

GOVA[®]home⁺ PLAST

A broad and
sustainable vision
| GOVADECK[®]

04/2014



- NL** Plaatsingsvoorschriften Govadeck[®] terras
- F** Instructions de montage terrasse Govadeck[®]
- D** Verlegeanleitung Govadeck[®] Terrassen
- UK** Installation instructions Govadeck[®] terrace.

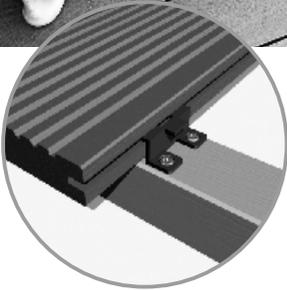




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finishing board

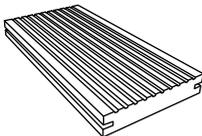


Gova-Connect

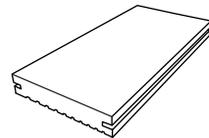
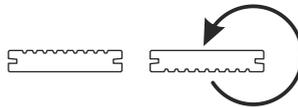
Govadeck decking boards are fitted using the Gova-Connect system. A simple high-grade plastic clip is used to fix the boards to the bearing structure.

This system allows for the inevitable expansion of the boards. The bearing structure is constructed from rot-proof eco-beams. The Gova-Connect is placed into the lateral grooves in the boards. This ensures that the screws are not visible on the top surface. In addition, this system allows the boards to expand and contract without causing any problems.

1 board = 2 looks !



grooved

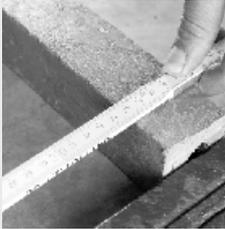


flat



Prior to installing Govadeck read the installation instructions carefully. Due to the specific properties of the material, problems may occur if the deck is not installed correctly. Therefore, for optimum results and trouble-free decking follow the instructions carefully.

Boards, supporting beams and finishing boards.



ECO supporting beams
5 x 5 x 240 cm
weight 5,6 kg per beam



decking boards CLASSIC
3 x 15 x 360 cm
Available in 5 colours
weight 14,6 kg per board



finishing board
3 x 8.2 x 360 cm
weight 7,9 kg per board

**3% tolerance
on thickness, length and width.**

Fittings



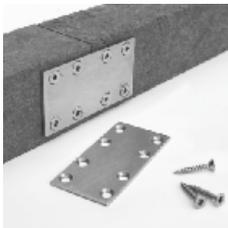
Gova-Screw
Flat countersunk torx screw in stainless steel
Type 4 x 20 mm (200 per box)
Type 5 x 80 mm (100 per box)
Type 5 x 100 mm (100 per box)



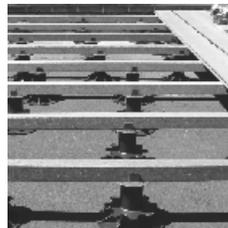
Gova-Connect
1 bag =
100 Gova-Connects
200 screws
(stainless steel torx 4 x 20 mm)



Gova-Start-Connect
1 bag =
25 Gova-Start-Connects
50 screws
(stainless steel torx 4 x 20 mm)



Gova-Fix
1 box = 25 Gova-Fix
(stainless steel connecting plates
2 x 40 x 77 mm)
200 screws
(stainless steel torx 4 x 20 mm)



Govalift
5 types for various heights
The eco beam is to be supported by a Govalift every 35 cm
Use per m² : 6.5 pcs.

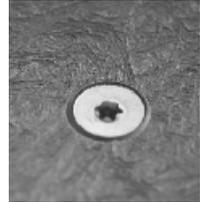
type	pcs. / bag
3/5 cm	50
5/9 cm	50
9/13 cm	50
11/15 cm	40
15/19 cm	40

For optimal drainage of the decking boards, the base ground needs to slope a minimum of 10 mm per meter in the lengthwise direction of the boards.

RECOMENDED SCREW SIZES

Always use our special stainless steel Gova-screws (countersunk Torx) for :

- The attachment of the Gova-Connects onto the supporting beams : 4 x 20 mm
- The connection of the supporting beams to each other : 5 x 100 mm
- The attachment of the Gova-Fix plates : 4 x 20 mm
- The attachment of the standard finishing board : 5 x 80 mm
- The attachment of the boards where visible : 5 x 80 mm



TOOLS

The Govadeck decking boards can be worked in the same manner as wood, with standard wood working tools. For sawing and drilling we recommend working the Govadeck steadily and slowly.



When using the stainless steel screws 5 x 80 mm, we recommend pre-drilling 4 mm holes, to enable easier fixing and removal/adjustment of screws if required, thus preventing undue stress on the screws.



To countersink visible screws (e.g. in a finishing border), we recommend using a counterbore cutter on the 4 mm drill.

