

CLIENT :  
VOLVO

PROJECT :  
EXTERNAL SIGNAGE

SITE REFERENCE :  
-

PRODUCT TYPE/DOCUMENT TITLE :  
CONTRACTORS GUIDE



DRAWING / DOCUMENT No :  
VOLVO CONTRACTORS GUIDE

ISSUE :  
8      DATE :  
02.12.19

DESIGN STATUS :  
NOT FOR CONSTRUCTION

DESIGN REGISTER

Our design information is issued as a multi-page document. Each document has a unique number and each drawing or page a sequential number of that. Individual drawings/pages within a document have a revision status marked by a letter and a red rev' cloud on the drawing. Each document issue is marked by a number, the table below provides a history of this document.

ISSUE :	DATE :	DESIGNER :	CHECKED :	APPROVED :	DESIGN STATUS :	SUMMARY OF ISSUE :
8	02.12.19	KM	SC	CM	NOT FOR CONSTRUCTION	DETAILS ADDED AS PER PM COMMENTS
7	23.08.19	KM	NB	CM	NOT FOR CONSTRUCTION	BASE DETAILS ADDED FOR SELEKT COMMS PANEL AND SELEKT TOTEM
6	17.07.19	KM	NB	CM	NOT FOR CONSTRUCTION	ENTRANCE PORTAL ADDED. SELEKT SIGN UPDATED
5	01.05.19	-	-	CM	NOT FOR CONSTRUCTION	DRAWING UPDATED
4	01.10.17	RA	MA	HW	NOT FOR CONSTRUCTION	TWIN POST PARKING SIGN REMOVED
3	15.02.17	AJ	MA	HW	NOT FOR CONSTRUCTION	5.2 UPDATED
2	10.02.17	JW	MA	HW	NOT FOR CONSTRUCTION	FULL SUITE OF CAR PARK SIGNS ADDED
1	25.01.17	JW	MA	HW	NOT FOR CONSTRUCTION	DRAWING FIRST ISSUED

RISK ELEMENTS

During design development risks are identified on drawings/pages using a bold red dashed box. This could be information or detail yet to be confirmed leading to risk in proceeding or ones that remain in the design but highlighted to reduce risk to construction, safety, health or the environment. The table below shows numbered risks and how these have been managed.

RISK No :	DESCRIPTION OF RISK :	RESOLUTION AGREED :
R1	-	-
INDICATED BY : <div></div>		



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# 1. PROCESS MAP

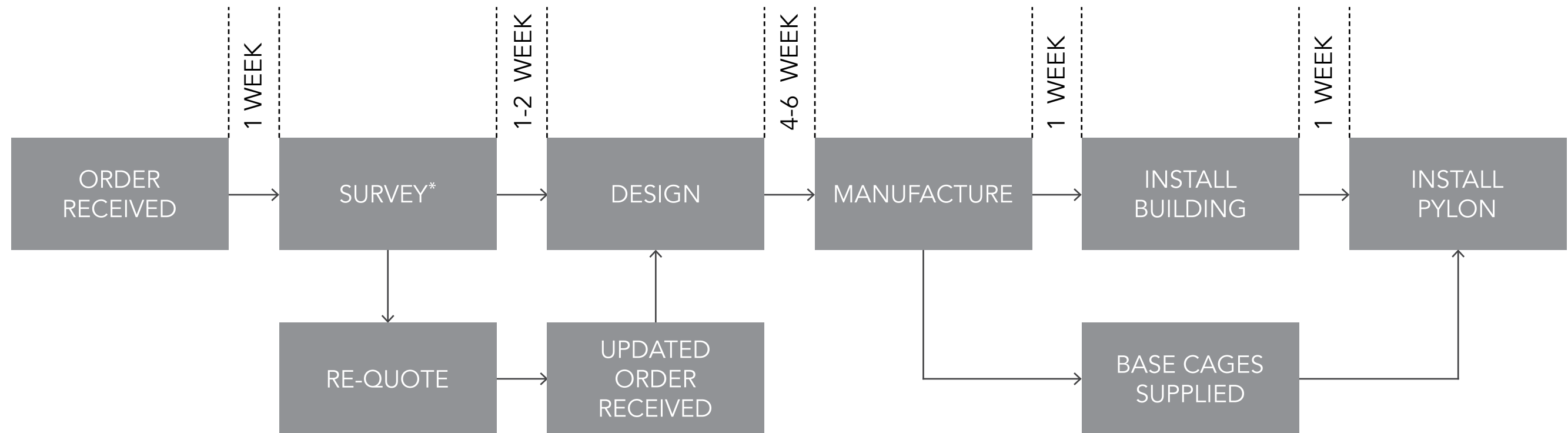




## 1.1 PROCESS MAP & ESTIMATED LEAD TIME

Information below based on a standard site of two half height monoliths, one pylon, one directional sign, one opening hours sign, one set of dealer name letters and six car parking signs.

*\*Survey should be carried out upon building completion*



## 2. MONOLITH SIGNAGE



## 2.1 MONOLITH - DESIGN OVERVIEW

### IMPORTANT SIGN TYPE INFORMATION FOR ON SITE CONTRACTORS

Monolith signage is constructed using powder coated Aluminium with only the 'Volvo' text illuminating.

The sign requires a 10 amp electrical supply, preferably inside the dealership centred at the rear of the sign.

An approximate sign weight can be calculated on the basis of  $1\text{m}^2 = 18\text{kg}$

The substrate required for sign installation should be solid, e.g. Timber at least 18mm in thickness. Alternatively for sheeting we can fix into existing purling's and tie back with screwed rod and Unistrut. To allow for this ensure we have access to the rear prior to any bulkheads or plasterboard erection.

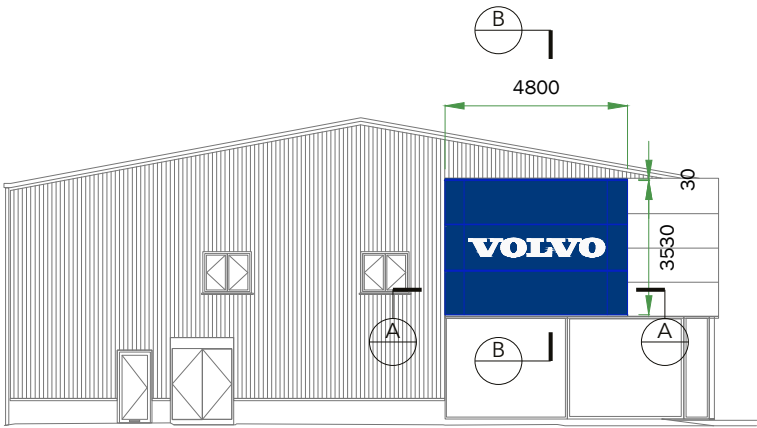
If installation is required to glazing a full Merson Group site survey will determine an appropriate fixing method.

Illuminated signage to be connected from an independent external lighting circuit on a photoelectric cell and time clock controller for control of sign illumination separately from general external lighting

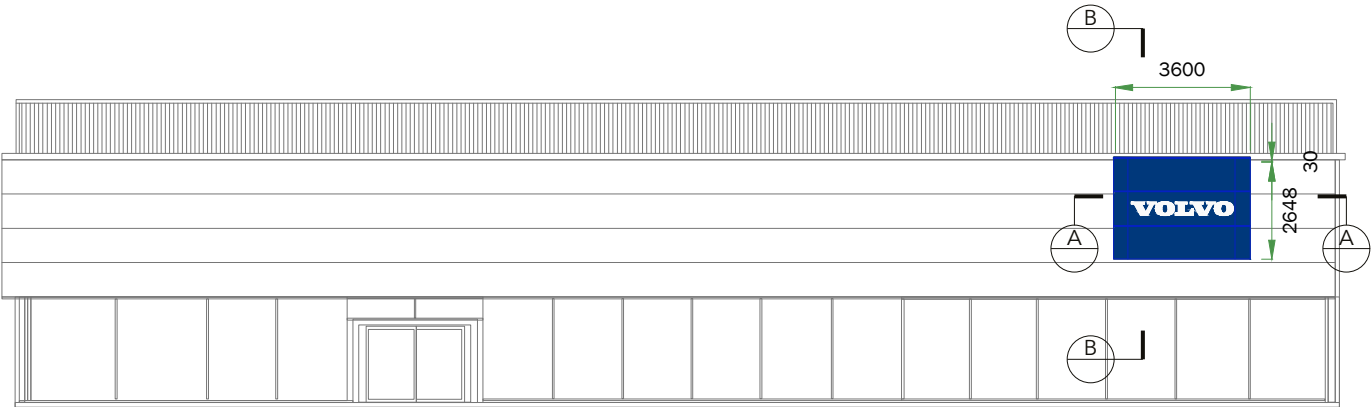


2.2 MONOLITH SIGNAGE - CONSTRUCTION DETAIL

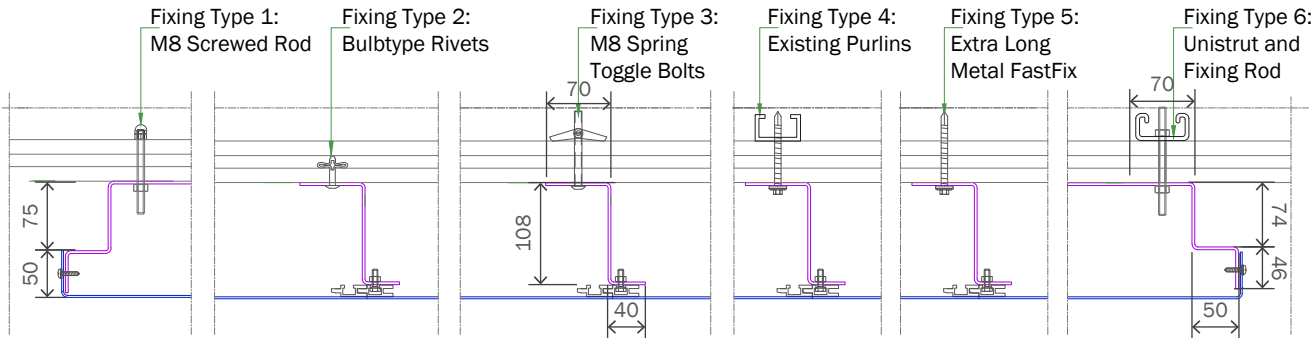
Each site will have different amount of available space which will dictate sign size. Appropriate tolerances will be allowed for in height but in general each sign should fill the overall height available.



