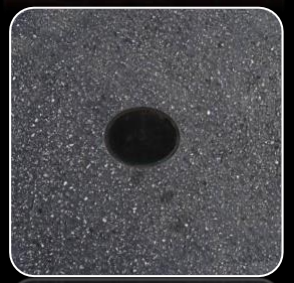
zero waste foundations

Advanced engineering delivers efficiency and long-term success



"Our selection is not based on price alone; we also took into consideration the safety & saving aspects.

ZERO WASTE Foundations allow quick replacement of items with no further effort required to the base, (providing a significant cost benefit in replacing the damaged item by re-using the existing footing) and reduces risk of injury to employees by reducing time spent on traffic islands exposed to traffic." MRWA SPEC 601

mainroads WESTERN AUSTRALIA

Department for Transport

Flush finish
Installed flush with ground level with no trip hazards.

Impact-absorbing polymer socket
Advanced polymer construction helps absorb impact energy and protect surrounding foundations.

Reinforced body
Vertical and horizontal ribs provide added strength and stability.

Flexible depth options
Standard 350 mm depth, with shorter or deeper options available to suit site conditions.

Drainage-ready base
Weak spot provided to allow drainage.

Reusable self-locking taper
Taper attaches to item using screws provided and finishes flush when installed.

Reusable cap included
For use during installation and when items are removed.

Every component is designed to reduce damage, simplify replacement and extend service life.

advanced engineering

Overcomes these problems:

Damage to locking device

Pins, padlocks and metal locking components can be damaged on impact, reducing locking capacity and creating unstable items, unauthorised removal risks and potential liability. Our friction-based locking system uses no breakable components, helping maintain secure holding capacity even in high wind conditions and severe impacts.

Keeping items well aligned, stable and secure

Damage to footings

Concrete and metal footings are rigid and unforgiving, so impact forces are often transferred into surrounding paving, concrete and asphalt. Our impact-absorbing foundation helps protect surrounding surfaces from damage during both low- and high-speed impacts.

Protecting safety, aesthetics and service life of pavements

Damage from corrosion and wear

Traditional concrete and metal fixing methods are prone to rust, corrosion and ongoing deterioration providing a limited lifespan. Our advanced polymer socket was developed to absorb impact energy and continue working even after severe impact, reducing maintenance and extending asset life.

This ensures items are easily removable using tools provided, no matter how long between removals

evolve not decline

With thousands of items of road infrastructure, bollards and street furniture, cities quickly decline.

By making foundation resilient cities move from a state of gradual decline to a state of continual improvement.

Developments remain in good working condition for decades, with all items perfectly aligned; without disturbance to pavements; damaged, old and degrading infrastructure is quickly updated and cities become dynamic.

Instead of being in a constant state of decline, cities grow increasingly resilient and efficient.

With rising populations, and increasing climate disasters, reports suggest that maintenance funding is failing to keep pace with the growing demand.

With every increasing safety requirements, need for extensive traffic management, an ever-increasing number of (often poorly mapped) dangerous underground services, and the growing risk of silicosis, **inaction now will be costly.**

A city will take years to become fully sustainable, but the good news is that **maintenance operations can shift to a position of financial sustainability within 3-4 years**

Moving cities from gradual decline to continual improvement

For maintenance operations inaction now- will be costly

We can now build ZERO WASTE developments that remain in good condition for decades

When impacted items bend at ground level (low impact can result in bending at point of impact) Items remain safely seated in the footing and can be easily removed using tools provided.

Refer to Specifications for more details.

Impact tests demonstrated no diminished capacity, following multiple impacts. With thousands of units installed over more than twenty years, in-service performance shows no damage from 5-100 kmph

Refer to Impact Testing & Approvals (including In-service documentation) for more details

from repetition to resilience

Moving operations from repetition to resilience - from repeatedly rebuilding pavements to building long term success

Traditional approach

- Repeated excavation and reinstatement
- Damage to paving, asphalt and foundations
- Unstable items and damaged footings increasing safety and liability risks
- Higher labour and traffic management costs
- On-going carbon waste and landfill
- On-going concrete and paving supplies
- Ongoing disruption to road users and pedestrians
- Gradual visual decline of streetscapes
- Risk of damage to dangerous and costly underground services
- High cost , high risk replacements
- Costs and risks continue to climb

ZERO WASTE Approach

- Reusable foundation remains in good working condition
- Damaged items removed and replaced quickly
- Surrounding foundations and paving remain protected
- Zero waste, disturbance or heavy labour
- Faster, more efficient replacements
- No on-going disturbance to underground services
- No repeated concrete break out (removing the risk of silicosis)
- Cleaner, longer-lasting streetscapes
- Very low cost, low risk replacements
- Cities quickly reduce both costs and risks, becoming more financially sustainable
- Time and money saved can be used for further improvements further increasing financial and environmental sustainability

DOH&S WorkSafe Award

Awarded for substantially reducing risk of workplace injury. Removing the need for digging and heavy labour (No.1 Workplace injury). Substantially reducing time in dangerous traffic (No.1 Serious workplace injury)

WorkSafe Western Australia

VIEW WEBSITE

SPECIFICATIONS

TESTING & APPROVALS

PRICING

ORDERING

MRWA ARPROVED
REF SPEC 601 APPROVED DEVICES