



ALPHA

DECKING

Composite Fencing Installation Guide - Aspen Range



Composite fencing is extremely durable however, to make sure it stays in tip top condition please follow these installation instructions when working with Alpha Composite Fencing products

Handling your fencing

Storage Area: We recommend storing your fencing in a suitable shaded, flat, clean, and clear area that supports the entire length of the panels, posts and accessories.

Storage Method: It is advisable to store the panels on a pallet or similar support to avoid placing them directly on wet, cold, or dirty ground (please note that pallets are not provided with delivery). If storing outside for more than 24hrs never leave uncovered in direct or partly direct sunlight. This is especially important when storing for longer periods of time.

Acclimatisation: In periods of extreme weather (over 30°C or under 2-3°C), allow at least 24 hours for your fencing slats to acclimatise to the outside environment before installation. Avoid installing in extreme conditions beyond these limits.

Handling: Take extra care when lifting, moving, or fitting products to avoid accidental damage scratching. Do not drag, slide, or drop products on rough surfaces.

Work Area: Keeping your work area tidy will help to keep the surface of the products free from construction debris.

Recommend/Potential Tools Needed

- Hammer Drill • Hand Drill • Tape Measure • Pencil • Jigsaw • Skill/Circular Saw • Table Saw
- Mitre Saw • Spirit Level • Carpentry Square • Shovel • Hole Digger

Recommend PPE and Safety Equipment

- Ear Protection • Safety Glasses • Safety Gloves • Long Sleeves • Dust Mask • Safety Footwear

Always refer to manufacturers instructions before using any machinery or tools you are unsure of.

ALWAYS THINK SAFETY FIRST

Pre- Planning

Pre-planning is key before you start doing any work. Consult a design specialist if you are unsure where to start your design process. Please ensure you comply with any and all UK and local building regulations controlling fencing.

Your composite fencing panels and accompanying accessories can be worked with normal woodworking and metal cutting tools. We recommend using a mitre saw with a fine-tooth blade to cut panels to size. When cutting, ensure products are properly supported at all times.

Expansion Gaps

Composite products naturally expand in hot weather and contract in cooler weather due to their wood and plastic composition. Therefore, it's essential to leave expansion gaps during installation. Failing to leave the correct expansion gaps will invalidate any warranty.

Guideline for slat expansion gaps:

Temperature during installation	Slat expansion gaps to be left on each side
2-3°C to 20°C	5mm each side (Overall 10mm minimum)
20°C to 30°C +	4mm each side (Overall 8mm minimum)

Vertical (Upward) Expansion:

We advise cutting the u channel inserts, composite posts and aluminium posts 1cm to 1.5cm higher than the finished fence height. E.g for a 183cm fence height cut the u channel or posts to 184-184.5cm. This will ensure all the components fit in comfortably and allow for any upward expansion.

Colour/Sanded/Grained Finish

It is strongly recommended to purchase all the products you may need for your project at the same time. This will ensure that the products come from the same batch, providing consistency in colour and sanding finish. Although colour variation between batches is generally minimal and often unnoticeable, we cannot guarantee that one batch will perfectly match another purchased later.

Fading

Our Aspen range composite fencing products include UV stabilisers, but like any outdoor product, you might notice some weathering in the first few months after installation. This occurs due to UV exposure and the natural tannins in the wood components of the boards. The colour may lighten slightly (by about 10-20%, depending on exposure and the time of year), with the most noticeable changes occurring in the first two months.

This weathering process can vary in speed depending on the time of year and the amount of UV exposure. For example, in winter, it might take 4-5 months, while in summer, it could happen in 1-2 months.

Don't worry, this is completely normal and will stabilise after the initial period. Over the years, once the product has stabilised, any further colour reduction due to UV exposure will be much slower and generally unnoticeable.

