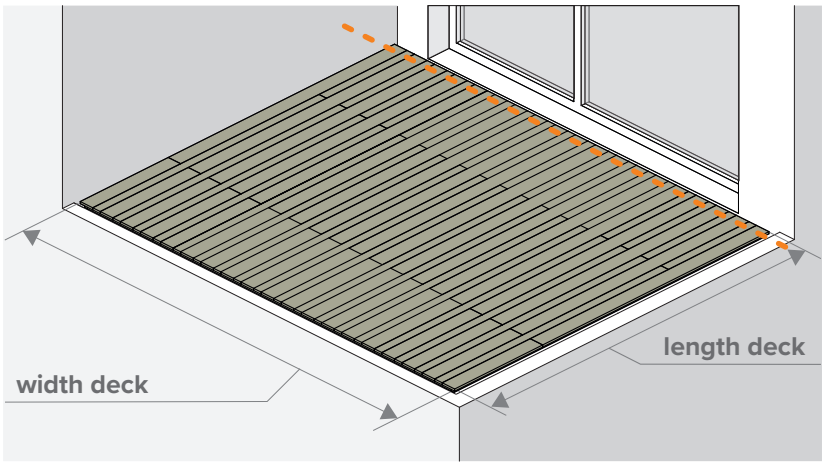
4. <u>Distance from the seam of interconnected boards to the lower beam:</u>
   Ensure that the distance between the board seam and the bottom beam is always larger than 70 mm.

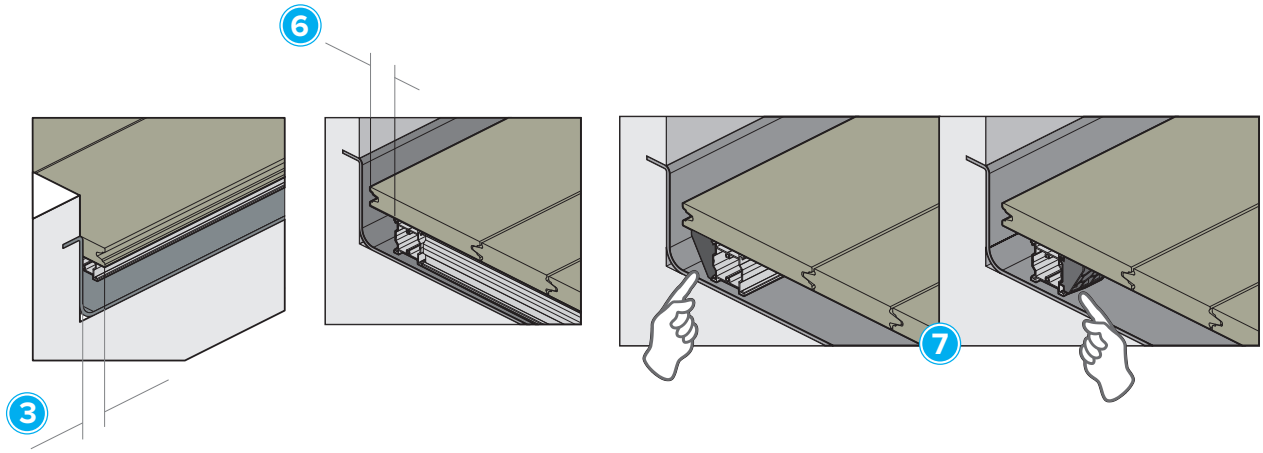
5. <u>The width overhang must be a minimum of 30 mm and a maximum of 50 mm.</u>

2.3 Design of length and width of the support structure of an **enclosed terrace**



When installing an enclosed patio or a roof terrace, it is advisable to allow the outer boards to slope slightly.
This allows you to minimise the gap or seam between the boards and the walls.



