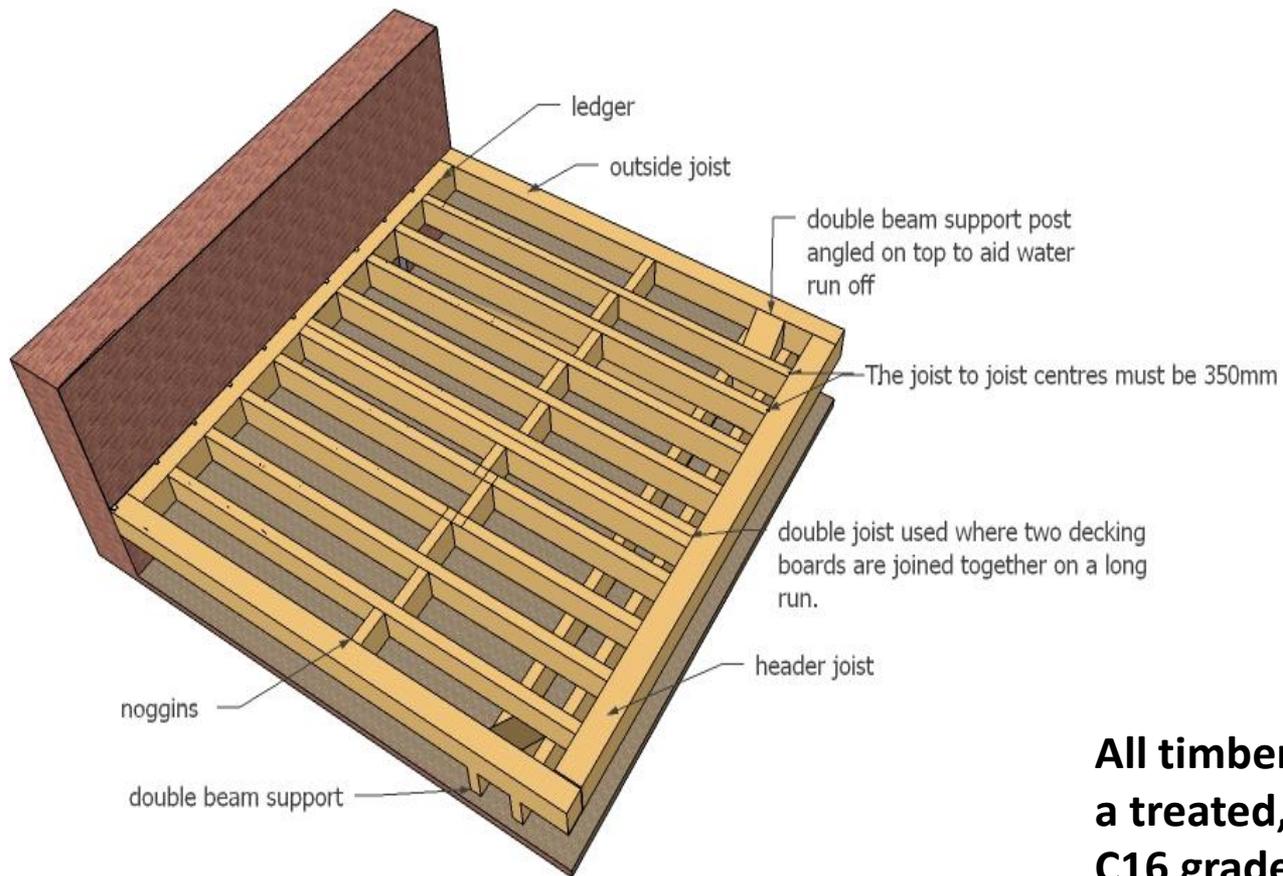


Installation guide for decking boards

Sub-Frame Information



All timber must be of a treated, structural C16 grade.

Important information

Always make sure the ground that you are building on is a suitably hard and well drained base for your project

When setting out building the deck it is important to know that joist spacing's on the sub-frame must be no more than 350mm centres max and all joints upon the deck surface should be layed on a double joist layout.

