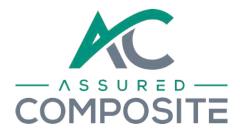
DECKING INSTALLATION GUIDE





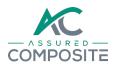
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Need help? Get in touch.

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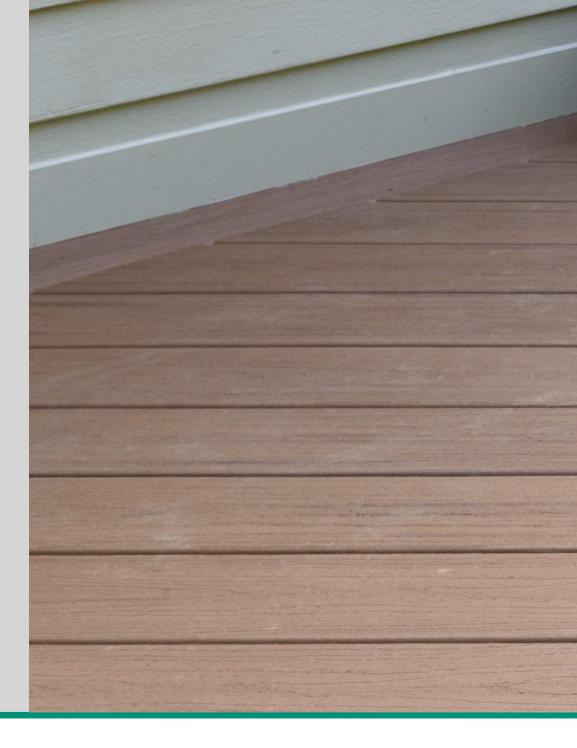






Tips & Advice

- Use a minimum of 2 people to make the project easier.
- Plan all areas and think about what is trying to be achieved.
- Measure twice to ensure the correct measurements are taken before cutting any material.
- Ensure all working areas are clear and free from any obstacles to avoid damage or injury.
- Clear all vegetation where necessary to avoid unnecessary growth.
- Allow a 1% 1.5% decline on concrete bases and subframes, running away from a property to avoid water build up.
- Pre-drill holes where necessary to avoid splitting materials.
- Only leave a maximum 20mm deck board overhang.
- Double joist where deck boards meet for support.
- Use supporting braces for more strength.
- Allow expansion gaps where advised to avoid unnecessary repairs.
- Allow a minimum 35mm space under deck boards for ventilation.
- Use Assured Fasteners and Fixings with Assured products.
- Refer to manufacturers user manual before using tools if unsure.
- Always wear safety equipment.
- Always have safety in mind.





Looking After Composite

When handling and storing Assured Composite products follow the advice of our experts, this helps prevent damage and injury before installation.

- When moving any Assured Composite product please ensure the correct safety equipment is worn.
- Check that the area where the products are being placed is clear and free from any obstacles.
- Ensure the ground is a flat hard surface and place wooden patterns every 450mm approx intervals to support deck boards and joists above the ground.
- We advise that 2 people move deck boards and joists. This is down to the weight and length.
- Do not drag or slide any deck boards or joists especially when laying on top of one another.
- Allow 24 hours for products to get used to the environment before installation.
- Any deck boards or joists stored for a long period of time inside or out will need covering.

HANDLING & STORAGE





Safety Matters

When installing any outdoor project this needs to be completed as safely and efficiently as possible, so ensure you have the right tools available which have been recommended by our team of experts.

If you are unsure on how to use any tool, refer to the manufacturers user manual before continuing.

RECOMMENDED TOOLS & SAFETY EQUIPMENT







Spanner



Impact Driver



Circular Saw



String Line

Spade

Tape Measure



Safety Clothing

Jigsaw



Spirit Level

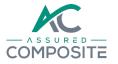


Hammer Drill

Set Square



Clamp



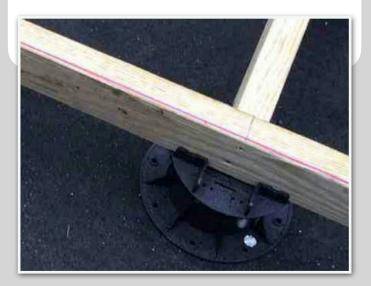
Subframe Options

Various subframes can be used when installing our Assured Composite deck boards. Be sure that you choose the right subframe taking into account the foundation and the space underneath deck boards for ventilation (minimum 35mm).

FOUNDATIONS & SUBFRAME

Assured Adjustable Pedestal Supports

Our Assured Adjustable Pedestal Supports are used in areas where you require the joists raising off the surface. These are for hard foundations and can be used with timber, plastic, metal or solid composite joists.



Assured Hollow Composite Joists

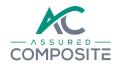
Our Assured Hollow Composite Joists are used where a concrete foundation is in place. The joists can be laid and fixed directly to the foundation or if solid can be used with our Assured Adjustable Pedestals for a raised decking area.



Timber Joists & Posts

Timber joists and posts can be used on hard or soft foundations and are ideal in situations where the ground is uneven or you require a high raised decking area.





