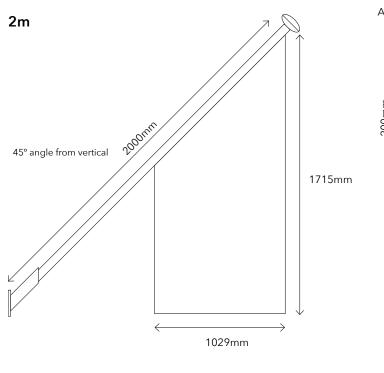
# **Installation Guide**

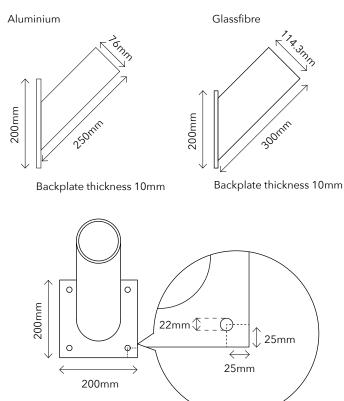


# **Angled Flagpole Dimensions**

# Flagpole Dimensions

### Wall Bracket Dimensions



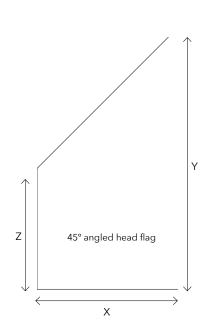


Flagpole Dimensions					
Material	Glassfibre	Aluminium			
Appearance	Tapered	Cylinder			
Flagpole Length (m)	2 - 4	1.5 / 2			
Flagpole Angle	45°	45°			
Butt Diameter Ø (mm)	100	60			
Top Diameter Ø (mm)	65	60			
Colour	Gel Coat White	Powder Coat White			
Sections (pieces)	1	1			
Maximum Wind Speeds (mph Flagged)	40 mph	40mph			
Wall Thickness (mm)	3	3			

# **Recommended Flag Sizes**

#### Flag Dimensions

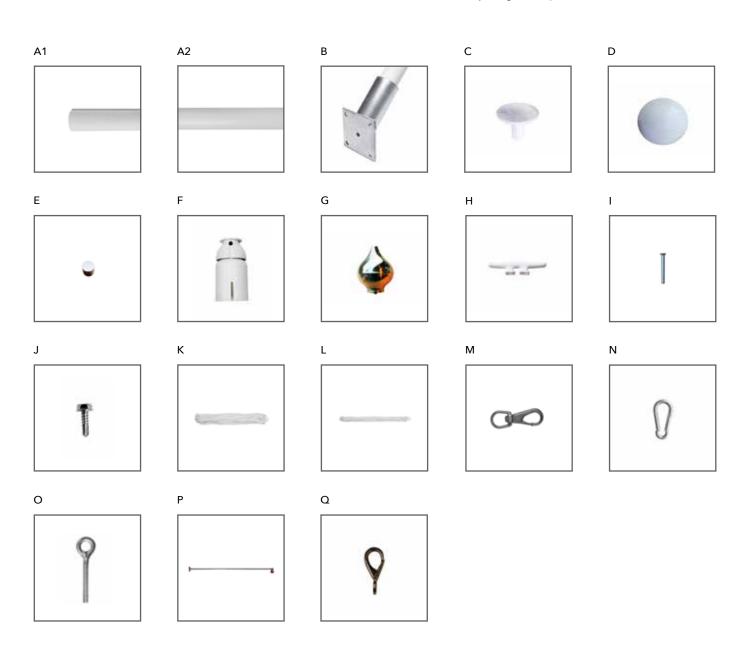
45° Angled Head Recommended Flag Size						
Single Sided	Double Sided	Flagpole Size (m)	X (mm)	Y (mm)	Z (mm)	
✓	✓	1.5	790	1400	610	
✓	✓	2	1029	1715	686	
✓	✓	3	1165	2079	914	
✓	✓	4	1429	2572	1143	



#### **Parts Checklist**

- A1 1 x Aluminium Pole (1.5m 2m) Or
- A2 1 x Glassfibre Pole (2m 4m)
- B 1 x Wall Bracket (Pre-bonded onto the flagpole)
- C 1 x Mushroom Finial Base (Aluminium Only)
- D 1 x Mushroom Finial Top (Aluminium Only)
- E 1 x Mushroom Finial Top Aluminium Insert (Aluminium Only)
- F 1 x Fairlead & Saddle (Glassfibre Only)
- G 1 x Gold Onion Finial (Glassfibre Only)
- H 1 x Cleat

- I 2 x Cleat Screws
- J 3 x Self Tapping Screws
- K 1 x Length of Halyard (Supplied at double the length of flagpole)
- L 2 x Halyard (Lazy Line) (Optional)
- M 2 x Swivel Clip (Lazy Line) (Optional)
- N 2 x Carabiner (Lazy Line) (Optional)
- O 2 x Eyebolts (Lazy Line) (Optional)
- P 1 x Flag Bar (762mm or 1220mm) (Optional)
- Q 1 x Fixed Clip (Flag Bar) (Optional)



#### Step 1

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





#### Step 2 - Aluminium Pole

Thread halyard through the mushroom finial base over the aluminium insert and back through the rear hole. Line up the top of the mushroom finial base and click into place with the mushroom finial top.





