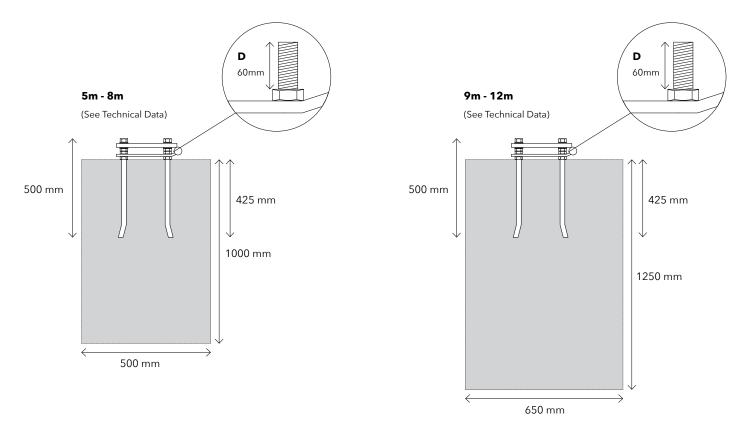
# **Installation Guide**



### **Foundation Dimensions**

### **Profile View**



Flagpole Dimensions																									
Flagpole Length (m)	5			6			7			8			9			10			11			12			
Butt Diameter Ø (mm)	120		120			120			120			140			140			140			140				
Top Diameter Ø (mm)	65		65			65			65			65			65			65			65				
Colour	Gel Coat White		Gel Coat White			Gel Coat White			Gel Coat White			Gel Coat White			Gel Coat White			Gel Coat White			Gel Coat White				
Material	Glassfibre			Glassfibre			Glassfibre			Glassfibre			Glassfibre			Glassfibre			Glassfibre			Glassfibre			
Strength	HD	EHD	UHD	HD	EHD	UHD	HD	EHD	UHD	HD	EHD	UHD	HD	EHD	UHD	HD	EHD	UHD	HD	EHD	UHD	HD	EHD	UHD	
Wall Thickness (mm)	3	4	5	3	4	5	3	4	5	3	4	5	4	5	6	4	5	6	5	6	7	5	6	7	
Finial	Gold Finial			Gold Finial			Gold Finial			Gold Finial			Gold Finial			Gold Finial			Gold Finial			Gold Finial			
Base Fixing	НВР			НВР			HBP			НВР			HBP			HBP			НВР			НВР			
Foundation Recommended (w2 x d) (mm)	500 x 1000			500 x 1000			500 x 1000			500 x 1000			650 x 1250												
Recommended Flag Size (mm)	1830 x 910			1830 x 910			1830 x 910			22	2290 x 1140			2740 x 1370											
Maximum Wind Speeds (mph flagged)	30			30			30			30			30			30			30			30			

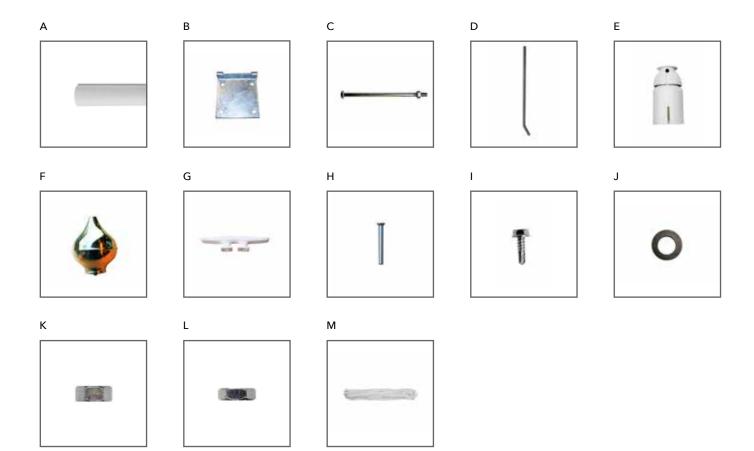
 $\mathsf{HD} - \mathsf{Heavy} \ \mathsf{Duty} \bullet \mathsf{EHD} - \mathsf{Extra} \ \mathsf{Heavy} \ \mathsf{Duty} \bullet \mathsf{UHD} - \mathsf{Ultra} \ \mathsf{Heavy} \ \mathsf{Duty} \bullet \mathsf{HBP} - \mathsf{Hinged} \ \mathsf{Base} \ \mathsf{Plate} \bullet \mathsf{GS} - \mathsf{Ground} \ \mathsf{Sleeve}$ 

NB: We recommend that the concrete used in the bases should be of a C30 quality as normally purchased from a ready mixed concrete supplier. If purchaser is to mix concrete up themselves then the ratio of the mix i.e. Cement/Sand/Fine Aggregate must 1:2:3 which results in a very strong mix. Any deviation from the above advice may result in warranty claims being invalid. If in any doubt please contact supplier for clarification.

