Boundaryline

SmartW**all**
Install Guide

June 2026

Contents

Before you start

Read this entire install guide before beginning any installation.

For guidance, information or advice, our technical team is available Monday to Friday, 7am to 5pm.
Call us on 0800 003 006, or email *enquiries@boundaryline.co.nz*

Identify soil type/ground conditions to determine the required concrete and footing details.

Be aware of any underground services prior to commencing digging, identify the legal boundary and check local council regulations on boundary fencing. Contact the local council for more information.

For fencing over 1800mm contact Boundaryline for guidance.
For **F4** (***Safety From Falling***) or **F9** (***Restricting Access to Residential Pools***) applications, refer to the PS1 for installation details.

Required Tools/Materials

- ☐ Tape measure
- ☐ Square
- ☐ Shovel
- ☐ Line Marking Paint
- ☐ String Line
- ☐ Spirit or laser level
- ☐ Drill/Driver
- ☐ Hex drive bit *5/16 driver*
- ☐ Auger/Post hole digger
- ☐ Circular Saw
- ☐ Nibbler/Tin snips
- ☐ Rivet Gun *(for SmartWall Slat Top only)*

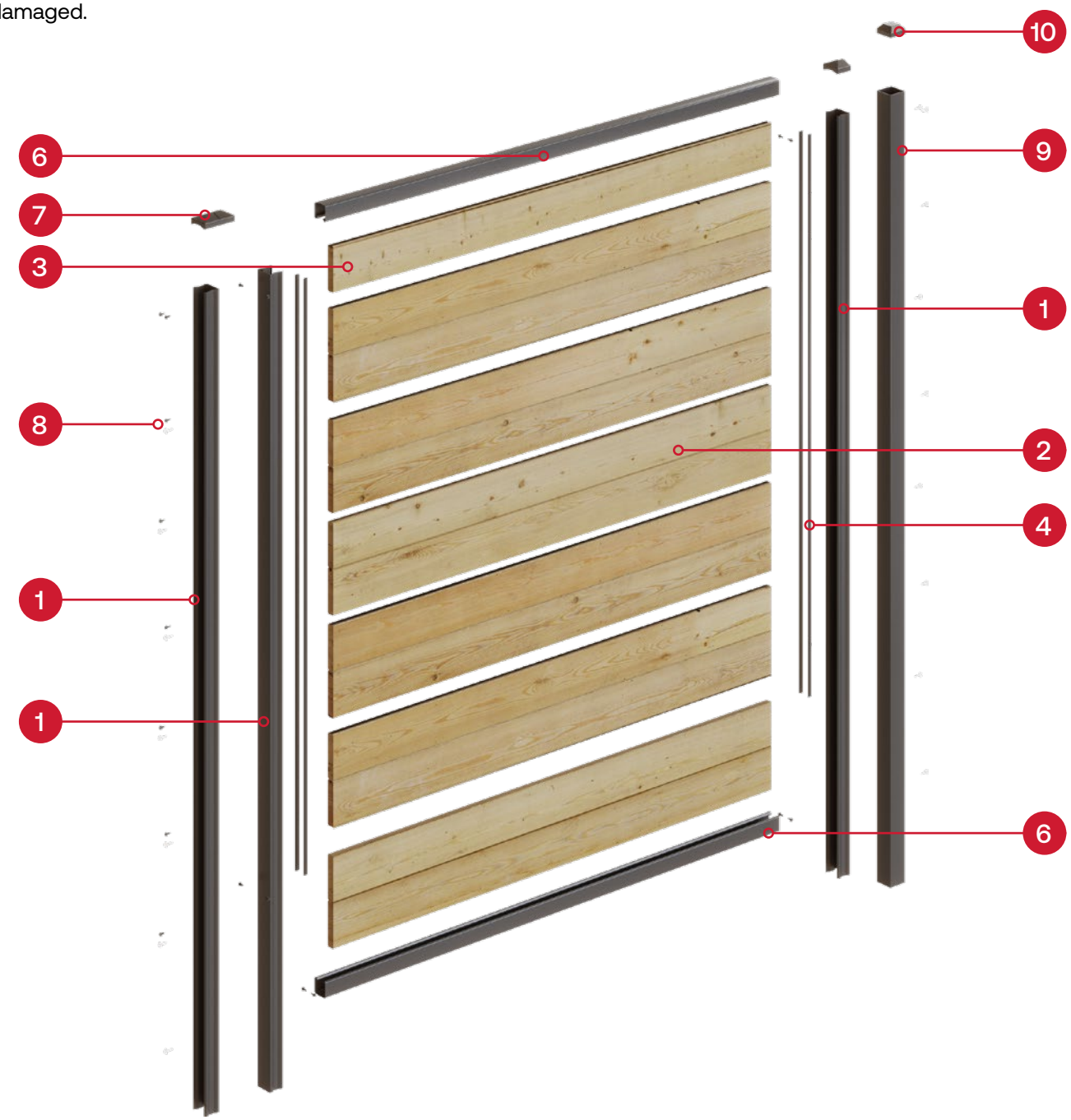
Safety Gear

- ☐ Safety boots
- ☐ Gloves
- ☐ Eye protection
- ☐ Hearing protection
- ☐ Sun protection

Carefully read through the entire installation guide before commencing any installation work.
Ensure measurements are correct before cutting components.

SmartWall Fence Components

Take care when opening and unloading the package. Ensure all components are accounted for and check it is all undamaged.



A complete SmartWall Fence System consists of:

1. C-posts

x2

2. CLT Palings

x3

3. CLT Half Paling *Horizontal*

x1

4. Vertical Support Bead *Horizontal*

x4

5. Bottom Rail Support *Vertical*

x1

6. Rails

x2

7. Double Caps

x1

8. Tek Screws

9. 65x65mm Post*

10. 65x65mm Post Cap*

*****Quantity of recommended 65x65mm posts will depend on situation. Contact our team for guidance.*

For additional Slat Top components and installation go to **page 08**.

Step 1 | Establish Fence Line