Counterbore cutter



STORAGE BEAMS AND BOARDS :

When storing the Govadeck decking boards, care should be taken to ensure that they are sufficiently supported on a flat surface at all times in order to prevent deformities.

GROUND :

A well prepared surface is very important. It needs to be solid, level, stable and of sufficient depth. (concrete, tiles, sand-cement, gravel...)

CAREFUL/CONCISE MEASUREMENT IS VERY IMPORTANT !

Accurate measurement of the patio beforehand, is required, not only to determine the quantity of materials required, but also to enable the design of a solid bearing structure. Examples shown on the following pages demonstrate the importance of a correctly installed bearing structure..



+/- Material per m²:
(as an indication only)

1.85 boards 3 x 15 x 360 cm
1.6 eco-beams 5 x 5 x 240 cm
18.5 x Gova-Connect
2.5 x Gova-Fix
57 x Gova-Screw 4 x 20
10 x Gova-Screw 5 x 100

Optional
Gova-Lift
6.5 pieces per m²

Allow for the max. expansion with regard to the temperature at the time of installation to prevent the boards jamming between walls, borders etc and consequently becoming damaged, e.g. bulging boards or damaged borders.



The higher the temperature at the time of installation, the smaller the max. expansion will be.
The lower the temperature at the time of installation, the larger the max. expansion will be.

EXPANSION TABLE

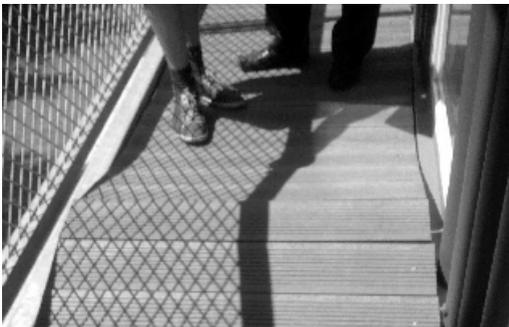
max. EXPANSION occurring per running meter
 (CONTRACTION is also mentioned fyi)
per installation temperature :

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)

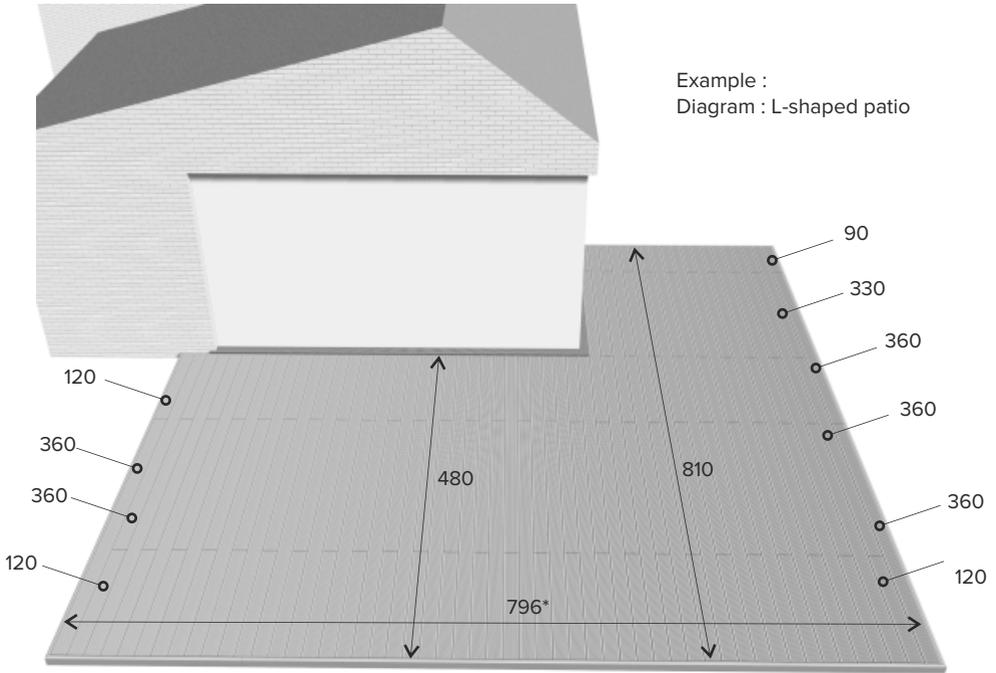


Min. temperature in Western Europe = -20°C. Max. temperature in the sun of e.g. black boards = 50°C.

Assuming that the installation is normally done at a temperature between 10 – 20°C, the max. temperature difference will be in the region of + 40°C (expansion) and in the region – 40 °C (contraction) This demonstrates the importance of taking into account the process of expansion/contraction.

