

WKSPT21

octopus

TECHNICAL MANUAL

mins
2 miles

mins
0.4 miles

mins
0.3 miles

6 m
0.3 m

Octopus Fingerpost Sign System is an engineered product, manufactured from robust aluminium extrusion profiles. The directional sign fingers can be set in 8 incremental positions of 45 degrees from each other and stacked 5 collar levels high as standard. The system employs a unique telescopic octagonal spline that can be set between 1 to 5 collars high. Each sign collar has an octagonal cavity into which the octagonal spline fits to prevent rotation of the sign fingers.

The sign system is available in 2 standard styles:

Heritage

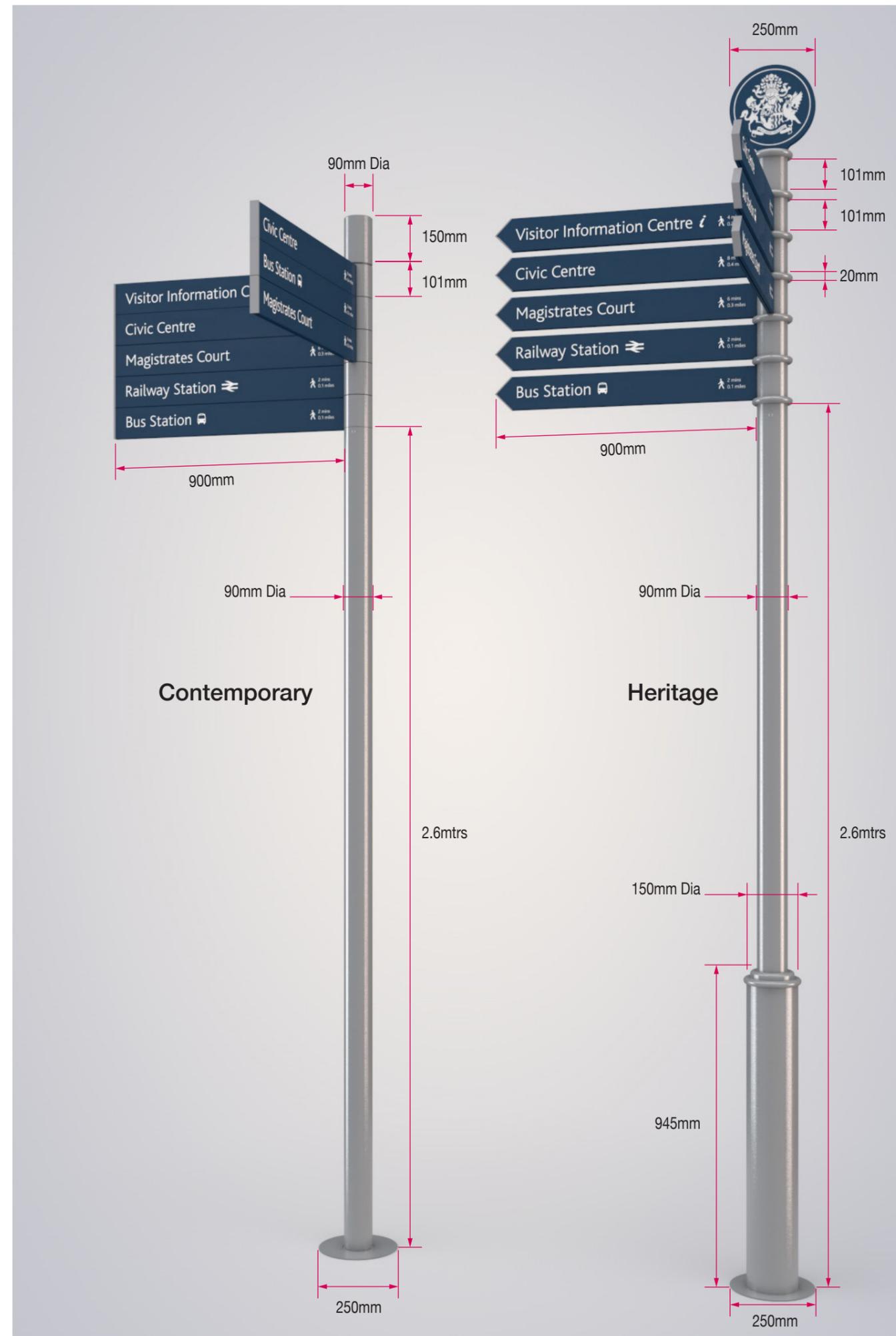
A traditional style fingerpost sign with chevron style fingers and optional spacing collars. Complete with a round post and wide diameter base fitted with a bullnose cap and decorative ground plate.

