

ZERO WASTE

UNBREAKABLE FOUNDATIONS ▶▶



Ergonomic Tools

Work Health and Safety EXCELLENCE AWARDS



Smart tools enable all work to be conducted from a standing position, facing on-coming traffic, greatly improving workplace safety.

Improve workplace safety

Awarded Department of Health and Safety Worksafe Award for successfully addressing the two major causes of workplace injury:

- **Body stressing**
- **Working in traffic**

Fast, efficient installation

If items of infrastructure are not ready to be installed, Smart Installation tools enable installation of ground sockets from a standing position facing traffic, substantially reducing time on location

Fast, efficient removal

Smart ergonomically designed removal tools enable replacement of damaged items from a standing position facing on-coming traffic, eradicating the major causes of workplace injury

Substantially improving workplace safety & reducing the risk of workplace injury

1. Eradicating the No1. Cause of workplace injury: Digging and heavy labour
2. Time on location is reduced considerably reducing the risk of the No1 cause of serious workplace injury or death resulting from working in traffic
3. Response to infrastructure failures is fast and efficient, without disturbance for maintenance on road-side infrastructure
4. By eradicating the need for digging and disturbance to foundations, eradicates the risk of serious injury caused by damage to underground services



“Our selection was not based on price alone; we also considered the safety & saving aspects



“Under Section 19 of the Occupational Safety and Health Act (1984), the MRWA has an obligation as an employer to provide a safe place to work”

The Smart Sustainable Foundations allow quick replacement of posts with no further effort required to the base

and reduce risk of injury to employees by reducing time spent on traffic islands exposed to traffic.”

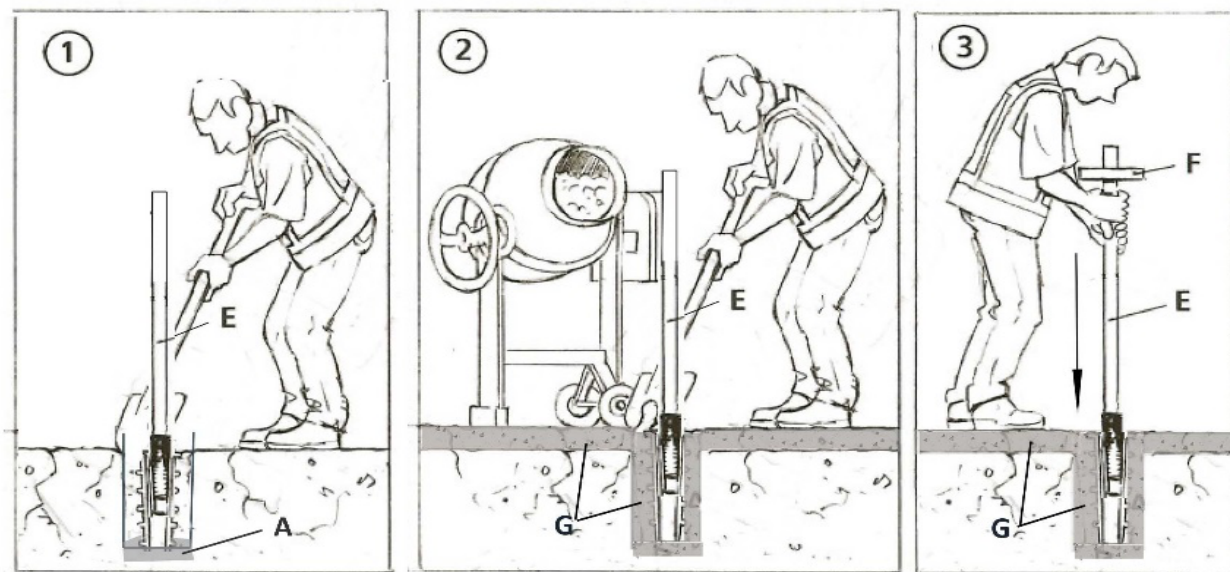


MAIN ROADS DEPT

Superior finish

The installation tool is used to install ground sockets when items of infrastructure are not ready to install.