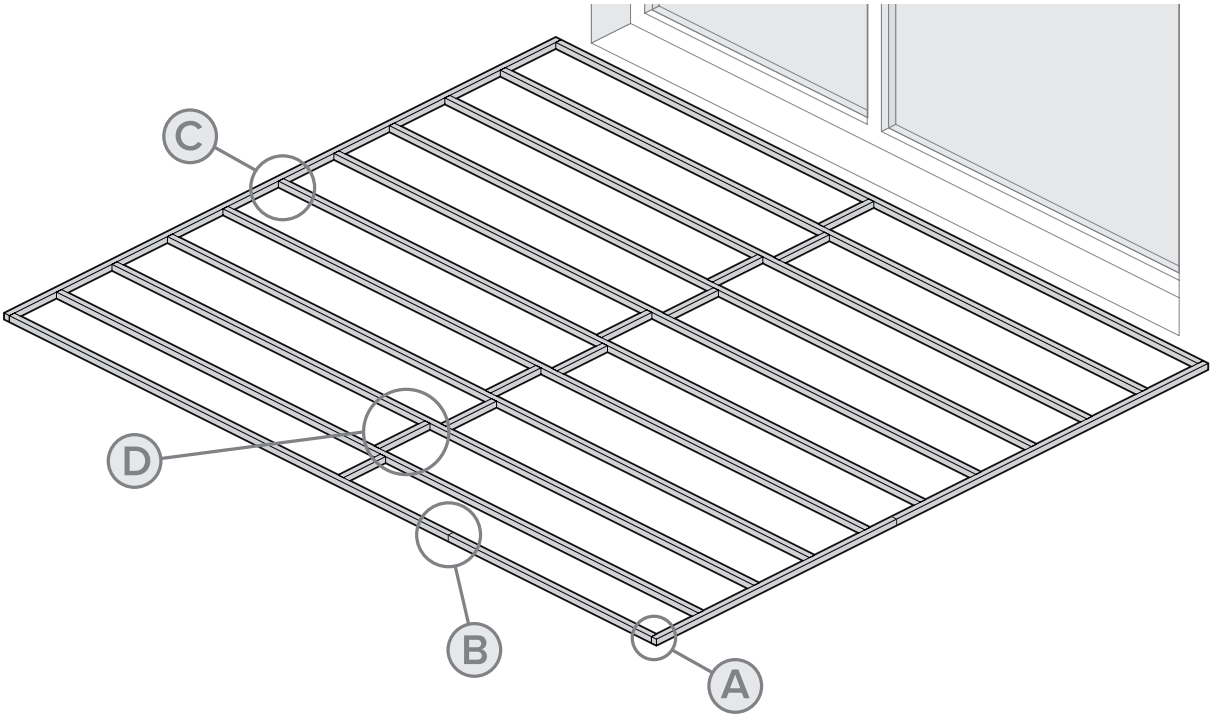


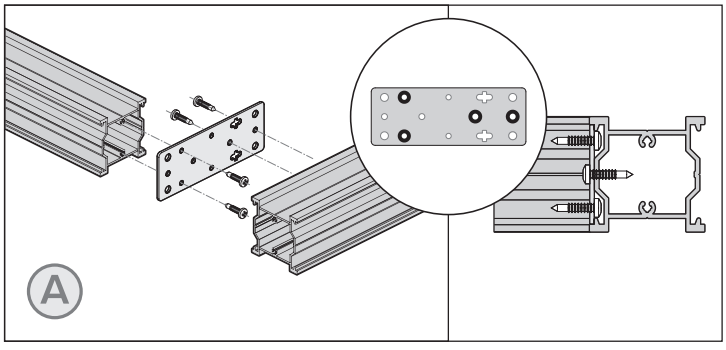
6 <u>In width, a maximum overhang of 30 mm.</u>

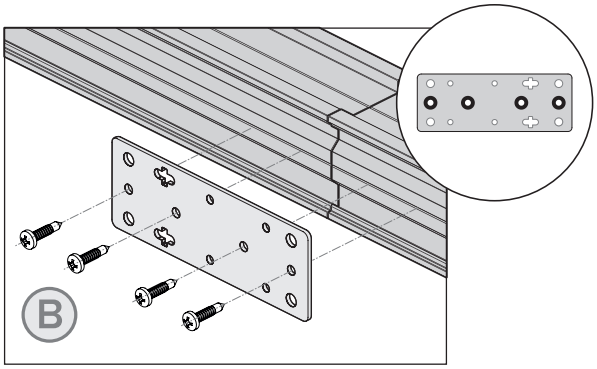
7 If there is an **obstacle, such as a threshold**, it is more convenient to mount the **side-connects** on the **inside** of the support structure. These **side-connects** are needed to fix the boards later.

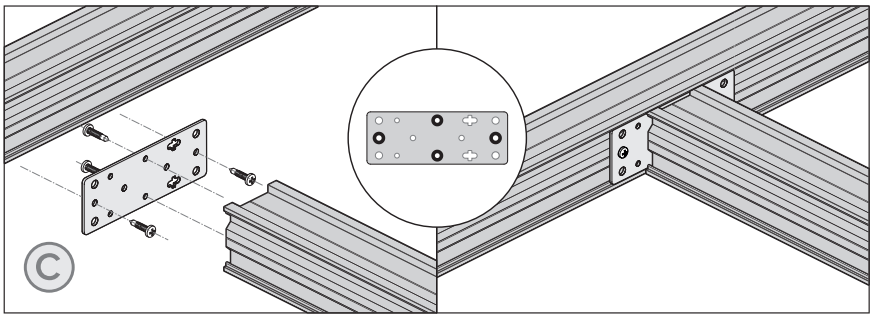
2.4 Installation of the support structure for a rectangular terrace

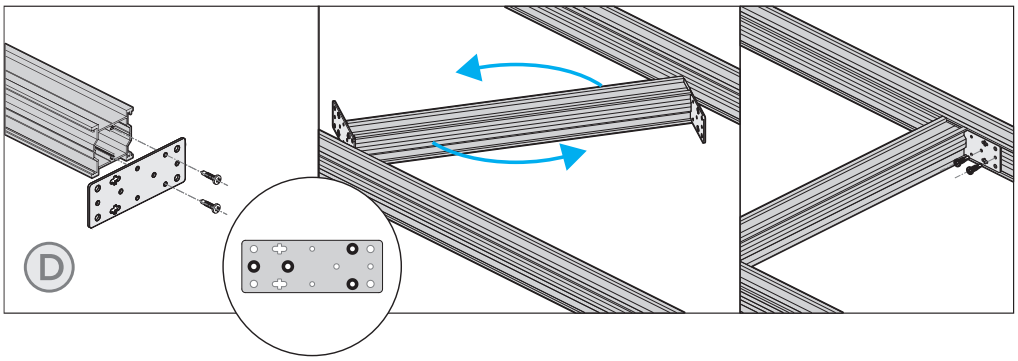
The **connection plate** can be used in different ways to build the support structure. Depending on the kind of connection, **specific holes** of the **connection plate** are used. In the diagrams below, the holes to be used are marked in **bold**.