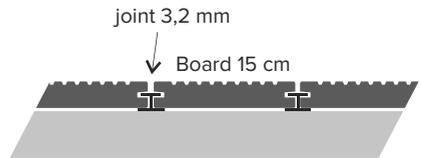
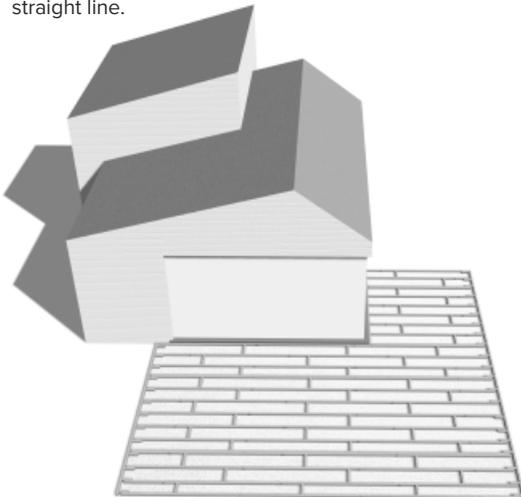


This picture shows the results of not properly taking into account the expansion of the bearing structure. These boards were installed during summertime, without the correct space being left to allow for the heat expansion effect; resulting in the distortion of the boards.



Prior to designing the decking and its' bearing structure, the direction of the boards should be determined. The most important factor is, that the linear direction of the boards, should follow the shortest dimension (width) of the proposed decking area to minimize the effects of expansion. When designing the installer should take into account the production length of the board and plan for minimal waste.

For a professional finish, install the boards with staggered joints, with the saw-cuts forming an optical straight line.



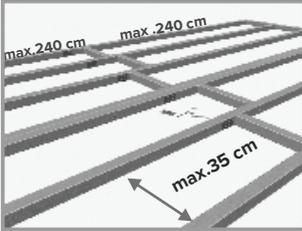
(*) Calculation (widthways)

$$52 \text{ boards} = 52 \times 15 \text{ cm} = 780 \text{ cm}$$

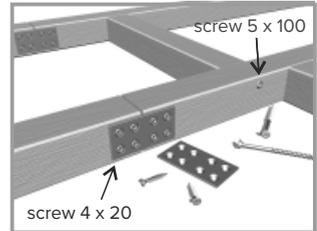
$$51 \text{ joints} = 51 \times 0.32 \text{ cm} = 16.32 \text{ cm}$$

$$\text{total} = \pm 796 \text{ cm}$$

This is important information for the design of the bearing structure.



The bearing structure must be composed of rot-free plastic eco-beams of 5 x 5 x 240 cm, with a maximum distance of 35 cm. The frame must be placed directly onto a flat, weight-bearing ground. Any gaps between the ground and the frame should be filled to avoid subsidence. *The bearing structure must form one solid construction.*



Due to temperature fluctuations, the decking boards will expand and contract lengthwise, as will the bearing structure, although this will be less for the bearing structure as it is not exposed to direct sunlight.

For this reason, a solid bearing structure with internally well connected beams is essential.

To obtain a solid structure the beams should be connected with cross-members, screwing them at least every 240 cm, especially at either side of the point where 2 beams of 240 cm are connected lengthwise. The cross-members are to be cut from eco-beams.

The bearing structure needs to be held within a frame.

The eco-beams are connected to each other with 2 Gova-Fix connecting plates (one at each side) and Gova-Screws (4 x 20 mm).

Cross-members are fixed with Gova-Screws of 5 x 100 mm (pre-drilling is recommended).



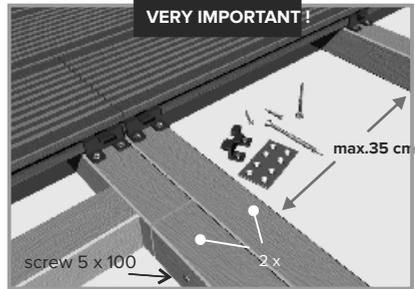
Watch our installation video on www.govaplast.com



Prior to designing the bearing structure, take into account: *At the point where 2 decking boards are connected to each other, a double supporting eco-beam must be installed.*

These 2 eco-beams are connected to each other with Gova-Screws of 5 x 100 cm (pre-drilling is recommended) every 50 – 60 cm.

Both decking boards are fixed to the 2 eco-beams using 1 Gova-Connect per beam, that means 2 Gova-Connects next to each other.

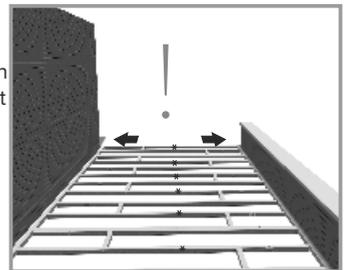


The staggered saw-cuts form an optical straight line, enabling the lengthwise connected decking boards to be fixed on a double eco-beam.