This tool is used to position socket from a standing position and check alignment, ensuring sockets are perfectly aligned and because items lock in using friction, they remain perfectly aligned year after year



Superior finish

You can simply position ground sockets upright when pouring the concrete foundations, preserving the integrity of the foundations and creating a perfect finish) or retrofit to heal your development one foundation at a time.



Substantially improve finish. All items are perfectly aligned, safe and secure



INSTALLATION TOOL

The installation tool is used to install ground sockets when items of infrastructure are not ready to install (items are heavy or conditions are windy)

This tool ensures sockets are perfectly aligned and ensures socket does not distort when compacting the concrete (which will leave the taper protruding from socket when items are installed)

The Taper is moved up the post to reduce the locking capacity and ensure the Installation Tool does not lock in the ground socket.

The installation tool enables simple installation of ground sockets from a standing position, facing oncoming traffic.

Smart sockets are slipped onto the installation tool and used to position ground sockets when pouring concrete foundations.

A spirit level is used to check alignment and when concrete has cured tool can be removed by simply twisting and lifting from the ground socket.

Steps:

1. Insert installation tool inside ground socket
2. Position upright in hole and fill hole with concrete
3. Use spirit level to check alignment
4. Spin removal tool to remove from ground socket and cap off until concrete cures.

Installation Tool has three sets of holes so Taper can be relocated on tool to enable installation of different depth ground sockets.



Items can be installed when pouring concrete foundations, or sockets can be installed using Installation tool (if not installing items)



INSTALLATION TOOL

Made from 60.03 OD PVC high pressure plumbing pipe (NOT 50 mm poly pipe)

The Taper is attached to the post (10 mm higher than usual) to reduce the locking capacity and ensure the Installation Tool does not lock in the ground socket.

NB: The further the Taper moves down the post the greater the locking capacity- the higher on the post the lower the locking capacity)

Installation Tool has three sets of holes so Taper can be relocated on tool to enable installation of different depth ground sockets.

Smart Taper-lock attached

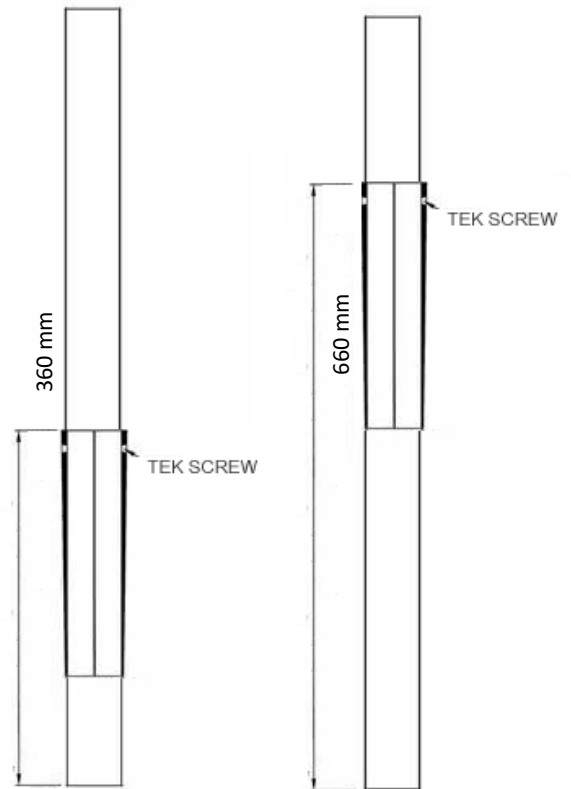
- 160 mm from base for 150 mm units
- 360 mm from base for 350 mm units
- 660 mm from base for 650 mm units

NB: Tools can be manufactured locally under license, by a supplier recommended by you.

* Conditions Apply

NB: If you make tools without a written Agreement and Specifications from Zero Civil, you risk litigation and your license to distribute our products will be revoked.

