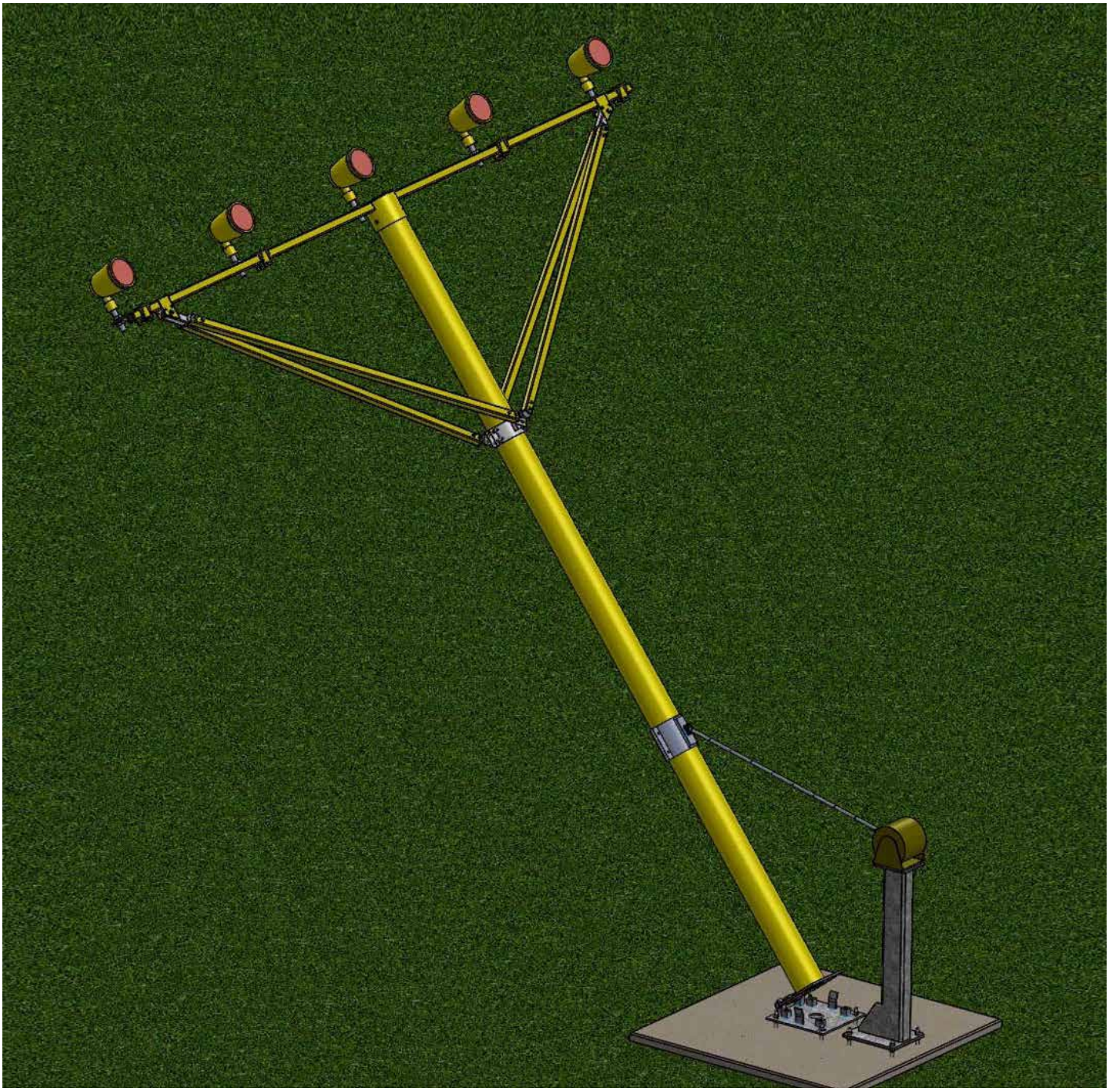
pollite
frangible structures

INSTALLATION MANUAL

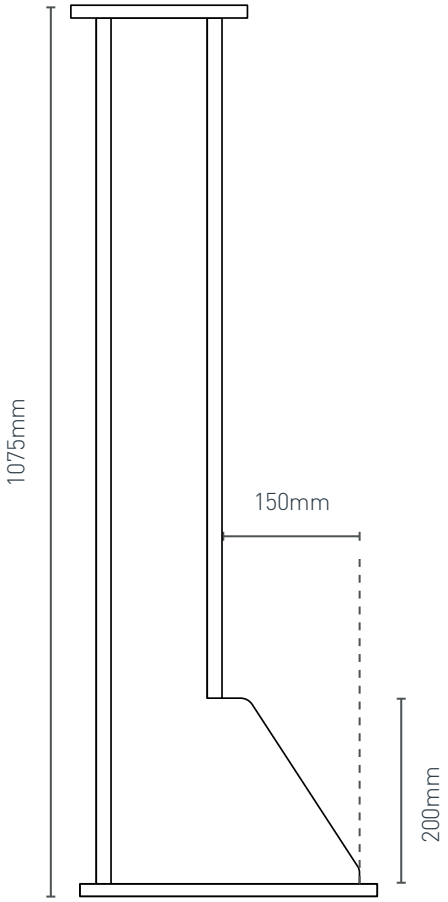


Winch System

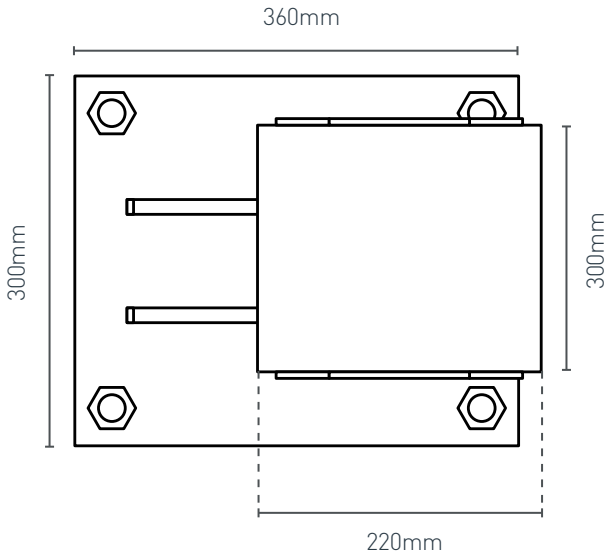
Install and Operating Guide

Winch Dimensions

Front View

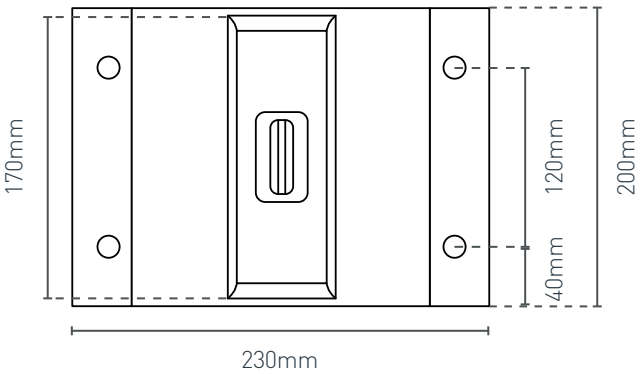


Plan View

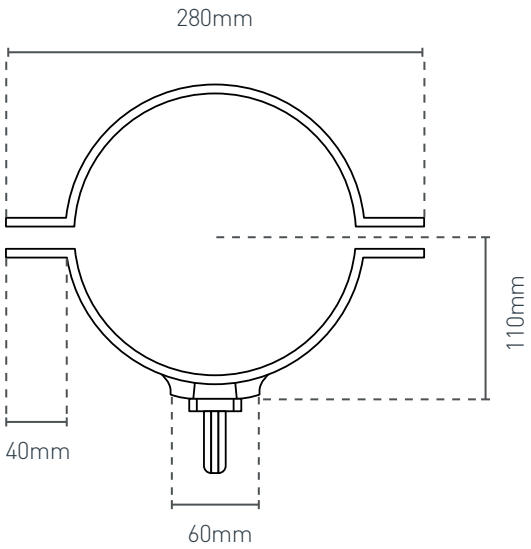


Winch Collar Dimensions

Front View



Plan View



Health & Safety Information

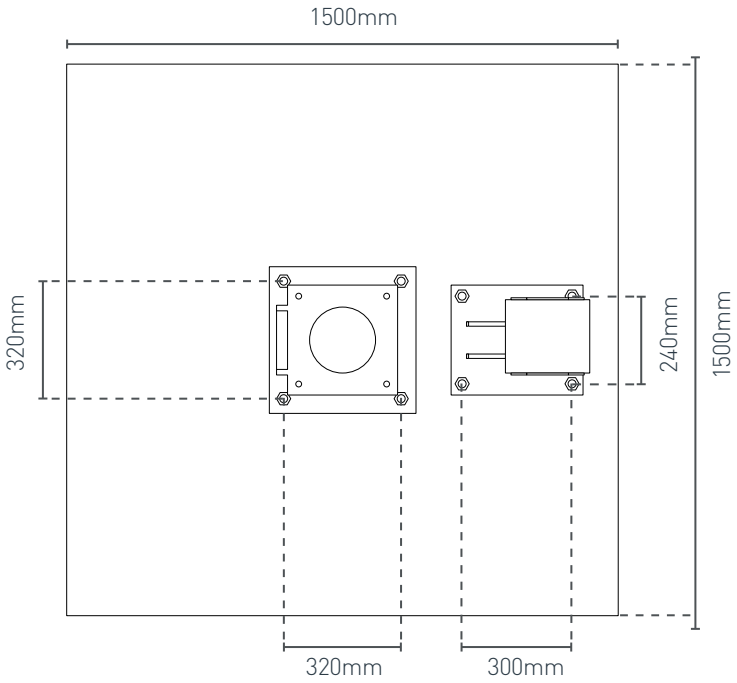
It is recommended that all operative involved in raising and lowering masts wear the following PPE:

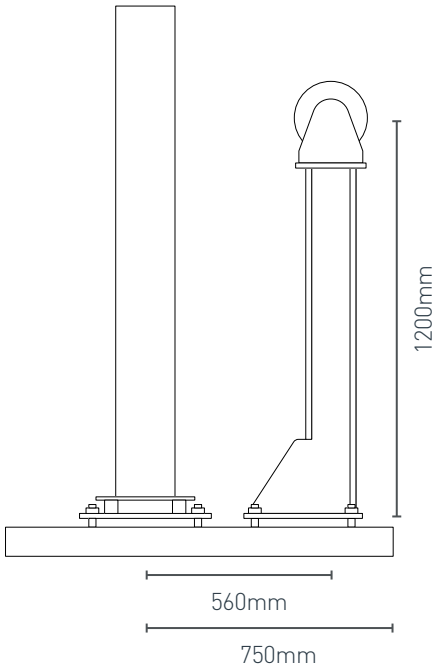