Installing Assured Adjustable Pedestal Supports & Joists

FOUNDATIONS & SUBFRAME

We advise using Assured Adjustable Pedestal Supports on a concrete foundation and creating a decline of 1% - 1.5% away from a property acting as a drainage slope.

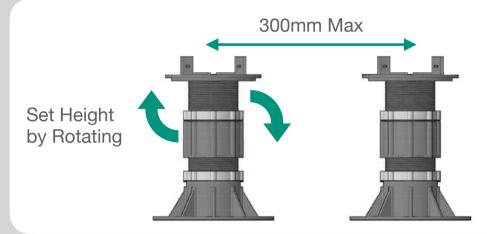
Start from the edge of the decking area and place the pedestals width ways in a gridline format leaving a 300mm max interval between each pedestal centre. Spacing between the pedestals length ways will depend on the thickness of the joists.

- 50x50mm Joist: 500mm max intervals
- 50x100mm Joist: 750mm max intervals

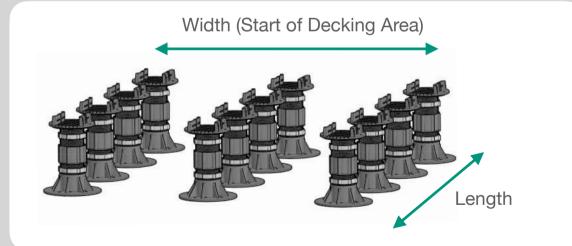
Rotate the base clockwise or anti-clockwise to set the required height. Check the heights from one pedestal to another with a spirit level.

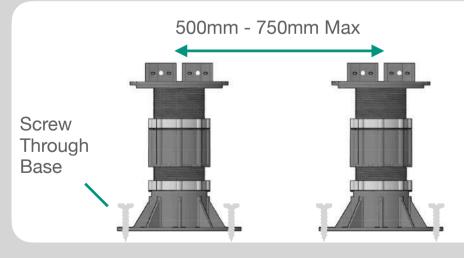
Pedestals can be fixed through the base if required. In most cases the weight of the joists and deck boards will hold the pedestals in place. We do not advise fixing pedestals to a roof terrace.

Width (Start of Decking Area)



Length







Installing Assured Adjustable Pedestal Supports & Joists

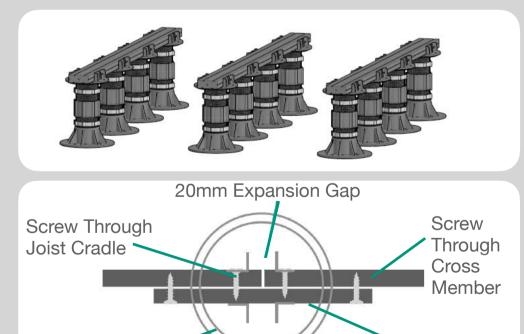
Measure and cut joists where required.

Lay joists through each pedestal joist cradle.

Allow a 20mm expansion gap between joist butt joins and use a 300mm cross member for support. Fix by screwing joist and cross member together.

Fix the joists to the pedestals by screwing through the joist cradle.

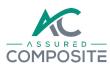
Double joist where deck boards meet at butt joins allowing 3mm between joists.



Cross Member

FOUNDATIONS & SUBFRAME





Joist Cradle

Installing Assured Hollow Composite Joists - Solid Foundations

Composite joists need a solid concrete foundation to fix to. We advice creating a decline of 1% - 1.5% running away from a property acting as a drainage slope. Drainage holes or gutters can be placed in the concrete foundations if needed.

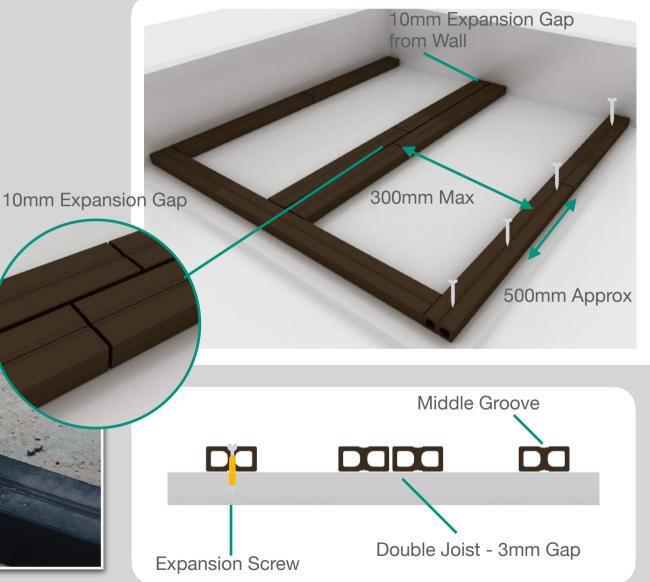
Measure and cut joists where required.

Lay joists into position leaving 300mm max intervals between each joist centre to centre. Leave 10mm expansion gaps close to a property and at joist butt joins.

Fix joists into place by drilling holes through the middle groove of each joist and into the foundation. Start at 80mm approx and then at 500mm approx intervals.

Double joist where deck boards meet at butt joins allowing a 3mm gap between joists.