This is required to ensure we maintain our high standards, as in the past we have had distributors make tools that were not manufactured to our standard and this has the potential to adversely affect our reputation.



INDUSTRIAL REMOVAL TOOL

Replacements are fast and efficient- no digging or heavy labour. No disturbance to public or underground services

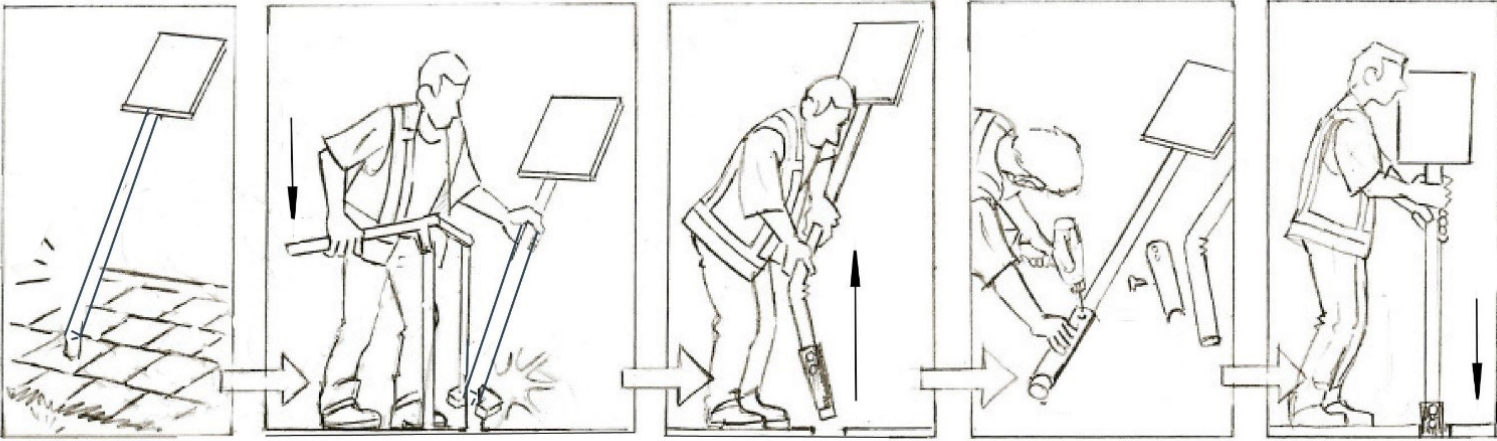
The industrial removal tool is designed to enable effortless removal of items from the ground socket, from a standing position, facing on-coming traffic.

1. The base of the removal tool is positioned close to the item.
2. The head of the removal tool is hooked around the post and as you do this the arm will rise.
3. A jerking action is applied to the leverage arm to break the seal and remove the item.

A sheared post attachment is provided to enable removal of sheared posts from ground socket.

Aust standards state that if an item can be replaced in less than 5 minutes, you do not require traffic management. Extreme locations such traffic light columns require minimal traffic management)

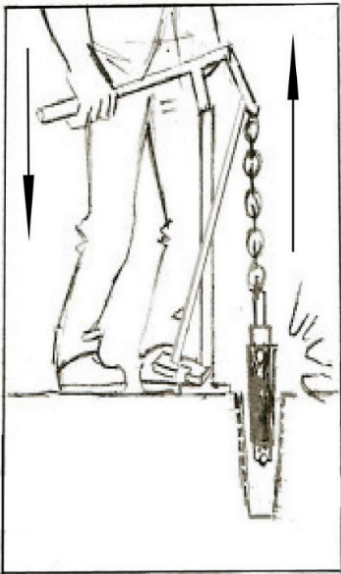




Sheared post attachment

Lever open the sheared off post enough to allow the triangular head of the tool to drop down into the cavity. Hook a link of the chain to the peg at the top of the vertical lifting bar (G).