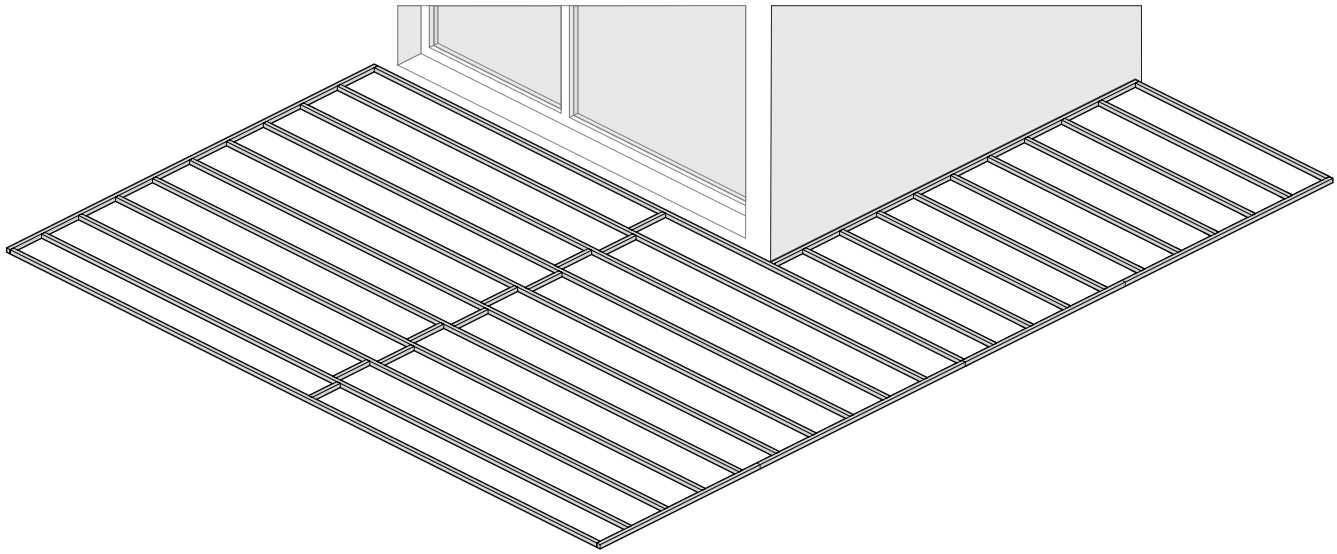






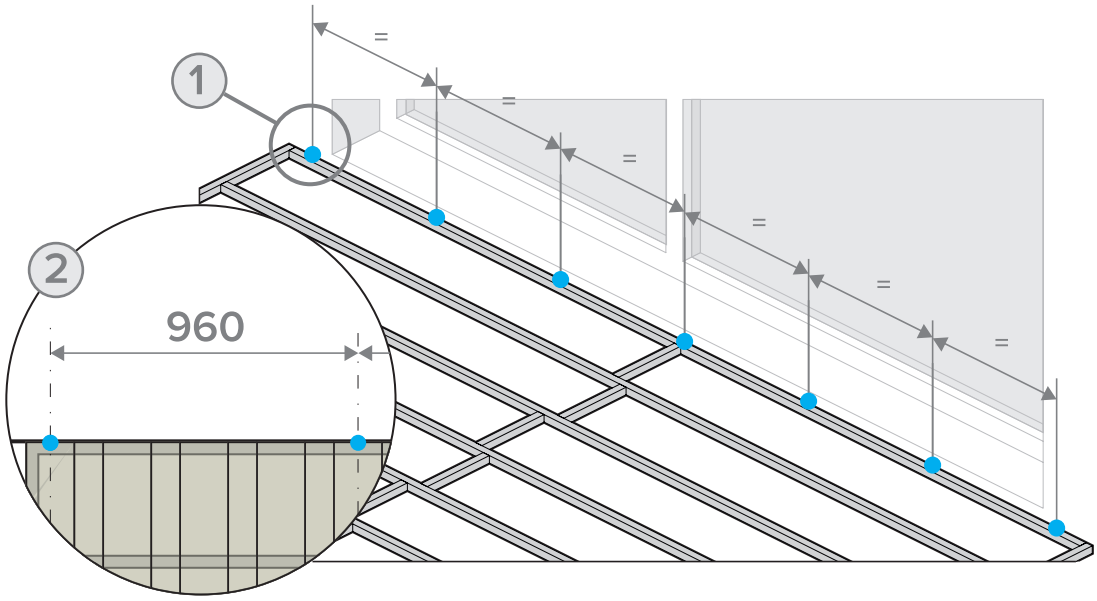


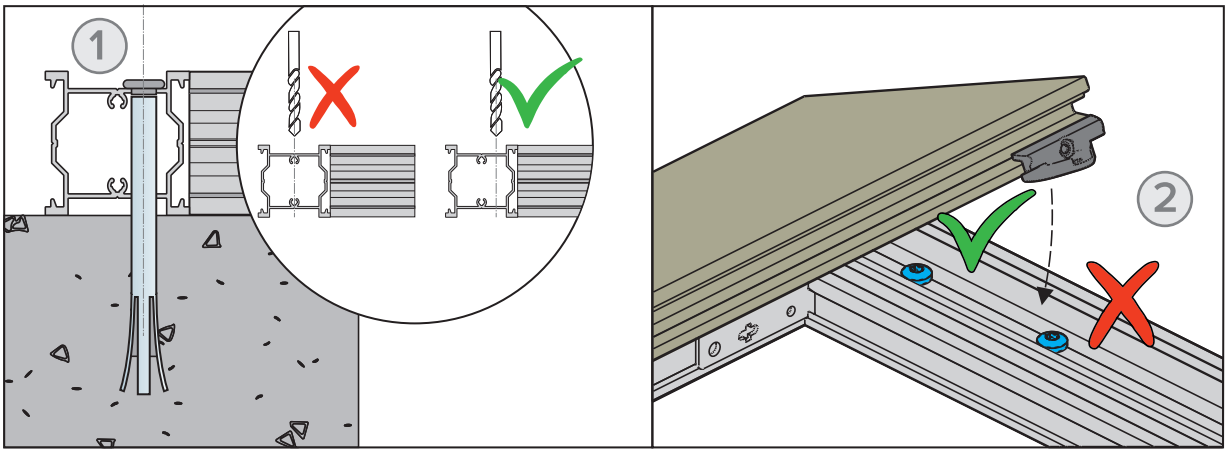
2.5 Installation of the support structure for an **L-shaped terrace**



2.6 Anchoring the support structure

The structure should be firmly **anchored** in the ground along the **fixed line** (1) using **anchoring plugs**. More information on the fixed line can be found on page 26.
Place the anchoring plugs preferably in the **middle** of a wide **groove-groove board** (2). Keep a recommended distance of **960 mm between the anchors**. This prevents the head of the plug from getting in the way of a **mid-connect (2)**.
The mid-connects are used at a later stage to attach the boards to the support structure.





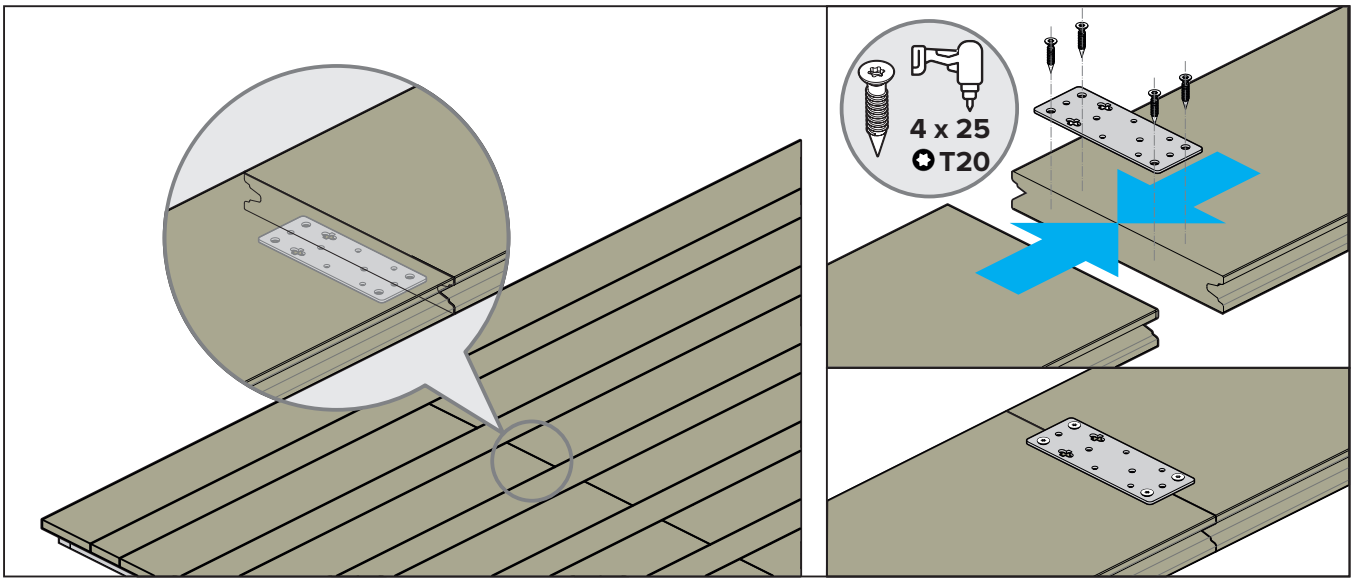
If it is not possible to anchor the support structure downwards (e.g. on a **roof terrace**), it may be considered whether **anchoring** in a **side wall** is possible. This may be possible with intermediate beams, so that the first beam is not positioned directly against the wall. Anchoring in the side wall is only possible **above the moisture barrier** in the wall.