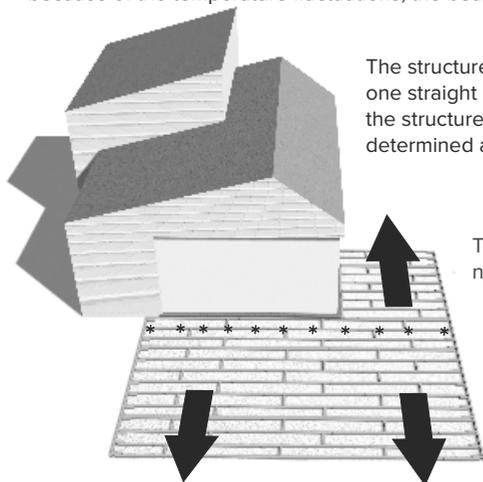
One of the advantages of using the double eco-beam, is that the boards will not be pushed upwards where they are connected to each other.

Regarding the expansion due to temperature fluctuations :
Ensure there is adequate space between the bearing structure and possible walls, borders or other obstacles (refer to expansion table in this booklet). The larger the structure, the more important this will be.

Use the expansion table in this booklet as an indication for the expansion of the bearing structure, although the bearing structure expands less than the decking boards. Larger structures will of course expand more. Bear this in mind so that the structure does not get jammed between walls, borders etc.

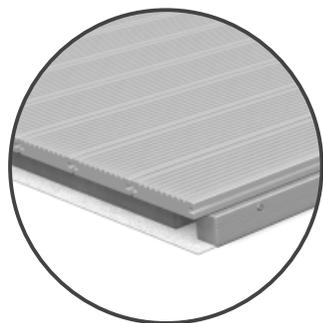
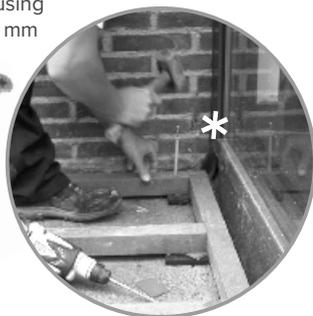


If there is no risk that the bearing structure will jam between walls or borders (as the bearing structure can expand freely to at least one side), it is essential to fix the structure e.g. the wall or the ground, in order to prevent movement. Due to the daily process of expansion and contraction because of the temperature fluctuations, the bearing structure may move slowly.



The structure needs to be fixed onto the ground (or into the wall), in one straight line to enable a controlled expansion. If it is not fixed, the structure may move slowly. The position of the fixing must be determined at the design stage.

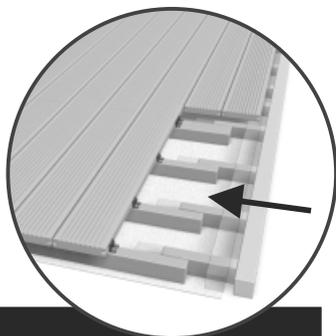
The fixation is done using nail plugs of 10 x 160 mm



We recommend making the bearing structure a few centimeters shorter (lengthwise) than the decking surface, especially if a finishing board is used. The finishing board, which is attached onto the crosscuts of the boards, requires space to expand. The overhang of the decking boards is a maximum of 5 cm.

Useful tip :

In order that the decking boards can fit the bearing structure perfectly, the end-beam (with the Gova-Start-Connect) should be installed so that it can be adjusted if required. Before installing the two last decking boards, the edge beam can be fixed in its' correct and final position.



The importance of a good plan !

Always sketch a scale drawing of your terrace to determine the exact position of the boards, how they will be cut and how the bearing structure will look.

The bearing structure needs to be drawn with the double eco-beams supporting the ends of 2 decking boards (the cuts are on the same spot as the double eco-beams). The position of the fixing of the decking onto the bearing structure (one line) is to be determined in the designing stage too.

Contact your Govadeck dealer for assistance.

To enable the supporting beams to become fully weight-bearing they must be placed directly onto a suitable flat weight bearing surface. Where they are not in contact with the ground, the empty space should be filled every 35 cm.

You can use rubber pads, which are rot-free, which cannot move, which protect the roofing and ensure easy drainage.



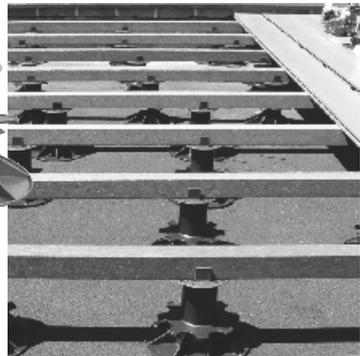
Use a long spirit level



Make sure that the bearing structure does not obstruct the drainage of the deck; the water must be able to drain away freely. This is especially important for roof terrace installations. If the ground is so level that the supporting beams show no gaps, it is recommended that 'notches' are cut in the beams so the water can still drain.



Make sure the boards never slope towards a wall, to avoid creating damp problems.