Starter clips are the ideal way to start laying your board where space is limited

Starter clips

starter clips



Step 1:

Place the starter clip flat side down on the frame and push the hooked end up to wall and screw down using a M4 x 18mm screw.

Repeat this down the length of your board at each 350mm joist location, it is important to place a Starter clip close to the ends of the board about 10mm from the end.

When all the necessary starter clips are in place push the board into Position making sure the hook on the clip goes into the channel profile on the side of the board

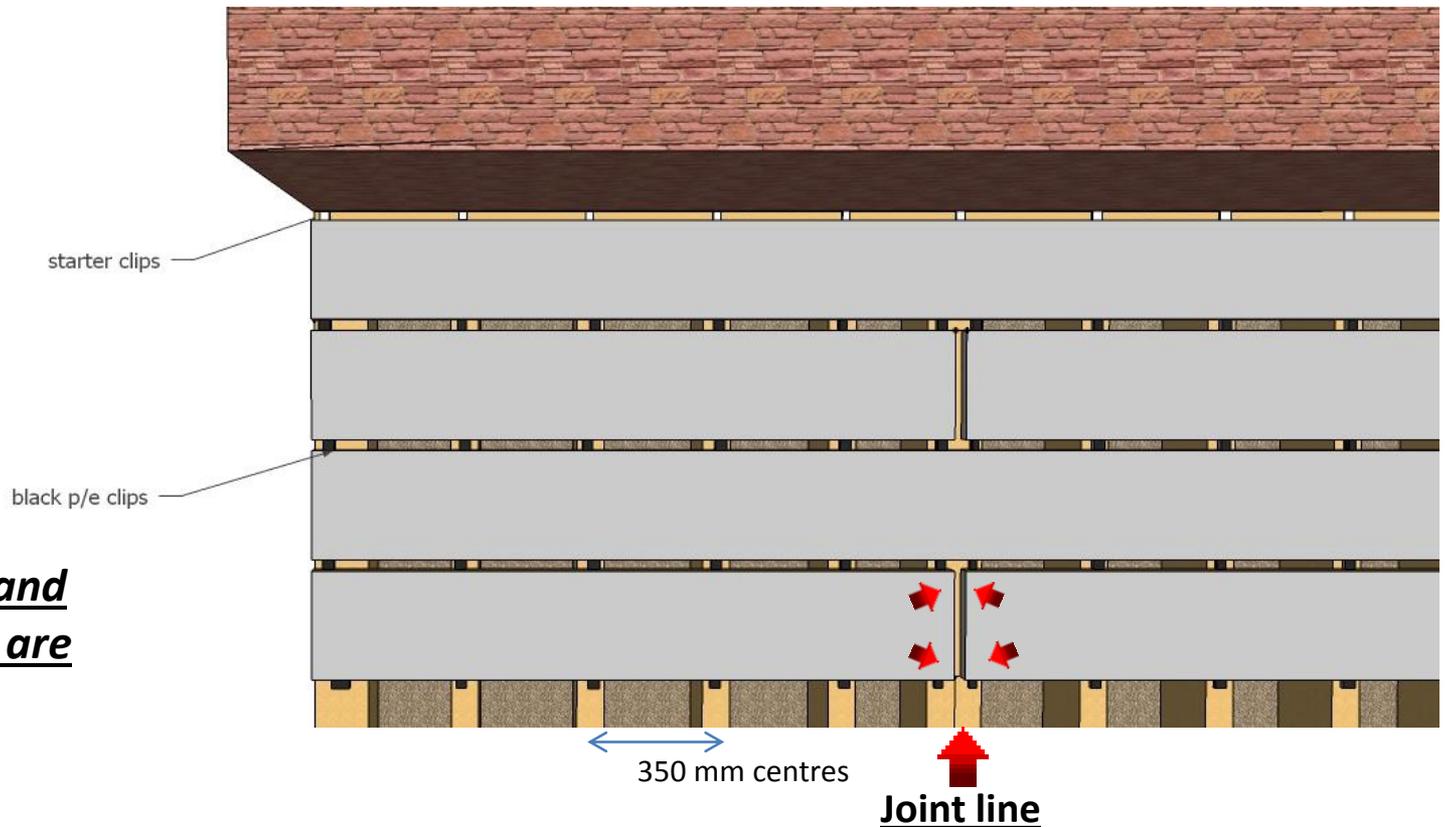
Out



In



Joints
And
Gaps

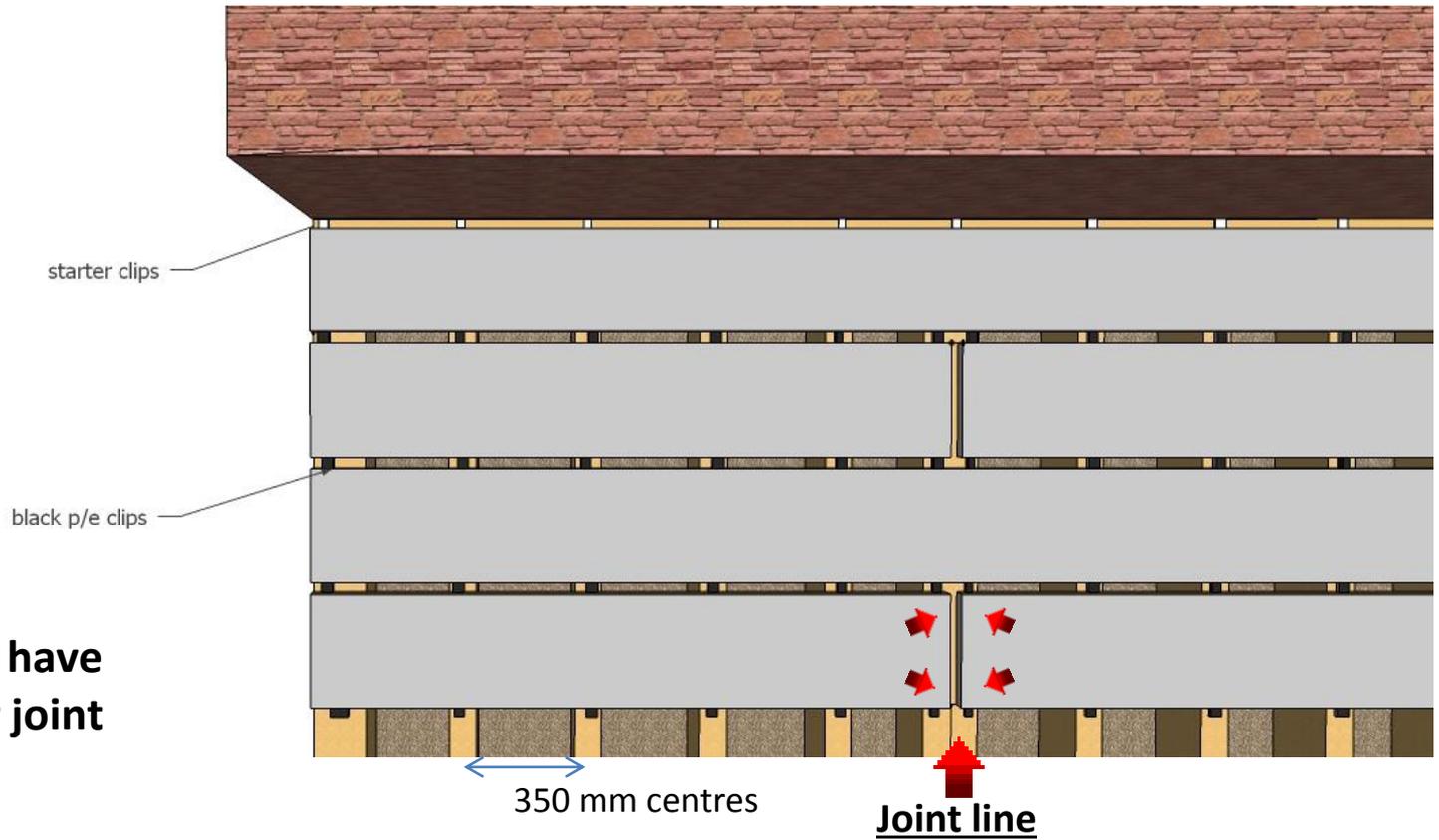


Standard gap and
Joint gap sizes are
6mm

Allowing for the correct spacing of all gaps and joints is very important, like with wood and other building materials all composite decking shrinks and expands with the changes in climate.
See temperature change info and charts on pages 8 and 9