Individual Components |

Aspen Fence Panel Slats

Dimensions: 1830mm | 6ft (W) x 210mm (H) x 21mm (D)



CHARCOAL



ANTHRACITE



GREY



OAK



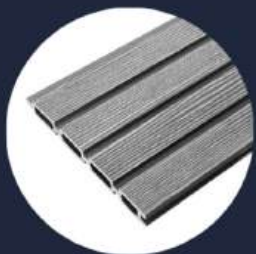
TEAK

Willow Fence Panel Slats

Dimensions: 1830mm | 6ft (W) x 210mm (H) x 21mm (D)



ANTHRACITE



GREY



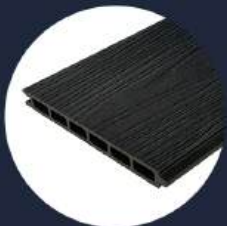
OAK



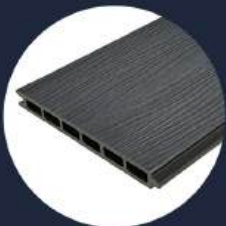
TEAK

Maple Fence Panel Slats with Alphashield™

Dimensions: 1830mm | 6ft (W) x 210mm (H) x 21mm (D)



DEEP BLACK



ANTHRACITE



SILVER GREY



HAZELWOOD OAK



SUNSET TEAK



MOONSTONE BEIGE

Individual Components

Composite Posts and Caps & Standing Base

Composite Post Dimensions: 2200mm | 3000mm (L) x 100mm (W) x 100mm (D)

Standing Base Dimensions: Plate 140mm x 140mm | Tube 500mm (50cm) (h) x 38mm x 38mm



CHARCOAL



ANTHRACITE



GREY



OAK



STANDING BASE

Aluminium Posts, Standing Base & Locking Brackets

Dimensions: 2750mm or 2200mm (L) x 80mm (W) x 80mm (D)

Colours: Charcoal

Standing Base Dimensions: Plate 140mm x 140mm | Tube 500mm (50cm) (h) x 38mm x 38mm



ALUMINIUM POST



ALUMINIUM
POST CAP



WILLOW UNIVERSAL RAIL
LOCKING BRACKETS



STANDING BASE

Trellis:

Dimensions: 1830mm | 6ft (W) x 300mm (H) x 20mm (D)

Colours: Black



SLATTED



DIAMOND



CUBE



LOTUS



WAVE

Individual Components |

U Channel Inserts for Concrete Posts & Cap

PVC Inserts

Dimensions: 1520mm | 2130mm (L) x 50mm (W) x 39.5mm (D)

Colours: Black

Aluminium Inserts (designed for our Maple Range)

Dimensions: 1530mm | 1850mm (L) x 50mm (W) x 34.5mm (D)

Colours: Black



ASPEN U CHANNEL
INSERT & CAP



WILLOW U CHANNEL
INSERT & CAP



MAPLE ALUMINIUM
U CHANNEL & CAP

Aluminium Rails

Dimensions: 1830mm | 6ft (L) Colours: Anthracite & Charcoal



ASPEN TOP RAIL



APSEN BOTTOM RAIL



WILLOW UNIVERSAL TOP
& BOTTOM RAIL

Heights and Compatibility

Slats Per Height Breakdown

Number of Slats needed to reach desired heights examples:

Height in cm (ft)	No. of slats needed
83cm (2ft 9")	4 Slats
103cm (3ft 4")	5 Slats
123cm (4ft)	6 Slats
143cm (4ft 8")	7 Slats
163cm (5ft 4")	8 Slats
183cm (6ft)	9 Slats

Slats can be cut down to custom heights if needed using a table saw or similar tool cutting between the honeycombs of the fence slats. They can also be cut to any required width.

Product Compatibility:

Product:	Fencing Range		
	Apsen Range Slats	Willow Range Slats	Maple Range Slats
Aluminium Top Rail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Aluminium Bottom Rail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Willow Universal Top & Bottom Rail	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
U Channel Insert (PVC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Willow U Channel Insert (PVC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Aluminium U Channel Insert	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Composite Posts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Aluminium Posts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trellis (All Designs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Ensure they are used as the bottom slat on top of the bottom rail

When building a fence bay using half-size or reduced-size slats, please ensure these are always installed as the bottom slat directly above the bottom rail.

If any slats are cut down on site and are smaller than the full-size slats supplied, these must also be installed as the bottom slat directly above the bottom rail.

This is an important installation requirement and must be followed at all times.

