

DIRECTIONS FOR USE



ZERO WASTE



ZERO HEAVY LABOUR



ZERO RISKS



ZERO EXPENSIVE MAINTENANCE

UNIT INCLUDES

- Ground socket
- Self-locking Taper
- Screws
- Cap

TOOLS

- Installation Tool
- Removal tool
- Foot removal tool



SOLD IN PACK OF 25 UNITS

Because items are secured using friction there is no limit to the size or weight item you install (you simply increase the size of the footing to support the item - think of the ground socket as a protective sleeve for the footing) and can secure large diameter bollards on the same ground socket using **ZERO WASTE IMPACT RECOVERY RINGS**



You can decrease depth of ground socket to 150 mm and additional ground sockets are used to extend depth by 300 mm increments

(150/650/950/1250 mm depth)





IMPORTANT

Ground sockets are installed flush with ground level. Concrete strength must be 30 MPa or greater. Rapid set is NOT impact resistant / grout is too flexible and will not last 100 years.

SIZE FOOTING

For the footing to be reusable you must ensure it is large enough that it is not dislodged when items are impacted.

The ground socket provides a protective sleeve for the footing. The size footing depends on soil conditions, strength of post, size of item, wind conditions and many other factors. Refer to local guidelines. We suggest

- 150 mm in solid concrete
- 350 mm in all other locations
- 650 mm depth for large or heavy items such as football posts/ columns/ pergolas/ or large diameter bollards that may be subject to extreme impact

WHEN POURING CONCRETE FOOTINGS:

Clip Taper 20 mm higher from base (do not use screws yet) and insert item gently into socket (340 for 350 mm socket).

Position socket upright in hole and pour concrete. Check alignment before concrete cures. Once cured you should remove item, attach taper at correct position using screws and reinsert item firmly in ground socket (Tap on top until Taper finishes flush with top of ground socket).

USING INSTALLATION TOOL

In strong winds; when installing large items / or items are not ready to install, or when you do not have time to wait for concrete to cure, place installation tool inside socket and use to position socket & check alignment. Once compacted, spin tool to remove and insert the cap

RETRO-FITTING

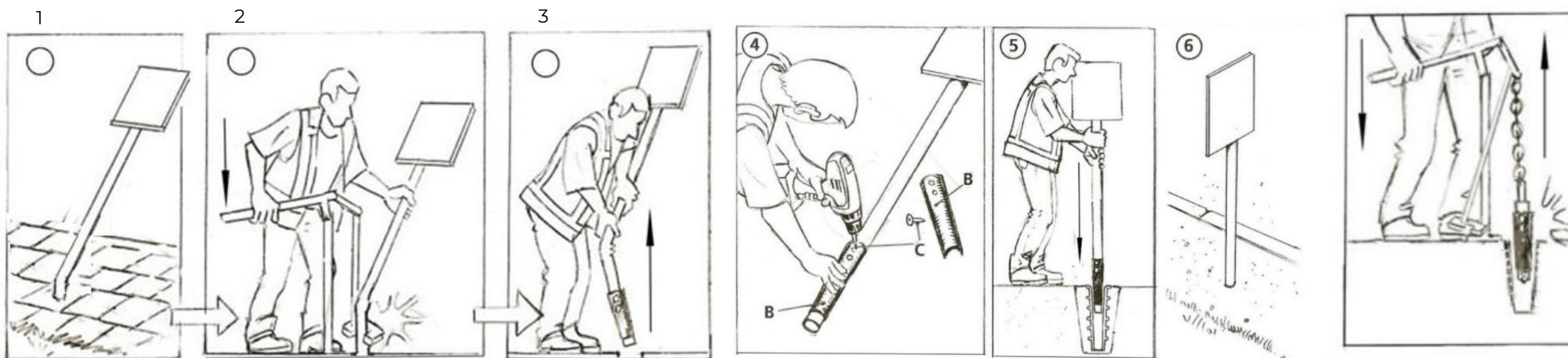
Minimum of 150 mm quality concrete (MPa30+) is required on all sides of socket. You can either core drill a hole 150- 200 mm diameter and fill gap with 30MPa concrete or remove a few pavers to install concrete footing. We suggest colouring the concrete to match surrounding paving.

ITEMS WITH MULTIPLE LEGS

Insert item into sockets and measure where to attach the taper. The taper on higher side is higher ensuring item finishes level with paving.

