

Decking

General information

The decking boards are available as 30 x 150 x 3600 mm and 40 x 150 x 3100 mm profiles in black and brown.

They can be worked using standard wood working tools and in the same manner as wood, please see "Working with Our Material" document for further information. With all recycled products it is important to remember the need for **expansion** and **support**, if these are taken into consideration then they can provide a long term, low maintenance solution for a number of projects and applications.

The decking boards can be face fixed using good quality screws, or by using connecting clips so that no screws are visible. The connecting clips allow for:

- Easy and quick installation.
- Automatic placement of the boards at the correct parallel distance.
- More aesthetically pleasing installation.
- Expansion and shrinkage of the boards due to temperature fluctuations.



Expansion intervals

The lower the temperature during installation, the greater the boards may expand. The decking boards have a maximum linear expansion of 0.109mm per metre per °C.

It is vital to calculate the maximum expansion of the boards in order to calculate the correct distance between boards/ walls/ borders.

Please remember that when boards are connected lengthwise they are to be treated as one long board.

Example

- Installation of 3600mm board at a temperature of 15°C.
- Max. temperature expected 40°C
- Temperature at installation 15°C
- Temperature difference 25°C
- Interval = 0.109mm per m per 10°C
= 0.109mm x 3.6 x 25
= 9.81mm

Preparation

The following is recommended to ensure ease of installation.

Ground preparation

- The subsoil needs to be firm, smooth and stable.
- The soil needs to slope at least 10mm per m lengthways to the direction of the boards.



Bearers

We would suggest 50 x 50 x 3100mm black sections for bearers, but other sizes are available. To ensure the posts are fully weight-bearing they must be placed onto a suitable weight-bearing subsoil.

Maximum distance between bearers

Angle between bearers and decking boards	90°	45°
Recommended distance between the bearers	350mm	250mm

To ensure correct drainage, place the boards lengthways at a right angle to the direction of the wall. This means the bearers are placed parallel to the wall ensuring the boards slope away from the wall.

Always allow a 50mm minimum expansion gap between the bearers and any wall. Only allow a 50mm overhang of the board at the ends of the application.

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Bearer installation

1. The bearers are placed directly onto the subsoil but are not anchored to the ground.
2. To ensure a stable structure, it is advised to attach crossbeams between the bearers; this will also make it easier to install the boards.
3. Where more than one bearer is required to run the length of the application, the bearers need to be attached to each other. This can be achieved by sawing off a piece of bearer and screwing it to both bearers at the join or by using connecting plates.
4. Where 2 boards abut along the length of the application, this requires 2 bearers to support the ends of the boards, i.e. one bearer is required to support the end of one board and another bearer is needed to support the start of the next board.



Decking Boards

General

The boards are manufactured at 3600 mm or 3100 mm but small tolerances in the measurements are normal. The ends of the boards may display extrusion rests; these should be sawn off prior to installation.

It is advisable to saw all the boards to the required length at the same time in the same environmental conditions to prevent shrinkage/ expansion due to temperature fluctuations.



Decking board installation using connecting clips

1. The decking boards should be attached to the bearers by the connecting clips. The connecting clips mean that expansion gaps are allowed for. (They can also be face fixed using good quality screws).
2. Each board is moulded with a groove on each length to allow the clips to glide into place.
3. The first row of boards will only require attaching to one side, 3 lips should be sawn off one side of the connecting clip.
4. Screw the first row of clips to the bearers and guide the board(s) over the clips.
5. Always ensure the clips are secured in a straight line on the bearers and always take into account the minimum 10mm expansion gap.
6. Once the first row of boards are laid, slide the second row of connect system clips into the opposite board groove and secure to the bearer.

For applications where more than one board is used in the overall length, it is advised to lay the boards in a half-offset staggered formation.

Where two boards abut each other lengthways, it is recommended that these adjoining ends are fixed to the bearers to allow expansion at the opposite end where sufficient gap has been left to accommodate this. Or preferably stainless steel connecting plates can be used.



Finishing

Upon installation the application can be finished with a border.

There are a choice of colours available to compliment the application and the range of profiles allow for a variety of border types. Option include bordering with a square section, e.g. where a 30mm decking section has been used with a 50mm post a 80 x 80mm section can be cut to size using a mitre and screwed to the posts. Adding a vertical board, e.g. a 40 x 100 mm section and screwing it vertically to the post, the section may need to be placed in the soil a few mm to level it with the decking boards. Border with corbelling, again where a 30mm decking section is used with a 50mm post, a 50 x 120mm section can be screwed to the post before attaching the decking. After the decking boards are placed, screw a 30 x 150 mm section to the 50 x 120 section to finish the border.