Top and Bottom Rails

To ensure your warranty remains valid, a top and bottom rail must always be used with every fence installation.

For our Aspen and Maple ranges, this means using our aluminium top rail and aluminium bottom rail.

For our Willow range, this means using two Universal rails - one as the top rail and one as the bottom rail.

This is an important installation requirement and must be followed at all times.

Method – Composite Fence Panel installation using existing concrete posts

This section of our installation guide will explain how we recommend installing our composite fencing when using new or existing concrete posts



Measure and Cut: Measure the height of the concrete posts. If necessary, cut the U channels to the correct size using a mitre/chop saw. We advise cutting the u channel insert 1cm to 1.5cm higher than the finished fence height. E.g for a 183cm fence height cut the u channel to 184-184.5cm. This will ensure all the components fit in comfortably and allow for any upward expansion.

Insert U Channels: Place the U channel inserts into the channels of the concrete posts, ensuring they do not fall forward.

Securing U Channels: U channels should fit comfortably in most concrete posts. However, adding some silicone adhesive in the concrete channel before inserting the U channel can help keep it in place while working and ensure the panels remain secure over time.

Important Note:

Once you have inserted the U channel inserts, the internal diameter between the concrete posts will be slightly reduced. This means the fence panel slats may need to be cut to fit into this smaller internal gap, as they are all supplied in 6ft (183cm) lengths.

This adjustment allows you to fit the slats to your concrete posts perfectly, ensuring the correct expansion gaps are maintained (refer to page 3).

Installation using Concrete Posts – Aspen Range

Important – When installing rails and fence slats, all slats and aluminium rails will sit within the U channel inserts.

Installing the Aspen Fence Slats, Aluminium Top Rail, Aluminium Bottom Rail and Insert Caps

Bottom Rail

Measure Internal Width: Start by measuring the new internal width between the two U channel inserts.

Positioning the Bottom Rail: Cut the bottom rail to size based on the new internal measurement. There should be a small gap either side of the bottom rail so it is not touching either side of the u channel insert, this can be around 2-3mm overall.

Insert the bottom rail between the U channel inserts at the top, one side at a time. The bottom rail will sit tightly and securely within the U channels, so you may need to tap them down lightly from side to side with a soft rubber-headed hammer to get it to the bottom of the u channel insert.



Aspen Fence Slats

Measure Internal Width: Double check and start by measuring the new internal width between the two U channel inserts before building up the slats.

Install and Build Up the Slats

Once you have confirmed the internal width between the posts, you can begin preparing the slats for installation.

Install the slats one at a time, cutting them as necessary to allow for the required expansion gaps inside the U-channel inserts (refer to page 3 for expansion guidance). Ensure all tongues are facing upwards.

Slide each slat down into position, making sure it is fully seated and securely slotted into the channel. Continue stacking the slats using the tongue-and-groove system until you reach the purchased or required fence height.

As you build upwards, periodically remeasure the internal gap. This is particularly important if the posts are older or have been concreted in for some time, as they may have moved slightly inwards or outwards over time.

Continue cutting (if required) and stacking the slats one by one until the desired height is achieved.

Installation using Concrete Posts – Aspen Range

Top Rail

Measure Internal Width: Again double check and measure the new internal width between the two U channel inserts.

Positioning and fixing the Top Rail: Using the same process as for the bottom rail, measure, cut, and insert the top rail. There should be a small gap either side of the bottom rail so it is not touching either side of the u channel insert, this can be around 2-3mm overall.

We recommend applying some silicone adhesive to the underside of the top rail before placing it on the top panel slat. Once the silicone sets, it will keep the top rail secure, preventing it from being dislodged by animals such as cats

Adding a Trellis

If you are adding a trellis to any of your fence sets then please follow these steps. If you are not adding a Trellis please skip to 'Insert Caps'

Prepare the Trellis: Trellis come in 183cm lengths and can be cut to the correct width in the same way as the slats and other components, ensuring the correct expansion gaps (refer to page 3). The trellis will sit within the U channel inserts and on top of the top rail.