Proposed Elevation 1  
not to scale

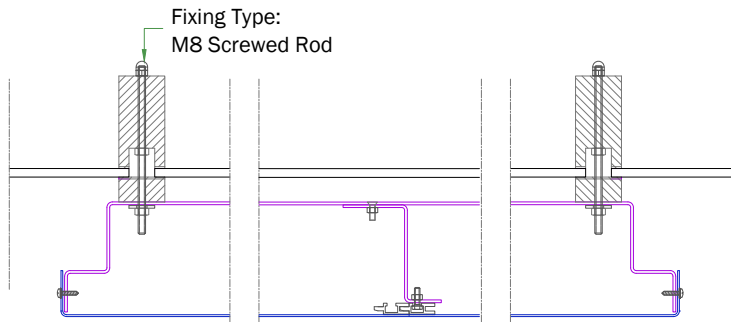


Proposed Elevation 2  
not to scale



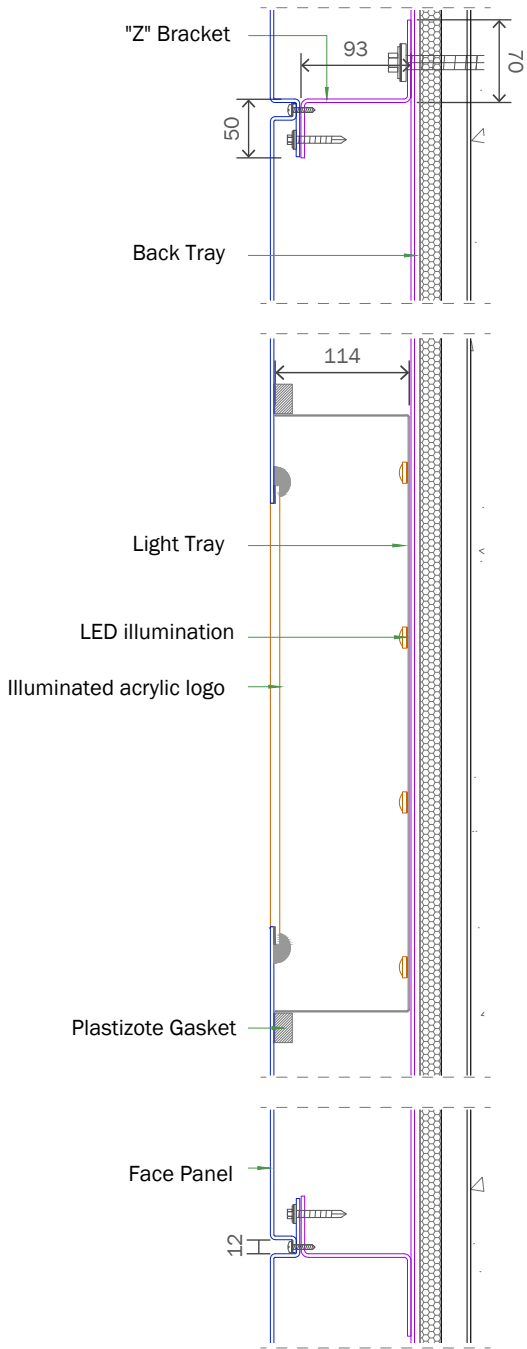
A Section  
not to scale

RENDERING BACKROUNG



A Section  
not to scale

MULLION



B Section  
not to scale



# 3. PYLON SIGNS



### 3.1 PYLON - DESIGN OVERVIEW

Bases to be installed by main contractor.

Merson Group can obtain planning consent for the full pylon. This must be advised as required at the point of order. Decisions from local authorities can take up to 12 weeks

Merson Group to supply base cages on an approximate two week lead time

Base requires 5-7 days curing time before installation

10amp wire armoured supply required by others

Final electrical connection to be undertaken by an Electrical contractor

Base specification on pages 13-15

Illuminated signage to be connected from an independent external lighting circuit on a photoelectric cell and time clock controller for control of sign illumination separately from general external lighting





### 3.2 PYLON - GENERAL SPECIFICATION

Constructed mainly from blue and silver coloured aluminium, this sign is available at a height of 5.5 metres. Suitably located at a high visibility location with only the letters illuminating, this sign will be very attractive and effective.

Electrical supply to this sign should be a 10 Amp wire armour supply. See information on page 13. All electrical work should be installed in accordance with current I.E.E. wiring regulations (16<sup>th</sup> Edition. BS7671 : 1992 - current revision as at June 2001). The final connection is required to be completed by an electrician. Merson Group will leave the cable available.

Root cages are available from Chris Mclean at Merson Group on 07733119228. Please quote size, site and delivery address at point of order.

Foundation details information can be found on pages 13 and 14.

\* Other size options only supplied in rare circumstance and are not generally freely available



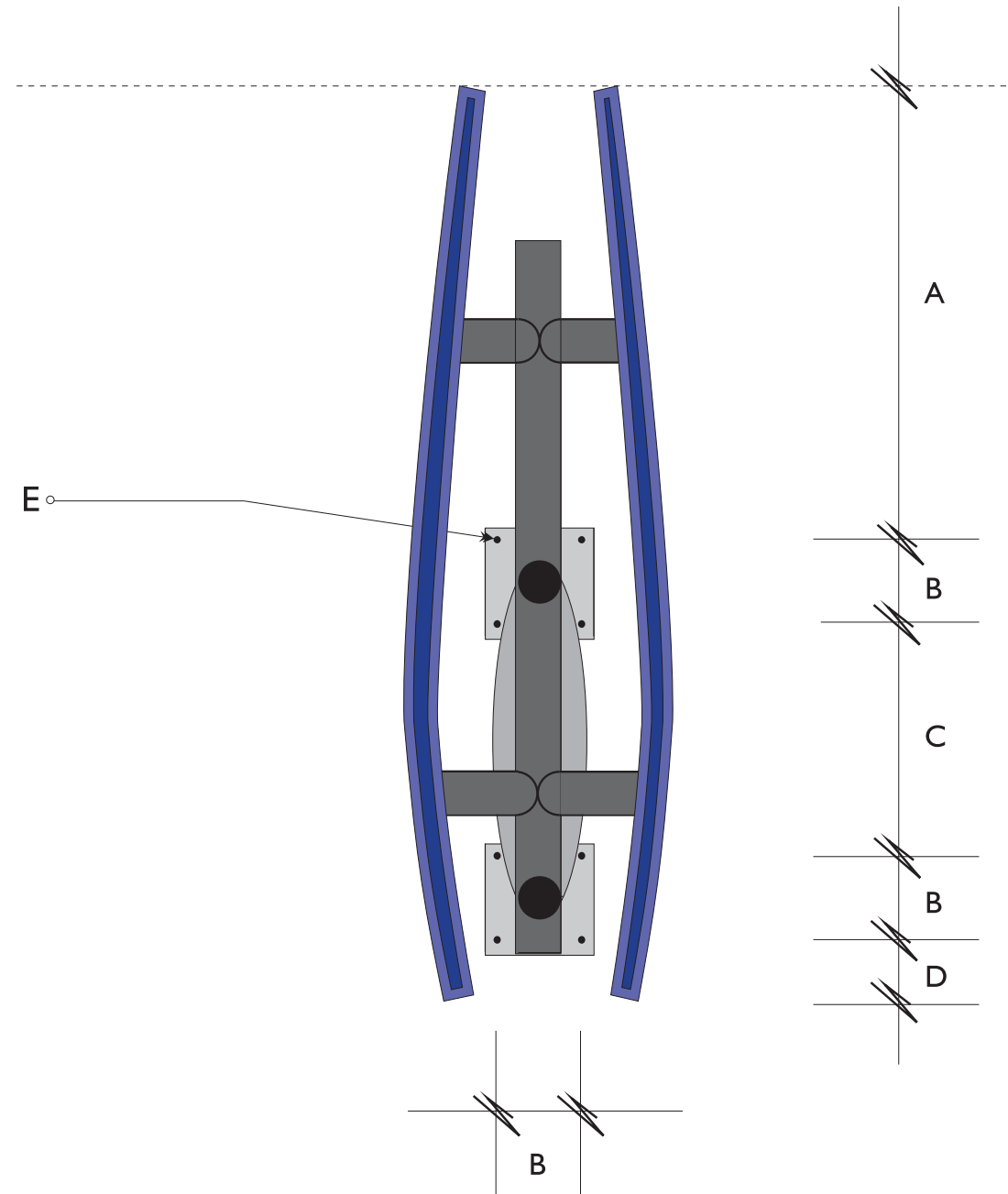
### 3.3 PYLON - POSITIONING

Pylon must not project over the boundary or kerb lin.

Pylon is to be 90 degrees to the showroom building and facing out.

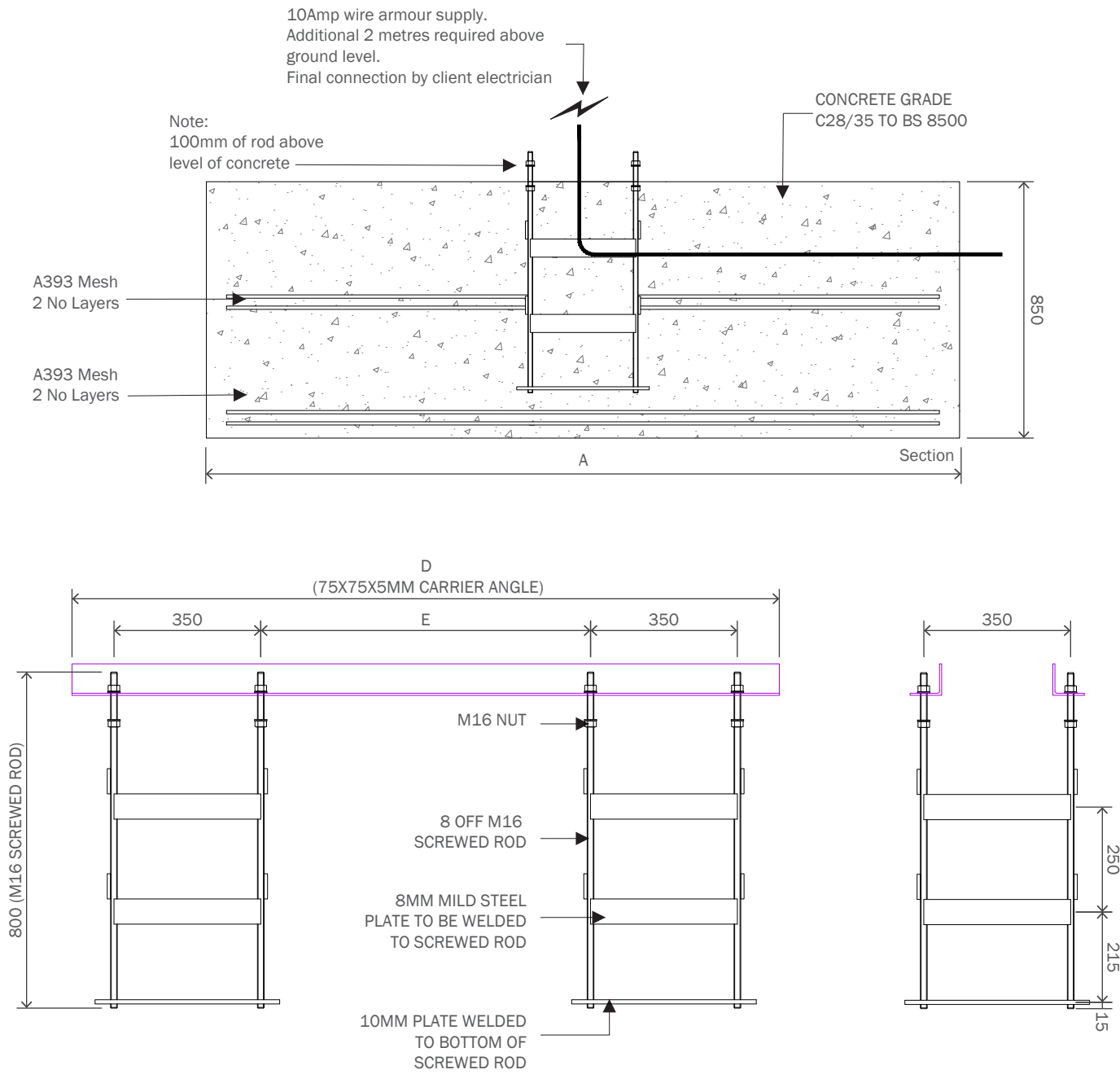
		5.5m	4.5m	3.6m
<b>A</b>	Bolt centres to front of sign	1800	1400	860
<b>B</b>	Bolt centres	350	250	250
<b>C</b>	Bolt centres	785	695	695
<b>D</b>	Bolt centres to rear of sign	295	205	197
<b>E</b>	Hole diameter	25	25	25