Installing Timber Joists & Posts -Soft Foundations

When installing timber joists and posts ensure the area is clear and free of any obstacles including any cables and pipes.

Measure and mark out the area including where holes need to be dug for posts ensuring posts are spaced every 1200mm approx. If Newel Posts are used, ensure the holes are dug in the right place.

Dig 600mm minimum holes into the ground making sure the width of the hole is at least 4 times the width of the post.

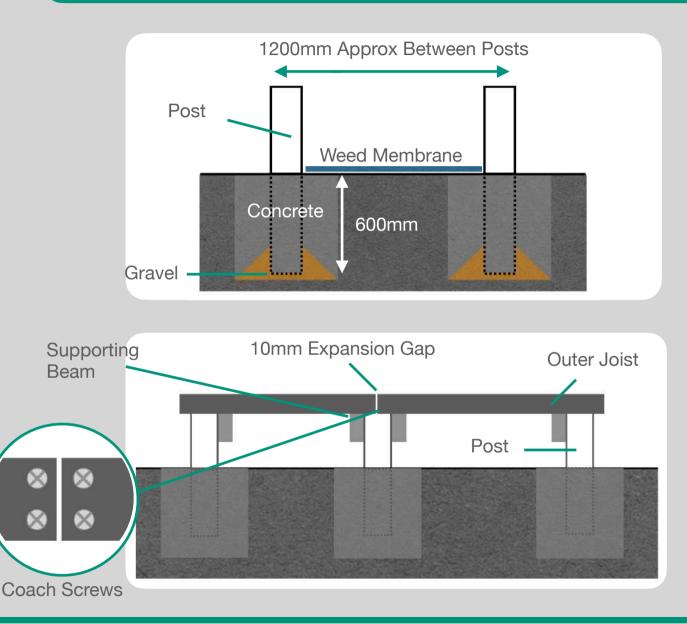
Measure and cut posts to the required height. Posts can be left a little longer and trimmed down at the end if preferred.

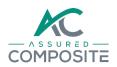
Place a layer of gravel into each post hole to help hold the posts in place while the levels are checked.

Pour concrete into the holes and wait to set.

We advise using a weed membrane to stop any vegetation growing. Roll the membrane out over the area and cut to size. Gravel or pegs can be used to hold in place.

Check all dimensions including outer board dimensions allowing any space for Newel Posts where required.





Installing Timber Joists & Posts - Soft Foundations

Measure and mark the height of the deck taking into account deck boards. We advice creating a decline of 1% - 1.5% away from a property acting as a drainage slope.

Measure and cut outer joists where required and clamp into place where marked. Pre-drill holes and screw together using 2 coach screws at each post.

Measure and cut support beams where required for underneath the outer joists. Pre-drill holes and screw together using 2 coach screws at each post.

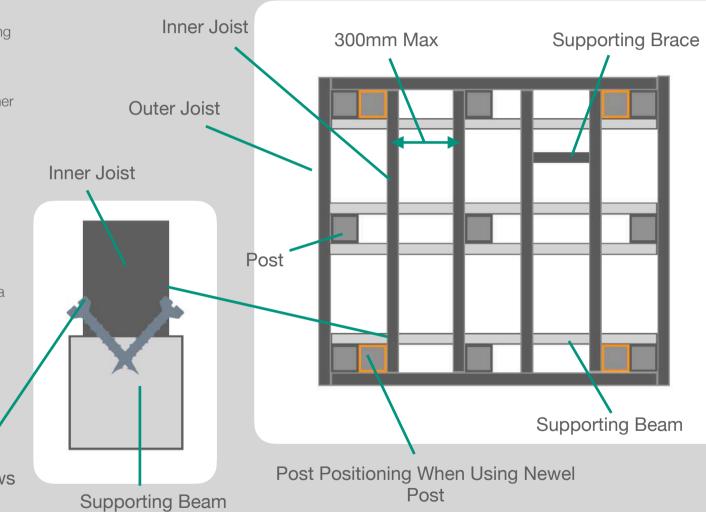
Measure and cut inner joists where required. Pre-drill holes and screw together through the outer joists at each end at 300mm max intervals (centre to centre) using 2 coach screws. Add extra support by screwing through the inner joists and into the supporting beams.

Leave a 10mm expansion gap between joist butt joins.

Double joist where deck boards meet at butt joins allowing a 3mm gap between joists.

If Newel Posts are used measure and cut where required. Pre-drill holes and screw together using 2 coach screws through the outer joist and into each post. Ensure the posts are flush with the bottom of the outer joist. If numerous Newel Posts are used we recommend evenly spacing allowing access to the deck.

Coach Screws





Installing Box Framed Steps

Box framed steps consist of a run of boxes on top of each other made from either composite, timber, plastic or metal. These all support each other to form a run of steps to a required height.

If the ground is soft, uneven or steps are above 2 metres high we recommend concreting posts into the ground to support the box frames (following the process on page 10).

Carefully plan the area taking into account the deck board and riser width when designing the tread and rise dimensions. Ensure the rise and tread is consistent along the steps.

Measure and cut 4 outer joists where required to the size of the step area/bottom box frame. Pre-drill holes and screw together at each corner using 2 coach screws.