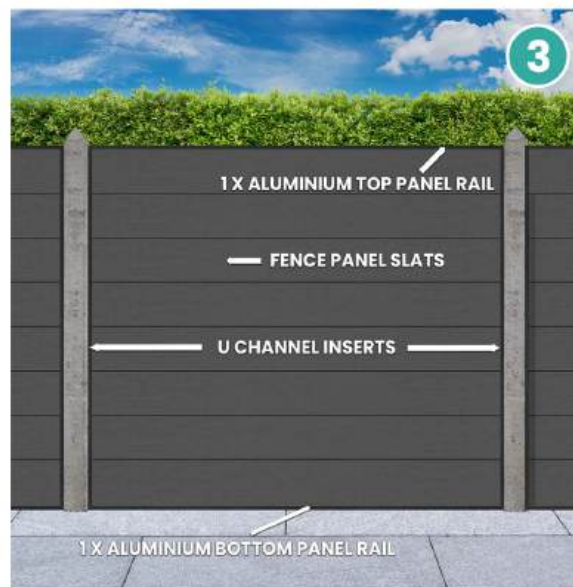
Securing the trellis to prevent any potential movement, we suggest the following solutions:

Silicone Adhesive: Apply a high quality silicone adhesive between the bottom of the trellis and the top rail to help secure the trellis firmly.

Screws: Alternatively, you can screw up through the top rail into the trellis equally along it's length. This will hold the trellis more rigidly in position.

Combination: For extra long-term strength, consider using both silicone adhesive and screws.

By following these steps, you can ensure that your trellis is securely installed and stable.



Installation using Concrete Posts – Aspen Range

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Insert Caps

Finish off by adding the insert caps: Position the insert caps so it fits into the hollow parts of the u channel inserts and give it a light tap to seat it into position.

To help keep the cap securely in place and to add some extra security, you can apply some silicone adhesive to the underside of the cap before positioning it.

If your set includes a trellis, please add the insert cap after installing the trellis.

6



Completed Fence

Your fence bay is now fully installed.

Repeat the same installation process for each additional fence bay purchased.

Do not assume measurements from a previous bay. Always remeasure the internal width and height as required before cutting or installing slats, as slight variations between posts can occur.

Installation onto Brick Pillars – Aspen Range

Method – Installing u channel inserts onto brick or brick pillars/uprights



If you would like to install our composite fence between brick pillars or end a fence run at a brick wall, you can use our U-channel inserts secured to the brick or wall (as pictured above).

To secure:

Measure and mark three to four evenly spaced screw locations where the u channel will be installed.

Drill small pilot holes at the marked locations.

Apply silicone adhesive on the back of the u channel between the screw hole markings and where the u channel will be positioned on the wall, then put the u channel in place.

Using screws and washers inside the channel slot, secure the u channel in place. Once the silicone has cured and the u channel is secure, you can continue to install the fencing as usual.

We advise allowing 24 hours for the silicone to fully cure to its full strength.