Note: The configuration of the 3.6m base plate is different to the others and therefore not proportionate





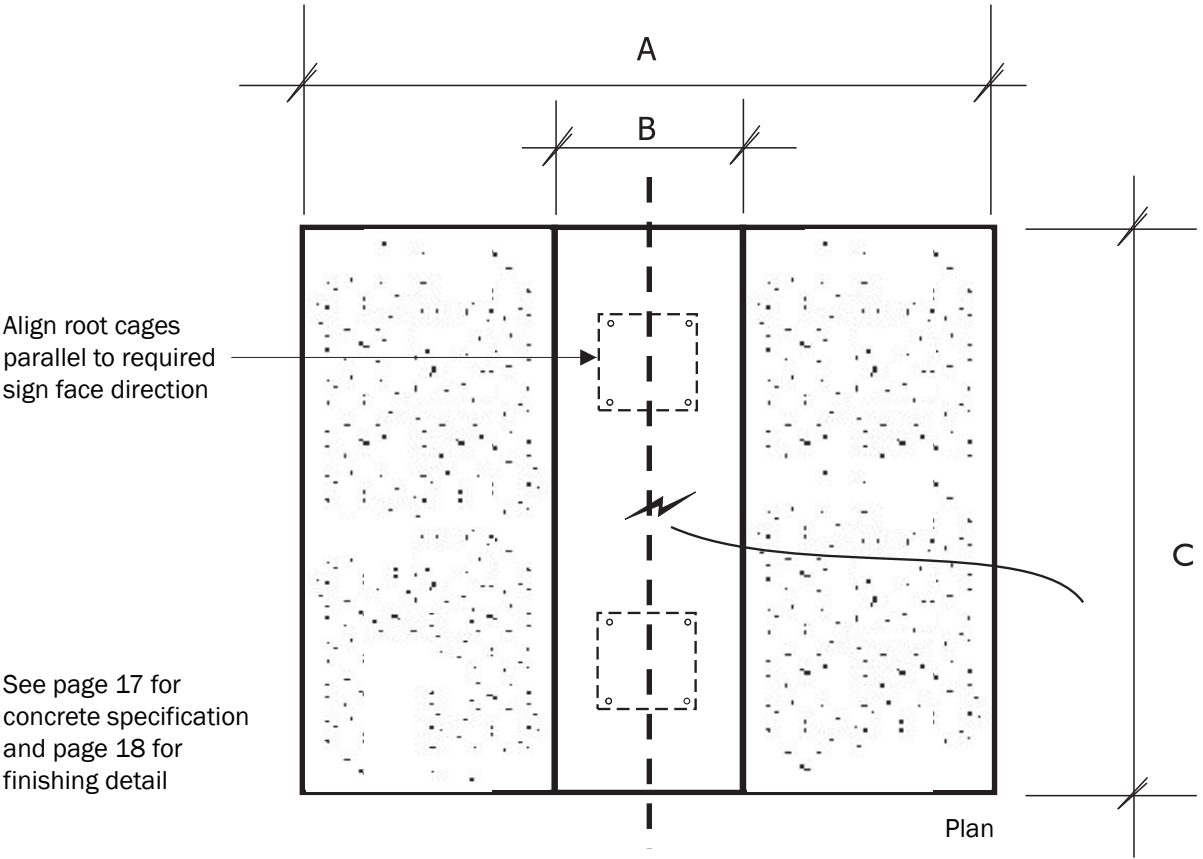
3.4 PYLON - FOUNDATIONS



**NOTES**  
Carrier Angle to be removed once concrete has set



	A	B	C	D	E
3.6 metre	1800mm	500mm	1800mm	TBC	TBC
4.5 metre	2200mm	600mm	2200mm	TBC	TBC
5.5 metre	2500mm	600mm	2500mm	1686mm	786mm



### 3.4 PYLON - FOUNDATION SPECIFICATION

The drawings on page 13 show Pylon foundations

Design is based on Ground conditions with average bearing capacity of 50 kN/m.  
(Medium consistency clay or gravel) Any soft areas to be excavated and back filled with lean mix concrete

Concrete to be grade C28/35 to BS 8500

Mesh to have cover as shown (Top mats to be supported on steel stools from R6 bars, bent on site)

Root cages are supplied by sign manufacturer and positioned as shown

Shutters can be rough timber, or side excavation if firm. Finished concrete sizes to be not less than dimensions shown

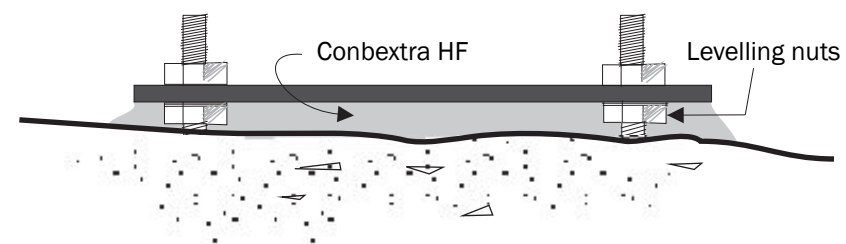
Location of sign to be determined on site by others. Existing services to be located by desk study and hand dug trial pits before start of bulk excavation. Bolt group shown is based on latest standard detail available.

Additional information for Installation teams only

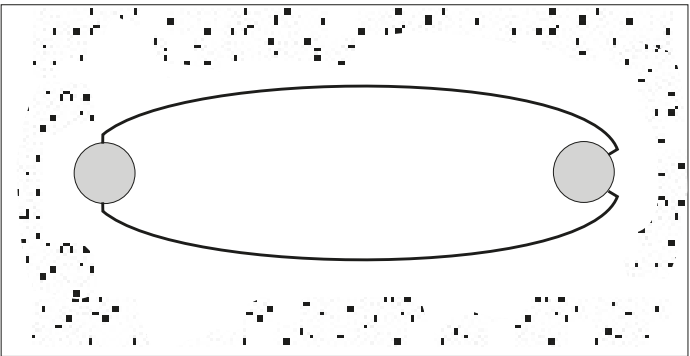
When fitting Pylon, Pole or Ground signs, Installers must fill the void below the baseplates with Conbextra HF. This would also apply to retro fit plates.

Remaining threaded rod should be cut level and all fixings epoxy painted to prevent rust and ease disassembly.

*\* Merson Group are not responsible for making good the area surrounding the base of the pylon*