### **Parts Checklist**

- A 1 x Glassfibre Pole (5m 12m)
- B 1 x Base Plate
- C 1 x Hinge Pin & Nut
- D 4 x Ground Rods (500mm)
- E 1 x Fairlead & Saddle
- F 1 x Gold Onion Finial
- G 1 x Cleat
- H 1 x Cleat Screws
- I 3 x Self Tapping Screws

- J 8 x Washers
- K 4 x Full Nuts (16mm)
- L 12 x Half Nuts (16mm)
- M 1 x Length of Halyard (Double the length of the flagpole)



#### Step 1

- » Order/mix concrete and place into hole (25-30 newton 50 Slump 20mm aggregate)
- » Screw a half nut onto each threaded foundation bolt for distance 'D' as shown on the concrete foundation dimension.
- » Place the baseplate over the foundation bolts (the hinge on the ground plate should point upwards). Ensure that the ground plate is level and secure in position with half nuts.
- » Place the foundation bolts in the concrete at the correct depth and ensure the hinge on the ground plate points in the direction where the pole will be both raised and lowered. Ensure the foundation ground plate is level and leave a small space (15mm max) between the concrete foundation and the ground plate. This will allow adjustments to be made to ensure flagpole is completely vertical.
- » When the concrete has hardened mount one more half nut and washer on each foundation bolt.
- » Place hinging bolt partially through the ground plate ready to secure once the pole is in position. Offer the flagpole up to the foundation ground plate and slide hinge pin through both sections and secure with bolt. Once secure carefully lower the flagpole for the next step.







#### Step 2

Slide the saddle over the end of the pole and secure in place with self tapping







#### Step 3

Using a flat headed screw driver, attach the cleat to the pole using bolts provided.





### Step 4

Screw the gold finial onto the fairlead and saddle and hand tighten.





### Step 5

Thread the halyard through the fairlead and saddle. Ensure there is an equal amount of halyard either side (providing the concrete has set, the pole can be pushed up vertically and secured in place with the full nuts and washers provided).







### Step 6

Tie both ends of the halyard together securely. A triple knot is advised. (It is recommended that the pole is raised at this point. Slide the pole into the ground sleeve ensuring that the concrete has completely set)







### Step 7

Create a slip knot in the halyard. Double the halyard back on itself to create a horizontal loop, pull the halyard down behind the first loop and create a vertical loop. Bring the first loop around behind the vertical loop and pull back through to create a knot.









### Step 8

Place the toggle through the slip knot and pull tight.









Step 9

Create another slip knot approximately 1½ times the length of the width (shortest side) of the flag.









### Step 10

Thread the halyard through the slip knot loop and create a clinch knot. Using the finger or thumb create a small loop and wrap the halyard around itself 3 times. Thread the remaining halyard back through the loop and pull tight to secure.

















Step 11

Hoist the flag to the top of the pole. Wrap the halyard under the bottom of the cleat then round over the top.









### Step 12

Bring the halyard over the top and under the bottom of the cleat in a figure of eight formation. Repeat this twice.







### Step 13

Thread the halyard up from the bottom and around the back of the halyard. Pull the remaining halyard through to secure.







### Step 14

Place one large washer and nut over each foundation bolt in turn and secure. The half nuts immediately below the foot of the flagpole can be adjusted to ensure the flagpole is vertical. Once vertical lock the half nuts below and full nut above tight to the foot. Re-tension the bolts after 3-4 weeks.









### Maintenance Recommendations For Glassfibre Flagpoles

#### Weekly

• Visual check of halyard for signs of wear or fraying, if necessary replace by sewing end of new halyard to end of old halyard and pull new halyard through top of flagpole.

#### Six Monthly

- Check stability of flagpole(s). Check operation of hinge bolt by removing nuts and washers and with the aid of an assistant walk flagpole down and place on a support (most important if ground collar 'in situ'). Do not remove levelling nuts.
- Check finial for stability, ease of rotation and check for damage to pulley groove. If necessary replace damaged or worn parts.
- For external halyard systems, check for signs of wear or fraying, replace if necessary. Check cleat for security and damage, replace if necessary.
- For **internal halyard** systems (including hoistable arms), check operation of Guardsman lock and jamming cleat, oil lock if necessary. Check for signs of wear or fraying of halyard, replace if necessary. Check for wear or damage on weight, ring and plastic clips. Check to see if any damage to flagpole at weight level. Repair or replace if necessary.
- For **swivel arm** systems, check for signs of wear or fraying of the rotating top, replace if necessary. Check for wear or damage on weight, ring and any clips. Check to see if any damage to flagpole at weight level. Repair or replace if necessary.
- Wash down flagpole with warm water and detergent to remove surface grime. Use a solvent cleaner for ingrained marks.
- Re-erect flagpole by walking the flagpole up, ensuring help is available. Check base nuts for tightness, adjust if necessary. Grease nuts to protect from rust. Check flagpole for vertical alignment.

#### Yearly

• Full service / inspection of the flagpole by a specialist should be carried out and log / report (provided by the contractor) kept of the date and works completed.

#### **Adverse Weather Conditions**

- Flags must be taken down in adverse weather conditions i.e. if flying a standard flag and wind speeds are expected to exceed 30mph.
- If there is a requirement to keep flags flying in adverse weather conditions, then specialist storm flags (of one third the size) must be used, which will withstand wind speeds up to 45mph.
- The flagpole should be inspected as above prior to re-flying your flag.