# Retention Sockets

## **Rapid Charger Foundation**



### **Applications:**

#### Street / EV Charging Stations, Taxi Rank Charging Bays, Petroleum Forecourt / Service Station Charging Bays

#### Overview

This system provides a universal foundation for all manufacturers of EV Rapid/Ultra Rapid Charge Units. The foundation is fully future proofed to allow for fast and straightforward replacements, necessary upgrades as technology advances, and allows for increased demand; whilst providing an improved civils installation along with a simplified cabling process.

#### Implementation

The Rapid Charger Foundation utilises the NAL Retention Socket and is available with a range of adapter plates; to fit bespoke designs and to accommodate manufacturer-specific rapid/ultra rapid charge units. Installed at civils stage, and prior to the delivery of units - if necessary, Retention Sockets are sealed with a pedestrian plug ensuring footways remain free of trip hazards and open to the public. The relevant adapter plate is then installed within the Retention Socket and the charge unit is secured to the adapter plate, to provide easy and improved access to utility cables.

### **Advantages**

- ♦ Feature Simplifies civils installation
- ◊ Benefit

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Shallow depth requirements reduce the amount of wet concrete – eradicating associated inconvenience and cost

- Feature
  Universal system
- ◊ Benefit

No lost time incurred waiting for manufacturers specific foundation fixings

- Feature
  Fully future proofed
- ◊ Benefit

No requirement for costly excavation work in the event of upgrade or damage and foundations can be installed ahead of time to meet future increased demand



### Advantages

#### ◊ Feature

Completion of civils work prior to delivery of Rapid/Ultra Rapid charger dispensers

#### ◊ Benefit

No lost time incurred due to conflicting schedules and awaiting planning permission

#### ◇ Feature

Allows ducting to enter from any location

#### Or Benefit

Flexibility allows for multiple cable sizes

◊ Feature

Positively connected ducting

#### ◊ Benefit

Provides simple and improved access to cabling, reducing installation and maintenance times

### ◊ Feature

Pedestrian plug seal

- Benefit No disruption to the public or any health and safety implications
- Feature
  100mm or 150mm bottom entry duct
- Benefit
  Improved cable manoeuvring capabilities
- ♦ Feature Non-conductive bollard protection
- Benefit Health and safety maximised, no requirement for earthing

### **Retention Socket Shallow Foundation Purchase Specification**

The socket head shall be constructed of cast steel to ISO 3755 230-450 or Ductile Iron to BS2789 500-7, galvanised on all internal and external surfaces.

The socket shall be capable of withstanding impact forces from vehicle impact to steel posts with wall thickness up to 6mm.

All assembly screws shall be M12 A2 stainless steel.

It shall contain two M16 A2 stainless steel lateral fixing setscrews inside a locking chamber.

This locking chamber shall be covered with a locking lid, EN124-B125 load rated fitted with RS worm lock.

The socket shall have a galvanised steel base.

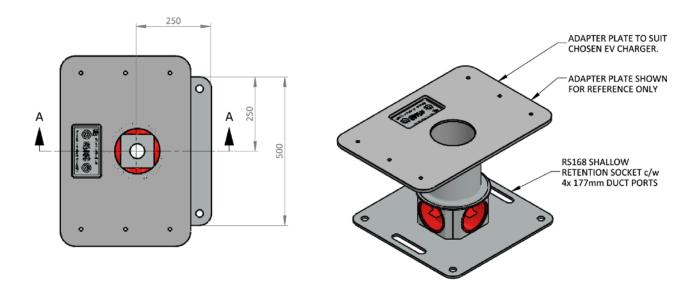
The socket shall contain a steel protective pressure plate.

All operating components shall be serviceable on site.

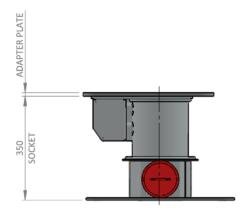
NAL calculate foundations to EN40 or BD94/07 for all Retention Sockets.

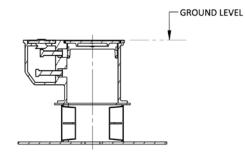
ST4 Concrete and A393 mesh must be used for all installations of Shallow Foundation Retention Sockets.





ISOMETRIC VIEW





SECTION A-A (ADAPTER PLATE REMOVED FOR CLARITY)



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