If anchoring in the wall is not an option, consider the possibility of installing **spacers** on the other side of the support structure against an exterior wall or curb. These do not need to be fixed to the outer wall or edge, but ensure that the support structure cannot shift too much. With roofing, it is important to apply a **soft material**, such as rubber, to the heads of the spacers so that the existing roofing is not damaged.

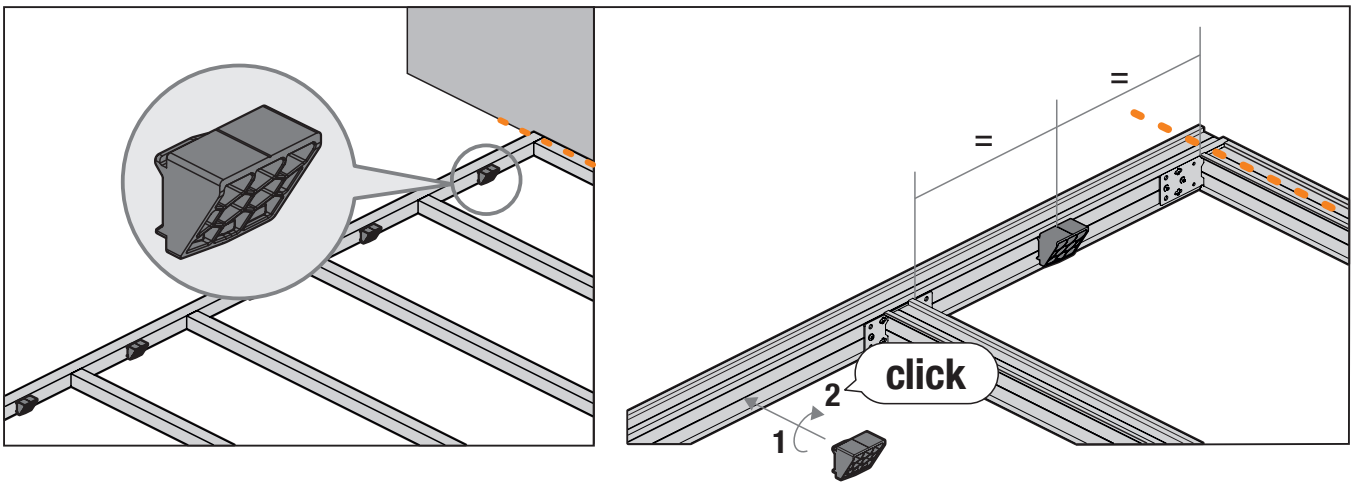
3. INTALLATION OF THE BOARDS

Connecting the boards lengthwise

For terraces where several boards are placed lengthwise behind each other, the boards are laid in bond. This has already been taken into account when designing the support structure.
The decking boards are joined lengthwise by a **connection plate**. Then the 'extended' terrace board can be turned over and attached to the supporting structure.
All boards should be cut at the **same temperature**.

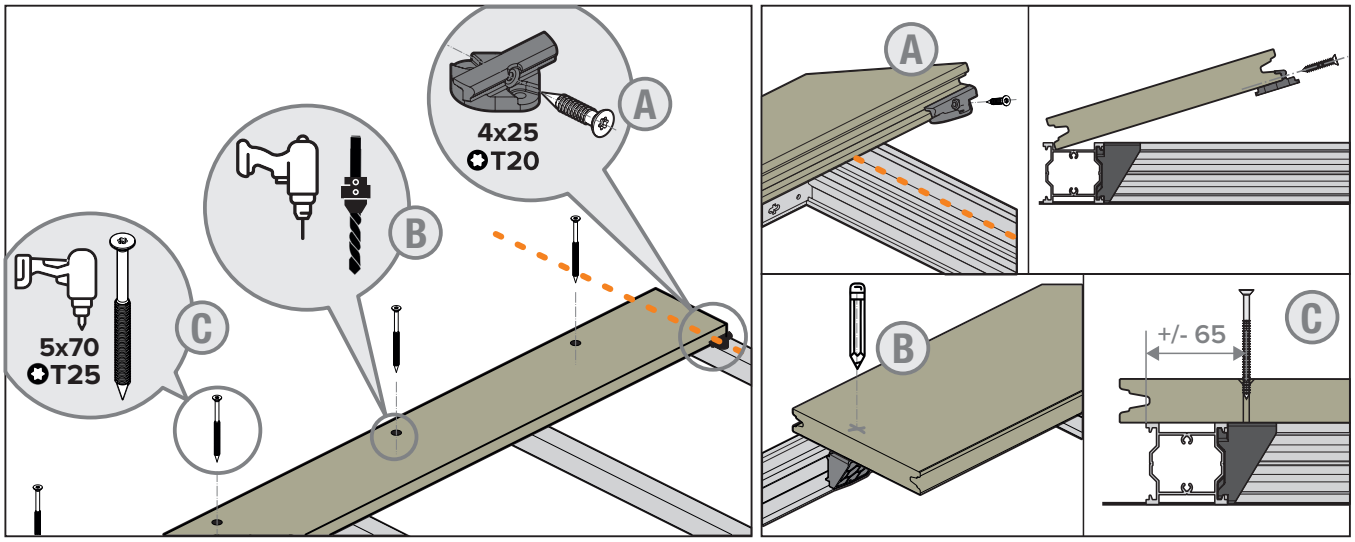


STEP 1: installation of the side-connects



Screw the **side-connect** into the grooves of the lower beam until a **click** is heard. Make sure the side-connect can slide freely to accommodate expansion and contraction of the board. So place them **at least 50mm** from the **connection plates** of the supporting beams.