1. Hammer a wooden peg (or similar) into the ground at each end of the fence line. These represent the start and end points of your fence. If there is a corner or a change in direction, put a peg in at each of those points too. *Fig. 1*

2. Tie a string line to the first marker peg, keeping the string line just off the ground. Run the string line along the pegs, from the beginning peg to the end, keeping the string line taut and straight with no sag. *Fig. 2*

3. Once the string line is in place, measure along the line and mark where the post centres will be located with spray paint or a marker peg. *Fig. 3*

4. To calculate standard SmartWall post centres measure the bottom rail length and add 10mm to allow for clearance.

Standard Post Centre Positions:

	Rail length	+	*Clearance*	=	*Post centre*
Horizontal	1800mm	+	10mm	=	1810mm
Vertical	2230mm	+	10mm	=	2240mm

5. After marking post positions, dig the post holes. *Fig. 4*

6. Post hole depth will vary depending on ground conditions and fence height. All post holes should be at least 250mm in diameter and should be straight, with the sides either parallel, or wider at the bottom than the top.

Post Hole Depths:

Soil type	Min. hole depth	Approx. required concrete (20kg bag)
Clay/Firm Earth	600mm	2 bags per post hole
Sand/Loose Fill	900mm	3 bags per post hole

7. The rails and paling's can be cut down to achieve even bay spacing across the entire fence line, instead of ending up with one narrow bay one end.

TIP Lay out your posts and rails along the fence line to establish the post positions before commencing digging *Fig. 5*

Fig. 1

Fig. 2

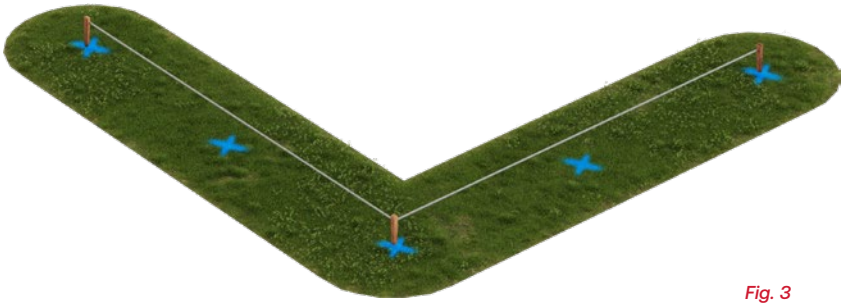


Fig. 3

Fig. 4

Fig. 5

Step 2 | Connecting C-posts

We recommend using 65x65mm posts for corners, junctions and ends to provide extra strength and stability; however these aren't required in every case.

If you need assistance or advice, contact us, we can help identify where 65x65mm posts may be required for your installation.

There are several methods for connecting corners, junctions, ends and line posts when installing products that utilise the C-posts. The following examples show various configurations for corners, ends, and junctions.