- Hard Hat
- Safety Glasses
- Ear Protection (If in aircraft operating area)
- Gloves
- High Visibility Vest
- Safety Boots

It is also recommended by Pollite Ltd:

- A minimum of two operatives should be used when winching.
- Winching should not be carried out in wind speeds greater than 20mph.
- We do not recommend winching in wet conditions, if winching must be carried out in wet conditions the location of the collar on the mast should be sufficiently dried prior to attaching.
- Identify any trip hazards within 1m either side of the path of descent, if necessary remove or visually mark any potential hazards.
- Be aware of any other hazards in the immediate area. Hazards can include but are not limited to: cables, conduit, electrical boxes, fences or any other masts.
- Identify and overhead hazards such as cabling.

Foundation Information

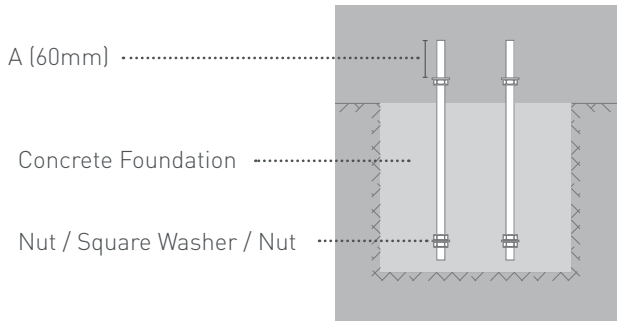




Casting Foundation Rods

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

b) Place the 4 rods through the holes drilled in the template provided and place into the wet concrete. Ensure there is at least 50mm of rod protruding. Once the concrete is set remove the template.