STEP 2: Installation of the first board (groove-groove)

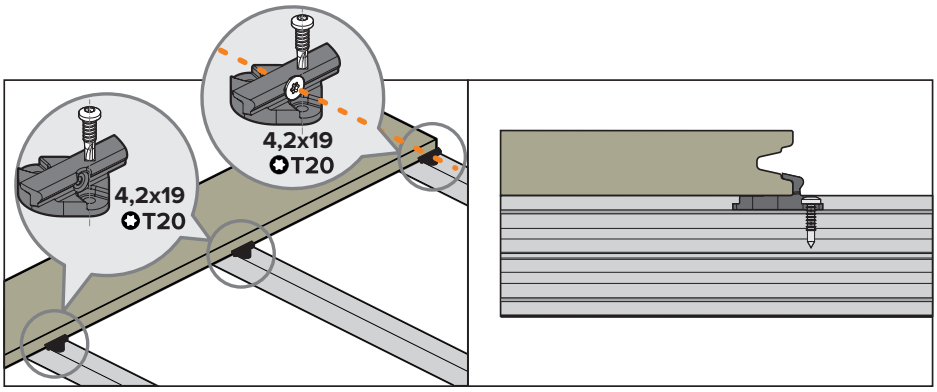


A: Attach the first mid-connect to the **fixed line** of the board and ensure that the screw is driven **straight** into the side of the board. Keep the **boards at an angle** while tightening. It is highly recommended **to pre-drill** before inserting the screw.

B: Position the **first board** parallel to the side of the support structure and **mark the position**s of the fastening points on the board (above the center of each side-connect). Then, use a drill with a countersink bit (diameter 4 mm) to create the necessary **pilot holes**.

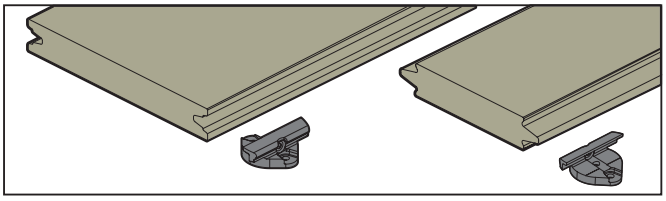
C: Drive the screws into the **side-connects**, but do not overtighten to prevent breakage.

Stap 3: fixing the mid-connects of the first board

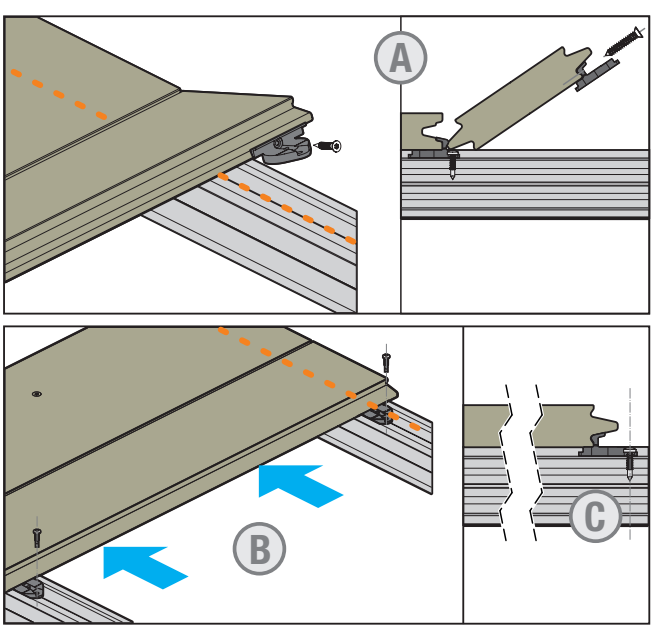


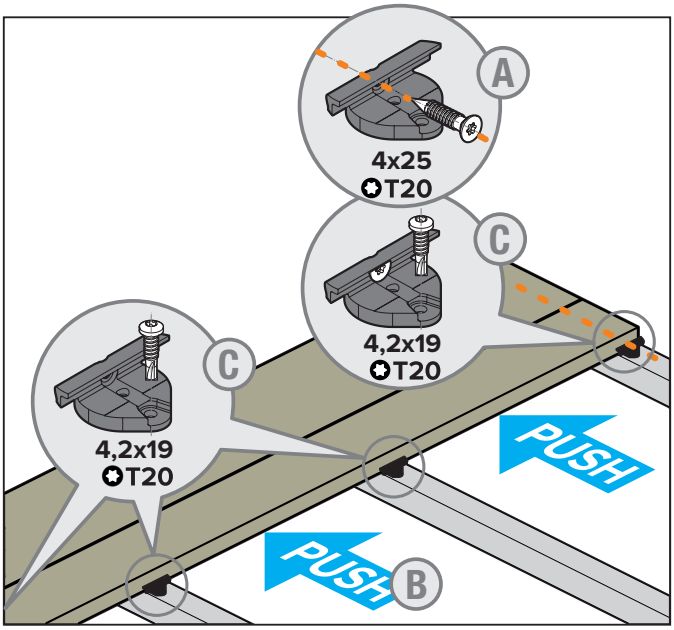
Schuif de **mid-connect** in de onderbalk tot tegen de plank en schroef deze rechtstreeks vast in de onderbalk. Belangrijk: alleen de **eerste mid-connect** heeft **twee schroeven**. Eentje voor de **vaste lijn** en een tweede in de **onderstructuur**. De **andere mid-connects** worden alleen op de **onderstructuur** geschroefd!

Step 4: second board (tongue-tongue)



By rotating the **mid-connect**, it can secure both tongue-tongue and groove-groove boards.



