

## Installation

***Retaining walls must be constructed according to engineering specifications!***

Height Of wall	Post length	Hole Depth	Footing Diameter
0.30m	0.6m	0.30m	0.35m
0.45m	0.9m	0.45m	0.35m
0.60m	1.2m	0.60m	0.35m
0.75m	1.5m	0.75m	0.35m
0.90m	1.8m	0.90m	0.35m
1.05m	2.1m	1.05m	0.45m
1.20m	2.4m	1.20m	0.45m
1.35m	2.7m	1.35m	0.45m
1.50m	2.7m	1.20m	0.45m

Note: 1.35m and 1.50m walls require backing panels

**The following direction describe the stages of a common method of installation**

1. Set up a string line between two stakes positioned at each end of the required wall.
2. Dig the first two post holes to the depth and diameter indicated above, and with centres 1.13m apart. (It is better to dig the holes too deep and add more sand than to dig too shallow and have to lift the post out to deepen the hole)
3. Place a post in the first hole, ensure it is at the correct height, and add the concrete footing. Check the post is vertical with a slight tilt towards the rear, as described in step #7. When the first post is positioned correctly adjust the string, using a string level, so that the height above the ground indicates the top of the wall and that it is aligned along the front and rear face of the wall.
4. Place a post in the second hole, using a measuring stick to ensure it is the correct distance from the first post. Check that the top of the second post is level with the top of the first post (just touching the string line), and that the posts are aligned correctly.
5. Dig two or three more post holes as in step #2, and place the posts in the hole with the correct separation. Some installers insert the bottom panel at this stage, but the use of a measuring jig is generally better.
6. Add concrete for footings. One part cement to four parts sand is adequate for walls up to 0.90m high. higher walls require aggregate (blue metal) for stronger footings.
7. Lean post slightly (2°) towards the load side for increased effectiveness, and ensure that the posts are in a line and that the tops of the posts are at the correct level.
8. Install the panels, making sure the top panels are flush with the top of each post. Brush the top of each panel to prevent particles of sand or grit from creating a gap between the panels. For a better finish insert thin wedges at the rear of each panel to force them forwards before backfilling.
9. An effective method, particularly if intending to pave afterwards, is to keep the tops of footings below ground level and a brick to support each panel. This allows for easier adjustment of the panel heights and gives room for paving later.
10. Continue and complete the wall. This can be done in a number of stages if more convenient.
11. Where the wall is used to retain a garden bed, the use of plastic sheeting between the soil and the wall will help to prevent seepage of water and assist in retention of moisture in the soil.

Builders/Owners should check with their local councils for the regulations governing retaining walls and obtain a licence when required.