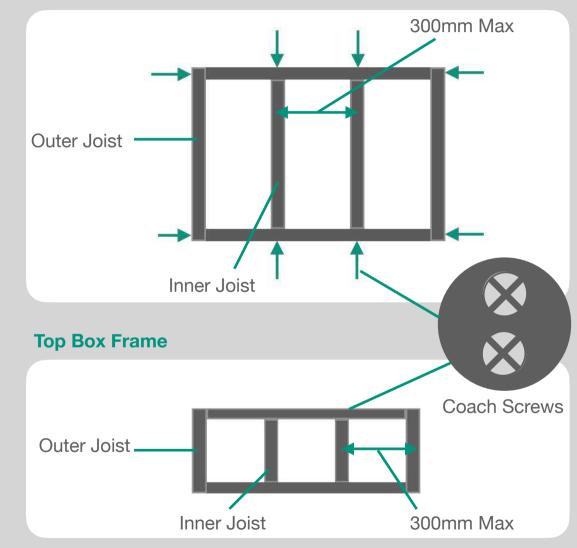
Measure and cut inner joists where required. Pre-drill holes and screw together at each end using 2 coach screws at 300mm max intervals centre to centre.

Double joist where deck boards meet at butt joins allowing a 3mm gap between joists.

Place the box framed step in the area and work from that creating as many box framed steps as needed using the same method.

FOUNDATIONS & SUBFRAME

Bottom Box Frame

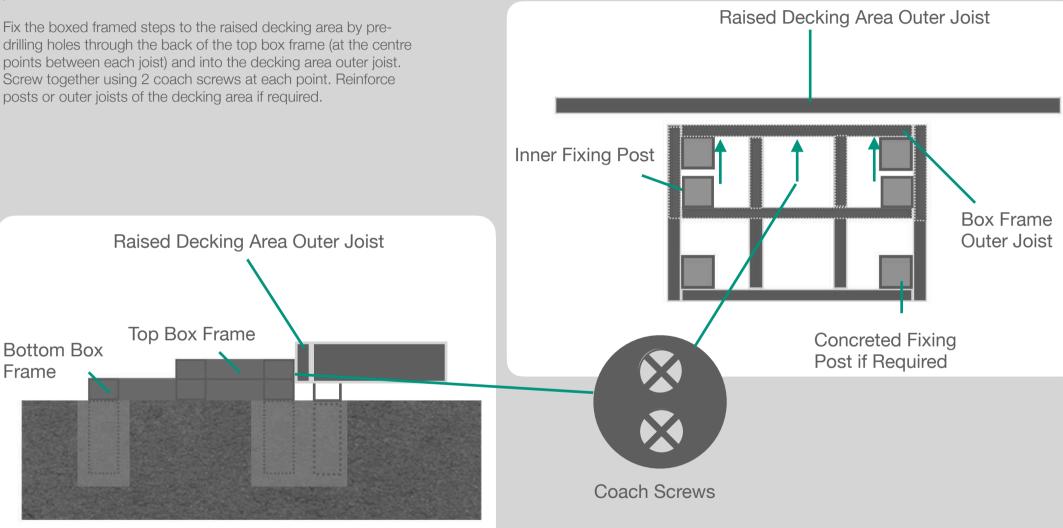


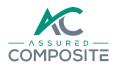


Installing Box Framed Steps

Fix the box frames together by measuring and cutting posts for each inner corner. Pre-drill holes through the outer joists and into the posts and screw together using 2 coach screws at every post and box frame.

Fix the boxed framed steps to the raised decking area by predrilling holes through the back of the top box frame (at the centre points between each joist) and into the decking area outer joist. Screw together using 2 coach screws at each point. Reinforce posts or outer joists of the decking area if required.





Installing Stringer Steps

Stringer steps consist of a row of stringers attached to a raised area and a landing area to form a framework of steps.

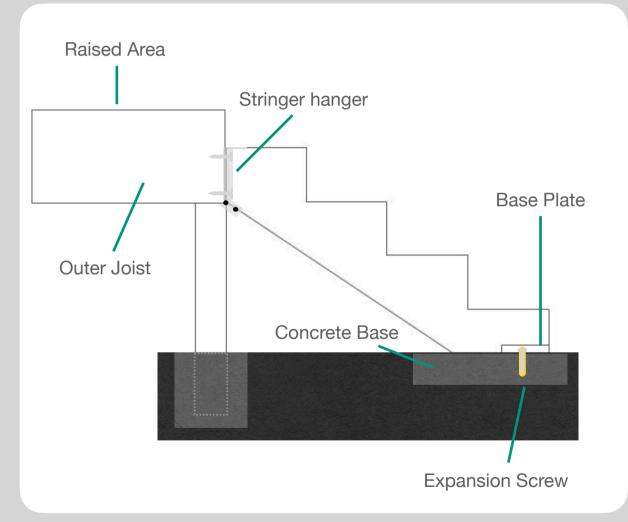
We recommend landing areas to be on a solid ground. If the ground is soft or uneven we recommend concreting posts into the ground to support each stringer (following the process on page 10).

