

# Passafe De-Mountable Post System

## Installation Guide

The Simmonsigns PASSAFE is a demountable post system ideal for vulnerable sites or where posts need to be removed for wide loads etc. It comes pre-wired for use with other 24 volt Simmonsigns products and offers a quick change post facility as well as enhanced driver safety. It is important that the foundation is prepared correctly to ensure the structural integrity of the system should the post be impacted.

### **TOOLS YOU WILL REQUIRE**

Excavation equipment.
Spirit level
Concrete mix
2 x 17mm AF spanner
19mm af socket
Small electrical screwdriver

## **ELECTRICAL CONNECTIONS**

- 1. The PASSAFE is supplied with a 24 volt 10 Amp supply module which operates from a standard 240 volt supply. The 10 amp supply can be used to power several 24 volt products totalling no more than 10 amps. This is sufficient to run two bollards, two Invinca 600mm LED illuminated signs and one CENTRENOL or one MODUCIC centre Island units over a cable distance of 50m (using 2.5mm conductor size). This makes it ideal for use in centre island locations.
- 2. For maximum safety the 24 volt supply module should be mounted away from the traffic threshold, but near a convenient fused 240 volt supply. This could be in an existing lighting column or in a mini pillar. 24 volt cables are then run into the traffic zone presenting lower risk to road users.
- 3. A typical wiring scheme for a centre island installation is shown overleaf.

### **FOUNDATION INSTALLATION**

- 4. Referring to installation drawing (overleaf). Note that the Passafe duct is **ORANGE**.
- 5. The PASSAFE foundation duct is engineered to be planted into a foundation hole measuring 800mm x 800mm wide by 559mm deep. For the purpose of drainage, the base of the hole should be compacted hard core preferably in free draining ground.
- 6. Take the assembled foundation duct (as supplied) and place in the bottom of the excavated hole with the Traffic flow indicators correctly aligned. **This ORIENTATION is VERY IMPORTANT**
- 7. Once the orientation of the duct is set, feed in necessary ducting and cable using appropriate 50mm and 100mm knife knock outs. NOTE: the centre Ø50.00mm knockouts can be simply hammered out using a ball pain or claw hammer. The outer annular may need to be scribed through with a blade. The ducting should suit the proposed wiring plan. Keep in mind a 25 metre supply cable is provided with the PASSAFE.
- 8. After ducting, check the duct orientation has not moved.
  9. Next, taking note of the finished ground level indicators on the foundation cover plate, level up using a spirit level. The foundation cover plate clearly indicates the finished ground level with the text reading "Ground level". This should be set level with any kerb tops or the desired finished site level and levelled using a spirit level.

10. Once entirely happy with duct entry, foundation orientation and level, proceed to back fill with concrete.

NOTE: To securely restrain the foundation it should be completely submerged in concrete to the installation instructions.

- 11. CONCRETE MIX In layman's terms, the concrete used should be composed of the following:- 1 part cement to 5 parts ballast (50/50 sand/gravel mix). As the foundation is progressively back filled with concrete, continue to check orientation and level to finished ground level. Re-adjust if necessary.
- 12. Ensure concrete foundation is well bedded around the stainless foundation restraints.
- 13. Bring concrete right up level with top edge of the stainless steel rebate valance and finally float surface to finish.
- 14. Remove any debris from top of the foundation and allow to cure.
- 15. Remove the four plastic protection plugs and the revealed M12 dome nuts. Retain for refitting later.
- 16. Remove the cast cover plate and uncoil the supply cable found in the bottom of the foundation.
- 17. Feed the cable back to the PASSAFE 24 volt supply point and terminate. Ensure that any cable passing through the duct is tied back to the duct wall with the ties supplied so that it is not trapped when the post is inserted.

#### FITTING THE PASSAFE POST

- 18. It may be found easier at this stage to fit any additional products to the post. The post is pre-wired for fitting two Simmonsigns Invinca signs back to back, mid way up the post. If this facility is not required the cables can be pushed back into the post and the holes capped with the supplied blanking grommets. There is also provision for a CENTRENOL or MODUCIC centre Island globe units at the top of the post. Please see Doc ref IG082 CENTRENOL AND MODUCIC Installation Guide.
- 19. Remove the post locking pin from the cast cover plate using 2 x 17mm AF spanners.
- 20. Pass the PASSAFE post through the bore of the PASSAFE cover plate and align the locking pin holes. Refit the post locking pin. The wiring loom within the post is terminated in an IP68 connector which should be pulled out through the large hole in the side of the post.
- 21. Ensure the cast cover seating is clean and free from debris.
- 22. Raise the post and cover plate assembly and as it is placed in the foundation rebate, connect the IP68 connector to the incoming 24volt supply.
- 23. If the connector is an Aquasafe type (see overleaf), please ensure that the plug and socket are pushed together until there is an audible click. If the connector is of the Hylec type please ensure the locking ring is tightly secured.

Note: Check connector cannot be pulled apart to ensure correct connection.

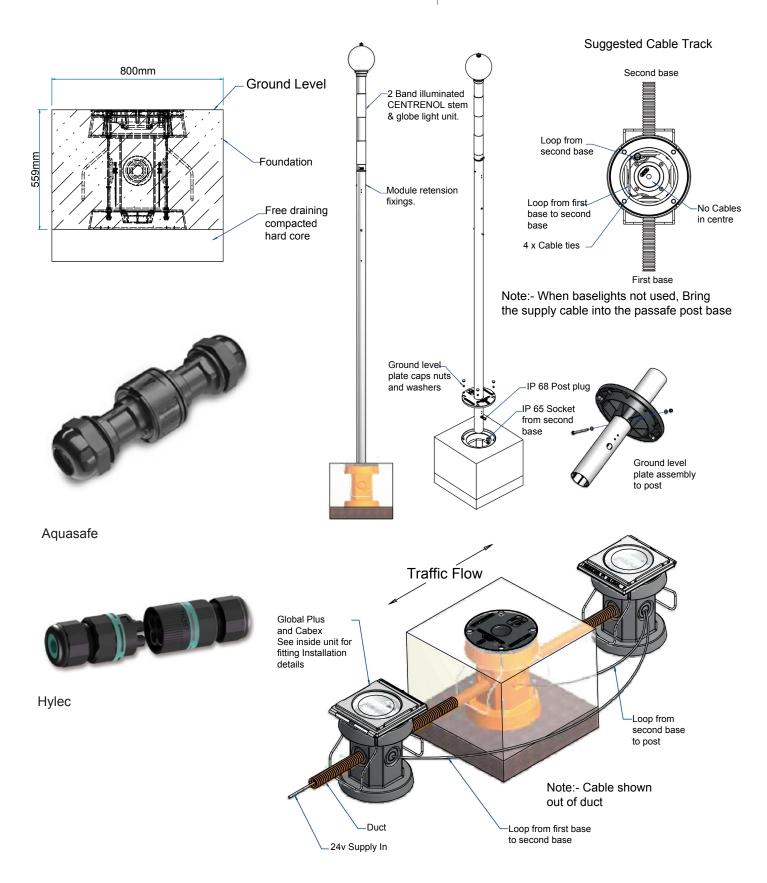
- 24. Complete the fitting of the post to the foundation ensuring that the traffic alignment is considered.
- 25. Replace the 4x M12 dome nuts and protective caps.

Simmonsigns Limited reserves the right to alter or improve this guide without prior notice.



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