See over for diagram.

A taper is attached to a new item using self-drilling screws provided, and dropped into position firmly so taper finishes flush with ground level IE: Not protruding)



TAPER MUST BE ATTACHED USING SCREWS

If Taper is not attached using screws provided items will NOT be removable from ground socket. Taper must be attached at exact level (5mm alters locking capacity by around 200kgf).

Attach Taper to post using Phillips drive and self-drilling screws supplied. Best to pre-drill posts 2.9 + wall thickness

- 140 mm from base for 150 mm socket
- 340 mm from base for 350 mm socket
- 640 mm from base for 650 mm socket

REMOVING DAMAGED ITEMS

Place head of removal tool around post. Place square base of tool close to post and apply quick jerking pressure to the extended arm to remove item from ground socket. You can place foot on base to stabilise and provide added friction.

REMOVING FLATTENED POSTS

If post is flattened slip foot removal tool or square base of removal tool under the flattened post and apply quick jerking action to release taper (only needs to move approx. 1 mm to break seal) alternatively use foot tool or crowbar.

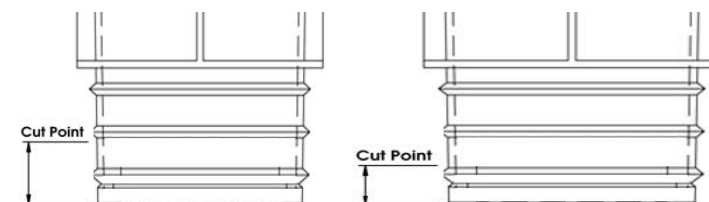
REMOVING SHEARED OFF POSTS

Lower triangular head of sheared post removal tool into the socket until it grabs the internal sides of the post. (Shown top right)

Hook chain link around pin on top of removal tool and use tool as usual to remove the post. (Head must be sharpened if tool is used regularly)

EXTENDING DEPTH OF SOCKET

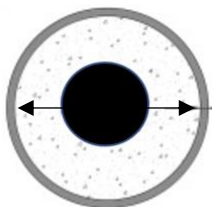
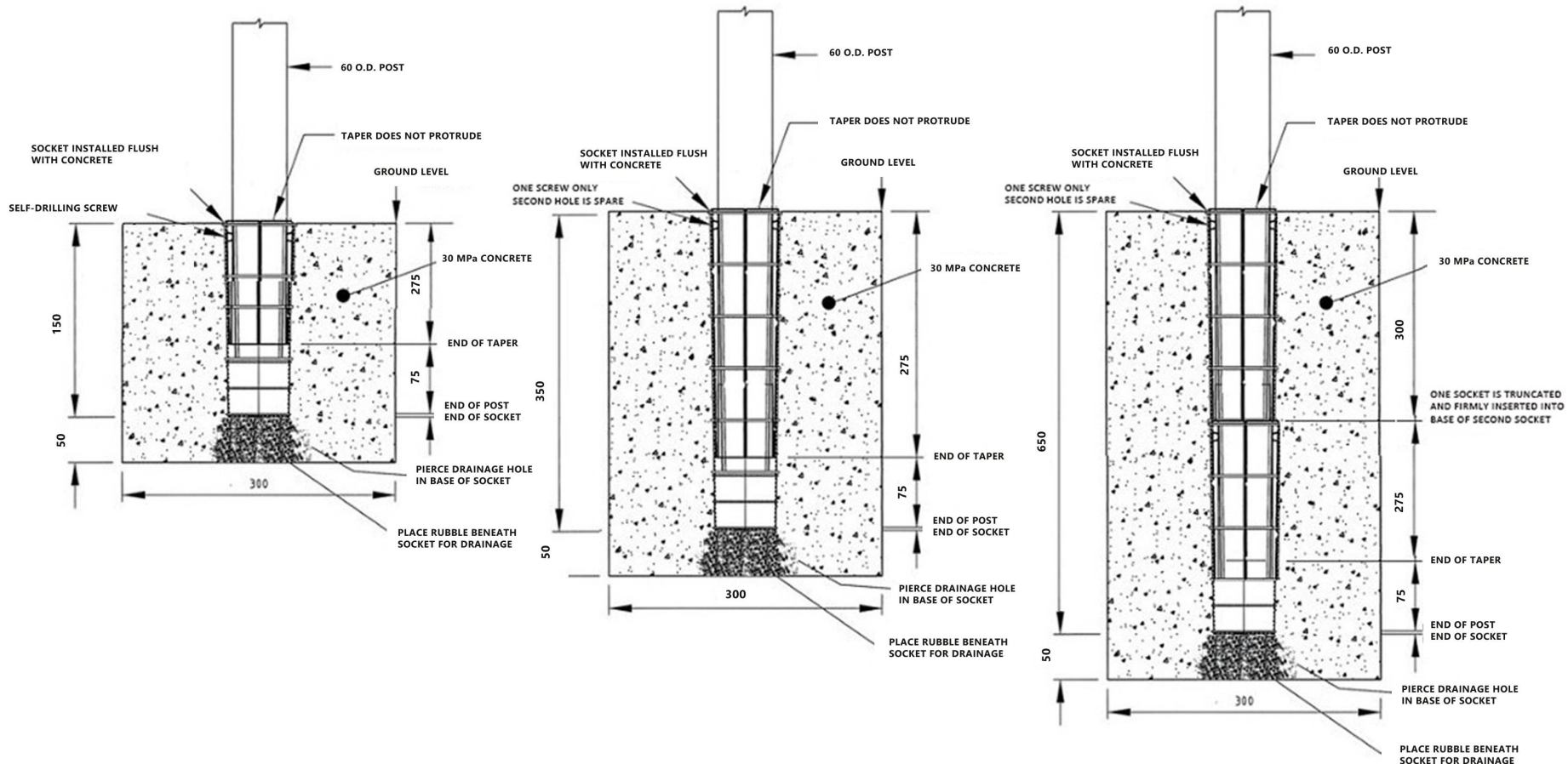
You can increase the depth by 300 mm increments by truncating a ground socket just below the second horizontal rib and inserting it firmly into the top of a complete ground socket



