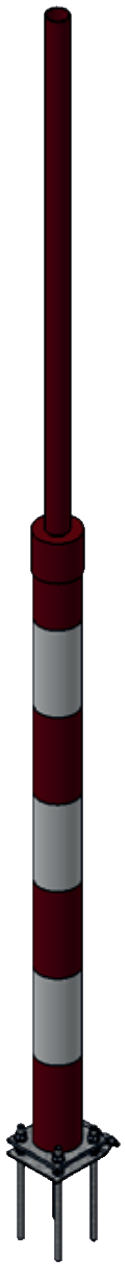
pollite
frangible structures

INSTALLATION MANUAL



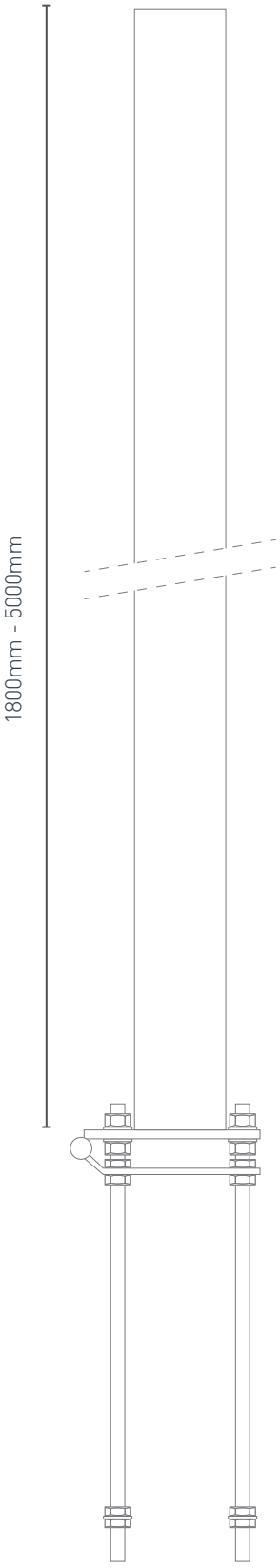
Weather System Monitoring Mast

(125mm Diameter)

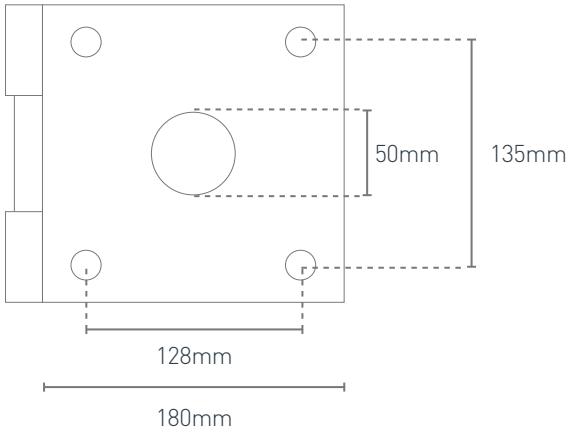
WEATHER SYSTEM MONITORING MAST

Dimensions

Mast Dimensions



Base Plate Dimensions



Specification (mm)

Mast Height	1800 - 5000
Mast Section Diameter Ø	125
Base Plate Dimensions	180x180
Base Plate Thickness	10
Ground Plate Dimensions	180x180
Ground Plate Thickness	10
Ground Rod Length*	500
Ground Rod Diameter Ø	16
Cable Hold Diameter	50

* Ground rod length dependent on foundation size.