Visual - Top Rail and Bottom Rail

Top Rail



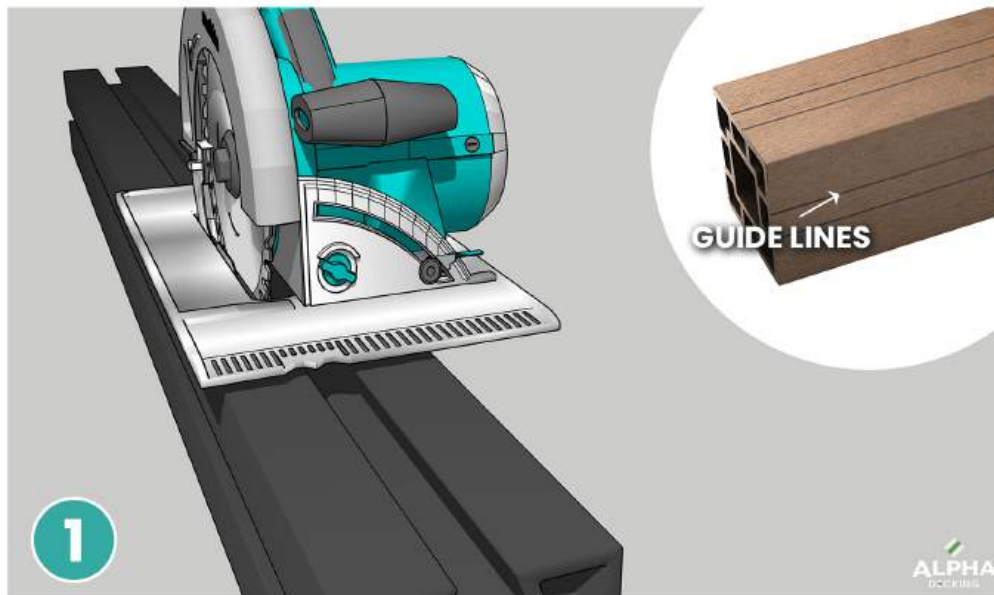
Bottom Rail

Installation using Composite Posts – Aspen Range

Method – Composite Fence Panel installation using Composite Posts sunk into the ground

This section of our installation guide will explain how we recommend installing our composite fencing when using our composite posts that are being sunk into the ground using concrete.

These instructions assume the fence height being installed is 183cm and standard 6ft width. Please fully read all instructions for your installation method before starting any of the steps.



Each post has four sides marked with two black lines, indicating where slots can be cut to install and slide in your fence slats. This versatile design allows the posts to serve as end, intermediate, two-way, or three-way posts.

Prepare Posts Before Installation

Cut Only Where Needed: Only cut the sides where the fence slats will be installed. Leave the remaining sides untouched. All required channels should be cut before concreting the posts into the ground.

Tools for Cutting: The easiest tool for cutting is a skill/circular saw with a guide attached. Alternatively, you can use a table saw or router.

Measurement Accuracy: The guidelines on the posts are there to assist with cutting, but we recommend measuring the required 21mm gap for our Aspen slats yourself. Slight manufacturing variations in the posts may occur, so double-checking ensures a precise 21mm channel slot.

Tip: Cut all necessary channels in advance before proceeding with the installation. This ensures all posts are fully prepared and ready for the next steps.

Installation using Composite Posts – Aspen Range

Cutting the Channel Slots

You can either cut the channel slots along the entire length of the post or follow the method below to create a base within the channel to support the slats and locking brackets during installation.

If you cut the channel the entire length of the posts the locking brackets used later should be secured into the channel so they are resting at ground, we do not recommend attaching them higher than resting at ground level.

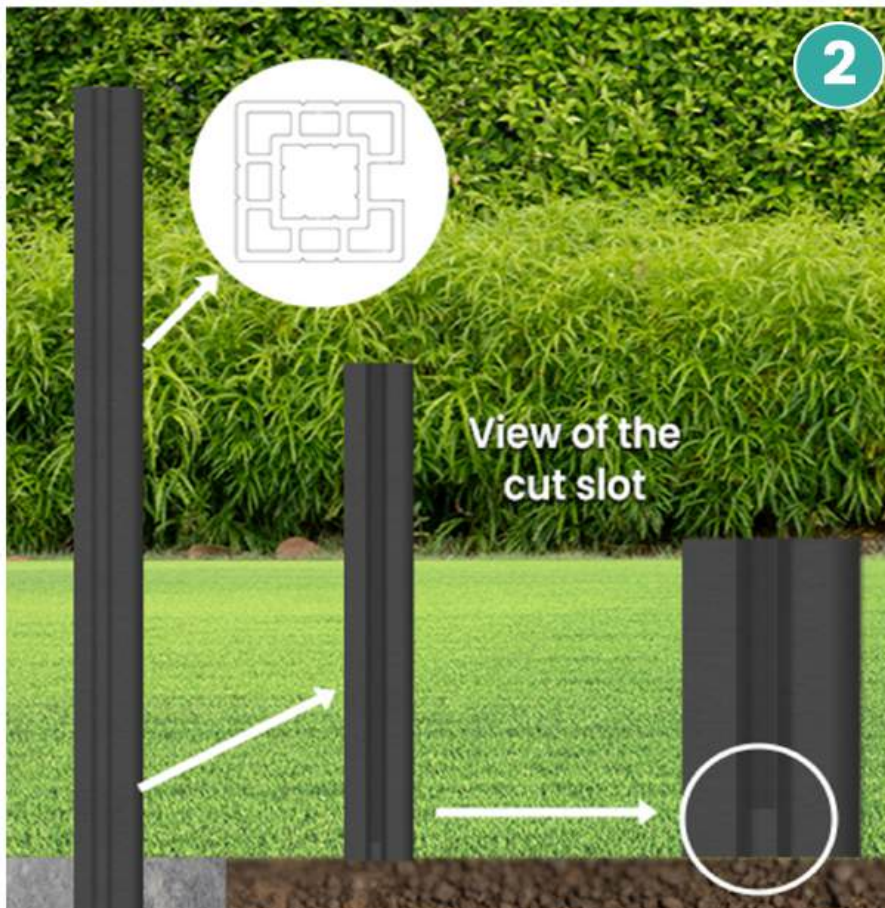
Method for Cutting Channels Short of the Post's Full Length