Parts Checklist

A 1 x Winch Tower
B 1 x Winch Break, Handle & Strap
C 1 x Collar - Silicone Gasket Attached
D 4 x Foundation Rods, Nuts & Square Washers

A

B

C

D

Raising

Step 1

Place the winch tower onto the pre cast foundation rods and secure in place using the nuts provided. Torque to between 100-150Nm.
(Two operatives should be used when lifting and positioning the 50kg tower.)




Step 2

Fit the winch brake mechanism to the studs fabricated on to the top plate of the tower using the washers and nuts provided. Torque to between 30-50Nm.




Step 3

If the winch handle is not already attached, remove the nut from the winch body and fit the handle. Secure the handle onto the body by replacing the nut.




Step 4

A minimum of two operatives should be used to lift the top of the mast to approximately 1m from the ground and rested on a table or trestle.
(The winch system must not be used to raise masts from ground level.)

Step 5

Fit the winch collar to the mast ensuring that the eye is facing upwards and towards the winch at a minimum height of 1.8m from the mast base.
(Ensure silicone gasket is attached securely to the collar.)

Step 6

Tighten the nuts evenly and torque each nut to between 50-60Nm.
(Do not overtighten as this may cause damage to the mast.)



WINCH SYSTEM

Step 7

Ensure the latch switch is in the upward position and unwind the winch handle to release the strap. Place the snap hook of the strap through the eye end located on the winch collar.
(Inspect the hinge pin prior to raising.)




Step 8

Move the latch switch to the down position, wind the winch handle to take up any slack from the strap.



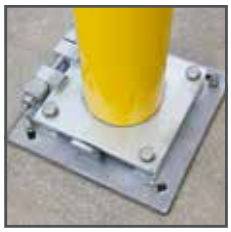
Step 9

Slowly and safely raise the mast by winding the winch handle.
(Ensure the mast is raised at a steady pace; avoid any jerking as over time this can cause damage to the internal structure of the mast.)

Step 10

Once the mast is fully vertical and the foot of the mast is in contact with the ground plate, secure the mast in place using the four M20 bolts provided. Torque the nuts to between 200-250Nm.



Step 11

Detach the strap from the collar by removing the snap hook. Fully wind the strap into the winch brake. Remove the winch tower from the rods and then remove the brake mechanism for the tower if required.




Step 12

Fully remove the collar from the mast.
(The winch collar and brake should be stored in a dry place when not in use.)


Lowering

Step 1

Place the winch tower onto the pre-cast foundations rods and secure in place using the nuts provided. Torque to between 100-150Nm.
(A minimum of two operatives should be used to lift/position the tower.)

Step 2

Fit the winch brake mechanism to the studs fabricated on to the top plate of the tower using the washers and nuts provided. Torque to between 30-50Nm.

Step 3

If the winch handle is not already attached, remove the nut from the winch body and fit the handle. Secure the handle onto the body by replacing the nut.

Step 4

Fit the winch collar to the mast ensuring that the eye is facing upwards and towards the winch at a minimum height of 1.8m from the mast base.
(Ensure silicone gasket is attached securely to the collar.)

Step 5

Tighten the nuts evenly and torque each nut to between 50-60Nm.
(Do not overtighten as this may cause damage to the mast.)

Step 6

Unwind the winch handle to release the strap. Place the snap hook of the strap through the eye end located on the winch collar.

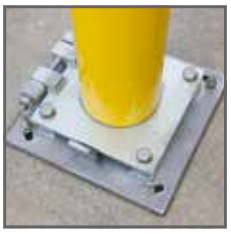
Step 7

Unwind the winch handle to take up any slack from the strap.



Step 8

Remove the four M20 bolts from the foot of the mast.
(Inspect the hinge pin prior to lowering.)



Step 9

Slowly and safely lower the mast by winding the winch handle.
(Ensure the mast is lowered at a steady pace; avoid any jerking as over time this can cause damage to the internal structure of the mast.)


Step 10

Lower the mast to approximately 1m from the ground and use a trestle or work bench to support the top of the mast.
(The winch system must not be used to lower the mast to ground level.)

Step 11

Carry out servicing as required on completion of servicing raise the mast in accordance of raising instructions.