Line Posts:

1. Attach two C-posts directly back to back
2. Attach two C-posts to opposite sides of a 65x65mm post

Corner configuration:

3. Attach two C-posts to adjacent faces of the 65x65mm post.
4. Attach one C-post to the side of the other C-post.

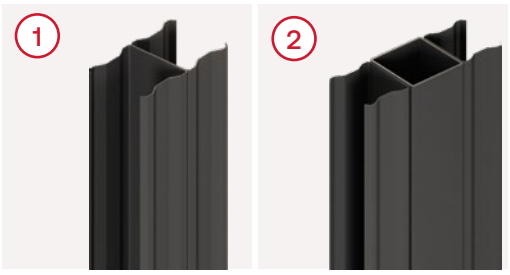
T junction configuration:

5. Attach three C-posts to adjacent faces of the 65x65mm post.
6. Attach two C-posts back to back, then attach the third C-post centred to the join on the sides of the posts.

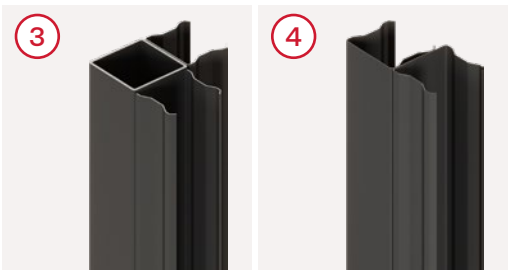
End Posts:

7. Attach a C-post to a 65x65mm post.
8. End with a C-post

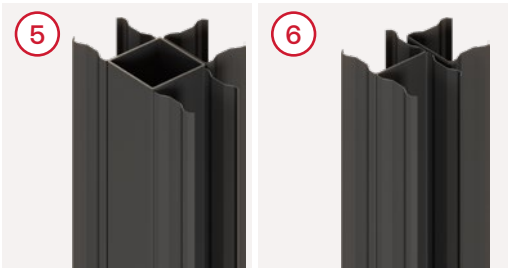
Line Posts



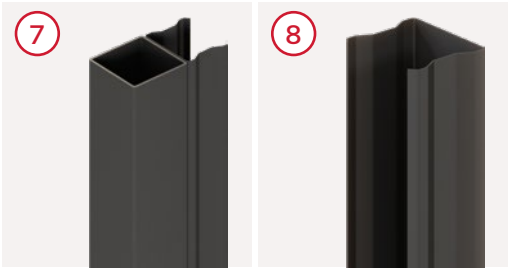
Corner Posts

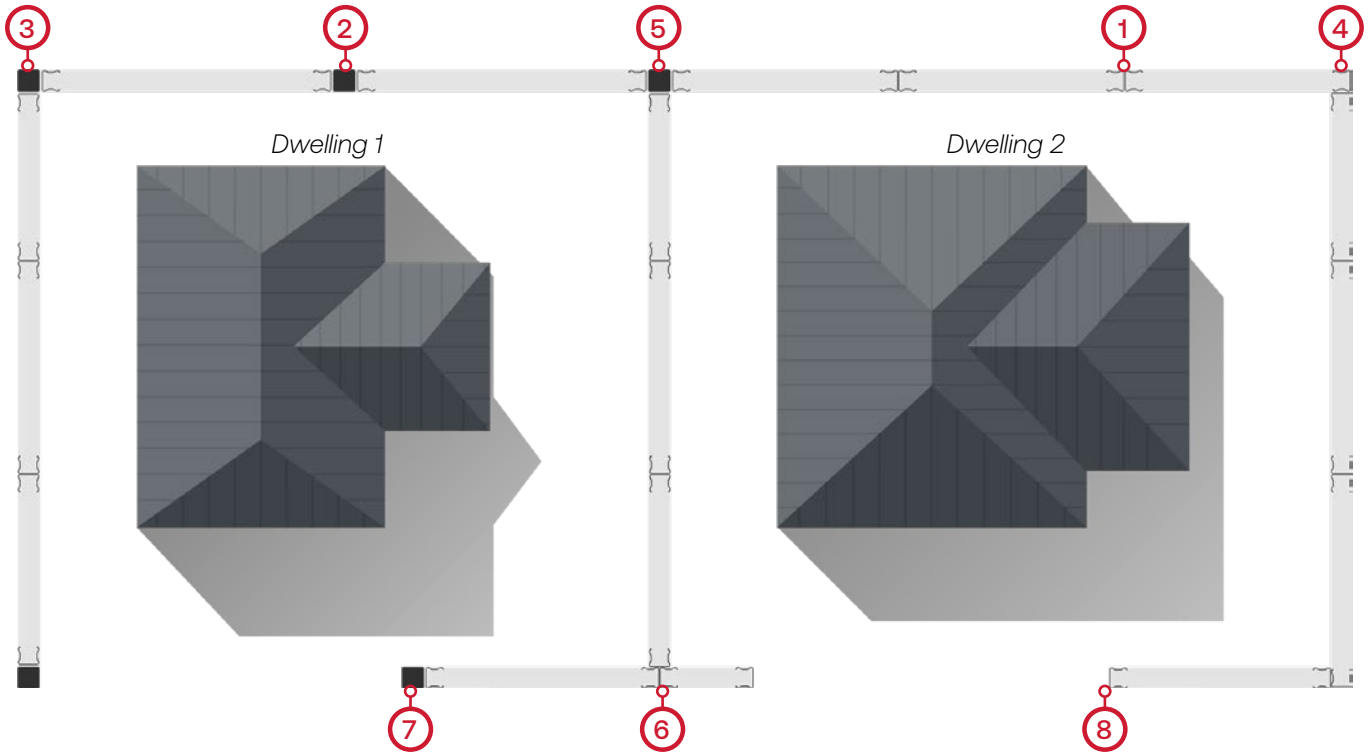


T Junction



End Posts





Step 3 | Installing Posts and Rails

1. Fasten the C-posts together, back to back. Begin by attaching two tek screws approximately 40mm apart and 100mm from the top of the post. *Fig. 6, Fig. 7, Fig. 8*
2. Continue fastening down the length of the C-post, alternating the fixing sides, and spacing the fixings up to 300mm apart, centre to centre. *Fig. 8*
3. Place the first post in the post hole. Ensure there is at least 100mm of concrete beneath the post in its final position. Check the posts are vertically aligned and brace them into position. *Fig. 9*
4. Fill the hole with fully mixed wet concrete, compacting to remove any voids. Slope the surface of the concrete away from the post to prevent water pooling. *Fig. 10*
5. Insert the bottom rail into the first C-post to determine the position of the following post. *Fig. 11*
6. Adjust the height of the bottom rail. It's important to maintain a minimum 50mm gap between the bottom of the rail and the finished ground level.
7. Fix the bottom rail into position on both posts. *Fig. 12, Fig. 13*
8. Continue inserting posts and attaching rails along the entire fence line.

Typical methods for connecting C-posts in corners, ends and junctions are shown on **page 05**.

If installing on sloping or uneven sites, refer to **page 12**.

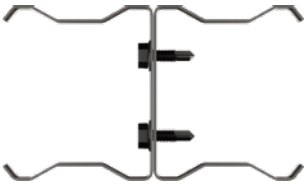


Fig. 6

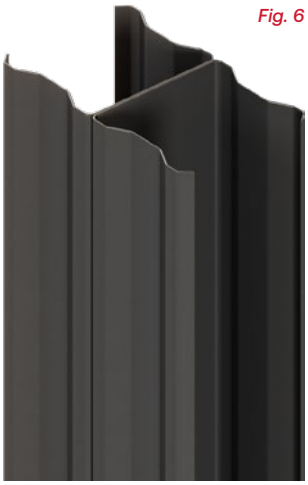


Fig. 7

Fig. 8

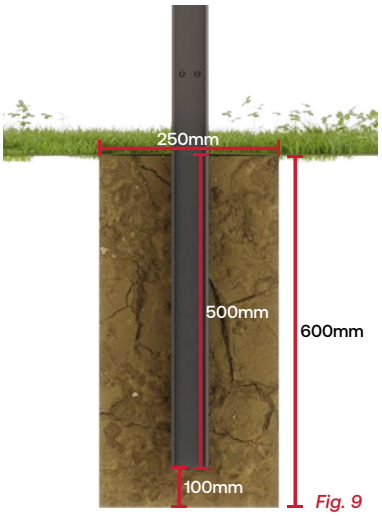


Fig. 9

Fig. 10

Fig. 11

Fig. 12

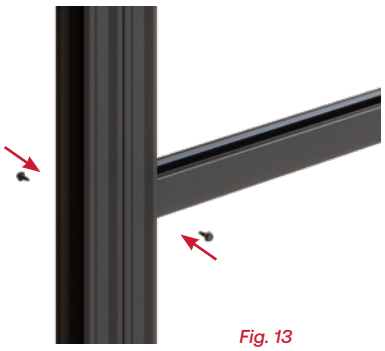


Fig. 13

Step 4a | Installing CLT Palings Horizontally

Once the concrete has cured, the CLT palings can be installed.