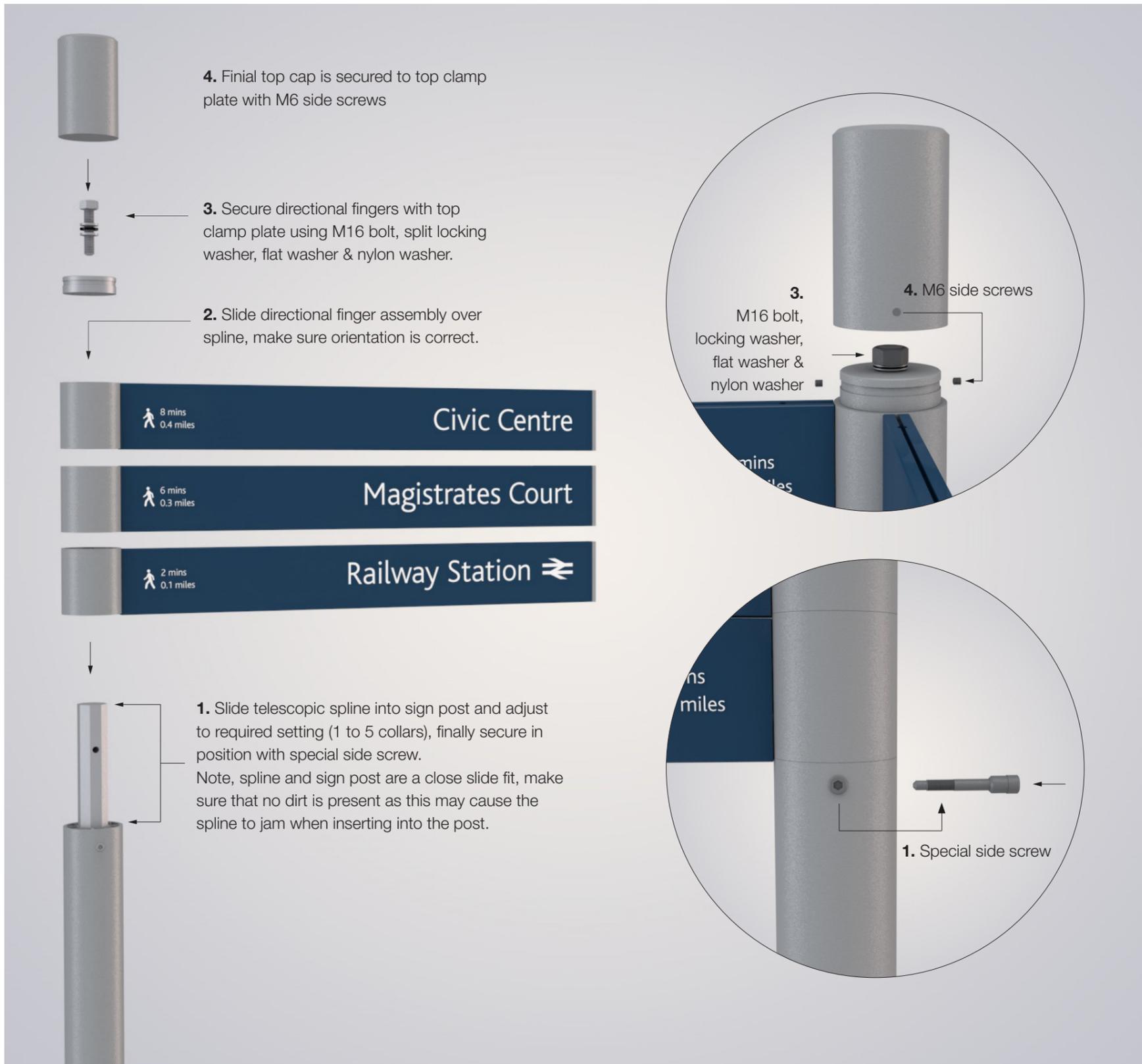
Contemporary

A modern style fingerpost sign with square ended directional fingers, and parallel round post with optional circular ground plate.

Octopus is a modular sign so both Heritage and Contemporary components can be interchanged to create a hybrid design.

The Octopus Technical Manual covers the standard design range, please seek advice for bespoke requirements.





**Contemporary-
General
Assembly**

Octopus Fingerpost Sign System can be delivered part or fully assembled to suit the customer requirements. For example, supply of product direct to site ready to install or as part assembly for finishing in a sign workshop.

Procedure to Assemble

1. Establish top end of sign post, this is easily identified by a 13mm dia hole drilled 15mm from one edge. Firstly check that the internal octagonal cavity is clean and clear from dirt, swarf or paint over spray, also check that the telescopic spline is clean. This check is important as the 2 components are a close slide fit and can jam if not clean when assembled together. The spline has a series of 5 holes drilled and tapped along its length, the bottom hole measures 185mm from one end, insert this end into the post. Make sure when inserting the spline that the clearance hole (side without screw threads) is facing the same side as the 13mm dia hole. Adjust telescopic spline to the required length, for 1 to 5 sign finger collars. Insert special screw with spacer into the post and fully tighten up.

2. Firstly establish configuration and assembly order of sign finger panels. We recommend the special screw is always designated the no 1 position (see separate diagram). Slide sign panels over telescopic spline until all panels are assembled as required. Check that all panels are stacked on top of each other neatly.

3. Place top clamp plate on top of the final sign finger collar with chamfer edge to the top. Insert M16 bolt with split locking washer, flat washer and nylon washer and fully tighten up using a spanner. Check bolt is fully tightened.

4. Place top finial cap over top clamp plate, making sure that M6 side screws are undone enough to allow finial to go over top clamp plate. When finial is in position, fully tighten side screws and check that it is secure.

Multiple Stacked Sign Panels

Where multiple stacked sign panels are pointing in the same direction, we recommend the use of finger panel lock bushes to keep the panels in alignment.

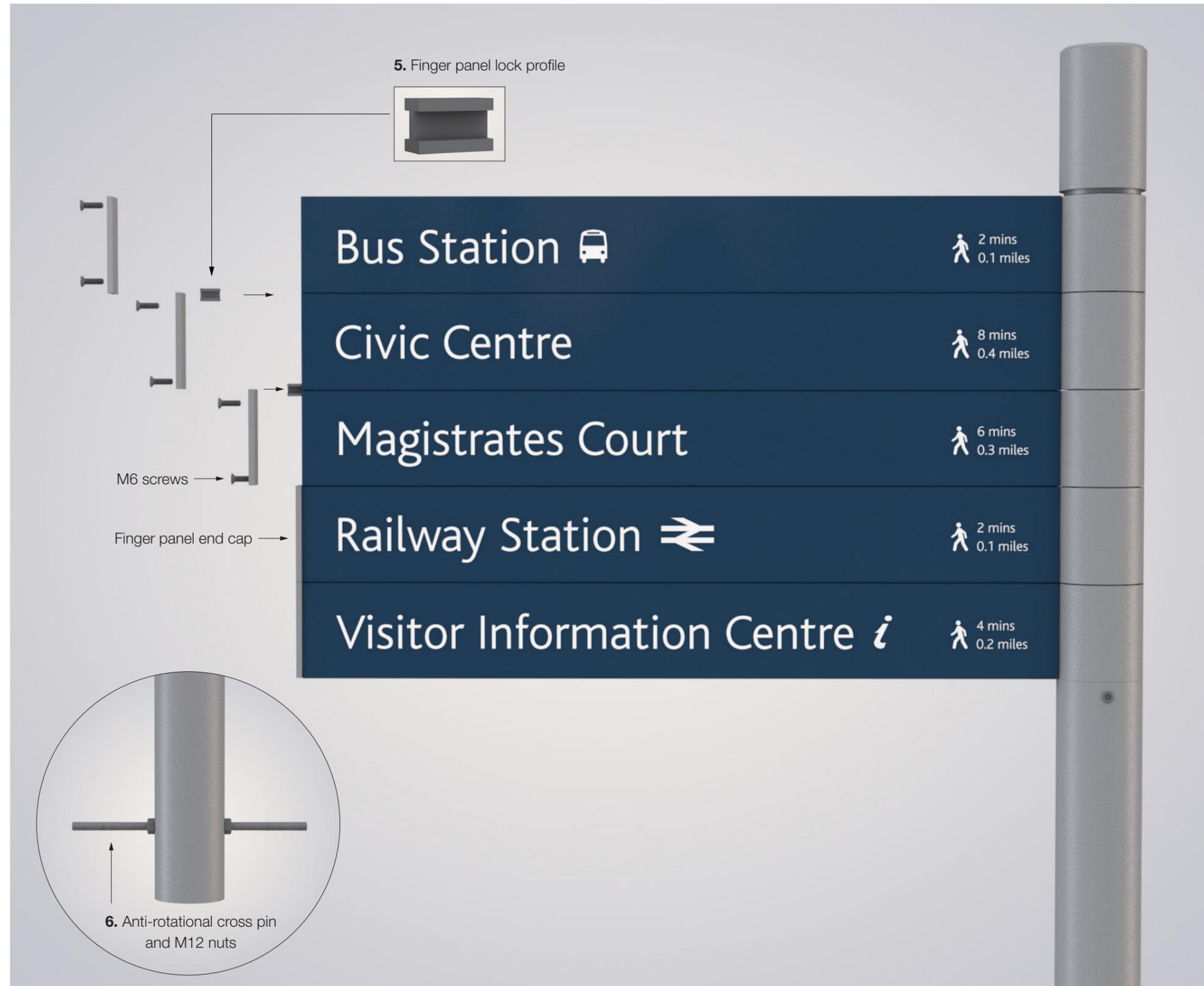
5. Panel Alignment Procedure

Once the sign panels are fully assembled as in steps 1 to 5.

Remove finger panel end caps by undoing M6 CSK head end screws, this will reveal a small groove into which the finger panel lock profiles are to be located. Insert panel lock profile into the groove and this will link the 2 panels together, continue to insert panel lock profiles until all panels are linked together and then finally refit finger panel end caps and tighten screws.