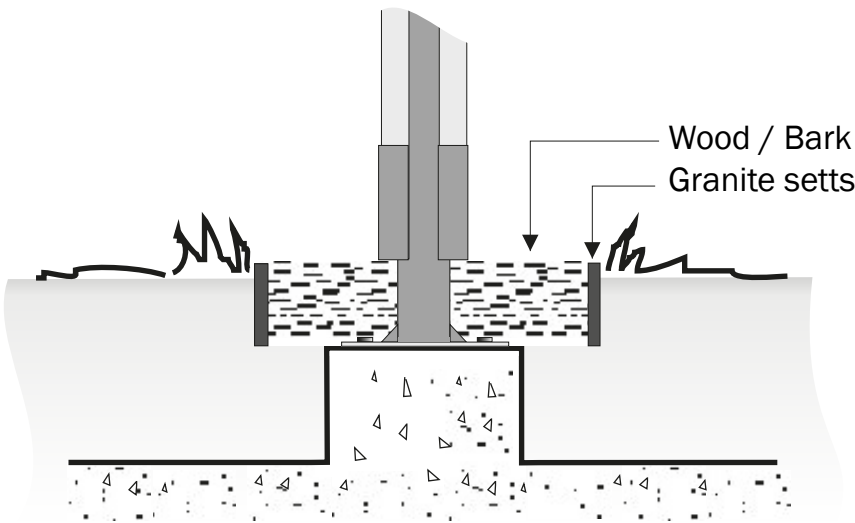


### 3.5 PYLON - GROUNDWORKS FINISHING DETAILS

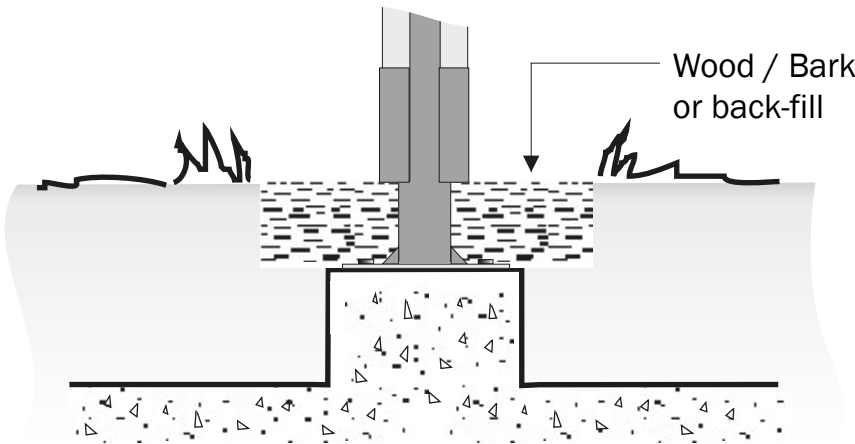


Approximate dimensions  
around signs:  
2000mm x 1000mm

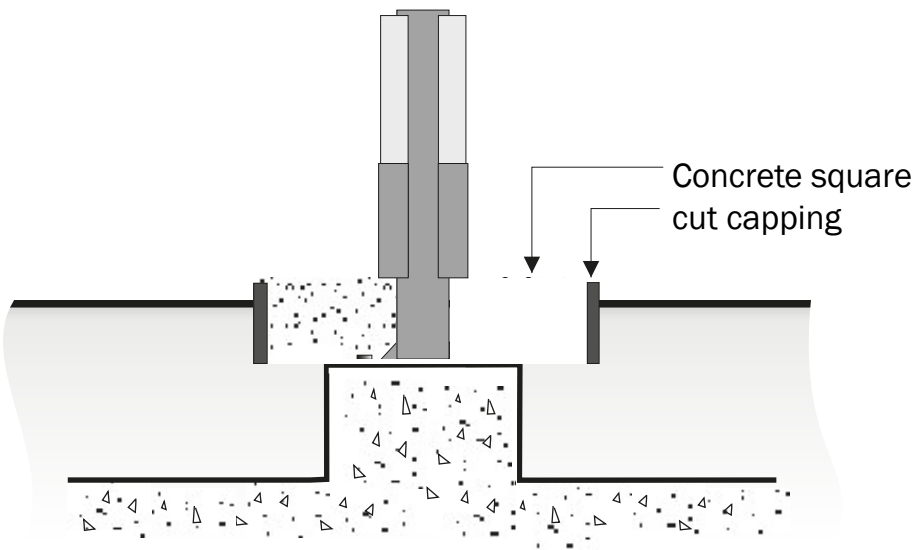
Grass



Planter



Tarmac



# 4. DIRECTIONAL SIGNS



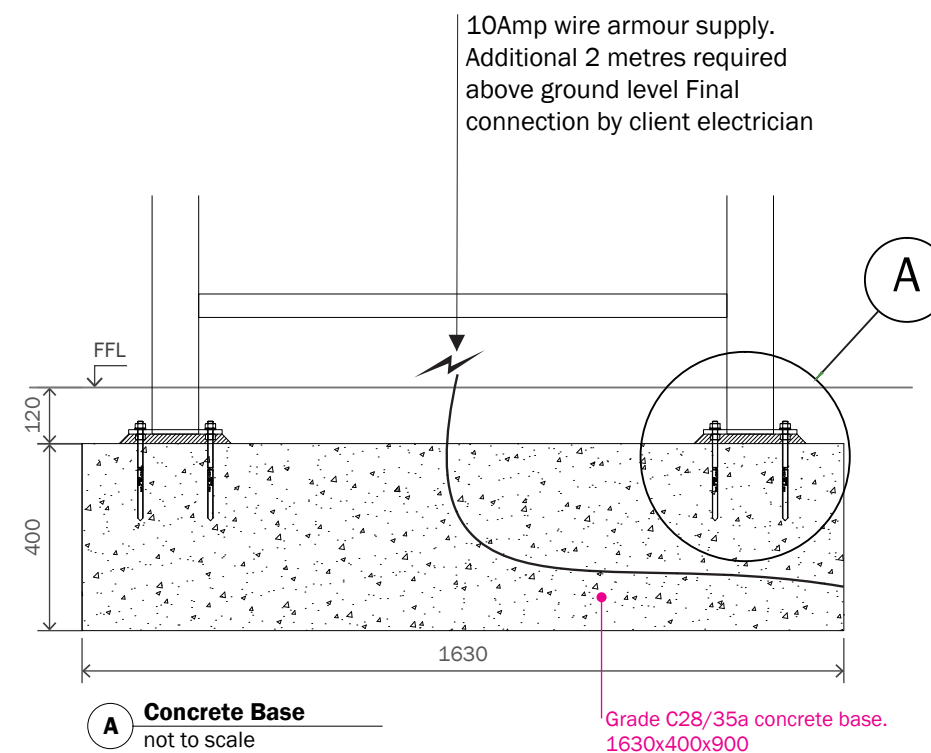
## 4.1 DIRECTIONAL SIGNS - DESIGN OVERVIEW

Bases to be installed by main contractor

Base requires 5-7 days curing time

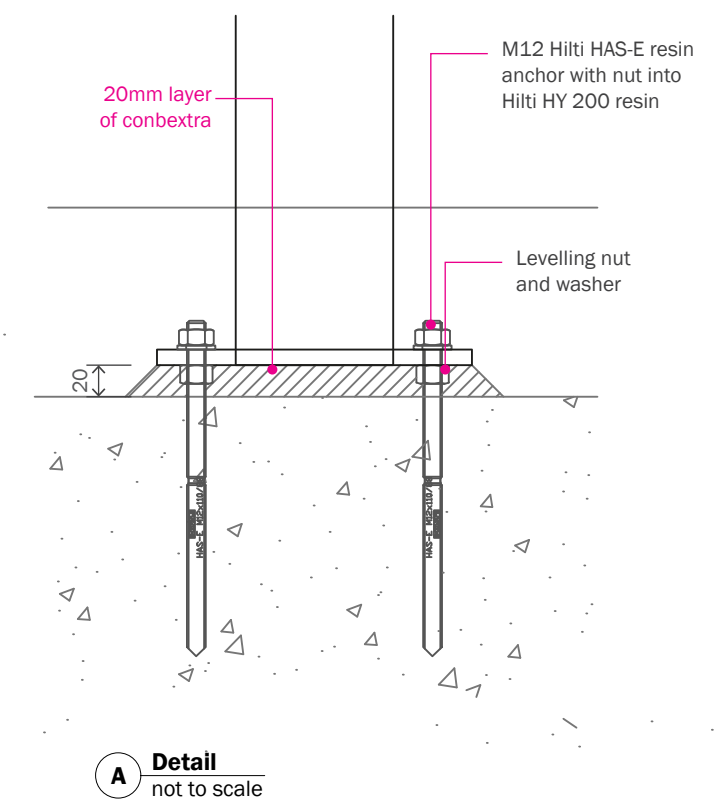
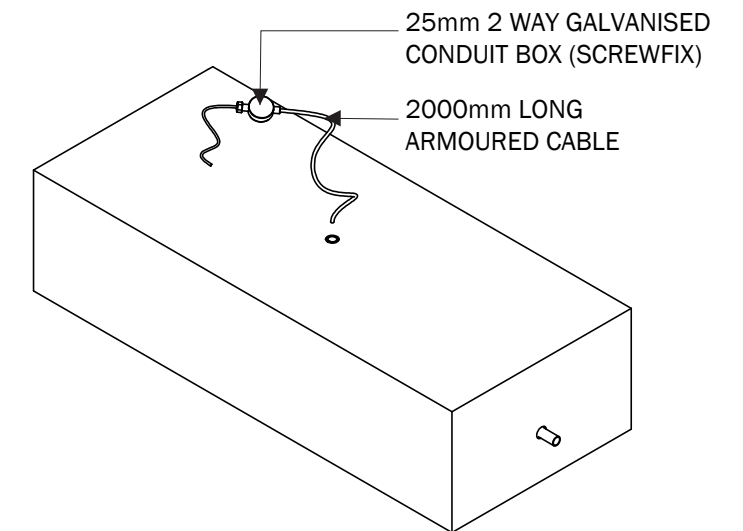
No cages are required as Merson Group will resin anchor when on site for installation. See base detail

All directional signs are illuminated and connected from an independent external lighting circuit on photoelectric cell and time clock controller for control of sign illumination separately from general external lighting



**MAIN CONTRACTOR TO ENSURE CONCRETE BASE IS INSTALLED  
120mm FROM FINISHED GROUND LEVEL TO TOP OF BASE**

**Power consumption:** 25W, 24V  
**Weight:** 57kg



# 5. CAR PARK SIGNS

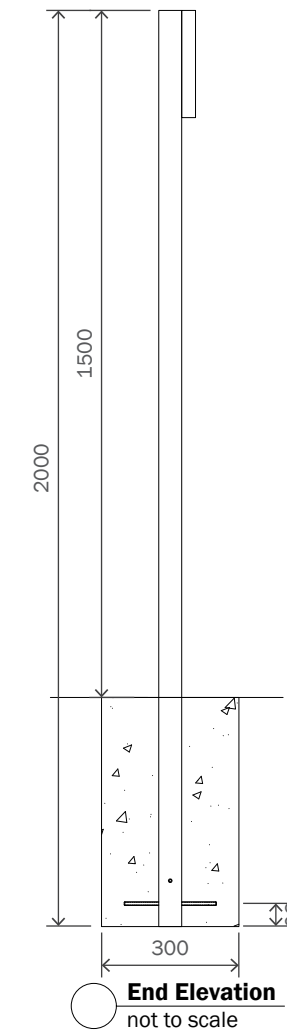
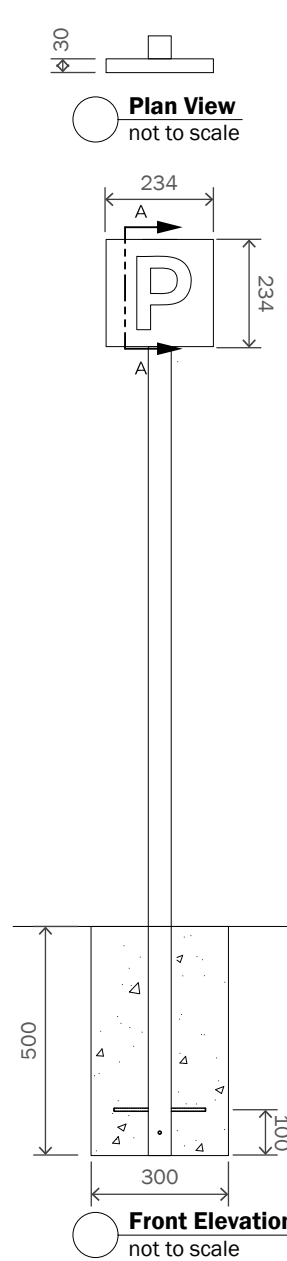
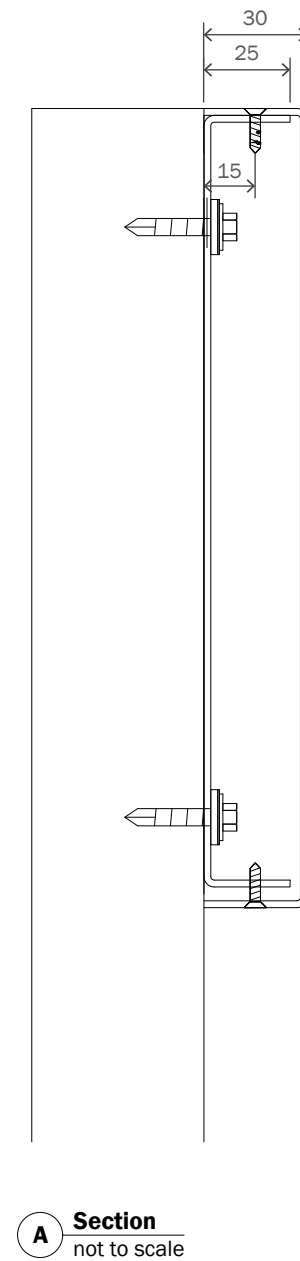




## 5.1 CAR PARK SIGNS - SINGLE POST - SINGLE SIDED

Holes to be dug by main contractor however Merson Group are responsible for pouring postcrete at point of installation.