If installing vertically, see **page 08**

If installing a Slat Top, refer to **pages 09-10**.

Installing Palings Horizontally

A half paling is supplied for the horizontal orientation, which can have either a tongue or a groove on one side and a flat edge on the opposite side.

The tongue side of the palings should point upwards, depending on which side of the half paling is supplied will determine if it is installed first or last. The half paling with a tongue will be installed first and the half paling with a groove will be installed last.

1. Slide down the first two palings into the C-posts and push firmly into the bottom rail. *Fig. 14*
2. Slide the vertical support beads into the grooves of the C-posts. *Fig. 15, Fig. 16*
   The support beads keep the palings stable.
3. Continue to stack the palings into the C-posts, ensuring they are pushed firmly into place. *Fig. 17*

Fig. 14

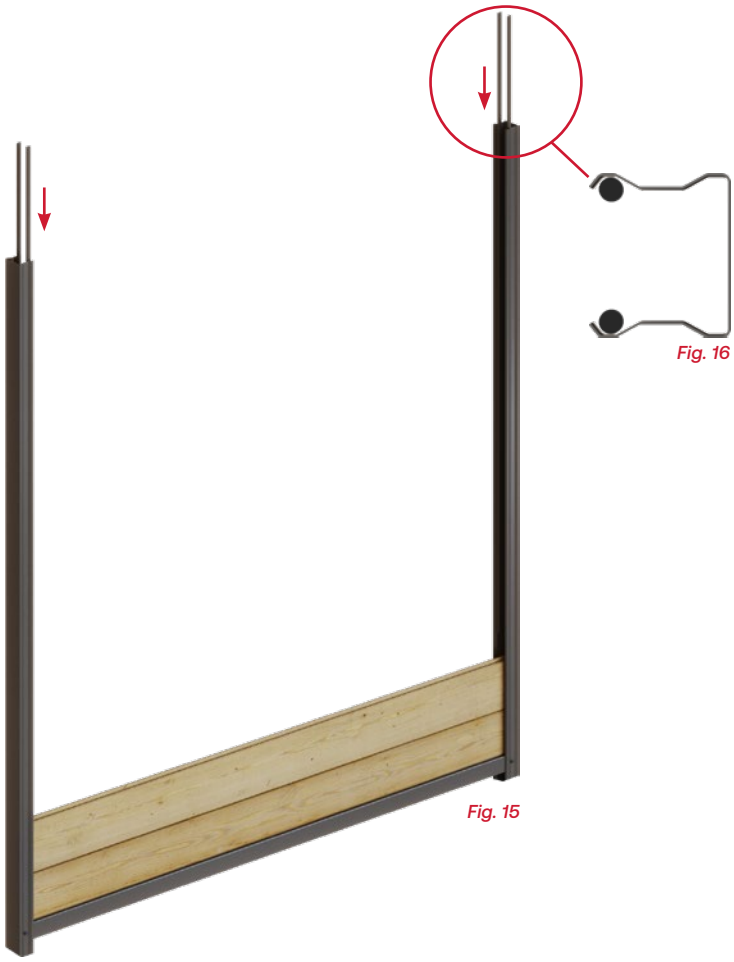


Fig. 15

Fig. 16

Fig. 17

Step 4b | Installing CLT Palings Vertically

Once the concrete has cured, the CLT palings can be installed.

If installing horizontally, see **page 07**

If installing a Slat Top, refer to **pages 10-11**.

Installing Palings Vertically

Depending on the height of the fence, the palings may require trimming to fit.

1. Insert the bottom rail support into the bottom rail. *Fig. 18*
2. Place the half paling vertically into the C-post, with the smooth edge in the C-post, and press down firmly into the bottom rail *Fig. 19*
3. Continue to insert the palings vertically, ensuring they are firmly placed into the bottom rail and the tongue and grooves are interlocked. *Fig. 20*

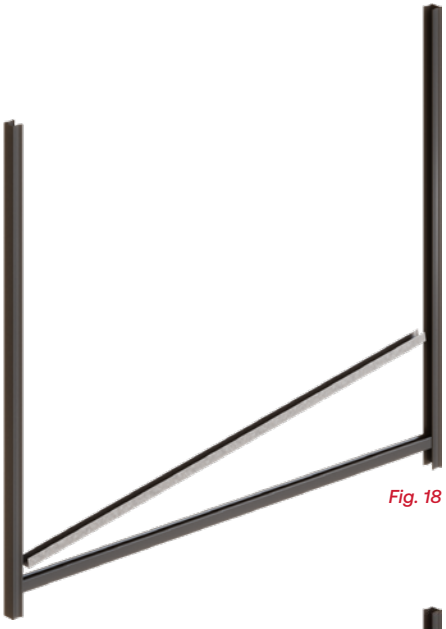


Fig. 18

Fig. 19

Fig. 20

Step 5 | Installing Top Rail and Post Caps

1. Place the top rail over the top paling, working from one end of the panel to the other to fit the rail firmly into place over the palings. *Fig. 21*
   A gentle tap with a rubber mallet may assist with fitting into place.