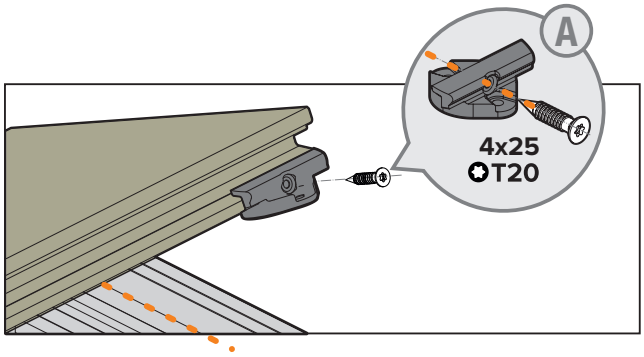


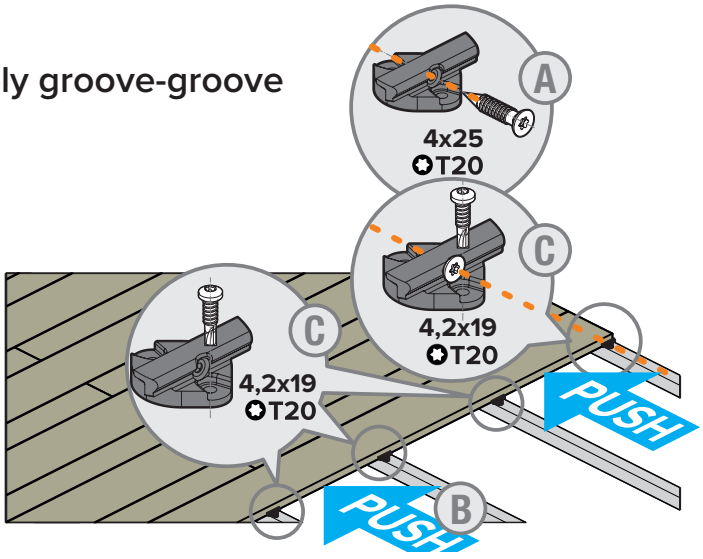
A: Also attach the first mid-connect, which is on the **fixed line**, to the board while holding it at an angle.

B: **Press** the board firmly into place.

C: Secure it with **mid-connects** in the beam using only the **vertical** screw.

Step 5: Place the next boards alternately groove-groove and tongue-tongue



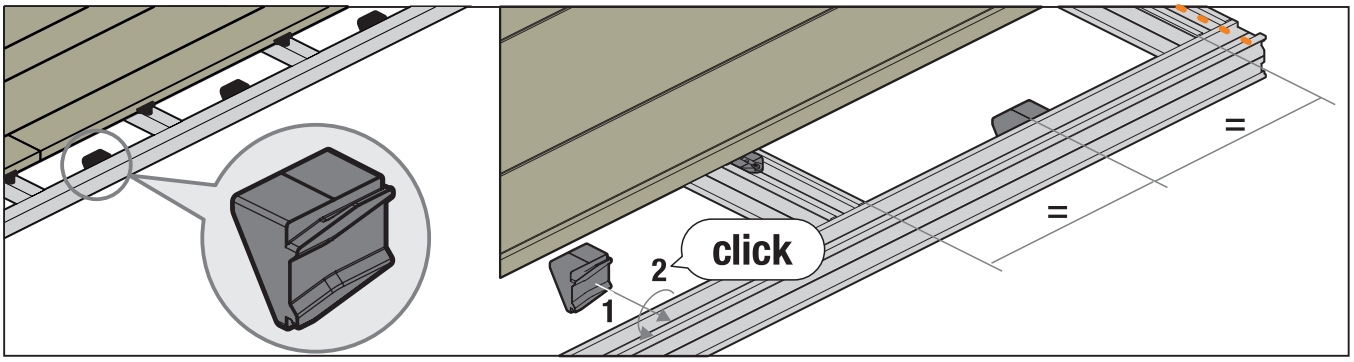


A: Screw the **mid-connects** on the **fixed line** to the boards.

B: Press the **planks** firmly into place.

C: Screw the mid-connects into the beam.

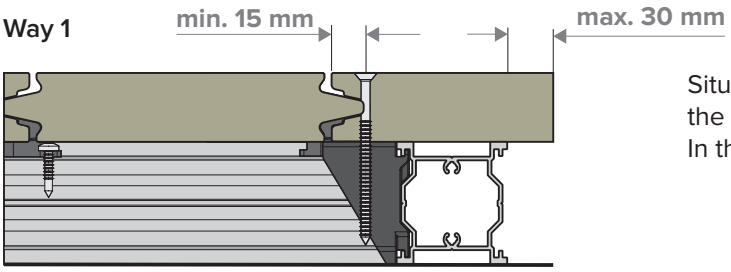
Step 6. Last board



Place the side-connects (rotate till ‘klik’).

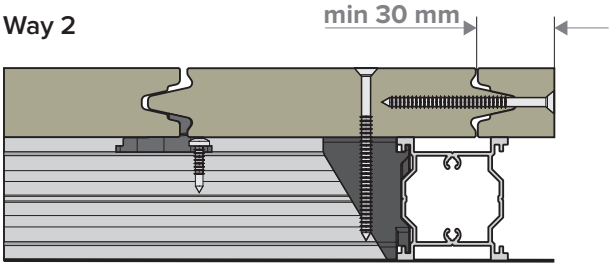
There are **three** possible **ways to finish**:

Way 1



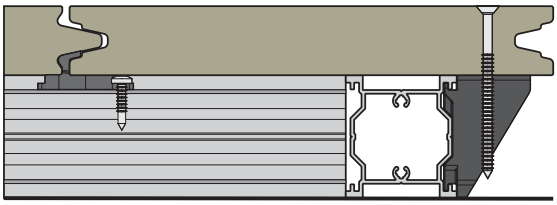
Situations where the last board is **wide enough** to cover the support structure:
In these cases, the board is **cut to width**.

Way 2



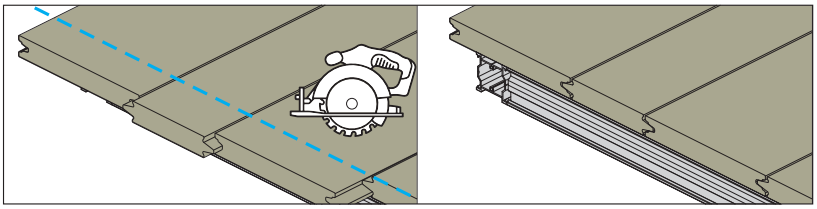
If the last board does **not fully cover** the outer edge of the support structure, it can be widened by adding a **cut board** to the side to achieve the desired coverage.

Way 3



If necessary, the **side-connects** can be placed on the **outside**.