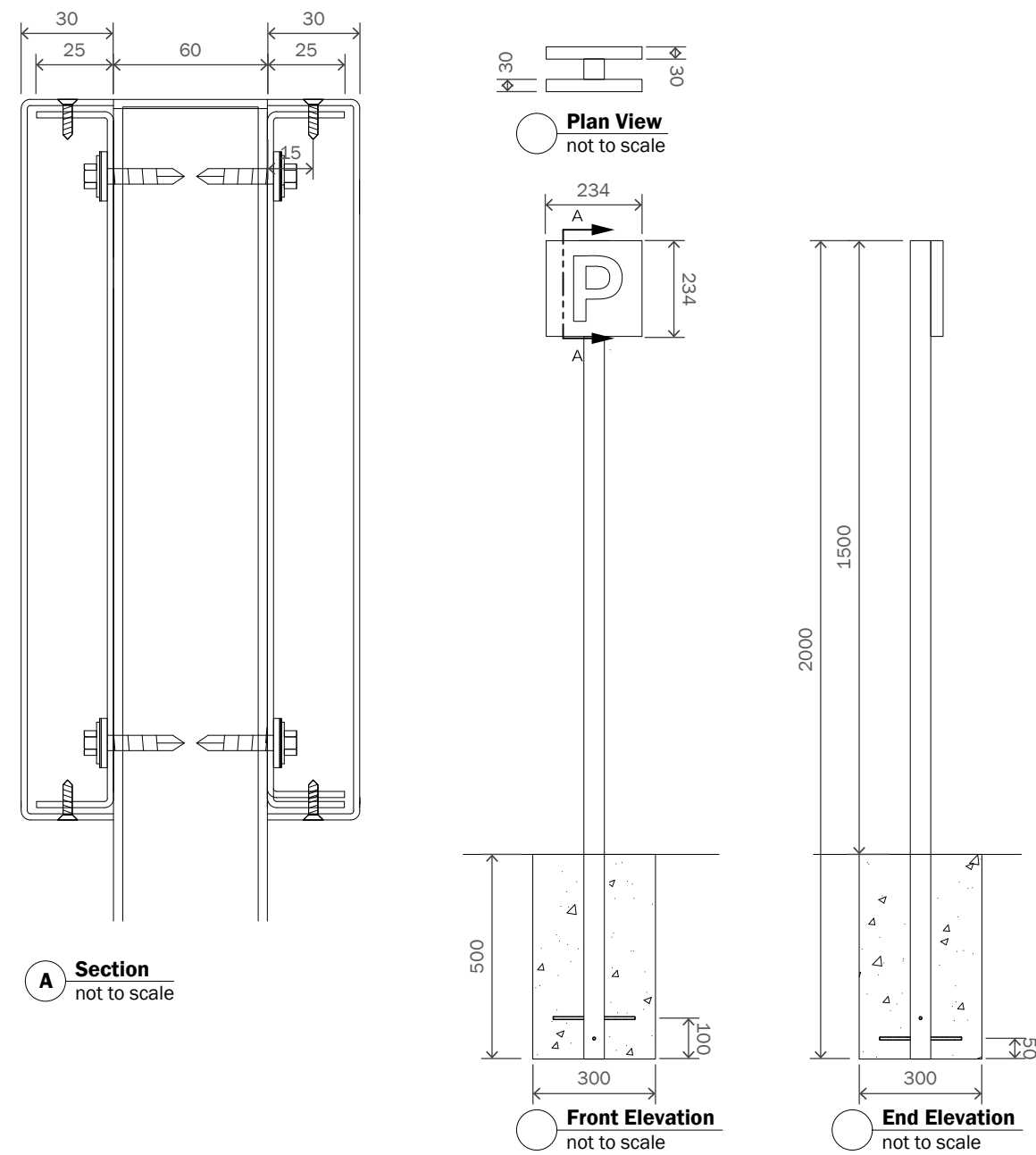
See detail drawings for hole specifications



## 5.2 CAR PARK SIGNS - SINGLE POST - DOUBLE SIDED

Holes to be dug by main contractor however Merson Group are responsible for pouring postcrete at point of installation.

See detail drawings for hole specifications

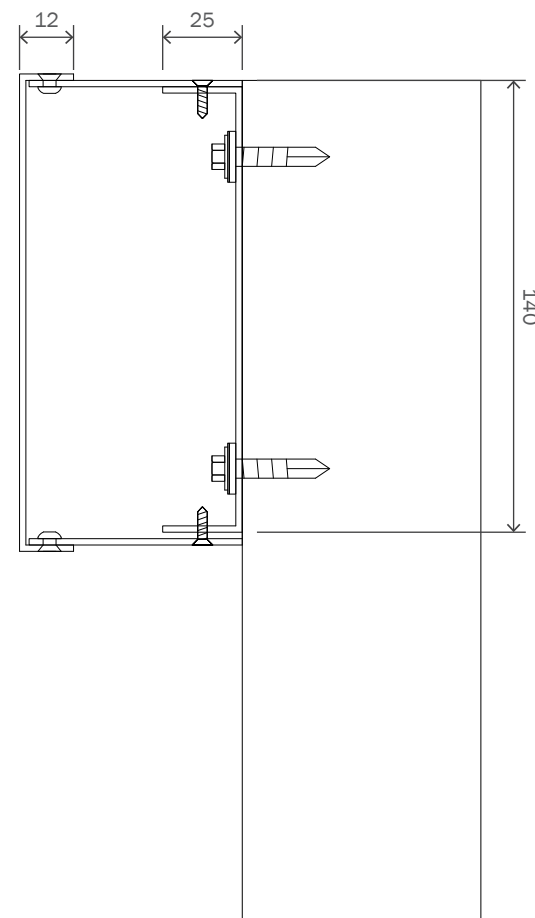




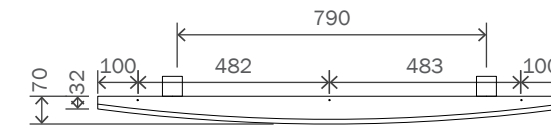
## 5.3 CAR PARK SIGNS - DOUBLE POST

Holes to be dug by main contractor however Merson Group are responsible for pouring postcrete at point of installation.

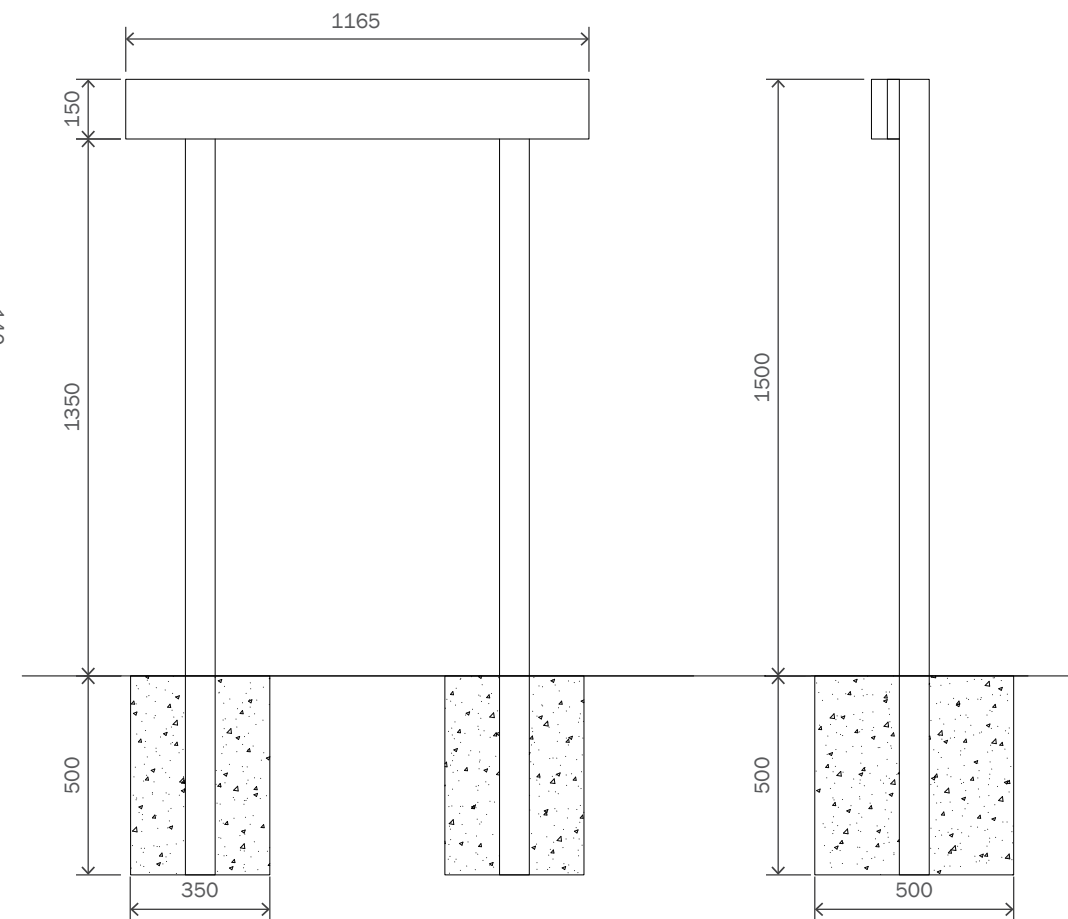
See detail drawings for hole specifications



**A Section A-A**  
not to scale



**Plan View**  
not to scale

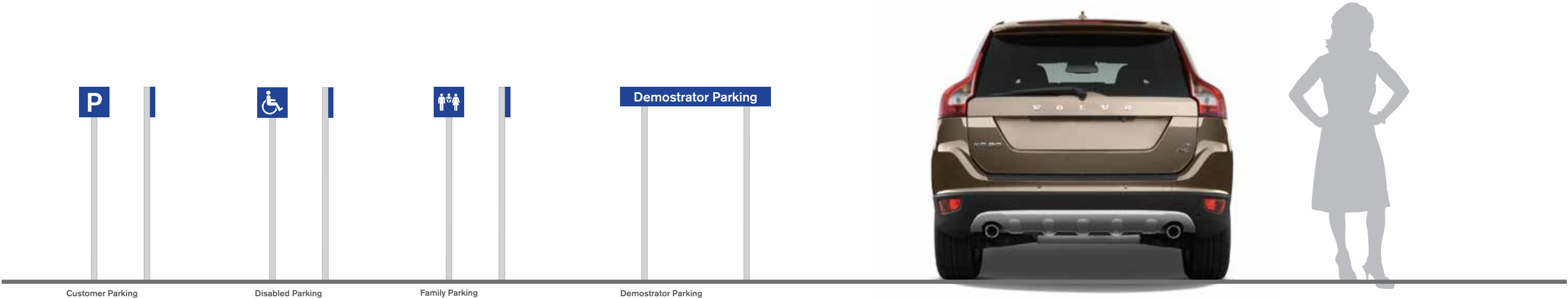
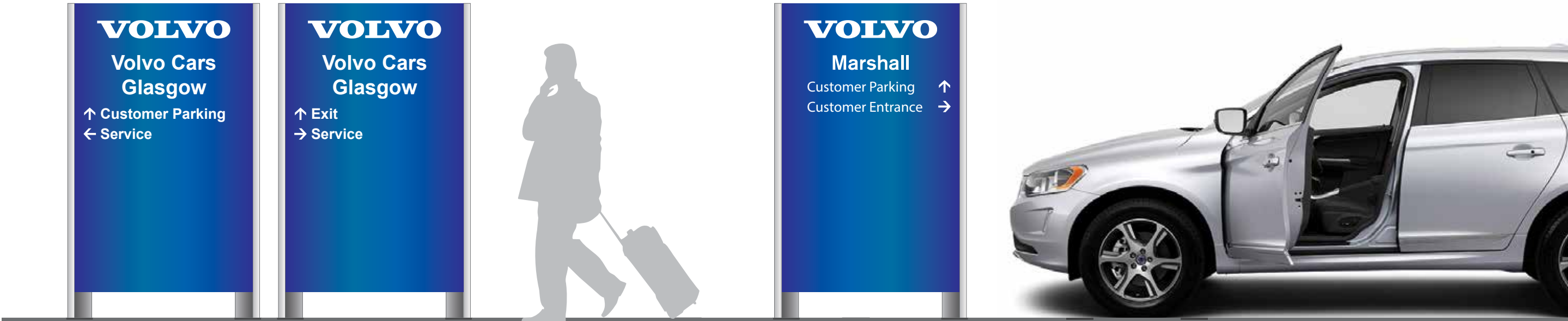