The black p/e clips supplied are important as they set the gaps along the sides of the decking boards automatically and on a cool day can be used to set the joint gaps by placing one in from the top to space the joint, but need to be removed afterwards.
For joint and gap sizes in hot and cold weather please refer to pages 8 and 9

Laying deck boards



**All board ends have
2 clips or 4 per joint**

The next step is laying boards with black p/e clips and their stainless steel screws.

Position a deck board tight against the starter clips. Loosely attach p/e clips against the bottom lip on the front side of the deck board, just tight enough to keep the board in place.

Push another deck board tightly against the front p/e clips and attach p/e clips against the bottom lip on the front side of the new deck board, then fully tighten the previous row of p/e clips.

Add another deck board and repeat the process, until the end of the deck.

Make sure all joints and ends of boards have clips correctly placed, as shown above 2 clips at each end of a board.

Step nose decking board



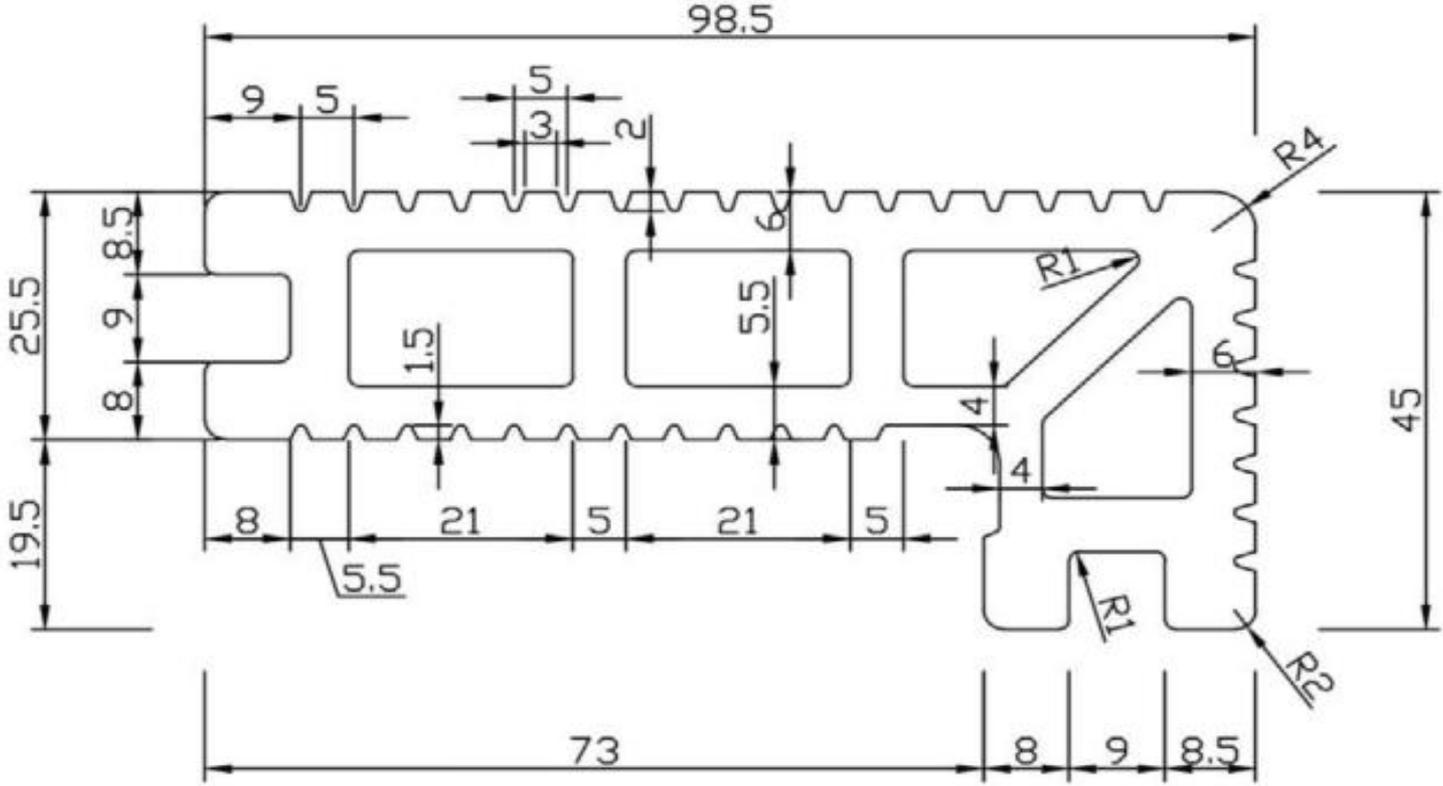
A trim and a board in one

Step nose decking board is ideal as it does the job of a trim but creates a seamless flow of deck from the surface down to the sides

Connect the step nose the same way as the decking boards by using the p/e clips on the surface and the sides of the deck and then continue with more boards on the surface or down the sides. (extra timber supports for the sides may be required)

To deck around a 90 degree corner simply mitre at 45 degrees and slide together, if it is a deck board skirting under this 90 degree corner they will require bevelling at 45 degrees

Step nose board technical data



Edging trim

The aluminium L shape edging trim can be used to cover any external 90 degree profile

Cut to size with square ends or mitred ends

Check sizes are correct by laying in position, if good then remove trim.

Run a small bead of exterior grade adhesive silicone down the centre of the backside of the trim but not too much that it squeezes out, then carefully position the trim.

Then using a 2mm drill bit, drill 30mm from the ends and equally space the rest of the holes at approximately 600 centres and tap in colour coded poly top pins.

Check that the poly pins fix to the timber sub-frame, you may have to adjust hole locations across the width of the trim

Deck board technical data