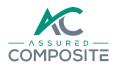
Carefully plan the area taking into account the deck board and riser width when designing the tread and rise dimensions. Ensure the rise and tread is consistent along the steps and allow space at the bottom of the stringers for base plates.

Measure and cut stringers and base plates where required.

Measure and fix the stringer hangers to the raised area using coach screws, pre-drilling all holes. Reinforce the raised area if required and ensure each stringer is spaced at 300mm max intervals centre to centre.





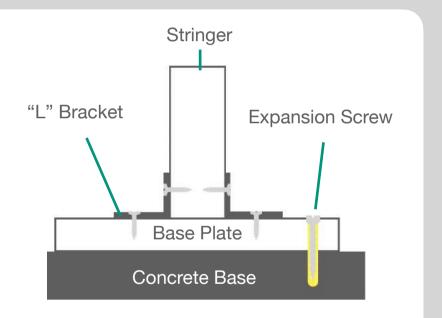


Installing Stringer Steps

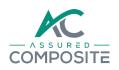
Measure and fix the base plates to the landing area by pre-drilling holes and screwing down using expansion screws. We advise every 100mm approx intervals.

Fix stringers to hangers by screwing together using coach screws, pre-drilling all holes.

Use "L" brackets to fix stringers to base plates using coach screws, pre-drilling all holes. Ensure that each stringer is spaced at 300mm max intervals centre to centre.







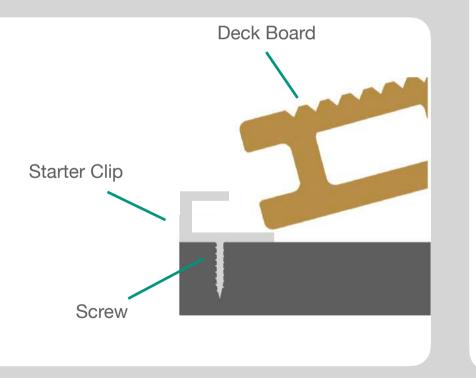
Installing Assured Decking Boards - Starter Clips

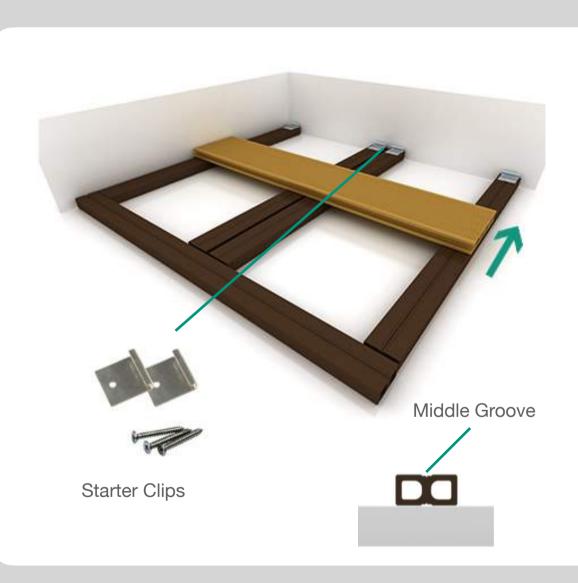
Flx starter clips to the edge of the framework at every joist. Screw through the hole on each starter clip with the screws provided ensuring that the screws are fully screwed into place to prevent catching on the deck board underneath.

Fix the first deck board by clipping into the starter clip. Check the deck board is securely in place before continuing.

We recommend a maximum joist overhang of 20mm.

If using metal clips go to page 17. If using plastic clips go to page 18.







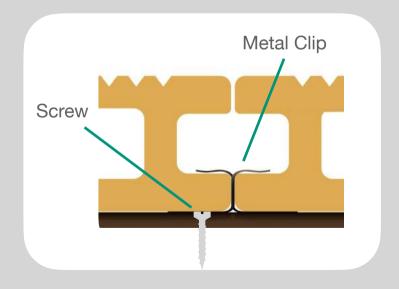
Installing Assured Decking Boards - Using Metal Clips

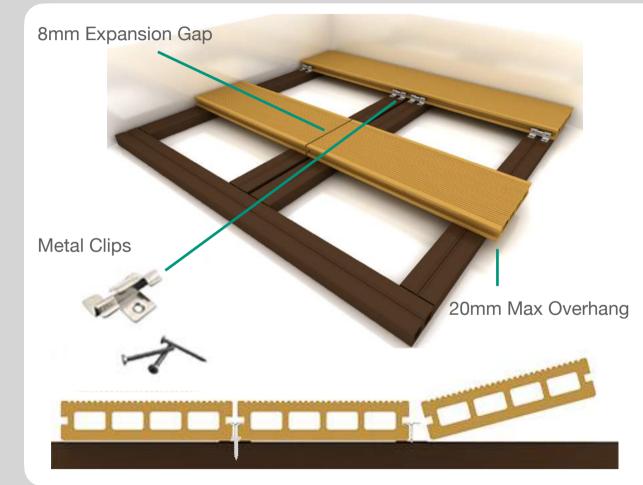
Fix metal clips to the first deck board at every joist with the screws provided. Place the metal clips into the deck board groove and screw the other side down through the hole. Fix the next deck boards into place.