Cutting the Channel Slot: Cut the channel slot to the required height for your bay plus an additional 1.5cm. For example, for a fence height of 183cm, cut the slot to 184.5cm. This provides extra space at the top of the bay, ensuring all components fit correctly. This top expansion gap should always be left regardless of the fence height.

Positioning for a Ground-Level Fence Finish: To achieve a ground-level fence finish, ensure that only the channeled section of the post (e.g., 184.5cm in this example) remains above ground.

Raising the Fence Bay Above Ground Level: For a fence bay with clearance off the ground, raise an additional 1cm of unchanneled post above ground, as shown in diagram 2 below.

Ensuring Consistency Between Posts: Measure and cut the channel slots to exactly the same height for both posts in a bay to ensure proper alignment. Use a spirit level across the tops of the posts to confirm they are level and aligned.



Installation using Composite Posts – Aspen Range

Prepare the Area: We recommend digging a hole with a minimum depth of 600mm regardless of fence height.

Dig the post holes to a minimum depth of 600mm or at least one-third ($1/3$ or 33%) of the total post height/fence height. This is a minimum and recommend digging deeper if possible. The hole where the post sits should have a diameter of at least 300mm around from the centre of the post.

Excess Post: Posts are supplied longer than required (e.g. you have a 3m post but are installing a 183cm fence), you may have excess material to remove.

Example: The fence height is 183cm, so you have 185cm above ground with 80cm of the post set below ground for concreting. You will use a total of 265cm being used. Any remaining excess can be cut off. We recommend trimming the post to the required length before concreting it in place to ensure a clean and accurate finish. Do not leave excess post above the top rail more than the recommended expansion gap to account for any upward expansion.

Stabilise with Concrete: Fill each hole with concrete to stabilise the posts. You will need enough concrete to fill the hole fully.

Post Spacing

Tip for Post Spacing: Create or cut a timber template that fits within the cut slots of the posts. The template should measure:

- 184cm when installing in temperatures 0°C to 20°C
- 183.8cm when installing in temperatures 20°C to 30°C

Ensure the template fits snugly up to the inside of the slot on each post. Use it to space the posts accurately, allowing for seasonal expansion. Once the posts are set in place, the slats will fit securely with the correct expansion gap.

Aligning and Levelling the Posts

Align the Posts: Use a plumb line stretched from the first post to the last to ensure all posts are perfectly straight.

Level the Posts: Check that each post is perfectly level in all directions before adding water. This is especially important when using quick-set concrete, as it hardens quickly, leaving minimal time for adjustments.

Once the concrete is fully set, you can begin installing the fence components.



Installation using Composite Posts – Aspen Range

Installing the Aspen Fence Slats, Aluminium Top Rail, Aluminium Bottom Rail and Post Cap

Bottom Rail

Measure Internal Width: Start by measuring and checking the internal width between the posts within the created channels.

Positioning the Bottom Rail: Cut the bottom rail to size based on the internal measurement. There should be a small gap either side of the bottom rail so it is not touching either side of the u channel insert, this can be around 2-3mm overall.

Insert the bottom rail between the U channel inserts at the top, one side at a time. The bottom rail will sit tightly and securely within the U channels, so you may need to tap them down lightly from side to side with a soft rubber-headed hammer to get it to the bottom of the composite post.