6. Anti-Rotational Post Cross Pin Assembly

The anti-rotational cross pin is fitted to the end of the sign post, this position is easily identified by two 14mm dia cross holes located 100mm from the end of the post. Insert threaded cross pin through the cross holes in the sign post, make sure it is central and then screw a M12 nut on each end of the threaded cross pin to finally secure. Check that the assembly is fully tightened.





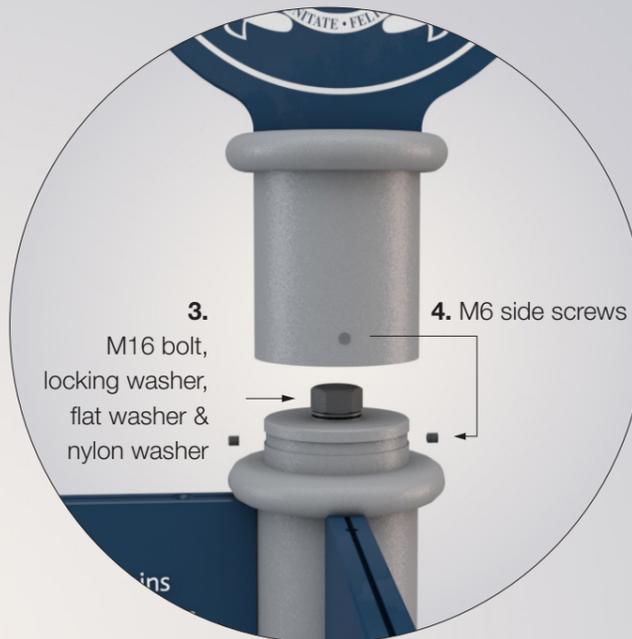
4. Finial top cap is secured to top clamp plate with M6 side screws

3. Secure directional fingers with top clamp plate using M16 bolt, split locking washer, flat washer & nylon washer.

2. Slide directional fingers and bull nose collars over spline, make sure orientation is correct.

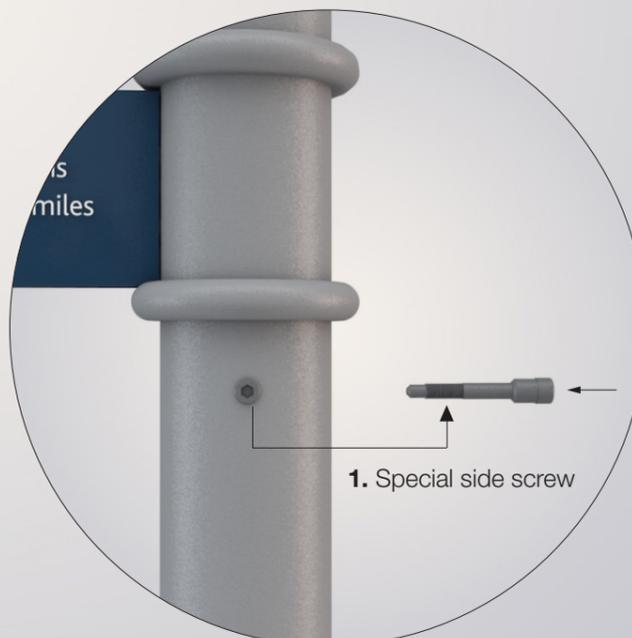


1. Slide telescopic spline into sign post and adjust to required setting (1 to 5 collars), finally secure in position with special side screw.
Note, spline and sign post are a close slide fit, make sure that no dirt is present as this may cause the spline to jam when inserting into the post.



3. M16 bolt, locking washer, flat washer & nylon washer

4. M6 side screws



1. Special side screw

Heritage- General Assembly

Octopus Fingerpost Sign System can be delivered part or fully assembled to suit the customer requirements. For example, supply of product direct to site ready to install or as part assembly for finishing in a sign workshop.

Procedure to Assemble

1. Establish top end of sign post, this is easily identified by a 13mm dia hole drilled 15mm from one edge. Firstly check that the internal octagonal cavity is clean and clear from dirt, swarf or paint over spray, also check that the telescopic spline is clean. This check is important as the 2 components are a close slide fit and can jam if not clean when assembled together. The spline has a series of 5 holes drilled and tapped along its length, the bottom hole measures 185mm from one end, insert this end into the post. Make sure when inserting the spline that the clearance hole (side without screw threads) is facing the same side as the 13mm dia hole. Adjust telescopic spline to the required length for 1 to 5 sign finger collars. Insert special screw with spacer into the post and fully tighten up.

2. Firstly establish configuration and assembly order of sign finger panels. We recommend the special screw is always designated the no 1 position (see separate diagram). Slide sign panels over telescopic spline until all panels are assembled as required. Check that all panels are stacked on top of each other neatly.

3. Place top clamp plate on top of the final sign finger collar with chamfer edge to the top. Insert M16 bolt with split locking washer, flat washer and nylon washer and fully tighten up using a spanner. Check bolt is fully tightened.

4. Place top finial cap over top clamp plate, making sure that M6 side screws are undone enough to allow finial to go over top clamp plate. When finial is in position, fully tighten side screws and check that it is secure.