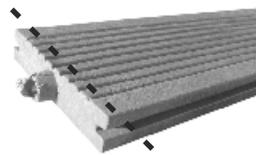


Use adjustable plastic Gova-Lift bearers to fill gaps over 3 cm. (Available in 5 heights, up to 19 cm)

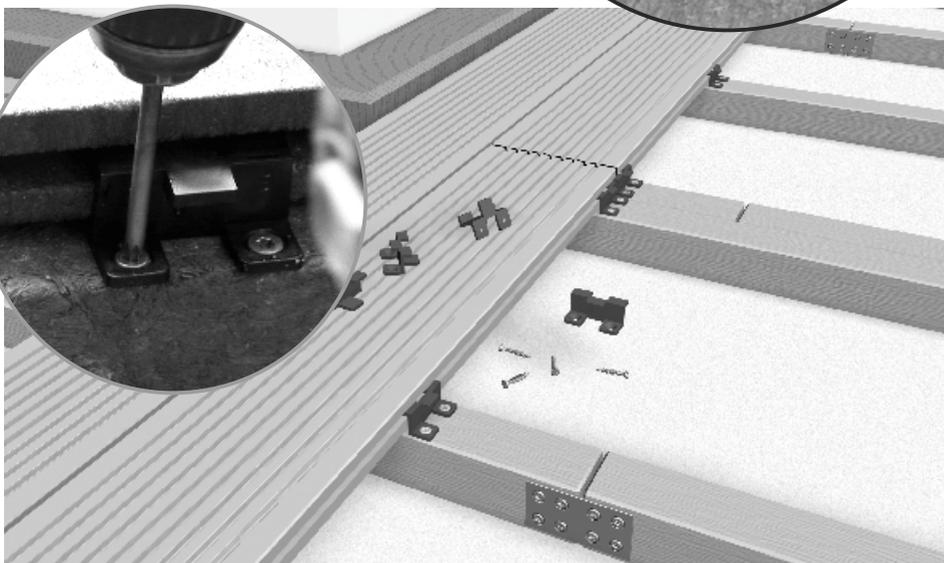
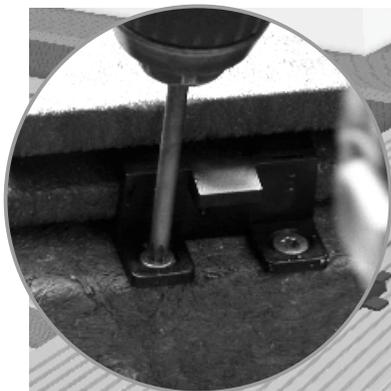
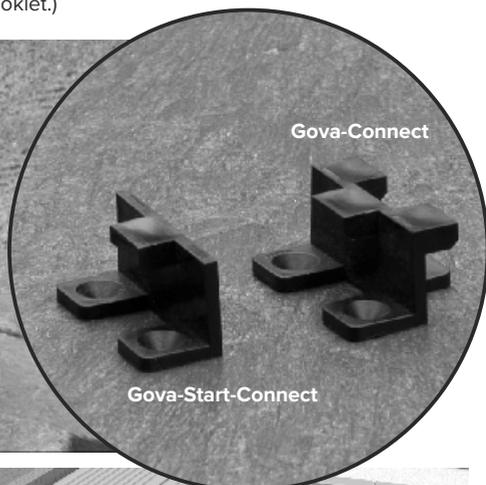
In some cases, it is easier to do the filling/packing whilst installing the bearing structure as a larger structure is not easy to alter once installed.



The Govadeck decking boards are always produced at a length of 360 cm. Small tolerances in the length are normal. The cross ends of the boards display extrusion rests. These need to be sawn off prior to installation.



Small differences in length may be visible after cutting due to temperature fluctuations : a 'cold' board cut to the same length as a board lying in the sun for some time will appear to be slightly longer afterwards. Cut all the boards at the same temperature (e.g. in the garage). Always apply the required distance between the boards and the walls, or other obstacles, in connection with the expansion. (Refer to table in this booklet.)



When using several boards connected together lengthwise, the boards should always be installed in a staggered formation, taking into account the design of the bearing structure. At the point where 2 decking boards are connected to each other lengthwise, a double supporting eco-beam should be installed. The ends of both decking boards are fixed to the 2 eco-beams using 1 Gova-Connect per beam, that means 2 Gova-Connects next to each other.



First the connection of 2 decking boards lengthwise is done with a Gova-Fix connection plate. Then the 'extended' board can be turned and put into the Gova-Connects.



Connecting the boards lengthwise, will not only avoid an expansion gap between the boards, but also prevent them from getting pushed upwards where they are connected.

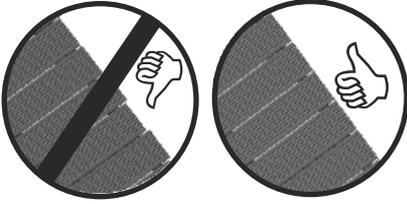
Using this method the expansion and contraction will only show at the ends of the connected boards.