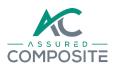
Where deck boards meet leave an 8mm expansion gap.

Continue with the same process until the last deck board, cutting deck boards where required.

Go to page 19 to fix the final deck board.







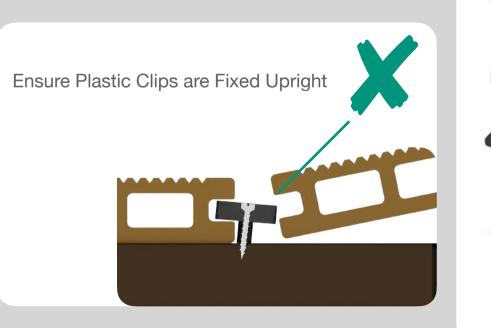
Installing Assured Decking Boards - Using Plastic Clips

Fix plastic clips to the first deck board at every joist with the screws provided. Place the side of the plastic clips into the deck board groove and screw down half way ensuring they are upright. Screw down fully when the next deck board is in place.

Where deck boards meet leave an 8mm expansion gap.

Continue with the same process until the last deck board, cutting deck boards where required.

Go to page 20 to fix the final deck board.



DECKING & ACCESSORIES

8mm Expansion Gap

Plastic Clips

20mm Max Overhang

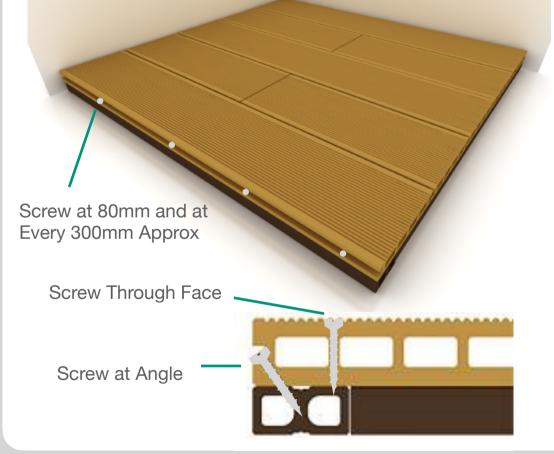


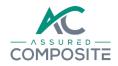
Installing Assured Decking Boards - Last Deck Board - Using Metal Clips

Fix the final deck board as normal but do not fix the metal clips to the outer groove. Pre-drill holes and screw through the outer groove at an angle and into the joist with the screws provided. Start at 80mm approx then at every 300mm approx intervals.

Where the groove is not accessible pre-drill holes and screw through the face of the deck board avoiding the groove.







Installing Assured Decking Boards - Last Deck Board - Using Plastic Clips

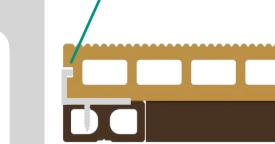
There are 2 ways to fix the final deck board when using plastic clips.

1) Fix the last deck board as normal but do not fix plastic clips to the outer groove. Pre-drill holes and screw through the outer groove at an angle and into the joist with the screws provided. Start at 80mm approx and then at every 300mm approx intervals. Where the groove is not accessible pre-drill holes and screw through the face of the deck board avoiding the groove.

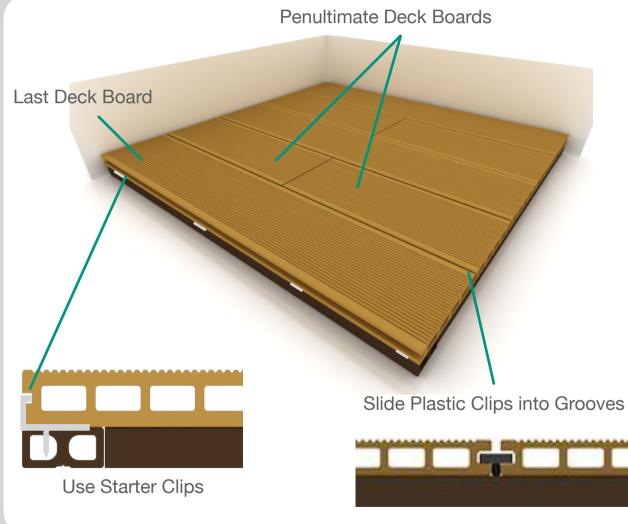
2) Do not fix the last 2 deck boards. Measure 2 deck boards width and 2 x 6mm gaps and mark. Fix the starter clips to the joist framework every 300mm intervals/at every joist. Screw through the hole on each starter clip with the screws provided ensuring that the screw is fully screwed into place to prevent catching on the deck board underneath.

Fix the last deck board by clipping into the starter clip. Check the deck board is securely in place before continuing.

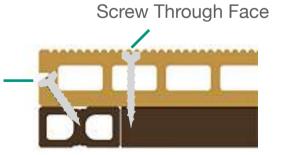
Fix the penultimate deck board(s) into the plastic clips which are already in place leaving a 6mm gap. Slide the number of plastic clips required between the last 2 deck board grooves and fix into place at every joist using the screws provided.



DECKING & ACCESSORIES



Screw at Angle





Installing Assured Bullnose Edge Steps

Carefully plan the area checking all measurements.