Installation using Composite Posts – Aspen Range

Aspen Fence Slats

Measure Internal Width: Double check and start by measuring the internal width between the two posts from the side of either channel before building up the slats.

Install and Build Up the Slats

Once you have confirmed the internal width between the posts, you can begin preparing the slats for installation.

Install the slats one at a time, cutting them as necessary to allow for the required expansion gaps inside the channels if needed (refer to page 3 for expansion guidance). Ensure all tongues are facing upwards.

Slide each slat down into position, making sure it is fully seated and securely slotted into the channel. Continue stacking the slats using the tongue-and-groove system until you reach the purchased or required fence height.

As you build upwards, periodically remeasure the internal gap.

Continue cutting (if required) and stacking the slats one by one until the desired height is achieved.

Top Rail

Measure Internal Width: Again double check and measure the new internal width between the two post channels.

Positioning and fixing the Top Rail: Using the same process as for the bottom rail, measure, cut, and insert the top rail. There should be a small gap either side of the bottom rail so it is not touching either side of the u channel insert, this can be around 2-3mm overall.

We recommend applying some silicone adhesive to the underside of the top rail before placing it on the top panel slat. Once the silicone sets, it will keep the top rail secure, preventing it from being dislodged by animals such as cats.

Post Caps

Tap into place: Finally, add post caps to the top of the posts and secure them using silicone adhesive. You may need to tap them lightly into place.

Installation using Composite Posts – Aspen Range

Adding a Trellis

If you are adding a trellis to any of your fence sets then please follow these steps. If you are not adding a Trellis please skip to 'Insert Caps'

Prepare the Trellis: Trellis come in 183cm lengths and can be cut to the correct width in the same way as the slats and other components, ensuring the correct expansion gaps (refer to page 3). The trellis will sit within the channel of the post and on top of the top rail.

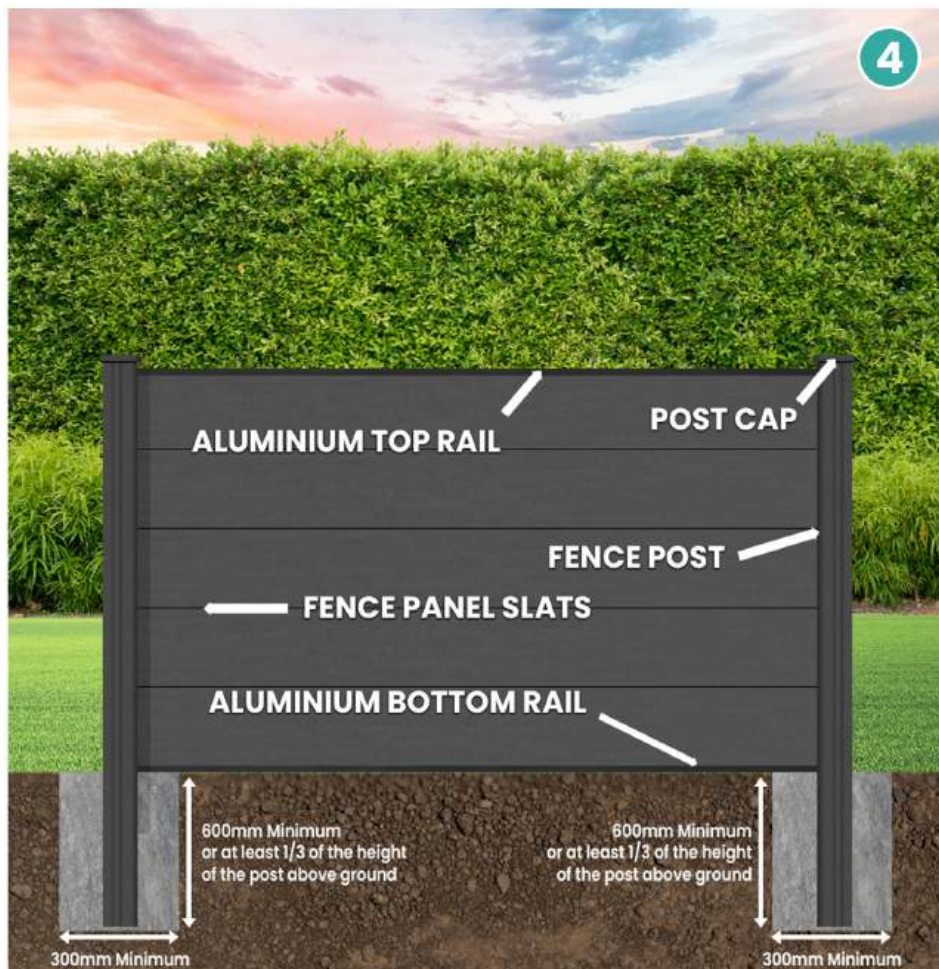
Securing the trellis to prevent any potential movement, we suggest the following solutions:

Silicone Adhesive: Apply a high quality silicone adhesive between the bottom of the trellis and the top rail to help secure the trellis firmly.

Screws: Alternatively, you can screw up through the top rail into the trellis equally along it's length. This will hold the trellis more rigidly in position.

Combination: For extra long-term strength, consider using both silicone adhesive and screws.

By following these steps, you can ensure that your trellis is securely installed and stable.



Top Tip for looking after your composite fencing

Our low-maintenance composite fencing comes with the reassurance of continual performance year-on-year, however we know that with a little care and attention once in a while our fencing can continue to look their sparkling best. This section will give you some handy tips on how to care for your fencing.

Routine Cleaning

We recommend a routine clean of your fencing when necessary and especially after the autumn/winter season, going into spring, to clear away dirt and debris that can accumulate over time.

General Clean: Use warm, soapy water with a non-abrasive cleaning cloth or sponge. Ensure you only use non-abrasive cleaning products, such as dishwashing liquid, and non-abrasive cleaning cloths and sponges.

Jet Wash: You can use a jet wash with a pressure no greater than 2000 PSI to clean the surface of your fencing products. Use the fan attachment and ensure it is not applied any closer than 250mm-300mm away from the surface. Test a hidden area first if possible. Overuse or prolonged exposure to high pressure can damage the products, so please bear this in mind. In general, a sponge and soap clean will be sufficient.

Stubborn Spot Stains

For stubborn stains, such as oil and grease marks or bird/animal droppings, use the techniques outlined in the general cleaning section above, along with the following advice.

Immediate Action: Clean any spillages of liquids, grease, oil, or food from your composite fencing immediately. The longer these substances remain on the surface, the higher the chance they have of causing damage by soaking into the composite, potentially causing lasting damage and invalidating any warranty.

Bird/Animal Droppings: Although bird and animal droppings will not cause structural damage, their acidity can cause long-lasting stains. We recommend rinsing and cleaning them off within a few days of their appearance.

Surface Mildew and Mould Growth

While our boards are resistant to the damaging effects of mould and mildew, this type of growth can occur on almost any outdoor surface and may collect on the surface of our slats. Following the steps in our general cleaning section will help avoid excessive build-up of such growth. Treat the affected area within the first 7 days if possible.

Top Tip for looking after your composite fencing

Water Staining – Tannin Water Spots

After it rains or when your slats get wet, you might notice tannin water spots on your panels. These occur when rain/water mixes with the naturally produced tannins from the wood-based components of the panels. The tannins contribute to the color of the panels and can sometimes leave temporary water spots as they dry.

What to Expect

Drying and Fading: The water spots will dry out and completely fade over time. This process is natural, so there's no need to worry. As the panels dry, you will see the spots gradually disappear.

Drying Time: Since the panels are wood-based, they may take a bit longer to dry fully. Some water may be absorbed into the wood before it completely dries out. This can take a little longer than just being touch dry.

Assurances

Normal Process: This is not staining; it's a completely normal process. The spots will fade away within a few weeks as the panels are exposed to rain and sun and dry fully.

Tips to Speed Up the Process

Warm Water and Cloth: If you want to speed up the drying process, you can use warm water and a cloth to wipe over the panels. This can help accelerate the fading of the spots.

When cleaning slats, please ensure you only use non-abrasive cleaning products, such as dishwashing liquid, and non-abrasive cleaning cloths and sponges.