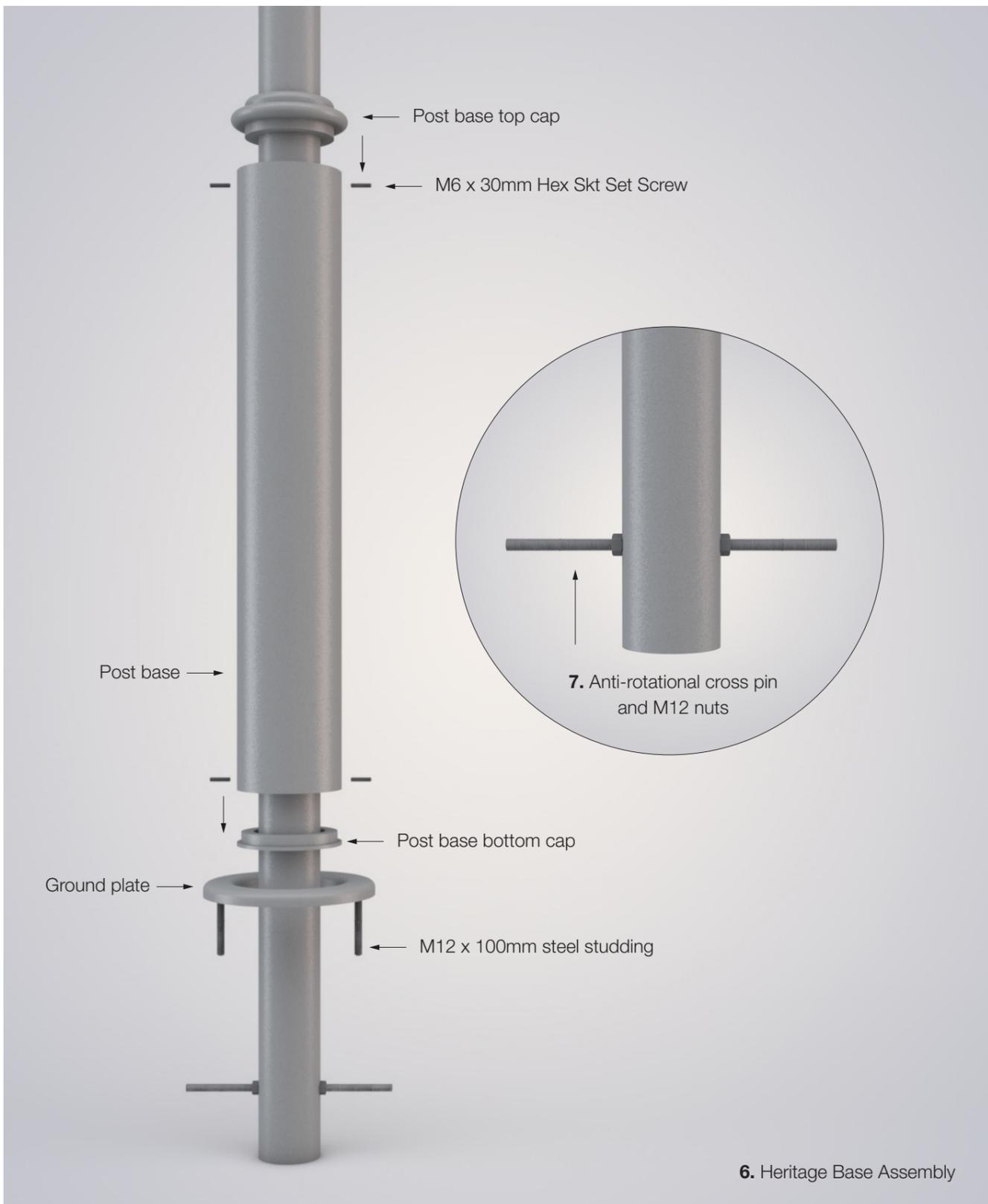
Multiple Stacked Sign Panels

Panel locking profiles are only required if directional panels sit directly on top of each other. If the design uses a bull nose spacer then locking profiles are not required.

5. Panel Alignment Procedure

Once the sign panels are fully assembled as in steps 1 to 5. Remove finger panel end caps by undoing M6 CSK head end screws, this will reveal a small groove into which the finger panel lock profiles are to be located. Insert panel lock profile into the groove and this will link the 2 panels together, continue to insert panel lock profiles until all panels are linked together and then finally refit finger panel end caps and tighten screws.





6. Heritage Base Assembly

The Heritage style incorporates an optional decorative 150mm diameter post base. The base is attached to the 90mm diameter Octopus post via top and bottom caps using M6 screws.

To assemble, starting from the bottom of the 90mm Octopus post, slide on the bull nose shaped top cap and then the large 150mm diameter base. Then slide on the bottom base cap and set at the required distance from the end of the post (typically 700mm). Slide the large diameter base over the bottom cap and tighten the M6 screws to secure in place. Slide the top cap down so it sits within the large diameter base and again tighten up M6 screws to secure in position. If the design includes for an optional ground ring then this should be slide on to the post assembly prior to fixing the anti-rotational cross pin.

7. Anti-Rotational Post Cross Pin Assembly

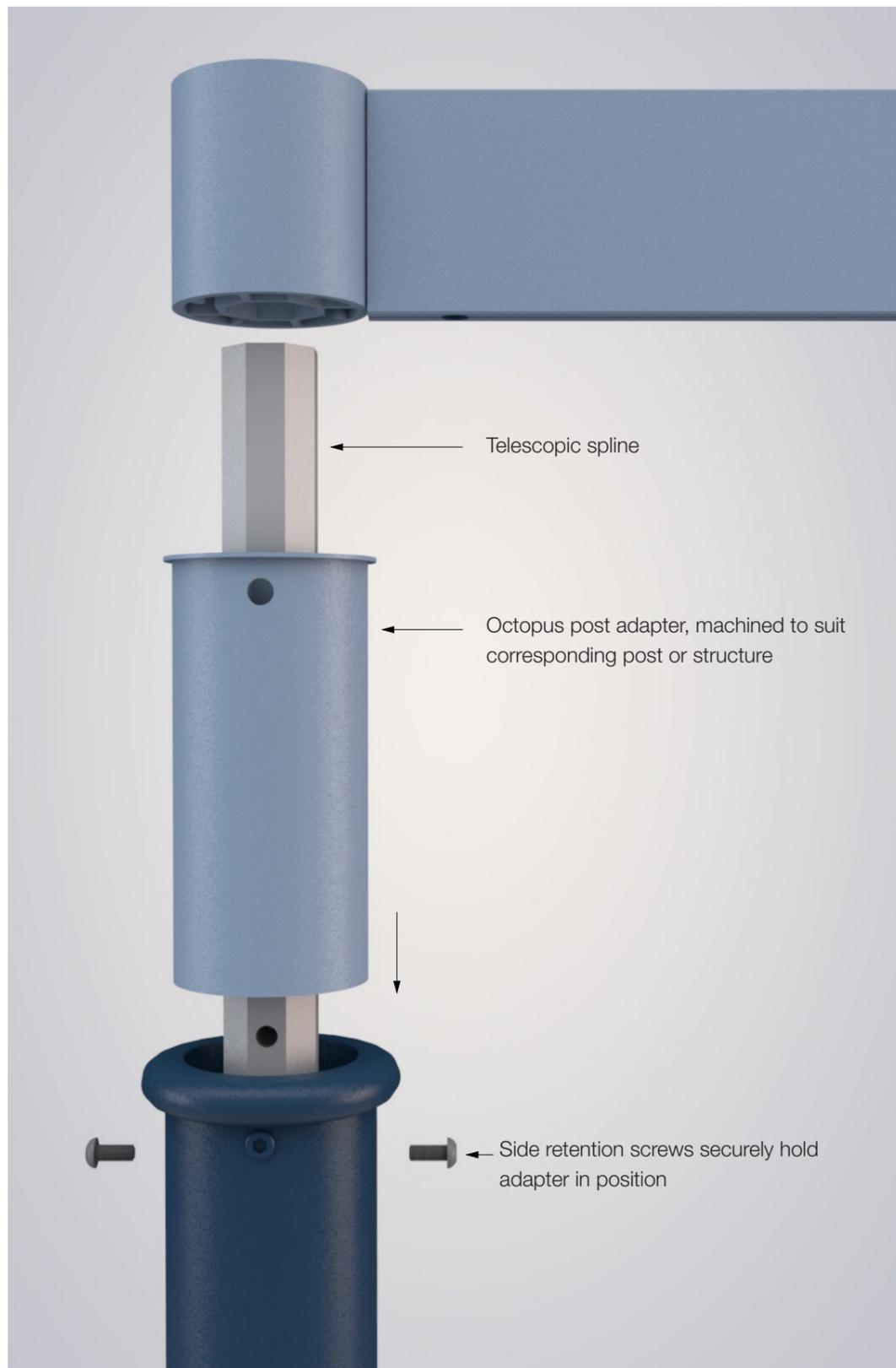
The anti-rotational cross pin is fitted to the end of the sign post, this position is easily identified by two 14mm diameter cross holes located 100mm from the end of the post. Insert threaded cross pin through the cross holes in the sign post, make sure it is central and then screw a M12 nut on each end of the cross pin to finally secure. Check that assembly is fully tightened.