Expansion at one end of the decking board

(patio connected to 1 wall)

We recommend fixing the boards to only one end (preferably the one near the wall) to the bearing structure with a stainless steel screw of 5 x 80 mm.

- This method of fixing has the following advantages :
 - The boards only extend in one direction
 - The boards will remain level, even after the continuous process of expansion and contraction, whereas loose boards would not.

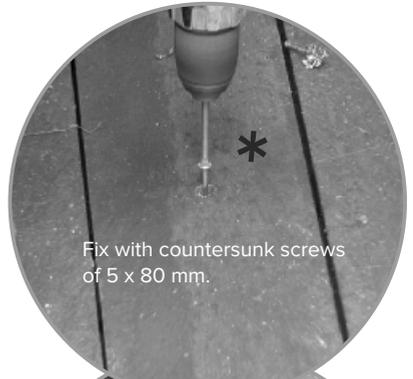
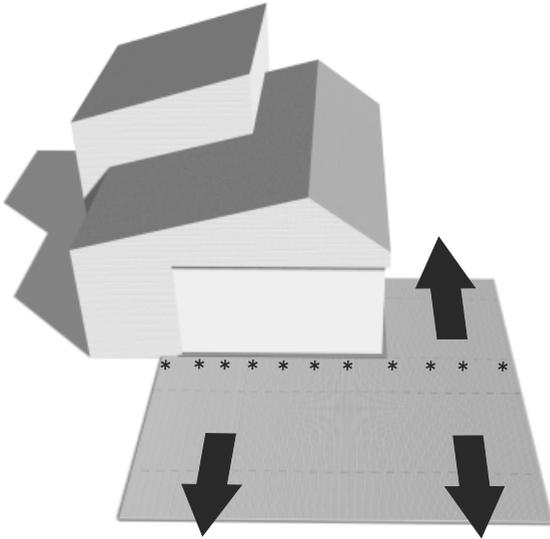


Proportional expansion at both ends of the decking board

(patio enclosed between 2 walls or an L-shaped patio)

In order to divide the expansion proportionally to both ends of the boards, the boards have to be screwed on the centre of the bearing structure if possible.

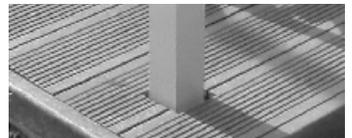
This is especially the case for boards connected lengthwise



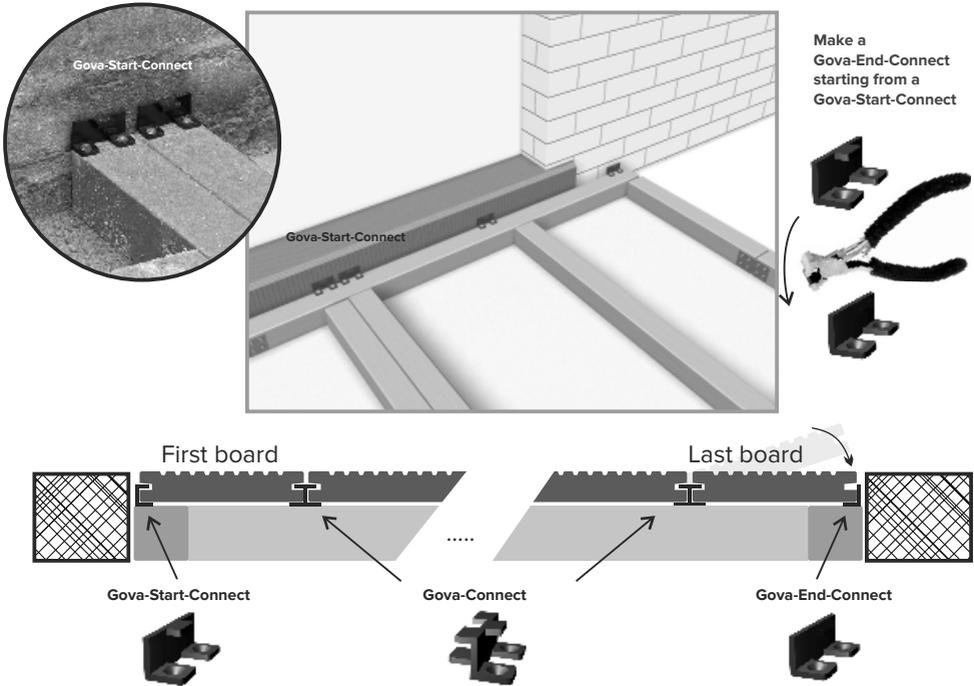
The fixation can also be done with invisible screws (see picture).

We recommend pre-drilling. This way of fixing needs to be done during the installation and cannot be done afterwards..

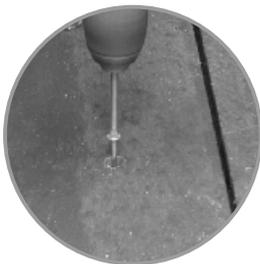
Always apply the required distance between the boards and the walls, or other obstacles, in connection with the expansion. (Refer to table in this booklet.)