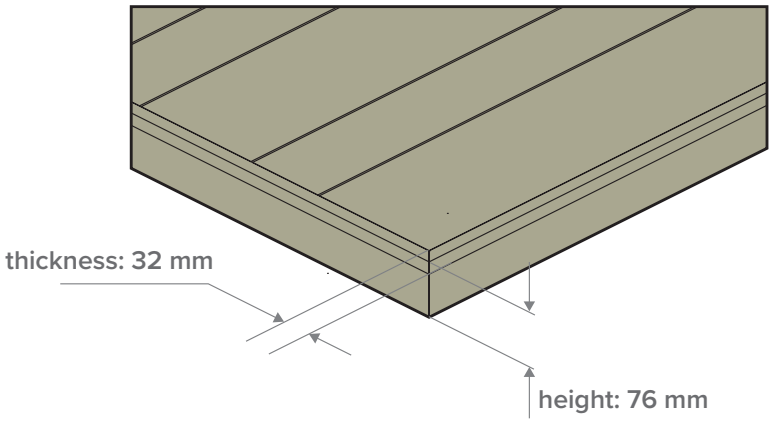
Once **all the boards** are installed, cut the lengths off in **one motion** to create a **straight edge**.



4. INSTALLING THE EDGING

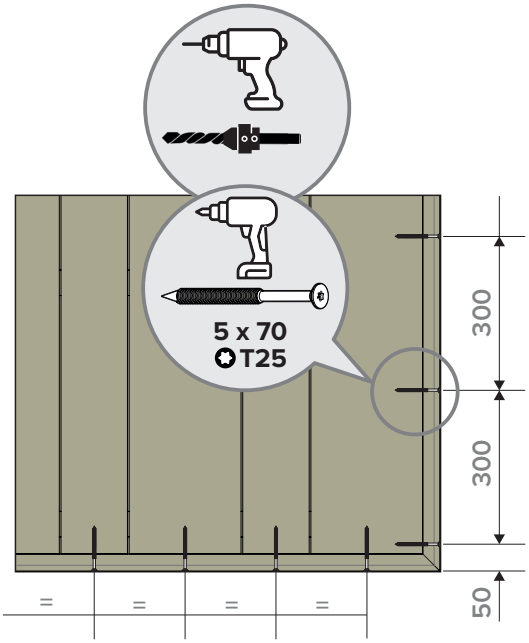
If desired, the terrace can be finished with an **edging board**.
The edging board is not necessary if the terrace is already neatly recessed, so the sides of the boards are not visible.

4.1 Dimensions of edging board

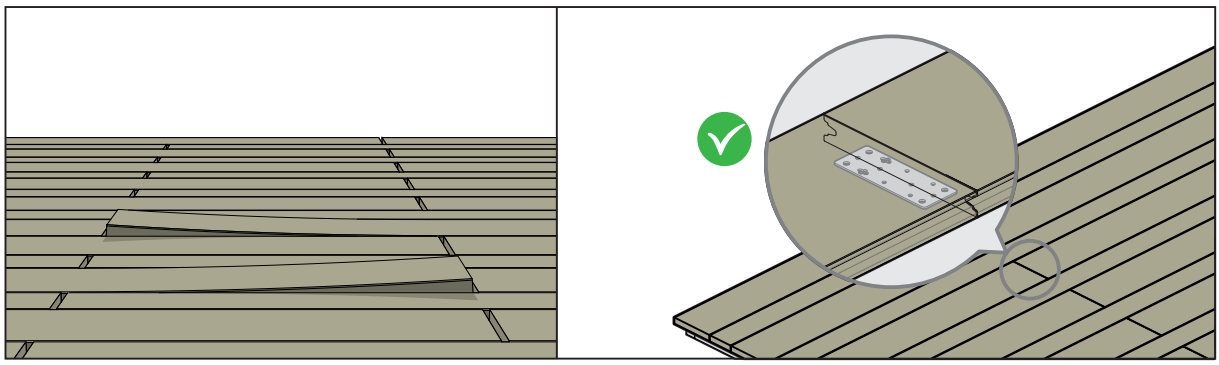


4.2 Attaching the edging board

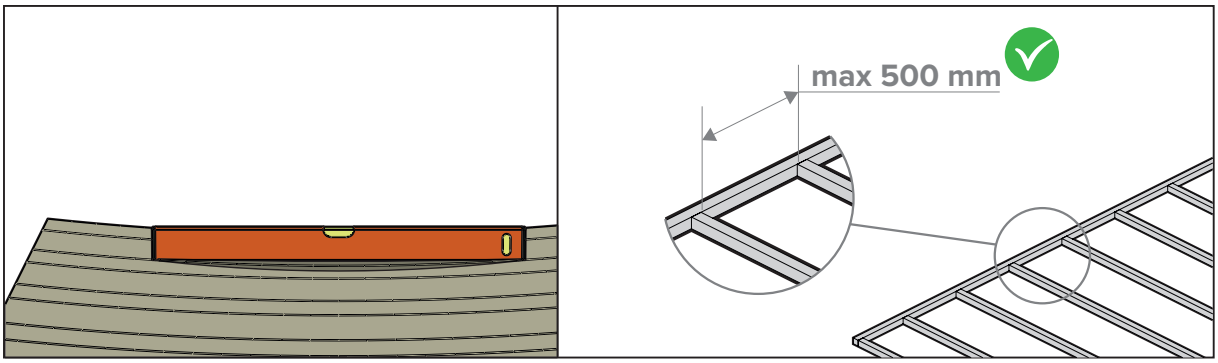
The edging with a rounded corner is screwed to the outside of the terrace boards every 300 mm using flat countersunk stainless steel Torx screws (5 x 70 mm). We recommend pre-drilling the screw holes in the edging using a countersink drill bit.