WEATHER SYSTEM MONITORING MAST

Parts Checklist - Mast

A	1 x Mast
B	1 x Ground Plate
C	1 x Hinge Bolt, Nut & Washer
D	4 x Foundation Rods, Nuts & Square Washers
E	8 x Washers
F	8 x Full Nuts
G	8 x Half Nuts
H	1 x Rubber Grommet
I	1 x Adjustable Spanner (Not Included)
J	1 x Utility Knife (Not Included)

A

B

C

D

E

F

G

H

I

J

WEATHER SYSTEM MONITORING MAST

Step 1

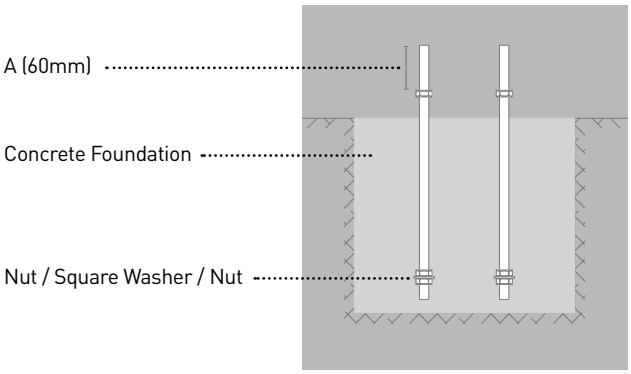
a) At the base of each foundation rod, fit a nut, square washer and a nut.

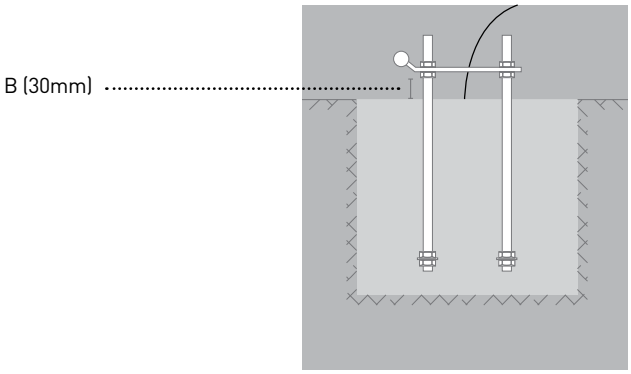
b) Screw a half nut onto each threaded foundation rod for distance 'A' as shown on the concrete foundation dimension.

c) Rest the ground plate onto the half nuts ensuring the hinge is facing up and in the direction in which the pole is to hinge down. Secure the plate in position using four remaining half nuts.

d) Thread the cable through the central aperture of the ground plate.

e) Place the foundation bolts in the concrete at the correct depth, ensuring there is a maximum gap of distance 'B' between the concrete and the ground plate, as shown on the diagram. This is to make it possible to adjust the mast vertically later.
(To help maintain a gap, use wooden lats.)





Step 2

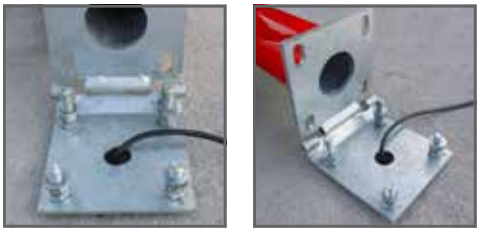
Ensure the ground plate is level. Torque the nuts to between 100-150Nm.

Step 3

Screw one full nut and one washer onto all four ground rods approximately 10mm up from the lower half nut, this is to allow for adjustment later.

Step 4

Mate the two half hinges of the mast base plate and the ground plate together, ensuring the holes are aligned.



Step 5

Once the holes are aligned and slide through the hinge bolt, use a hammer if required. Secure the hinge bolt with the washer and nut provided. Torque the nut to between 80-100Nm.

Step 6

Once the base plate has been correctly secured to the ground plate, rest the mast horizontally and feed the cables up through the mast to the pre-drilled hole at the top.



Step 7

To prevent ingress of water into the mast, slice the rubber grommet and thread it onto the cable until it meets the wall of the mast and secure in place.




Step 8

At this point, if required fit the sensing equipment. (See manufacturer's installation guide.)

Step 9

Hinge the mast up vertically until it meets the washers.
(Use lifting assistance if required.)



Step 10

Use the remaining washers and full nuts to secure the mast in position. Ensure the mast is level by using the lower full nuts. Torque the upper full nuts to between 150-200Nm.