Octopus Post Adapter

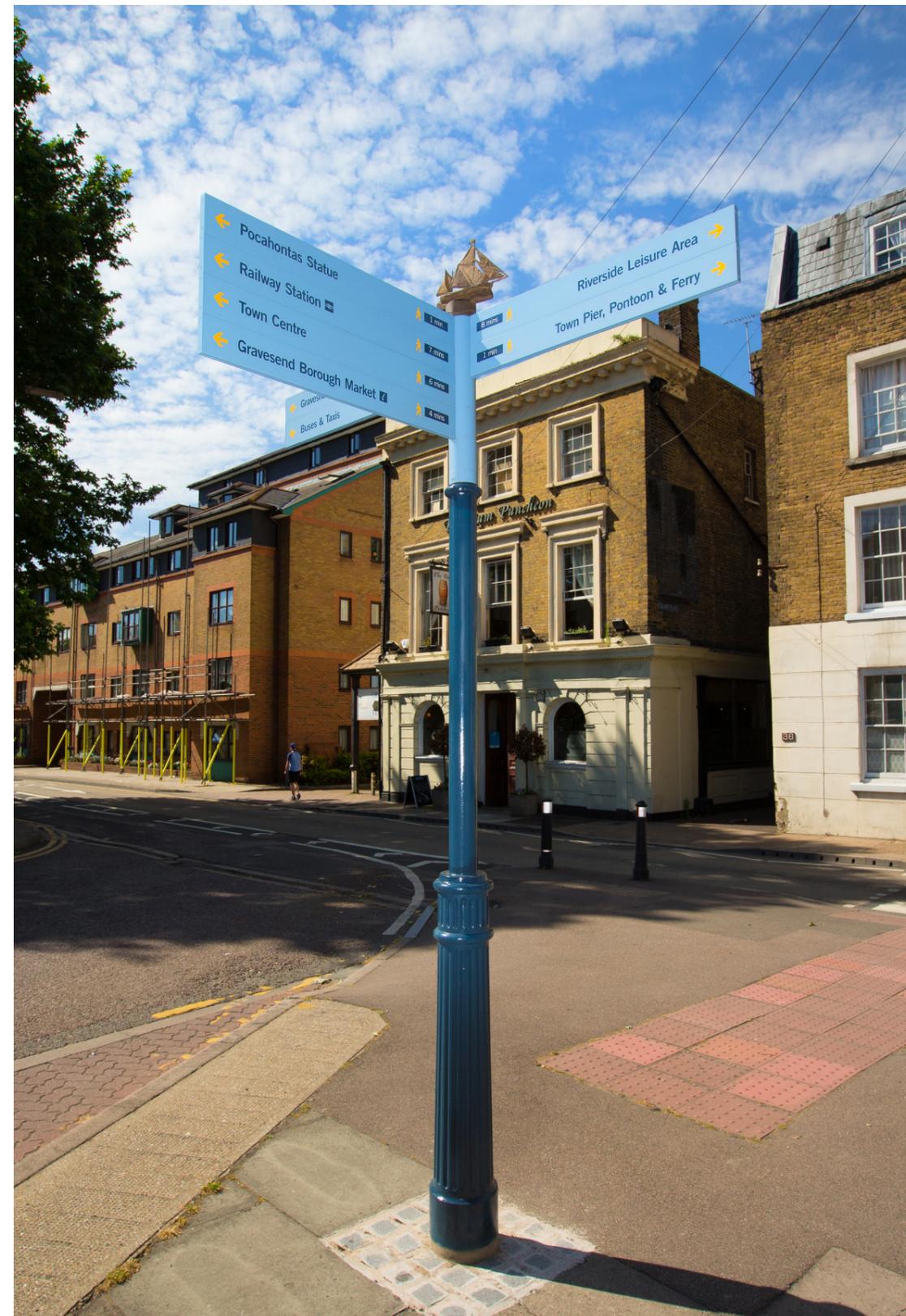
By using the Octopus post adapter it becomes possible to connect the directional finger and telescopic spline assembly to other types of posts or structures. These can include: existing sign posts on site, stainless steel posts, steel posts, glulam timber posts and even square posts.

Each post adapter solution may differ so the adapter is uniquely machined to suit each application.

Please seek advice when wanting to use the Octopus post adapter.



Example of Octopus post adapter, used to connect directional fingers and telescopic spline to existing cast sign post.



Configuration & Graphic Application

Directional Positioning of Finger Panels

We recommend the use of the following system to correctly position finger panels and to produce a consistently looking finger post sign.

To establish a reference point on the round sign post, this is done by allocating position no 1 to the special screw.

Direction of sign fingers can be allocated to 1 of 8 positions, these positions are equally positioned at 45 degrees apart.

The sign finger is then allocated to a sign finger collar level, there are a total of 5 levels available. Typically allocate from the top level 1 and work downwards. Where 5 levels are not used in the sign configuration this can be accommodated by adjusting the telescopic spline to suit the number of levels or by using blank sign finger collars. We would recommend that sign finger text is sorted by alphabetical order as a general rule.

Graphic Application

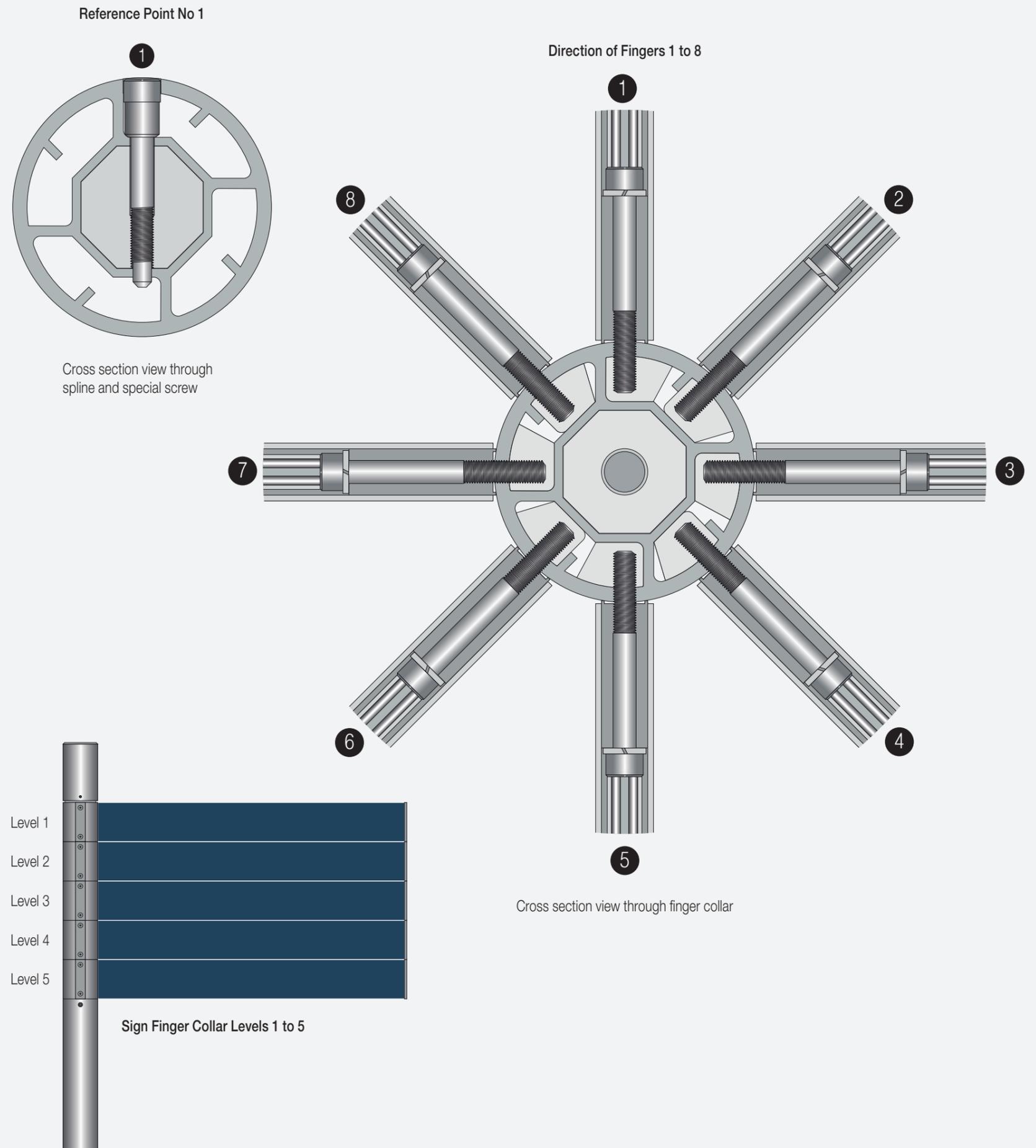
Octopus sign fingers accept a wide range of graphic processes, ranging from: self adhesive vinyl text, screen printing, direct to media digital print and engraved lettering.