2. Secure the top rail into position. *Fig. 22*
   Ensure there is enough clearance (about 10-15mm) at the top of the posts for the post caps.

3. Continue along the fence line until installation is finished. Attach the post caps to the posts and C-posts. *Fig. 23*
   The C-post caps are supplied as a double cap, and can be snapped in half using tin snips (or similar) to create single caps where required.

Note: Double caps are only available in Black.

TIP If the cap is not a tight fit, apply a small bead of silicone in the inside corners to secure it.

Fig. 21

Fig. 22

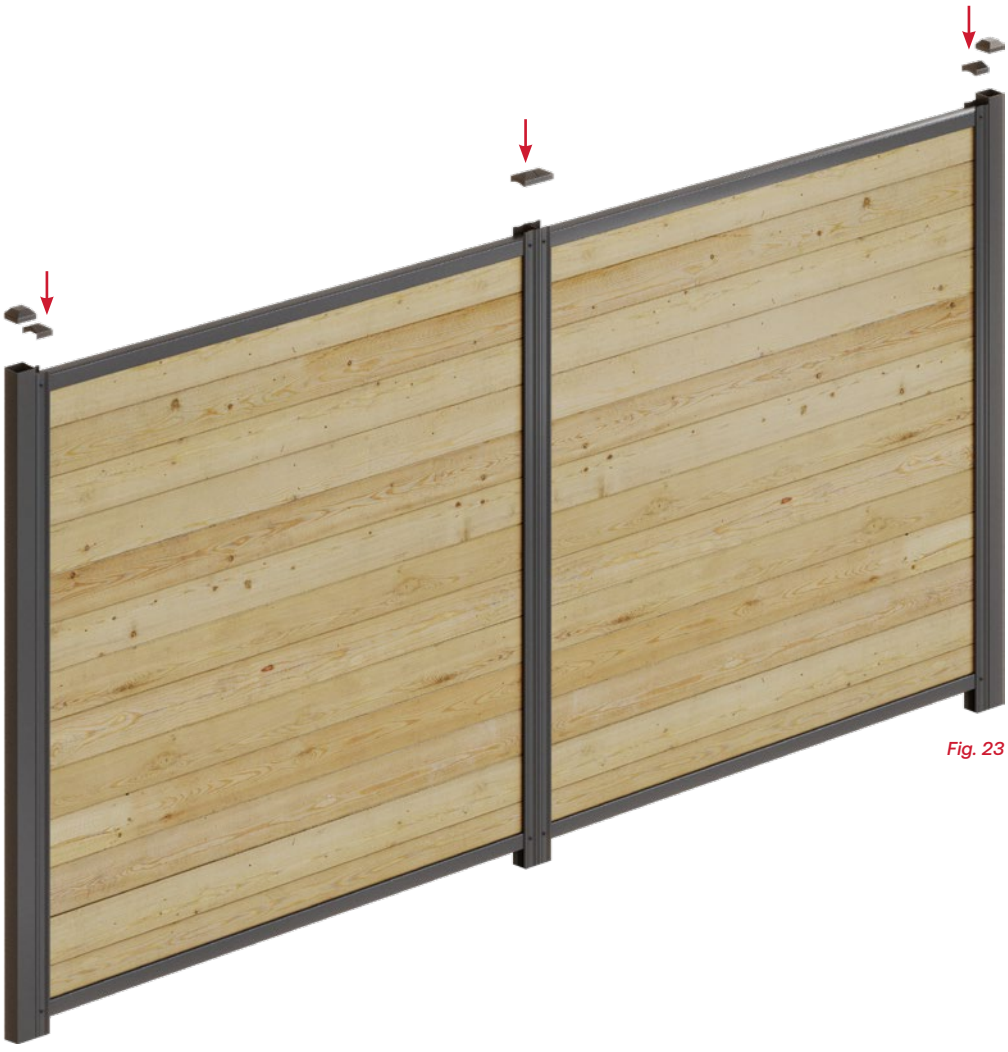
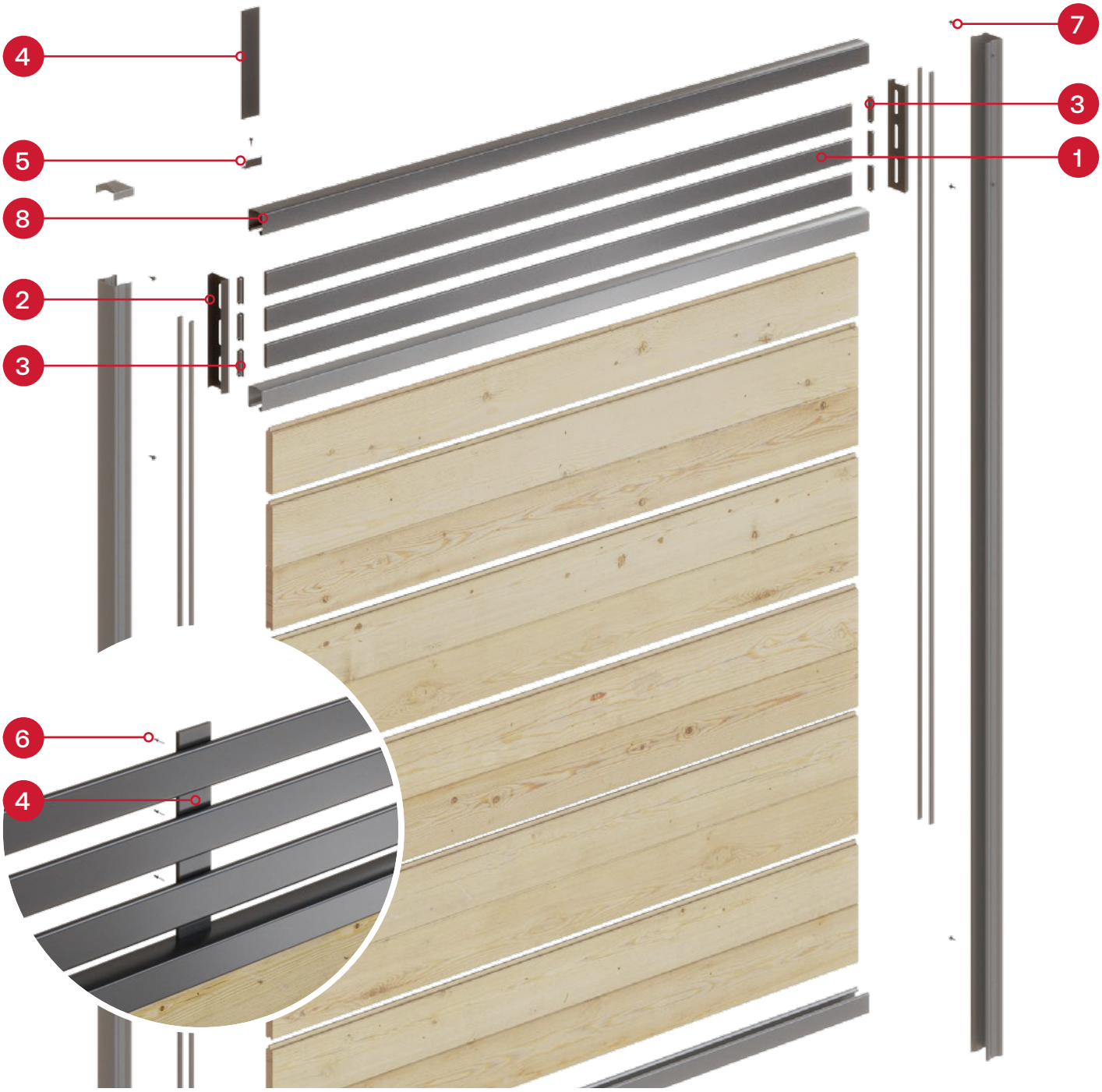
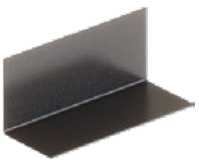


Fig. 23

SmartWall Slat Top Components



Additional components for a complete SmartWall Slat Top fence system:

1. Steel Slat  x3	**2.** Slotted Post Insert  x2	**3.** Grommet/Locking Plug  x6	**4.** Slat Support  x1
5. L Bracket  x1	**6.** Rivets  x5	**7.** Tek Screw  x1	**8.** Top Rail  x1

Step 6 | Installing a Slat Top

SmartWall Slat Top includes an additional top rail, 3 slats, 2 slotted post inserts, 6 grommets/locking plugs and a slat support for each bay.