**Front Elevation**  
not to scale

**End Elevation**  
not to scale



5.4 CAR PARK SIGNS - FULL SUITE



# 6. VOLVO SELEKT



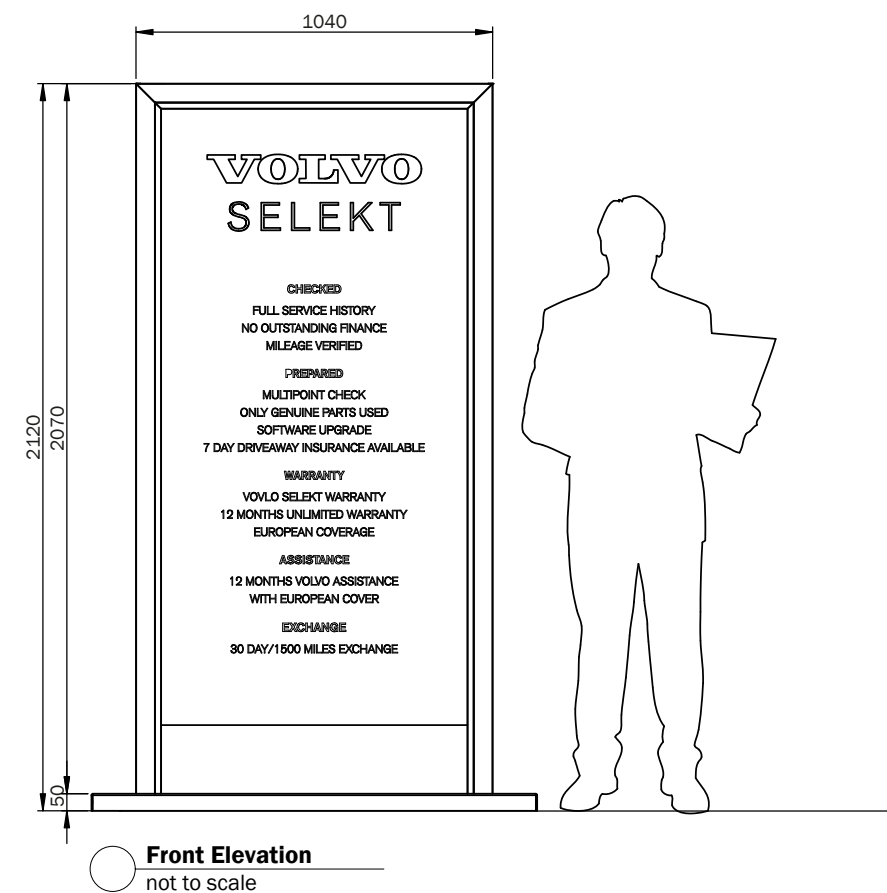
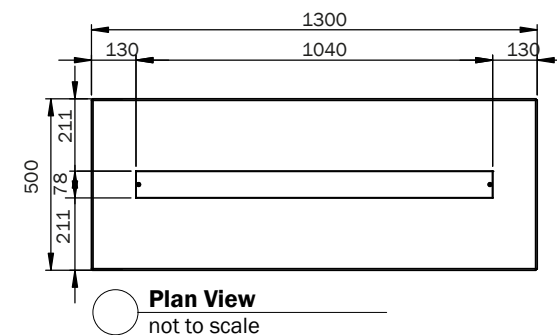
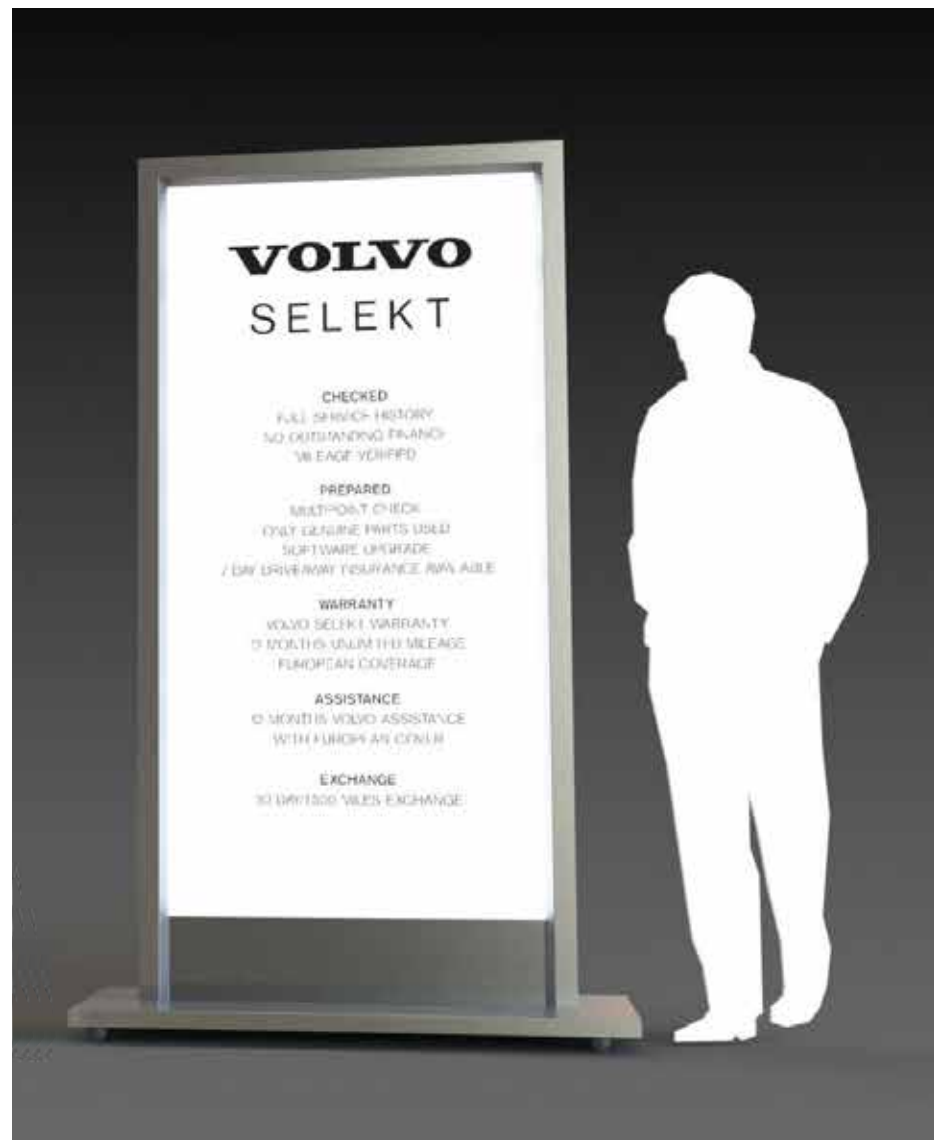
## 6.1 VOLVO SELEKT - COMMUNICATIONS PANEL

Bases to be installed by main contractor and require 5-7 days curing time

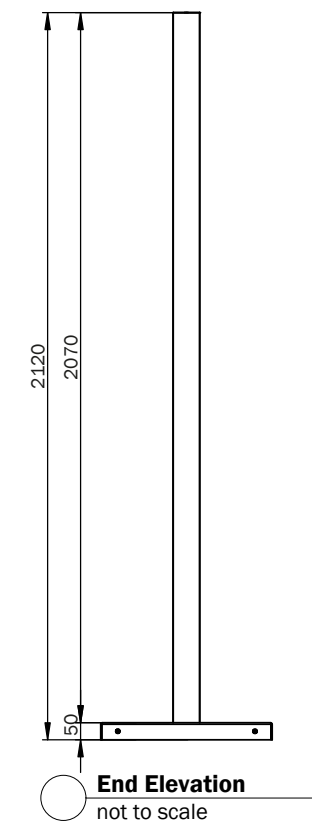
See details drawings for base requirements

No cage is required. Merson Group will resin anchor when on site for installation

Include a power supply for Merson Group to connect to at installation. Power supply to have waterproof casing.