When using self adhesive vinyl we recommend the use of a good quality vinyl, typically with a durability life span of 7 to 10 years. Always follow manufacturers guidelines to achieve best results.

Screen printing is also recommended, always follow manufacturers guidelines to achieve best results.

Direct to media digital print process can be used but care must be used to check the suitability of this print process to adhere satisfactorily to painted sign panels. The use of a clear over lacquer may assist with external durability.

Engraved lettering is recommended, care should be taken to ensure infill enamels adhere correctly.



Finger Positions Chart

There are 40 possible directional finger panel positions on a standard 5 collar high Octopus finger post sign.

To simplify the specifying of these positions we have devised a simple chart to provide clear and precise information.

We recommend starting at collar level C1 and then allocating the relevant finger positions P1 to P8 that are used on that level. This is then repeated for collar levels C2, C3, C4 and C5. Each sign may require its own chart as the finger panel positions are often different.

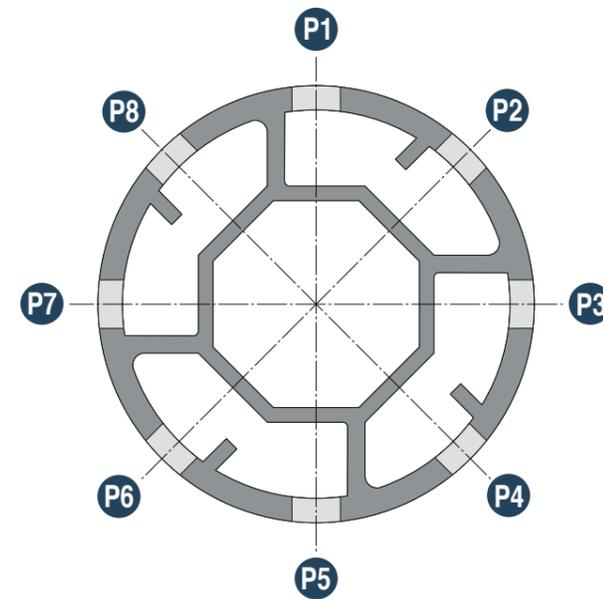
Please note:
More than 5 collar levels are available by special request.

It is recommended to have a maximum of 15 directional fingers per sign, please seek advice if the requirement is in excess of this.

Sign Reference:

Finger Positions

Diagram below shows the 8 finger positions at 45 degrees around the post

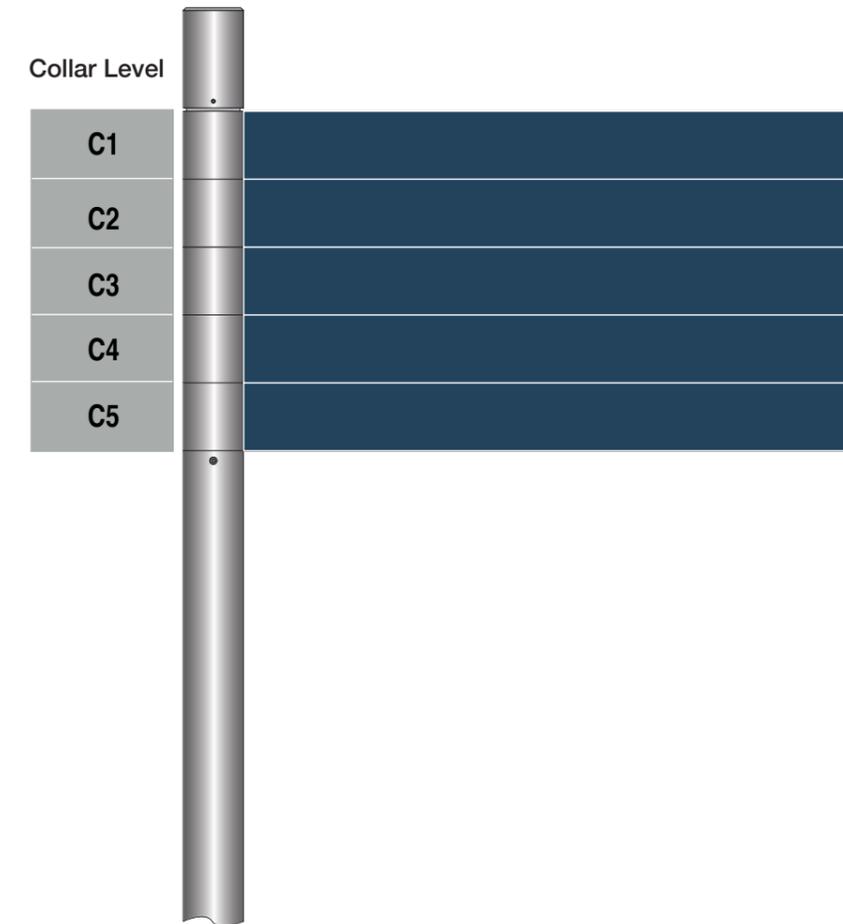


Finger Position Chart

Collar Level	P1	P2	P3	P4	P5	P6	P7	P8
C1								
C2								
C3								
C4								
C5								

