

Reinforced Concrete Sleepers and Galvanised Steel Posts

**Please Note: This installation guide is prepared for retaining wall projects that do not require council approval.

Please always check your local council requirements for building a retaining wall before commencement**

STEP 1: PREPARING THE AREA

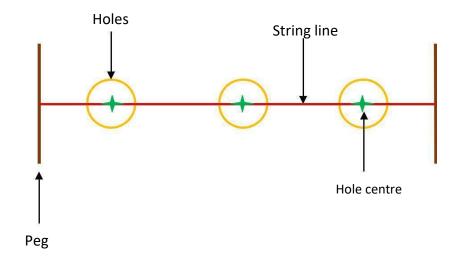
Clear and level your site where you plan to build the retaining wall. Please ensure you leave 200mm behind the retaining wall area for backfill.

STEP 2: ALIGNMENT

Place a star piquet or peg at both ends of the proposed wall. Attach two string lines at each end of the wall, top and bottom, to keep your wall aligned.

STEP 3: MARKING OUT HOLES

Starting from one end of the wall, mark a cross on the ground at intervals with their centre being approximately 15mm more than the length of the sleeper. For example, if you are using 1530mm sleepers the hole centres should be 1545mm apart – note, this will vary on the length of sleeper used.



STEP 4: AUGER HOLES

Auger holes as per following engineer specifications, for walls over 1m please give our office a call for advice.

| WALL HEIGHT | SLEEPER LENGTH | POST TYPE | POST SPACING | HOLE DIAMETER | PIER DEPTH |
|-------------|-------------------|-----------|-----------------|------------------|---------------|
| 0.4m | 2.0m | 100UC ' | 2015mm | 450mm | 0.6m ' |
| 0.6m | 2.0m | 100UC | 2015mm | 450mm | 0.8m |
| 0.8m | 2.0m | 100UC | 2015mm | 450mm | 1.0m |
| 1.0m | 2.0m | 100UC | 2015mm | 450mm | 1.2m |

STEP 5: POURING CONCRETE

Pour concrete into holes, one at a time. If using ready-mix concrete, order 20/20, 60 slump. Set your post by lowering into ground until level with the top string lines. There is a minimum lean back of 30mm for every 1.0m in height.

STEP 6: CHECKING POSTS

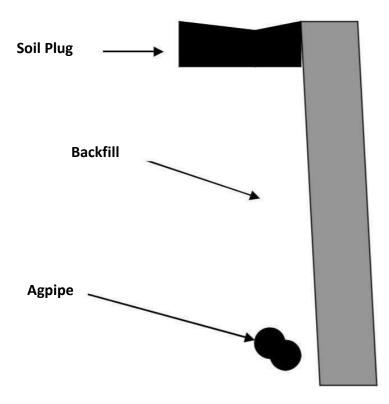
Use a spirit level to make sure all your posts are aligned with the string line and are perpendicular on the sides. It is also important to measure the remaining distance to the top of your steel posts, to ensure the sleepers finish flush with the top of the posts. If required, lay a concrete pad on both sides of the steel post.

STEP 7: AGPIPE AND BACKFILL

Allow the concrete to cure for two to three days before you place your sleepers in. Place agpipe at the base, then backfill with gravel to 200mm from the top of your wall.

STEP 8: SOIL PLUG

A soil plug is then placed in, to fill the wall to the top.



NOTE:

- Ensure when backfilling do not push dirt from behind into the back of the wall with any machinery. Always place dirt/fill from the top, when using a Bobcat/Dingo, or if you prefer, by hand.
- Retaining walls in QLD over 1.0m or within 1.5m of another building require a Form 15 and 16 to be completed by an engineer (RPEQ) in order to receiving council approval. This requirement differs from state to state so please check with your Local Council before commencing on your project.