**Power consumption:** 36W, 24V  
**Weight:** 113kg



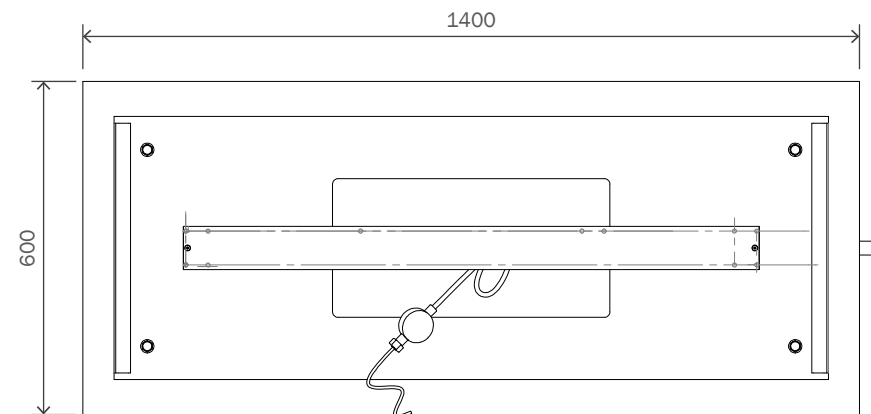
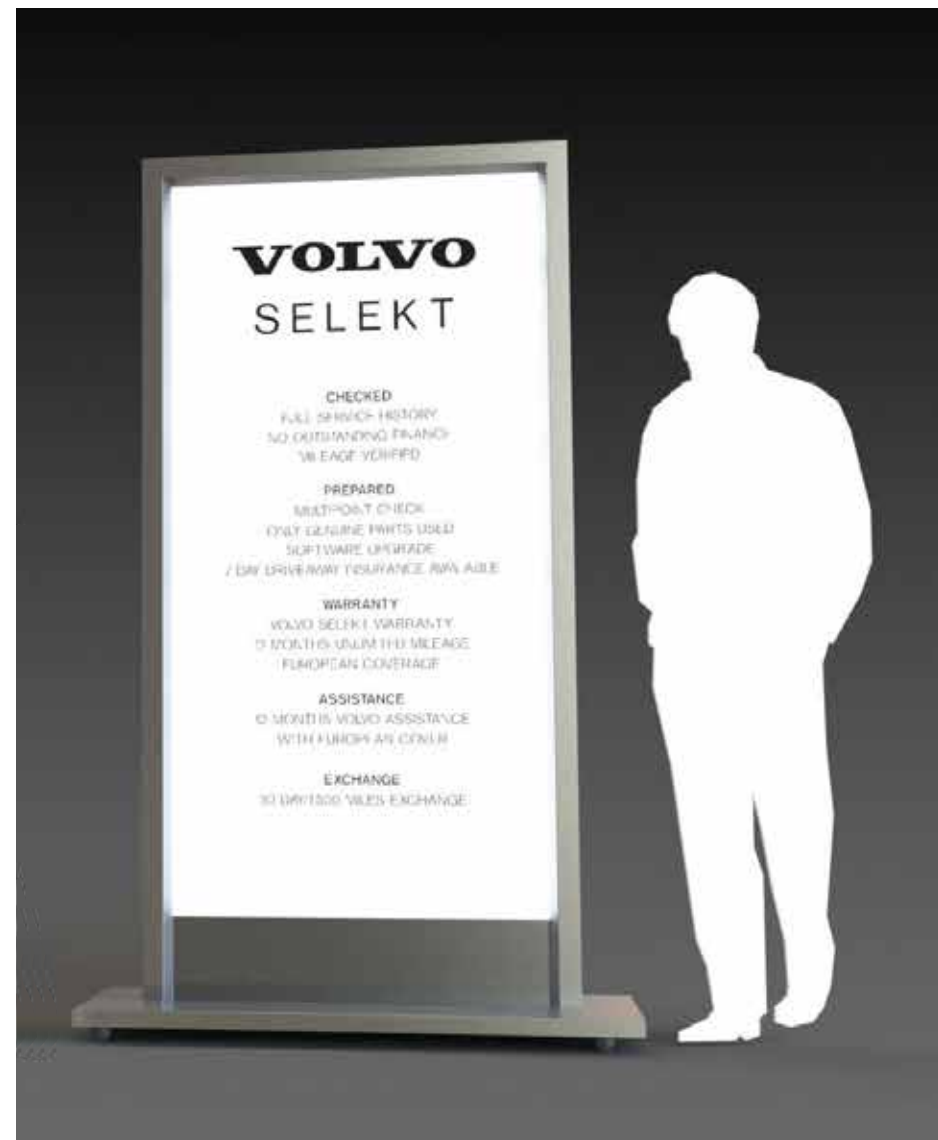
## 6.2 VOLVO SELEKT - COMMUNICATIONS PANEL - FOUNDATIONS

Bases to be installed by main contractor and require 5-7 days curing time

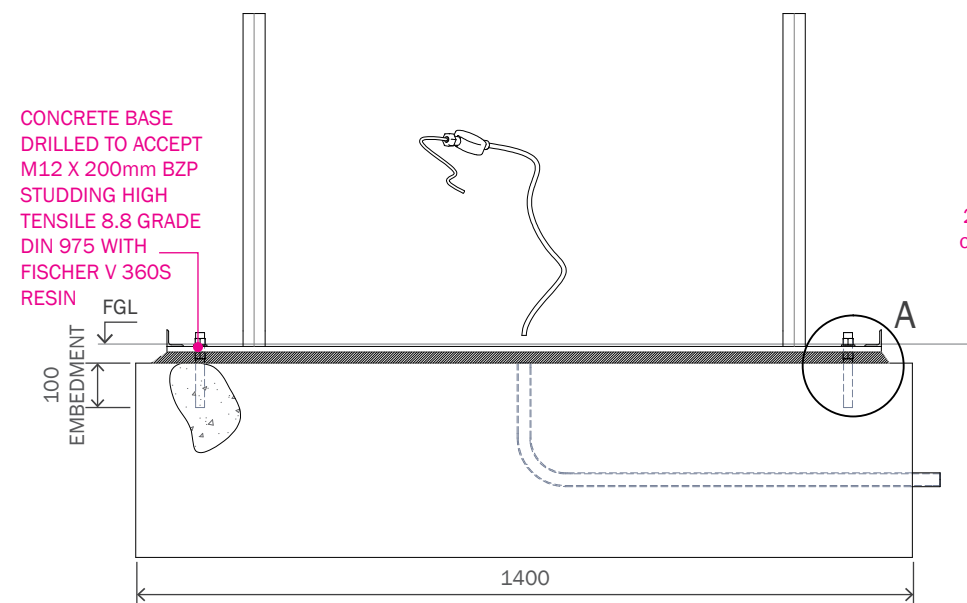
See details drawings for base requirements

No cage is required. Merson Group will resin anchor when on site for installation

Include a power supply for Merson Group to connect to at installation. Power supply to have waterproof casing.

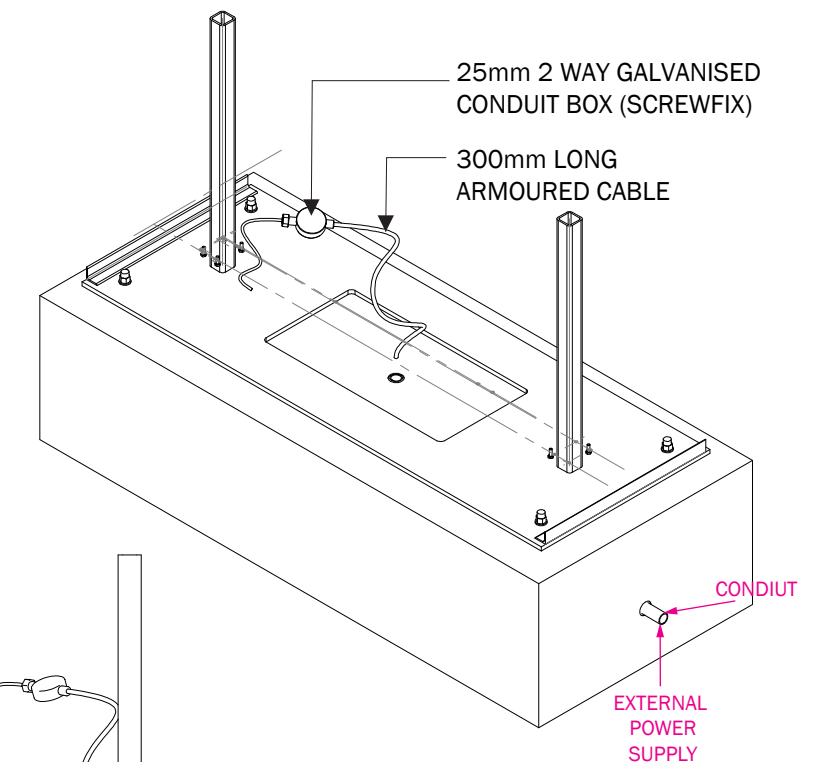


Plan View  
not to scale

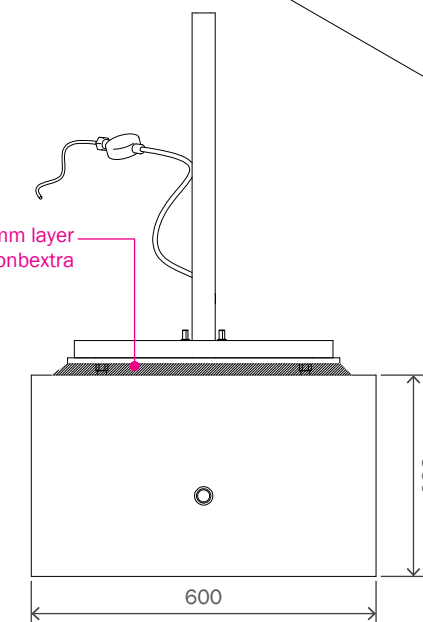


Front Elevation  
not to scale

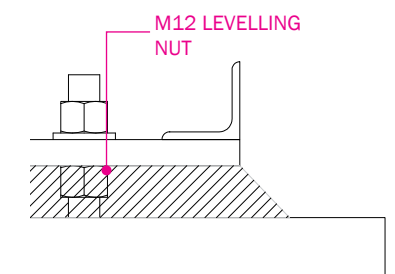
**Note:** Concrete mix design C35  
Concrete density 24 kN/m<sup>3</sup>



20mm layer  
of concrete



End Elevation  
not to scale



Detail  
not to scale



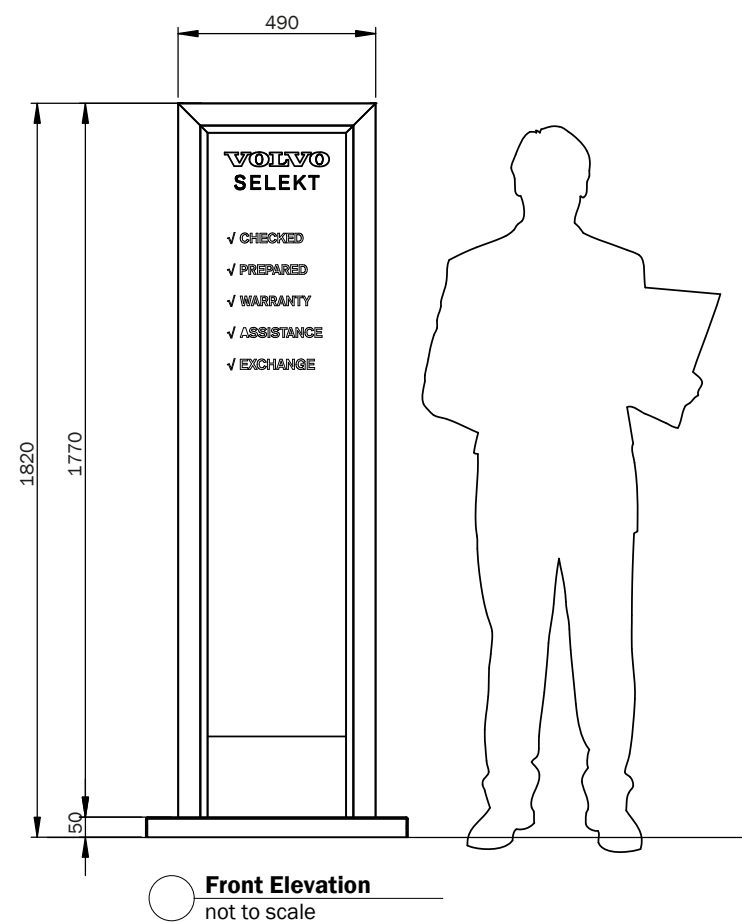
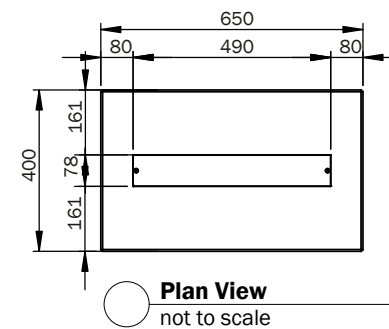
## 6.3 VOLVO SELEKT - TOTEM

Bases to be installed by main contractor and require 5-7 days curing time

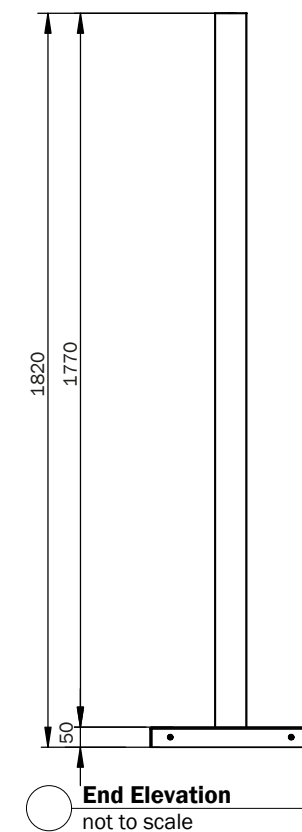
See details drawings for base requirements

No cage is required. Merson Group will resin anchor when on site for installation

Include a power supply for Merson Group to connect to at installation. Power supply to have waterproof casing.