Collar Level Positions

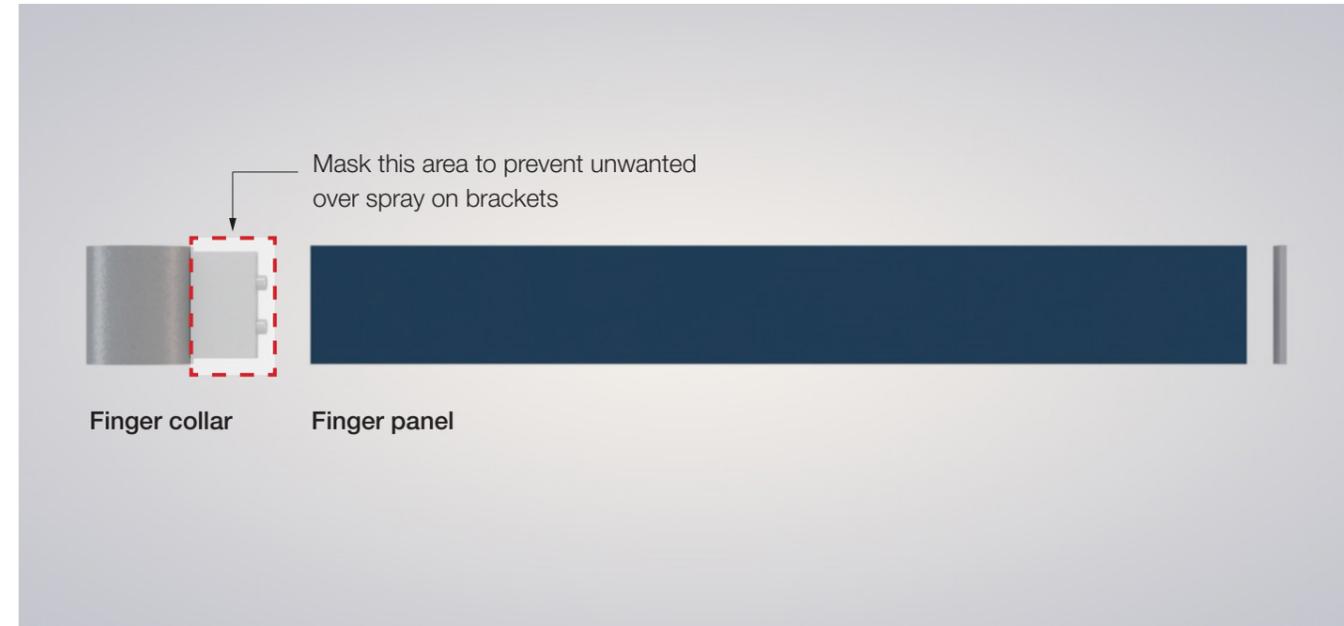
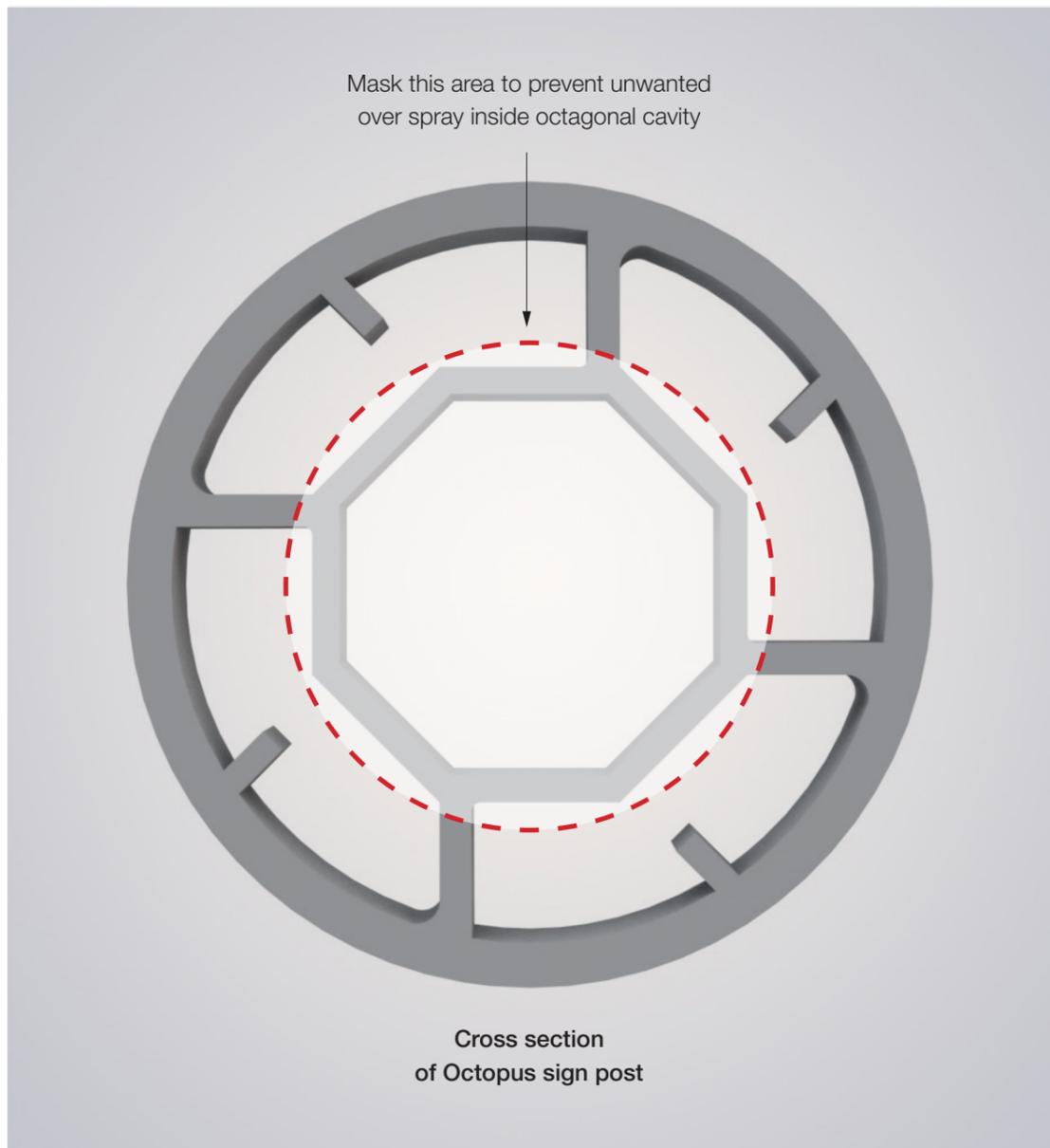
Diagram below shows 5 standard collar levels



Paint Finishing

Paint Systems

Octopus Finger Post Sign System is ideal for painting and we recommend the use of a good quality wet spray or powder coating system. When applying any paint finish always follow manufacturers guidelines to achieve best results. Where powder coating is used, care should be taken to not apply heavy coats on corners or edges that may affect the operational performance of the sign system.