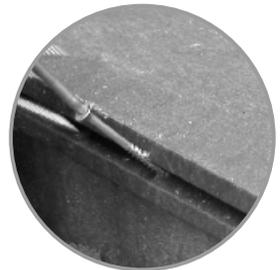
Patios without finishing board (patio connected to a wall or level with surrounding ground)



For the first row of boards, the Gova-Start-Connects are used. Screw the first row of Gova-Start-Connects to the eco beams and glide the board(s) over the Gova-Start-Connects. Make sure that the first board fits the Gova-Start-Connects and that it is straight. For the second row, the normal Gova-Connects are put in the groove of the board, and these are screwed onto the eco-beams with stainless steel screws of 4 x 20 mm. The last row of boards lie in a Gova-End-Connect that is screwed onto the eco-beam before the boards are placed. The Gova-End-Connect is a Gova-Start-Connect from which the upper tab is removed with sharp cutters. After the boards are placed they must be screwed onto the eco-beam, on the spot where the board lies on the Gova-End-Connect (that is +/- each 40-50 cm).

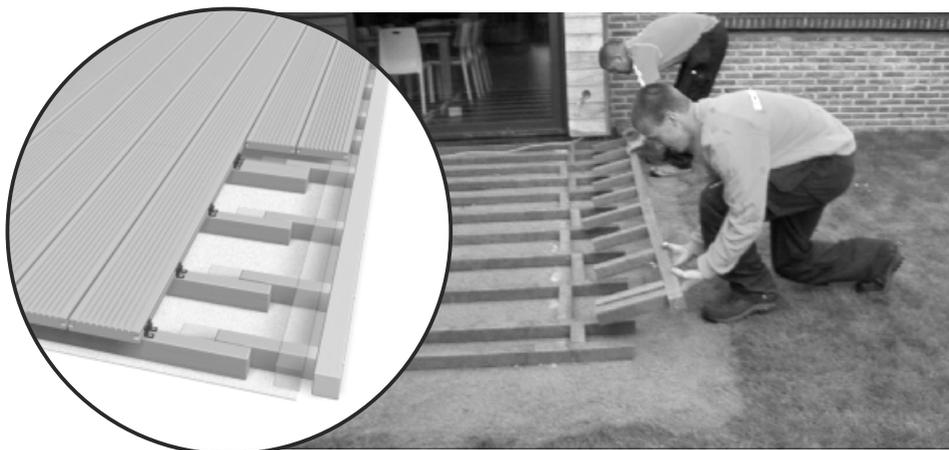


The fixing can also be done with invisible screws (see picture). We recommend pre-drilling. This way of fixing needs to be done during the installation and cannot be done afterwards.



Patios with finishing board

First the outer eco-beam of the bearing structure is placed on its final spot, leaving the last board slightly overhang the eco-beam. This outer beam is then screwed onto the bearing structure.

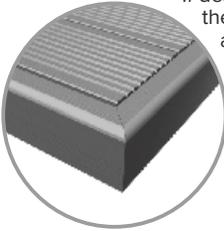


For the last board, no Gova-Connects are used, to avoid that the installation of the finishing board is obstructed. As an alternative for the Gova-Connects, wedges are used to fill the 3 mm space between the eco-beam and the decking board. The fixing of the last board is done with invisible countersunk screws of 5 x 80 mm, at the top or through the side groove (see picture).

We recommend pre-drilling. After the boards are placed they must be screwed onto the eco-beam, on the spot where the board lies on the wedges (that is +/- each 40-50 cm).



If desired, the deck can be finished with a border. With this method you can hide the bearing structure and the cross ends of the decking boards to obtain an attractive professional finish. The border can be the same colour as the decking board or alternatively another colour from the Govadeck® range.

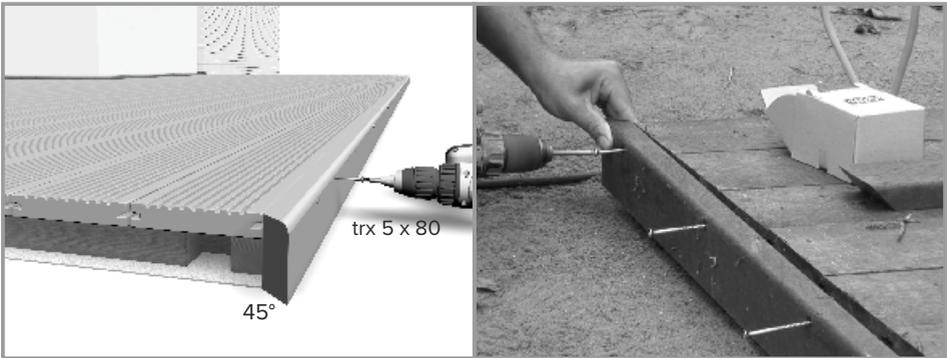


A finishing border is not required when the decking has been installed to finish level with the surrounding ground, or flush to an existing wall or border, as the cross ends would not be visible.