Measure and cut deck boards where required.

Fix starter clips to the edge of the step at every 300mm max intervals centre to centre. Screw through the hole on each starter clip with the screws provided ensuring that the screw is fully screwed into place to prevent catching on the deck board underneath.

Fix the bullnose edge by clipping into the starter clip. Check the bullnose edge is securely in place before continuing.

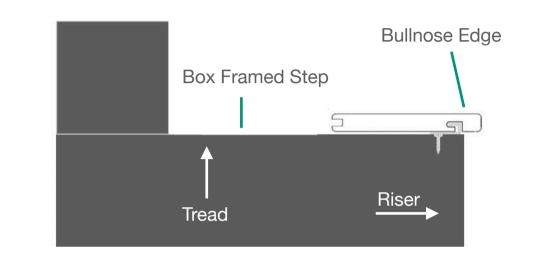
Where deck boards/bullnose edges meet leave an 8mm expansion gap.

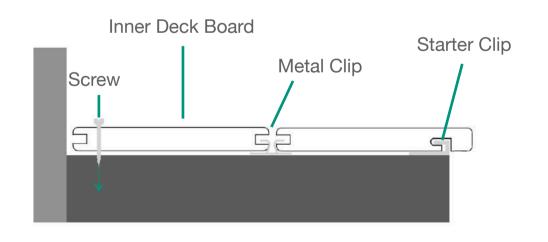
Using Metal Clips

Fix metal clips to the bullnose edge at every joist with the screws provided. Place the metal clips into the deck board groove and screw the other side down through the hole.

Fix the inner deck board as normal into the metal clips. Pre-drill holes and screw through the face of the deck board avoiding the groove. Start at 80mm approx then at every 300mm max intervals.

Assured deck boards or Assured Fascia can be used for the risers.







Installing Assured Bullnose Edge Steps

Using Plastic Clips

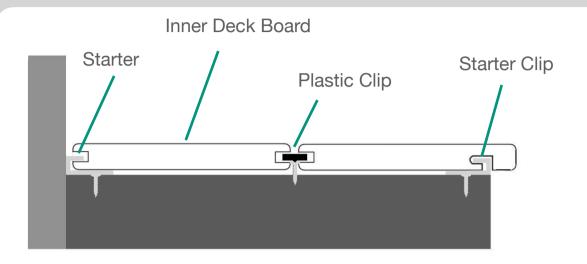
Fix the inner deck board by measuring from the bullnose edge the width of a deck board and a 6mm gap and mark. Fix the starter clips at every 300mm max intervals. Screw through the hole on each starter clip with the screws provided ensuring that the screw is fully screwed into place to prevent catching on the deck board underneath.

Fix the inner deck board by clipping into the starter clip. Check the deck board is securely in place before continuing.

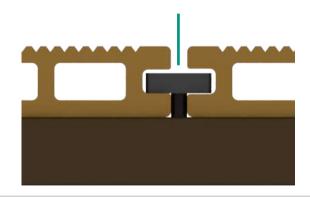
Slide the number of plastic clips required between the deck board grooves and fix into place at every joist using the screws provided.

Assured deck boards or Assured Fascia can be used for the risers.

DECKING & ACCESSORIES



Slide Plastic Clips into Grooves





Installing Assured Decking Board Steps

Carefully plan the area checking all measurements.

Measure and cut deck boards where required.

Fix the deck board to the riser by pre-drilling holes top and bottom and screwing through the face of the deck board. Start at 80mm approx then at every 300mm max intervals. Ensure that the deck board finishes flush with the top of the tread and avoid screwing through grooves.

Fix starter clips to the inside of the tread every 300m max intervals. Screw through the hole on each starter clip with the screws provided ensuring that the screw is fully screwed into place to prevent catching on the deck board underneath.

Fix the inner deck board by clipping into the starter clip. Check the deck board is securely in place before continuing.

Using Metal Clips

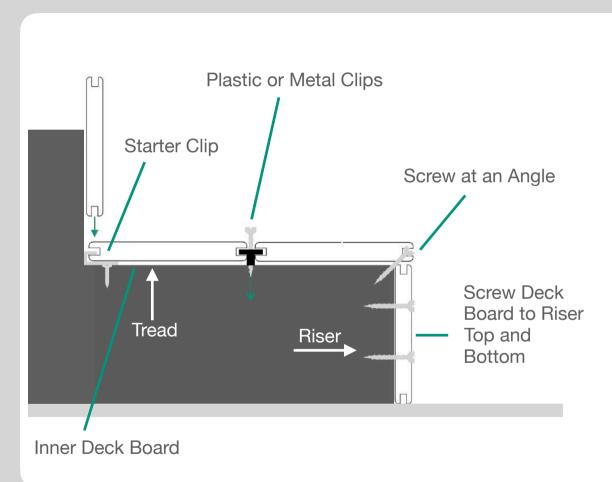
Fix metal clips to the inner deck board at every joist with the screws provided. Place the metal clips into the deck board groove and screw the other side down through the hole.

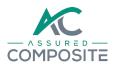
Using Plastic Clips

Fix plastic clips to the inner deck board at every joist with the screws provided. Place the side of the plastic clips into the deck board groove and screw down half way ensuring they are upright. Screw down fully when the next deck board is in place.

