

DIY Retaining Wall Installation Guide



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What you need



Concrete Sleepers Steel Posts Base Plates

- **Component Kits:**
 - i. Spike
 - ii. Turn Buckle
 - iii. Eye Nut
 - iv. Hex Screw
 - v. Tie Back(s)

Star Droppers

Sand* (for levelling Base Plates)

Backfill* (Drain-free materials i.e. Gravel or Soil. <u>Not clay</u>)



Tools required

- Shovel*
- Hammer*
- String Line*
- Steel / Wood Pegs*
 (for String Line)
- Spirit Level* (Long & Short)
- Piece of Timber* (1m length for spacing)

*Not supplied by Notwood. Items can be found at your local hardware store.

Measurements

Number of Sleepers High	Wall & Post Height	Component Kit Required (per Steel Post)
1 Sleeper	150mm	Kit #1
2 Sleepers	300mm	Kit #1
3 Sleepers	450mm	Kit #2
4 Sleepers	600mm	Kit #3
5 Sleepers	750mm	Kit #3

Materials

Steel Posts



C Channel A single sided Steel Post used as an end column to start and finish your wall.



I Column A double-sided Steel Post, also known as a joiner, used to connect bays together in a straight line.



Corner Channel

A double-sided Steel Post used to create 90° internal & external corners.

Base Plates

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Base Plate A For use with I Column

Base Plate B For use with C Channel & External Corners

For

Base Plate C

For use with Internal Corner Channels

Hex Screw

Steel Posts.

Used to secure

the Eye Nut to

Star Dropper

Anchors the

the ground.

Tie Back(s) to

Component Kit Contain each of the following:



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Positioning: Plates & Ties



Step 1: String Line

A string line is used to help create a straight line between two reference points. It is important to establish your string line prior to installation to ensure your wall remains straight throughout the installation period.

1. Using the pegs, run a string line to ensure the wall is straight. 2. Determine your ground level using the long spirit level and find the high ground.

Step 2: Base Plates

1. Using sand, level the ground for placement of the first Base Plate.



Always aim to start your wall from an End bay (Base Plate B and a C Channel upright / post).

 Hammer in the Spike to secure the Base Plate (included in the Component Kit).

> IMPORTANT It is critical that the Base Plates do not move whilst being secured to ensure your wall remains straight.





Place a Sleeper on the Base Plate to hold in place while securing

the spike.

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Step 3: Steel Posts

- 1. Once the Base Plate is secured, place the appropriate Steel Post on top:
 - Base Plate A for use with I Column(s).
 - Base Plate B for use with C Channel(s) & External Corner(s).
 - Base Plate C for use with Internal Corner Channel(s).



- 2. Make sure the hole in the Steel Post is at the Top (not at the bottom near the Base Plate) and ensure that the hole is facing the back of the wall (back of the sleeper side).
- Secure the Eye Nut in the pre-drilled hole (facing towards the backfill section of your wall) with the Hex Screw.



Step 4: Spacing

 The next Base Plate and Steel Post needs to be positioned approximately one metre from the first Steel Post. Use your 1m piece of timber as a guide.

Slot your first Sleeper and check your level.

It is important to get your ground levels right, so use Spirit Levels extensively in this stage. Use the sand to create level/flat ground for the Base Plate foundation.

- 2. Remove the Sleeper and proceed to level the area for your the Base Plate (see Step 2).
- Repeat Steps 2 3, as required, to install all Base Plates and Steel Posts.





#1 Use the Spirit Level to check that the Steel Posts are level too to ensure that your wall is straight.

#2 Use the impression left in the sand by the sleeper as a guide for your level and the next Steel Post/Base Plate centre.

Step 5: Buckles & Ties

1. With the Steel Post level on the Base Plate:

Place Turn Buckle through Eye Nut in the extended position.

2 Hook the Tie Back to the Turn Buckle.

Keep the Tie Back relatively loose – <u>do not</u> tighten the Turn Buckle just yet.



 With opposite end of Tie Back at the bottom of the Star Dropper, hammer part way into the ground, this should be done as close as possible to a 90° angle to the Tie Back (Note: diagram on page 4).



Step 6: Backfill

1. Proceed to slot the first layer of sleepers (150mm high).



2. Backfill the first layer with drain-free materials i.e. gravel or soil (see tip below).



When Backfilling, typically you can use the same material that was removed during the excavation, or use sandy gravel or soil, as they are easily water draining materials.



3. Secure Star Dropper into the ground using a hammer while keeping the Star Dropper as close to a 45° angle as possible.

> To align your wall tighten the Turn Buckles by hand (use a shifter / spanner if required). To do so grip the centre piece of the Turn Buckle and turn in a clockwise motion until the tension is firm and the wall is straight.

- DIY TIP Do not over tighten as this will cause your wall to be pulled inwards.
- Continue to slot, backfill and align one layer of sleepers at a time until your wall is complete.
- Use a brush to remove any excess soil / gravel / dirt that may be sitting on the top of the sleepers to avoid staining when it rains or if water hits the wall.

Refer to the Product Care Guidefor information and guidance on how best to care for your Notwood Retaining Wall.



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DIY TIP

Backfill to the top of your wall to conceal the Turn Buckles and Tie Backs.





DIY**Wall Creator™**

Prior to installation please utilise our DIY Wall Creator™ to design and calculate your required materials:



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