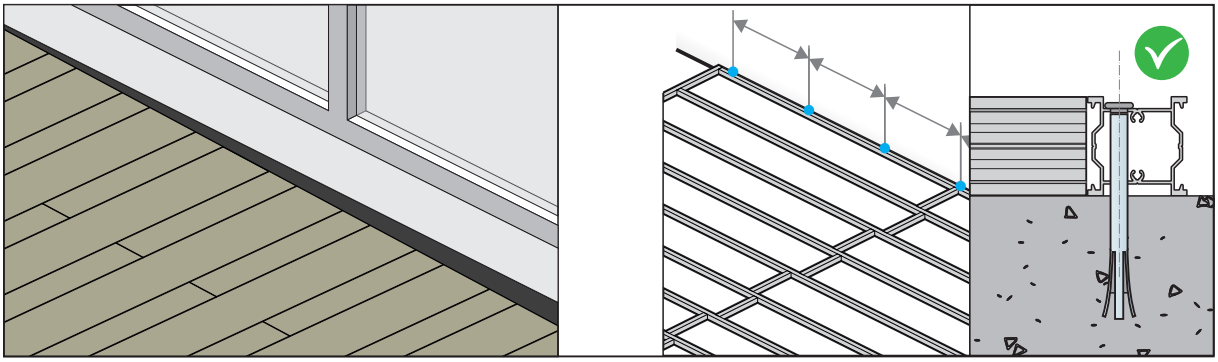
5. AVOID THESE MISTAKES



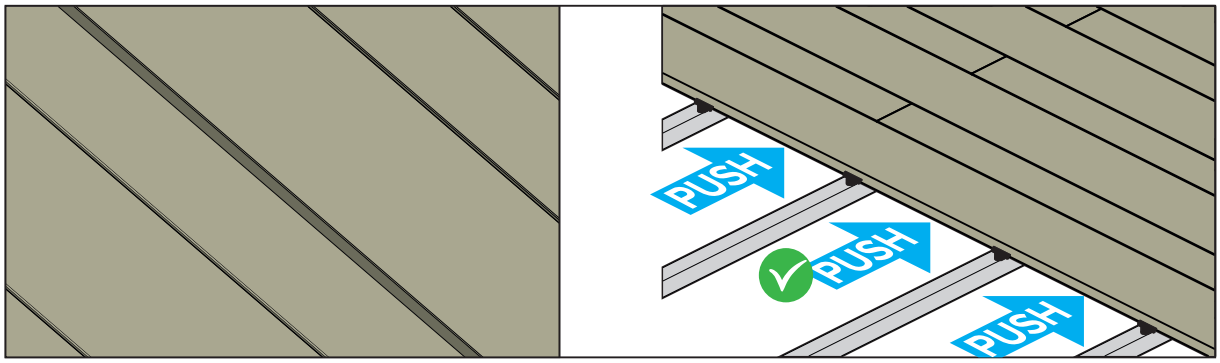
When the boards are not connected with a ‘connection plate,’ the ends will lift.



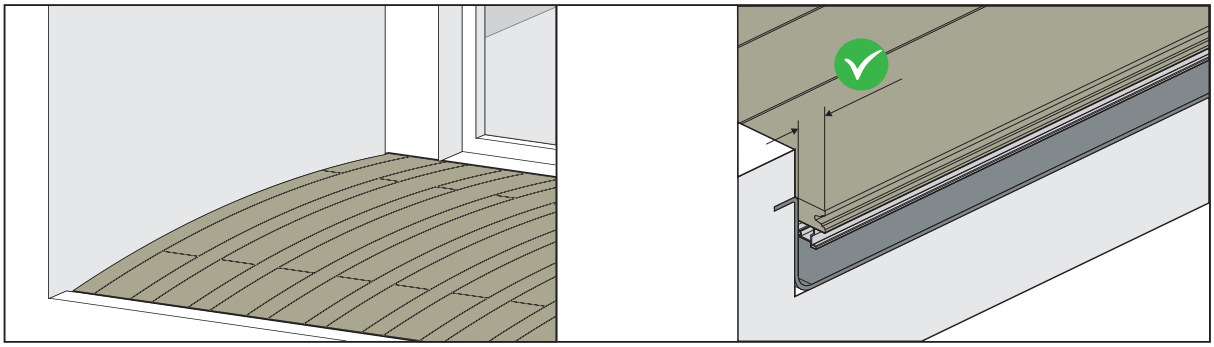
A gap that is too large between the beams of the support structure can cause the boards to sag.



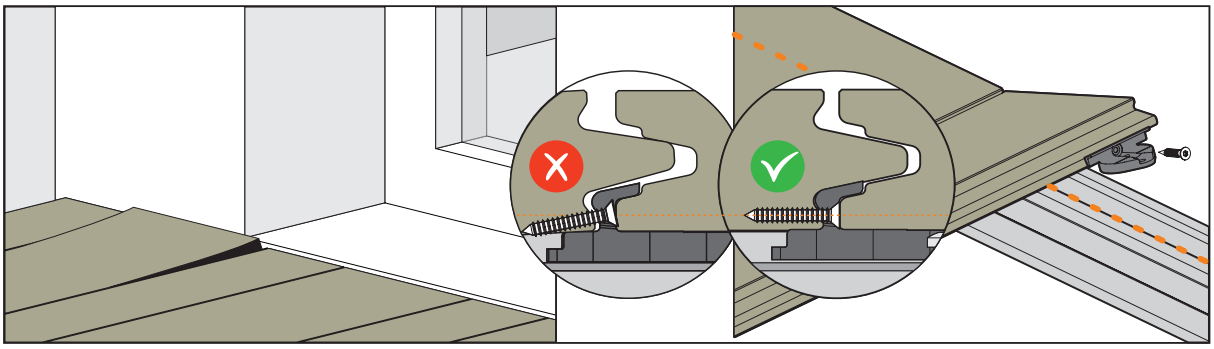
The support structure must be secured to the ground to control contraction and expansion. Without proper fastening, it can slowly shift.



If the boards are not pushed firmly during installation, irregular grooves may form.



The boards can warp due to constraint during expansion. Always ensure there is enough space to allow for the board to expand.



If the screws are tightened at an angle on the fixed line, the board may lift locally. Therefore, make sure the screws are driven in straight.

If the scr
screws a

6. MAINTENANCE INSTRUCTIONS

The maintenance of the Govadeck decking boards is minimal and limited to cleaning the boards. The moisture absorption of the decking boards is less than 0.29%, which means oil, grease, and other products cause little to no stains. However, we recommend removing such contaminants from the decking boards as soon as possible. This very low moisture absorption also means that moss, algae, and similar organisms have difficulty or cannot adhere to the terrace boards.

A few tips:

Cleaning:
Use water and, if necessary, a cleaning product. If using a **pressure washer**, choose a **fan-shaped spray** and do not set the **pressure too high**.

Removing scratches:
If the scratch is **superficial**, you can treat it by lightly **sanding**. Use fine sandpaper, such as grit 200 or higher. Sand over the scratch, making sure not to damage the surrounding area. After sanding, you will notice the scratch becoming less visible.

If needed, apply a **heat treatment**. By gently heating the material with a (gas) burner, the material softens and can recover better. Here's how: hold the burner at a safe distance (20 cm) from the surface to avoid melting the material. Keep the heat source moving constantly to prevent overheating. Once the surface is slightly heated, you can repeat the sanding process.

After removing the scratch, you can finish the treated area with **finer grit sandpaper** and go over it again with the burner.