#### Step 3

Line up the top of the mushroom finial base and click into place with the mushroom finial top.



#### Step 4

Slide the complete mushroom finial into the top of the aluminium pole section.





#### Step 2 - Glassfibre Pole

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







#### Step 3

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





#### Step 4

Thread the halyard through the fairlead and saddle. Ensure there is an equal amount of halyard either side.







#### Step 5

Fit the bracket to the wall.

Check with a structural engineer if unsure on the condition of the wall before attaching the wall bracket.

- Create a template by drawing around steel work, mark holes and cut to size.
- Offer template to top bracket location and mark wall clearly, ensure it is square
- Proceed to drill holes (20mm x 125mm recomended sleeve anchors)
- Insert anchors into wall, and proceed to build your flag pole placing saddle and finial etc.
- Offer pole into position and tighten anchors, check for square as you tighten.
- Proceed to attach flag. (Always keep halyard taut against cleat when flag flying)

#### Step 6

Tie both ends of the halyard together securely.









**Step 7**Create a slip knot









Step 8

Place the toggle through the loop and tighten knot.

(If using a flag bar, please skip step 9 & 10 and refer to the last page for the flag bar fitting instructions.)









Step 9

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









#### Step 10

Thread the halyard through the loop. Using the finger or thumb create a small loop and wrap the halyard around itself 3 times. Finally 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.

(If using a flag bar, the flag bar should be fitted at this point, please refer to next page for fitting instructions.)









## Step 12

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







#### Step 13

Finally bring the halyard up from the bottom, thread under, over and back through. Pull down to secure.







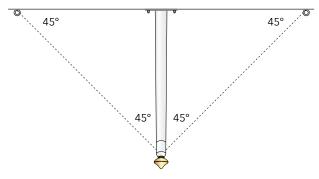
#### **Step 14 - Lazy Line Fitting**

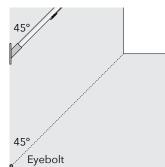
Secure two eye bolts into the wall at a  $45^{\circ}$  angle as shown in the diagram.

Take the two pieces of halyard for the lazy line and tie one end of each onto the swivel clip.

Tie a carabiner to each of the other ends of the halyard.

Attach the swivel clip to the eyelet in the bottom corner of the flag and attach the two carabiners to the eye bolts in the wall. (Eyebolts should be placed close to the 45° mark if any obstacles obstruct this.)





#### Step 1 - Flag Bar Fitting

Clamp the bar onto the reinforced area on the flag and secure using the screw and locking nut. Use a hex key and a spanner to ensure a tight fit, do not over tighten. Hook the flag bar through the eyelet at the top of the hoist side of the flag.









#### Step 2

Create a loop in the halyard at approximately 1½ times the length of the width (shortest side) of the flag (A in the diagram below). Slide the loop through a fixed clip, loop the halyard back over the clip and pull tight to secure. Attach the fixed clip to the loop on the flag bar. (Proceed to hoist the flag, following from step 11.)











#### Flag Maintenance

There are a number of techniques that can be used to fly flags from angled wall poles, a flag can be left to fly naturally but this can lead to the flag simply hanging limply in calm weather, or wrapping round the flagpole in windy conditions.

To help prevent a flag from wrapping around a flagpole, a loosely-tethered halyard can be used, fixed to the vertical surface from which the pole projects. This is often described as a 'lazy line' (and is often used in pairs to provide fixing both to the left and right of the flag).

To produce a flag shape in calm conditions, a flag bar, either externally attached to the flag, or incorporated into the flag along its lowest hanging edge can be used.

A combination of a flag bar, tethered by lazy lines at either side is a common solution. However, it must be noted that all such arrangements will not tolerate high wind conditions and a deal of self-maintenance by the customer is recommended. In gale conditions, lazy lines are highly-likely to detach from flags or from vertical surfaces. Even if they do not, the entire mechanism can wrap around a pole, becoming unsightly.

Assisting with the rectification of such issues can be offered, but will not be free of charge. Ideally, the ability of the customer to access the flags so that they can be taken down when windy conditions are forecast should be considered before installation of the poles.

In any event, it's strongly recommend that an end user is prepared to self-maintain flags on angle wall poles, either by (safely!) accessing the flag and pole via an upstairs window or an access platform, or by simply using an extending pole from ground level as a means of unravelling flags that have wrapped around poles.