REDUCING DEPTH OF SOCKET

Truncate the ground socket at exactly 150 mm from top lip, (just below the second horizontal rib) and insert into the open end of the truncated ground socket. This provides a tight fit but can be sealed with industrial glue for extra precaution



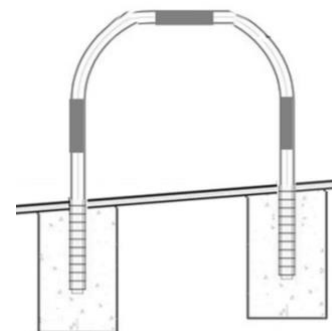








MIN 150 MM CORE

TO PROTECT PAVING FROM DAMAGE

When core drilling, a minimum of 150 mm solid 30 MPA concrete is required to surround socket and protect brick paving from damage when items are impacted.

DO NOT USE RAPID SET OR FLEXI GROUT



TASK	HAZARDS		SAFE WORKING PROCEDURES
<p>Installing Sockets</p> 	<ul style="list-style-type: none"> - Bending of the back - Twisting of the back - Working in traffic 		<ul style="list-style-type: none"> • Dial before you dig • Install appropriate traffic management • Dig hole to insert ground socket • Insert Installation tool inside ground socket • Lower Installation tool & socket into hole and fill with concrete. • Operate installation tool from standing position with straight back
<p>Installing Items</p> 	<ul style="list-style-type: none"> - Bending of the back - Twisting of the back - Working in traffic - Item not secure 		<ul style="list-style-type: none"> • Install appropriate traffic management/ cones • Attach Taper to item using self-drilling screws provided (This can be done prior to going onsite to reduce time on location) • For 2.9 – 3.6 wall thickness posts we suggest pre-drilling • Using two hands, drop item firmly into ground socket • Check item is sufficiently installed to protect from unauthorized removal
<p>Using Removal Tool</p> 	<ul style="list-style-type: none"> - Bending of the back - Twisting of the back - Working in traffic - Trapping of fingers 		<ul style="list-style-type: none"> • Position a minimum of two safety cones or safety barriers at extremity of working space • Make sure the base of the tool as close as possible to the base of the item before applying jerking action • Apply downward quick jerking action to arm of tool • Lift item from ground socket using two arms (for items over 25 kg, 2 people must lift item from ground socket) • Bend knees to insert cap in ground socket