The slat section of SmartWall Slat Top is 300mm. Ensure there is 10mm of clearance above the top rail to allow for the post caps**.**

1. After installing the posts and bottom rails *(refer to* **page 06***)*, install the CLT palings *(refer to* **page 07/08***)*. There should be 300mm of space for the slat section. Fit the second rail on the top of the CLT palings and fix into place.
2. Ensure the grommets are fitted in one slotted post insert and the locking plugs in the other. The locking plugs should have the lock point positioned at the bottom of the slot.
3. Fit the slotted post insert into the C-posts. *Fig. 24*
4. Using the provided tek screws, attach the L bracket to the centre of the horizontal rail. Attach the slat support to the L bracket using the supplied rivets. *Fig. 25*
5. Predrill holes for the rivets in the centre of the slats to attach the centre support.
6. Insert the slats into the slotted post inserts. Each slat has a notch on one side that fits into the side with the locking plugs to secure them in place. *Fig. 26*
7. When the slats are all installed, using the rivets, attach them to the centre support, ensuring the slats remain straight. *Fig. 27*
8. Attach the top rail to the C-posts, allowing post cap clearance, and fix into place, then attach the post caps.

Fig. 24

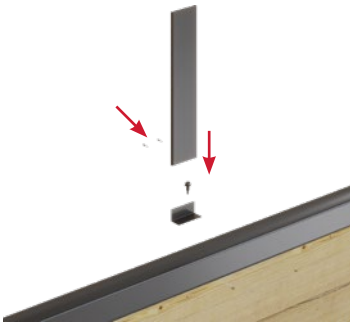


Fig. 25

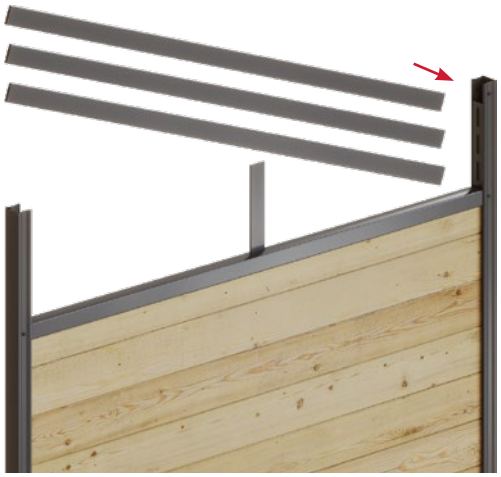


Fig. 26

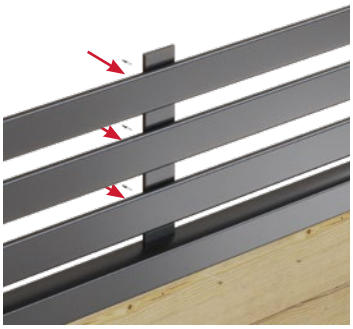


Fig. 27

Extra | Installing on Sloping or Uneven Sites

SmartWall can be either stepped or raked to suit sloping or uneven ground.

A 3100mm long rail is available. This allows the post centres to remain at standard intervals along the fence line.

Fig. 30

To create a raked fence line:

1. Space out the marker pegs along the fence line *(refer to* **page 04***)*.
2. Add a peg at the start and end of where any panels will rake.
   Where the ground is uneven, or undulating, the top rail can be angled to create a smoother top fence line, while the bottom rail follows the ground's contour. *Fig. 30*
   Note: A longer post may be required.
3. Install the posts *(refer to* **page 06***)*.
4. Determine the required angles. Running string lines along the top and bottom of the posts can help indicate where on the infill sheets need to be cut to follow the slope.
5. Lay out the infill sheets and step them to align with the angle of the fence line.
   Trim off the excess using a nibbler or tin snips. *Fig. 31*
6. Insert the infill sheets to check the fit and fit trim further if required.
7. Attach the top rail once everything is aligned and fix into place.
8. Finish by adding the posts caps.

Cut excess from CLT palings before installing

Fig. 31

Extra | Tapering the Front of Your Fence

Where there is an unsupported end, tapering the last two panels of the fence is recommended. This strengthens the fence and improves visibility, particularly around driveways.

Reflect sheets can be cut at an angle to create the tapered end. If using the standard post centres, a 3100mm top rail is available to maintain consistent bay lengths.

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