Place the base of the removal tool as close to hole as possible and raise the handle until the triangular head grips the inside of the post and apply pressure to handle as usual.



Replacements are fast and efficient- No digging or heavy labour. No disturbance to public or underground services. All work is conducted from standing position facing on coming traffic



FOOT REMOVAL TOOL

The Foot Removal tool can be used to lever up flattened posts or to remove items with pin installed near base.

Designed for the domestic market; street furniture such as outdoor umbrella stands, tables and chairs for café strips and indoor bollards and barriers

NB: Tools can be manufactured locally under license, by a supplier recommended by you.
* Conditions Apply



	Smart Tools	RRP	Height	Square	Weight	Material
TOOLS	Smart Pack of Tools	\$250.00	1300 mm	200 mm	25kg	Mixed
TOOL REM	Smart Removal Tool	\$200.00	1300 mm	200 mm	20 kg	Galvanized Steel
TOOL FOOT	Smart Foot Removal Tool	\$50.00	5 mm	30 mm	5 kg	St Steel
TOOL INST	Smart Installation Tool with Taper	\$40.00	1000 mm	65 mm	5 kg	PVC

Pack includes

- Installation tool
- Industrial removal tool
- Sheared post removal tool attachment.

LOCALLY MANUFACTURE COMPONENTS

We can arrange for tools to be manufactured locally by a supplier recommended by you. **Call us to discuss this option * Conditions Apply**

It will usually require ordering a minimum of twenty or more sets of tools to get the same price. If you wish to take advantage of this and save freight costs. Price will be determined by the local manufacturer of your choice.

NB: If distributors make their own tools or authorise another organisation to make tools on their behalf, their licence to distribute our products will be revoked, and they risk litigation.

These products are fully patented so written authorisation is required to avoid litigation.

You and the chosen manufacturer and manufacturer must both sign a licence Agreement to assure they will maintain our quality standards and do not substitute the heavy-duty core for a cheap alternative. Anything less than 3.6 will cause excessive maintenance for your clients

WORKING PROCEDURES

Tasks	Hazards	Processes to be followed	Specific precautions/Controls
Installing Ground Sockets	<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 • Safely dispose of waste • Insert Installation tool inside ground socket • Lower Installation tool into hole • Operate installation tool from standing position with straight back 	<ul style="list-style-type: none"> - Avoid bending of the back - Avoid twisting of the back - When possible, it is advisable for user to face on-coming traffic
Installing Items	<ul style="list-style-type: none"> - Bending of the back - Twisting of the back - Working in traffic 	<ul style="list-style-type: none"> • Install appropriate traffic management • Attach Taper to item using self-drilling screws provided (This can be done prior to going onsite to reduce time on location) • Using two hands, drop item firmly into ground socket • Check item is sufficiently installed to protect from unauthorized removal 	<ul style="list-style-type: none"> - Avoid bending of the back - Avoid twisting of the back - When possible, it is advisable for user to face on-coming traffic
Using Removal Tool	<ul style="list-style-type: none"> - Bending of the back - Twisting of the back - Working in traffic 	<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 quick jerking action using both arms to release taper-lock • Lift item from ground socket using two arms (for items over 25 kg 2 people must lift item from ground socket) • Turn body (do not twist) to dispose of damaged item • Bend knees to insert cap in ground socket/ or insert new item 	<ul style="list-style-type: none"> - Always operate tool from a standing position facing tool - Avoid bending of the back - Avoid twisting of the back - When possible, it is advisable for user to face on-coming traffic





ZERO WASTE SOLUTIONS FOR BUILDING A BETTER FUTURE

CONTACT US

+618 9248 5545

hello@zerocivil.com

www.zerocivil.com

Quality you can trust

We don't just sell products - we listen to our customers and provide practical, low-cost solutions that improve the safety and sustainability of developments, reducing risks and overcoming common problems. Or focus is on helping you build a better future.



THE SUNDAY TIMES