Last Deck Board

Fix the last deck board as normal finishing flush with the deck board riser but do not fix any clips to the outer groove. Pre-drill holes and screw through the outer groove at an angle and into the joist with the screws provided. Start at 80mm approx then at every 300mm approx intervals.





Installing Assured Decking Board Steps & Fascia

Carefully plan the area checking all measurements.

Measure and cut deck boards and fascia where required.

Fix starter clips to the inside of the tread every 300m max intervals. Screw through the hole on each starter clip with the screws provided ensuring that the screw is fully screwed into place to prevent catching on the deck board underneath.

Fix the inner deck board by clipping into the starter clip. Check the deck board is securely in place before continuing.

Using Metal Clips

Fix metal clips to the inner deck board at every joist with the screws provided. Place the metal clips into the deck board groove and screw the other side down through the hole.

Using Plastic Clips

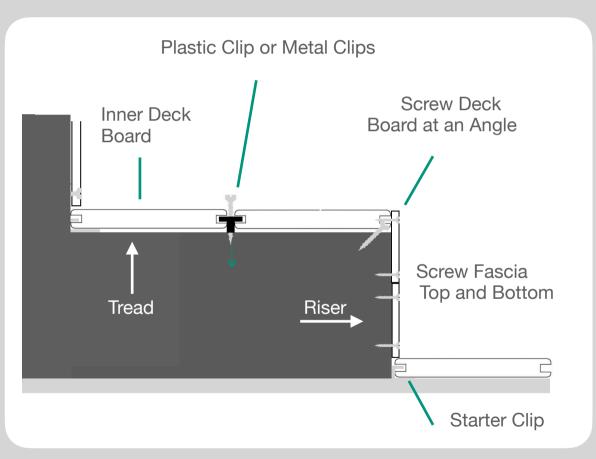
Fix plastic clips to the inner deck board at every joist with the screws provided. Place the side of the plastic clips into the deck board groove and screw down half way ensuring they are upright. Screw down fully when the next deck board is in place.

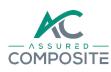
Last Deck Board

Fix the last deck board as normal finishing flush with the riser but do not fix any clips to the outer groove. Pre-drill holes and screw through the outer groove at an angle and into the joist with the screws provided. Start at 80mm approx and then at every 300mm approx intervals.

Fascia

Fix the fascia to the riser by pre-drilling holes top and bottom and screwing through the face of the fascia. Start at 80mm approx then at every 300mm approx intervals. Ensure that the fascia finishes flush with the top of the deck board and leave a 2mm expansion gap when joining fascia.





Installing Assured Corner Trim

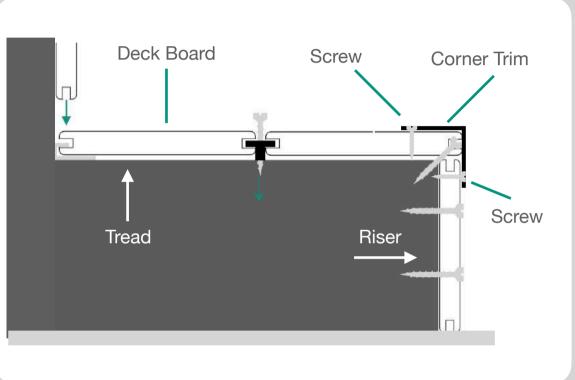
Carefully plan the area checking all measurements.

Measure and cut corner trim where required.

Fix the corner trim by covering the deck board edge. Pre-drill holes and fix into place by screwing directly through the corner trim and into the deck board and riser. Start at 80mm approx and then at every 300mm approx intervals. Leave a 2mm expansion gap when joining corner trim.

Corner trim can also be fixed into place using a high bond strength grab adhesive.







Installing Assured Fascia

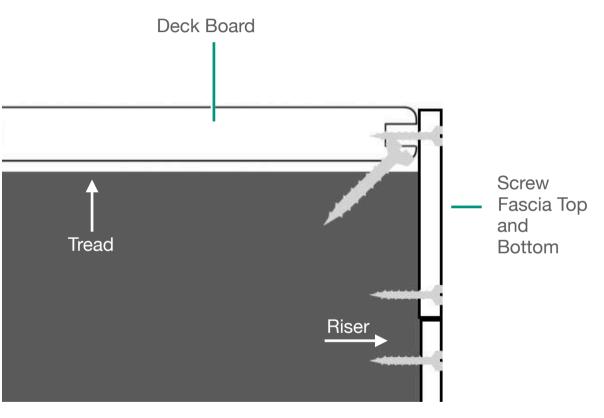
Carefully plan the area checking all measurements.

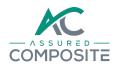
Measure and cut fascia where required.

Fix the fascia by pre-drilling holes top and bottom and screwing through the face of the fascia. Start at 80mm approx then at every 300mm approx intervals. Ensure that the fascia finishes flush with the top of the deck board and leave a 2mm expansion gap when joining fascia.

Fascia can also be fixed into place using a high bond strength grab adhesive.







Still need help or have any questions?

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