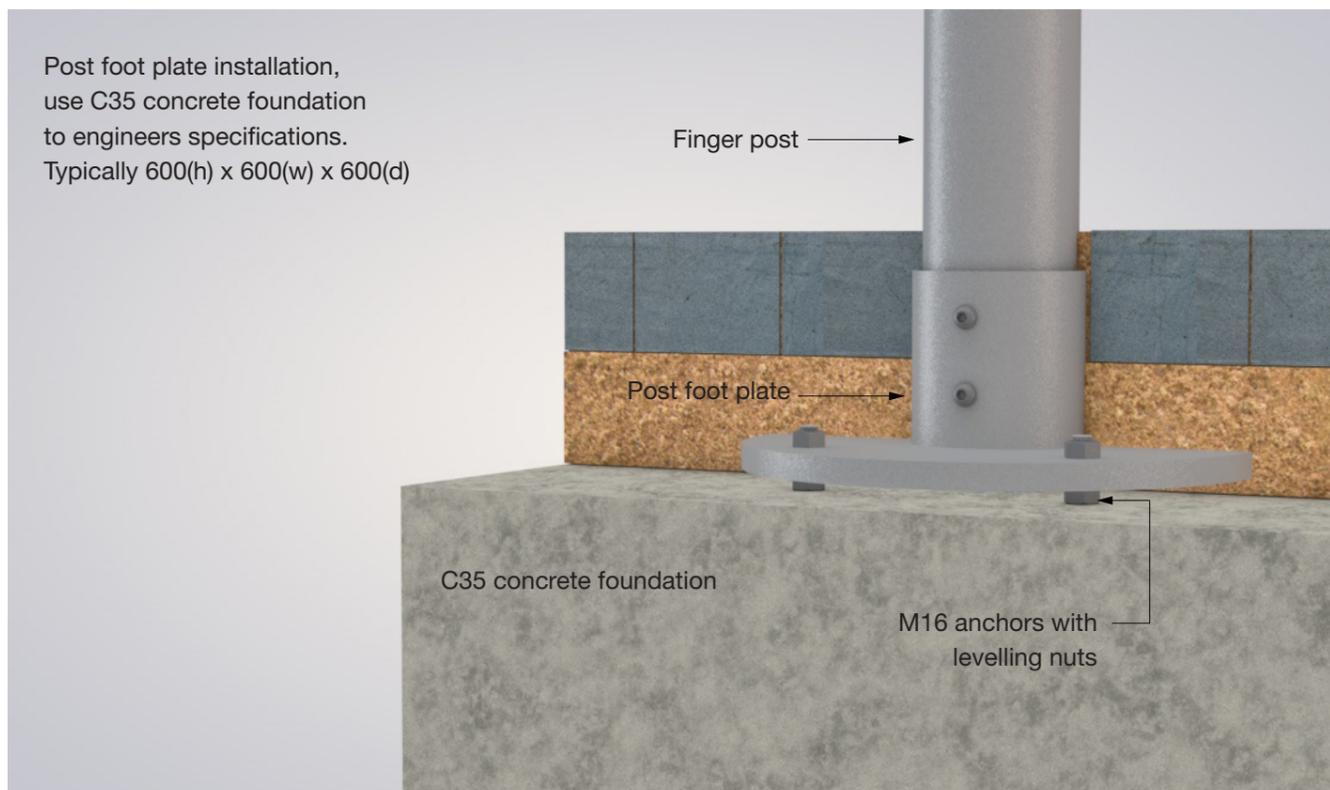
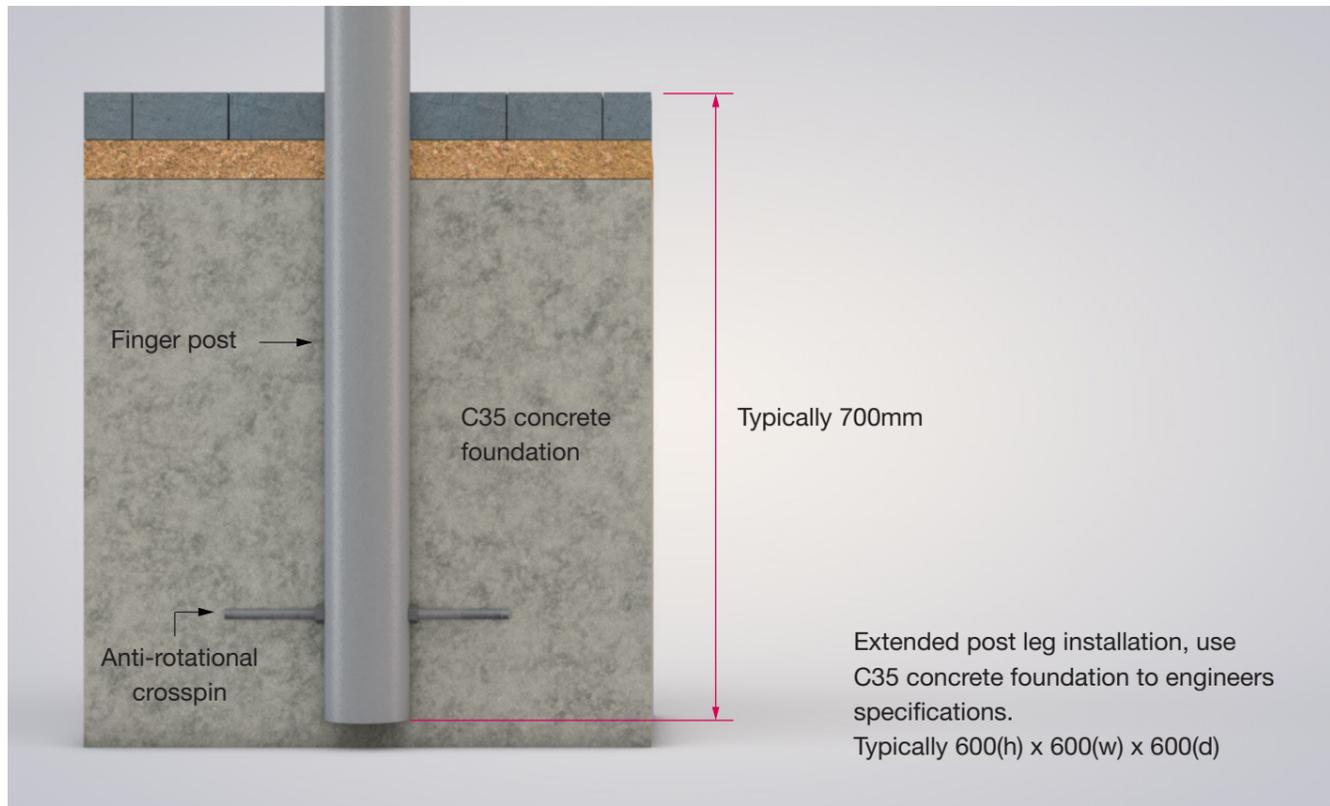
Masking of Components

Due to the close slide fit of the telescopic spline, sign post and finger panel collars it is essential to prevent any over spray from getting inside the octagonal shaped cavity. We recommend that octagonal cavities are locally masked to prevent unwanted over spray.

If sign finger panels and sign finger collars are to be finished in different colours then we recommend that these be painted separately. Sign finger collar brackets should be masked to prevent over spray as the bracket has a close internal fit to the sign finger panel.

Telescopic Spline

We do not recommend the painting of the telescopic spline as this may cause the spline to jam inside the sign post. The spline is protected by an AA25 external grade anodised finish.



Installation

Extended Post Leg Installation

The Octopus Sign System is designed to be installed by burying the sign post into a concrete foundation.

Before installation can take place the foundation details must be calculated to suit the unique geographic location where the sign is to be installed, this will take into account factors like wind loading and soil types. We are therefore not able to specify foundation details as each location is unique and should be calculated as such.

The generic layout diagram shows a typical foundation that will require verification subject to survey and geographic location.

Sign posts are supplied at 3.3mtr long of which 700mm should be buried below ground. The distance from ground level to the first finger or to the top of the sign post is 2.6mtrs. The poured concrete base is located 150mm below ground level, this is to allow for reinstatement of paving slabs, tarmac, concrete or soft landscape. When excavating for the concrete base, pocket sides to be produced straight and perpendicular, base of pocket to be flat. Sign should be set square and central in the excavated pocket and then concrete poured to the required level. Make sure all air bubbles are removed from the freshly poured concrete.

Note signs can be installed with or without sign fingers attached. Great care must be taken if installing without fingers to ensure the post is correctly orientated. We would recommend the use of a directional template to assist with alignment of the post.

Post Foot Installation

An alternative method of installation is available using a post foot plate arrangement. To use this installation method the Octopus sign post must be reduce in length by 550mm.

The footplate is secured to a concrete foundation using M16 chemical anchors or expansion bolts. Typically the footplate is secured subsurface to allow for making good however it is possible to secure at ground level if required. Please seek advice when wanting to use this alternative installation method.

We reserve the right to change the specification at our discretion



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