The standard finishing board with rounded edges (3 x 8.2 cm) is screwed to the decking board each 30 cm, using flat countersunk Torx screws of 5 x 80 mm.

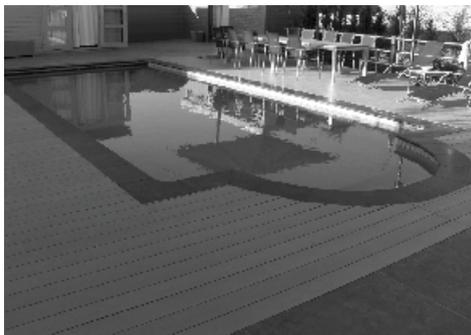
We recommend pre-drilling.



If required, alternative Govadeck boards (non standard) may be used to form a finishing border. Contact your Govadeck dealer for assistance.



Rectangular decking with finishing border. The bearing structure is fixed to the wall.

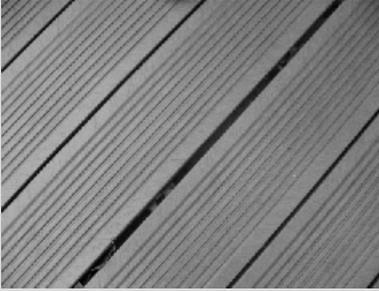


Two examples of decking installed finishing level with the surrounding ground. (No finishing border required.)



Decking with rounded borders (for experienced installers!)

A few examples showing the importance of a correctly installed bearing structure...



The bearing structure was not well connected, resulting in gaps due to expansion.



The boards are not sufficiently supported and there is too much space left between the supporting beams. This results in a floor area that has sagged.



Although the boards are well installed in a staggered formation, they were not connected lengthwise and no double supporting beams were used. As a result, the boards have pushed up and joints are visible.



The bearing structure needs to be fixed onto the ground in one straight line to enable a controlled expansion. If it is not fixed, the structure may move slowly, as demonstrated in this picture.

Roof terrace installation instructions:

A Gova-Pad should be placed under the most loaded points of the bearing structure in order to avoid damage to the roof and inadvertently creating leaks and to facilitate drainage.

The stress on the roof, caused by the weight of the terrace, will cause imprints. In addition, the roof can be pushed away by the expansion-contraction if not installed correctly. Due to these reasons specific care is required for all roofing projects.

Very occasionally on roof terrace installations, due to the material's characteristic static electricity may occur, but it will automatically disappear after a while. If it does not disappear, this can be resolved, by installing stainless steel profiles between the boards. (Available on demand)



Govadeck decking boards have minimal maintenance requirements. They do not require any treatments or staining. It is sufficient to clean the boards as required. The decking boards absorb less than 0.29 % moisture therefore oil, fat and other products create minimal stains. However, it is still advisable to remove any stains from the board as soon as possible. The boards limited absorption of moisture means that moss, algae etc. have very limited (if any) capacity for growth upon them.



Manufacturer's tips:

Cleaning :

With plain water or with some soft detergent if required. The boards may be cleaned with a high-pressure cleaner with a maximum pressure of 100 bar. This method of cleaning is not normally necessary and should be kept to a minimum. Spray the water in the direction of the grooves with a fan-shaped jet, at a minimum 30 cm distance.

Light scratches:

Can be treated with a car trim and interior spray (available at appropriate retail outlets). Allow the product to sink in and polish with a wool-free cloth afterwards.

Large, deep scratches:

Can be flattened with pressure applied to them using a flat tool (knife...) after which they will gradually disappear.

Burn stains:

Light burn stains may be removed with sand paper. Always sand in the direction of the grooves. Severe burn stains are difficult to remove. It may be necessary to replace the affected board(s).

GOVA[®] home+ PLAST

| GOVADECK[®]

Gova-Connect



100 x



200 x

NL

Gova-Connect
+/- 5 m2
in deze verpakking zitten
100 Gova-Connect en
200 RVS torx schroefjes 4 x 25 mm

F

Gova-Connect
+/- 5 m2
cet emballage contient
100 Gova-Connect et
200 vis torx en inox 4 x 25 mm

D

Gova-Connect
+/- 5 m2
In dieser Verpackung :
100 Gova-Connect und
200 Edelstahl Torx Schrauben
(4 x 25 mm)

UK

Gova-Connect
+/- 5 m2
this bag contains
100 Gova-Connects and
200 stainless steel torx screws
(4 x 25 mm)



- NL** Lees eerst de plaatsingsvoorschriften !
- F** lire d'abord les instructions de montage !
- D** Lesen Sie zuerst die Verlegeanleitung !
- UK** First read the installation instructions !