•How much will decking expand / shrink ?

This is very important question to answer and understand before installation. The coefficient is 3.45/100000 If we have a decking plank 2.2M, let's see how much will it change with a temperature change By 10 degrees C **2200*3.45/100000*10=0.8mm**. If the temperature changes by 50 degrees C, then the length will change 4.0mm and if the temperature change by 70 degrees C then the length will change by 5.6mm. Please understand that 70 degrees C of temperature change is normal for most areas in the world, as in hottest time in the summer the temperature of the surface of the decking can reach up to 60 degrees C.

This is just theoretical calculation and we need to consider the coefficient as 3.45/100000 so that we can refer to the expansion sheet on the next page.

Always keep in mind that WPC like other materials, will expand and shrink with temperature change, that means WPC planks are longer in summer and shorter in winter (or longer in middle of day and shorter in the morning). So certain gaps between planks in length direction is important and necessary.

Temperature Change

<u>10C</u>	<u>20C</u>	<u>30C</u>	<u>40C</u>	<u>50C</u>	<u>60C</u>	<u>70C</u>	<u>80C</u>	
1.0M	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
2.0M	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
2.2M	1.1	2.2	3.3	4.4	5.5	6.6	7.7	8.8
2.9M	1.5	2.9	4.4	5.8	7.3	8.7	10.2	11.6
4.0M	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0
5.0M	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20.0
5.8M	2.9	5.8	8.7	11.6	14.5	17.4	20.3	23.2

- This chart shows how much boards of certain length will change with temperature change. Note that the **top line** represents ‘temperature change’ **not** the actual ‘temperature’.
- We suggest that change in length will not change by more than 10mm under limited weather conditions (hottest in summer and coldest in winter). From this chart we can get this information.
No 1-- If we install a long plank, then it will change a lot between summer and winter, so we suggest the planks be within 2.9M as most of the areas in the world will have more than 50 degrees C difference in summer and winter.
No2 We need to leave **more** of a gap when we install in **winter** and **less** of gap when install in the **summer** .

DEKKA Composites hold no responsibility for installations that are not carried out to the instructions provided or inferior installations.