

INSTALLATION INSTRUCTIONS FOR ORION RETENTION SOCKETS FOR ILLUMINATED SIGN POLES & LIGHTING COLUMNS.



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1. Remove Zintec dirt cover plate if applicable.
2. Excavate the hole to allow the Orion retention socket to be surrounded by concrete dimensions as specified by the Structural/ Civil engineer to the full planting depth, plus 50mm underneath the base plate. Allow for drainage / soak away. Concrete specification should be to a minimum crushing strength of 20N/mm²
3. Connect duct(s) to the duct entry elbow at base of socket, single or twin tee. Or alternatively connect duct(s) to Orion sockets with a Rhino Bend mounted on the side wall of the socket, when extended socket depths are required.
4. Connect all cable duct to the duct entry elbow at the base of the socket, single or twin-tee



Single duct entry



Twin Tee duct entry for loop in/out



Orion socket with Rhino bend
for side wall duct entry.

4. Once the final surface level has been achieved (the top of the socket must be at finished surface level), use a spirit level **importantly** on **two plains** positioned vertically in the barrel of the socket (*Some size sockets have the lower top ring which is smaller than the socket tube diameter. The 2 x notches at 90° allow for the spirit level to be placed vertically against the internal socket wall*).

5. Surround the socket with concrete ensuring verticality at all times. Check that all is level on both the plains and finished surface level is correct, allow concrete to harden.

6. Replace the protective dirt cover or safety end plate if pole installation is to take place at a later date.

CONTINUED:

POLE INSTALLATION PROCEDURE:

1. Before pole installation brush away soil & debris to protect the Orion & screw holes prior to commencing pole installation.
2. Remove Zintec dirt cover plate and stainless steel O Ring cover plate, from top of clamp ring.
3. Remove all locking bolts from surface clamp ring and O Ring rubber seal. Place the O Ring cover plate followed by the clamp ring over the root of the pole or bollard and then roll the O Ring rubber seal up the pole above the planting depth by 50mm or more if required. Ensure the underside internal chamfer vee on the clamp ring is face down before installing the pole.



EASY POLE INSTALLATION



**A2032 Worthing-Installation
of Orion Socket**



**BNRR Orion Socket
& KAPU Column**

4. Roll the rubber ring down the pole until it is at the top of the Orion socket and then bring down the clamp ring. Then insert the pole or bollard into the Orion socket.
5. Keep the pole vertical and align the holes in the clamp ring with the bolt hole positions in the Orion socket. Gradually tighten the clamp bolts evenly, alternately/diagonally, (*as you would wheel studs on a car*). To ensure the clamp ring finishes flat and level with the surround rim.
6. A short length of tube can give extra leverage if using a short Allen key, (long Allen keys can be provided). Tighten bolts fully. Then screw the stainless steel cover plate to the screw fixings in the clamp ring if required. If not being used, the button head screws can be put back into the top ring for any future removal.
7. Should you require any further information or advice on installation, please contact:



NB: IF YOU NEED TO REDUCE THE PLANTING DEPTH:

If an underground obstruction is found and relocation is not possible, the planting depth of the Orion can be reduced (consult with the site engineer for the implications involved). There are grooves on the barrel of the socket at 470mm and 300mm which can be used as a disc cutting guide. Undo the base plate bolt, and remove the base plate making sure not to lose the internal nylon pole centralising shoe. Safely disc cut the socket tube and re-insert the nylon pole shoe back into the shortened socket. Proceed as per above instructions.



**REMOVEABLE BASE &
THE INTERNAL NYLON
CENTRALISING SHOE &
SOCKET TUBE**