**Power consumption:** 36W, 24V  
**Weight:** 57kg



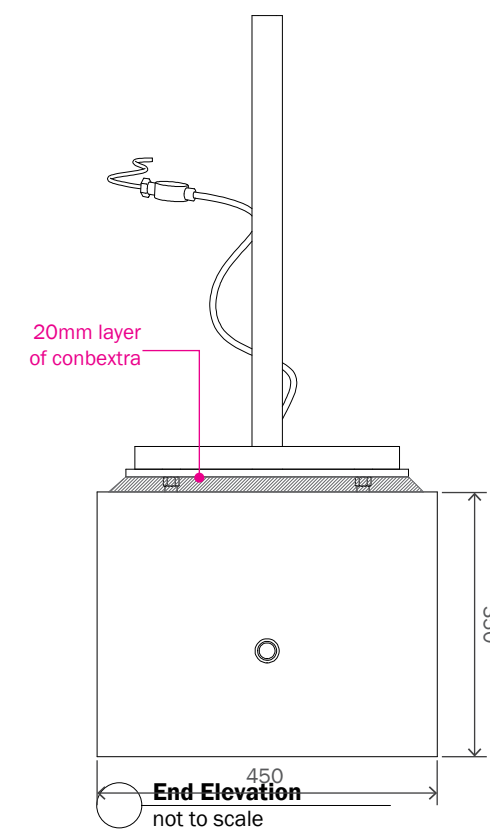
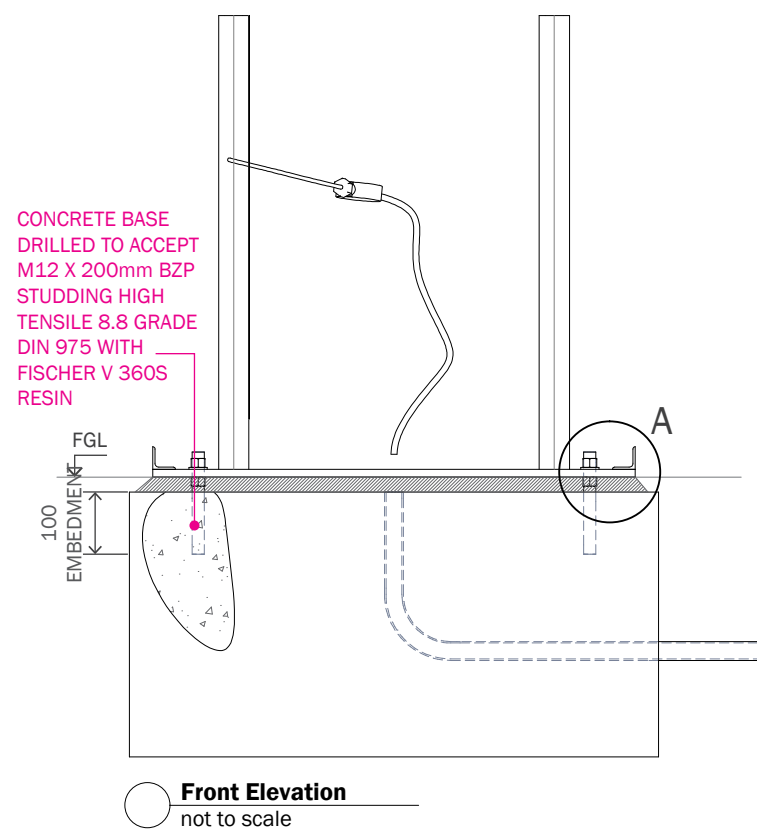
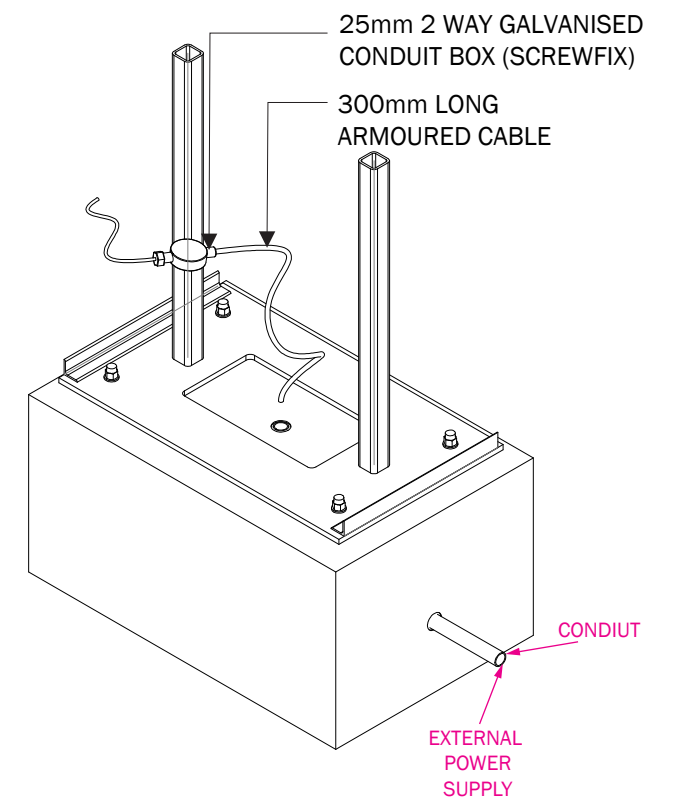
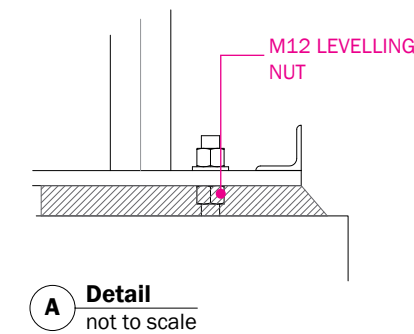
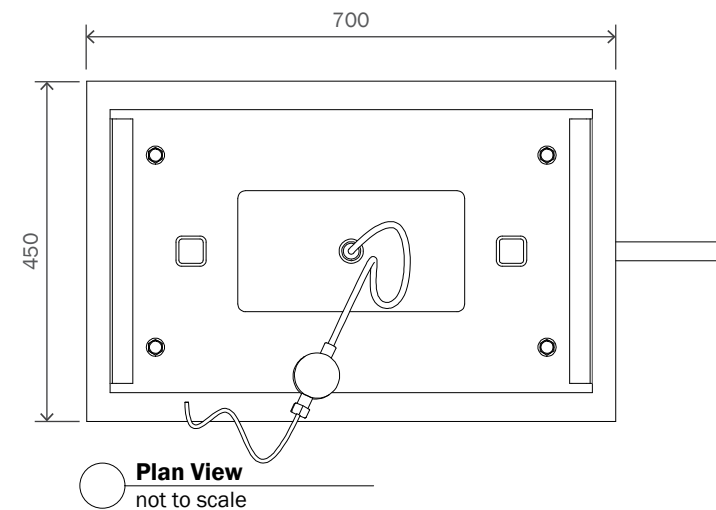
## 6.4 VOLVO SELEKT - TOTEM - FOUNDATIONS

Bases to be installed by main contractor and require 5-7 days curing time

See details drawings for base requirements

No cage is required. Merson Group will resin anchor when on site for installation

Include a power supply for Merson Group to connect to at installation. Power supply to have waterproof casing.



**Note:** Concrete mix design C35  
Concrete density 24 kN/m<sup>3</sup>



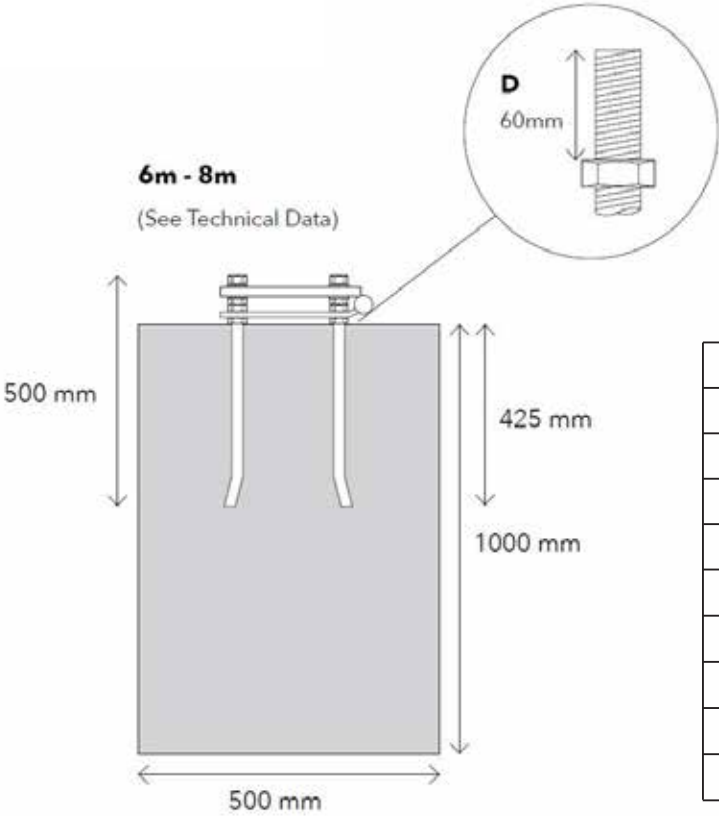
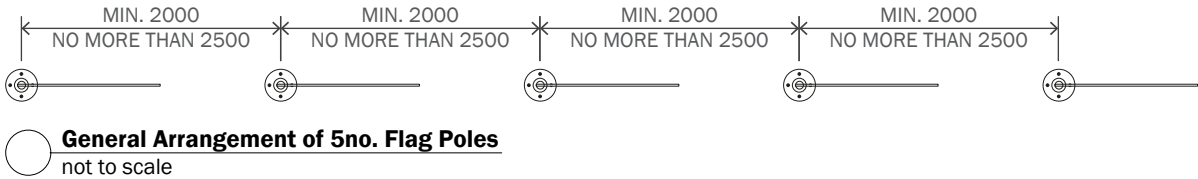
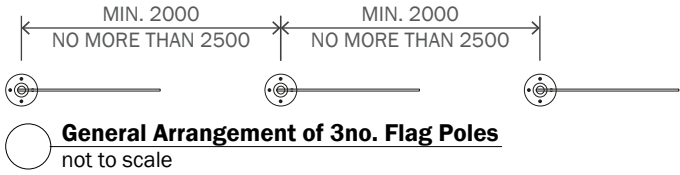
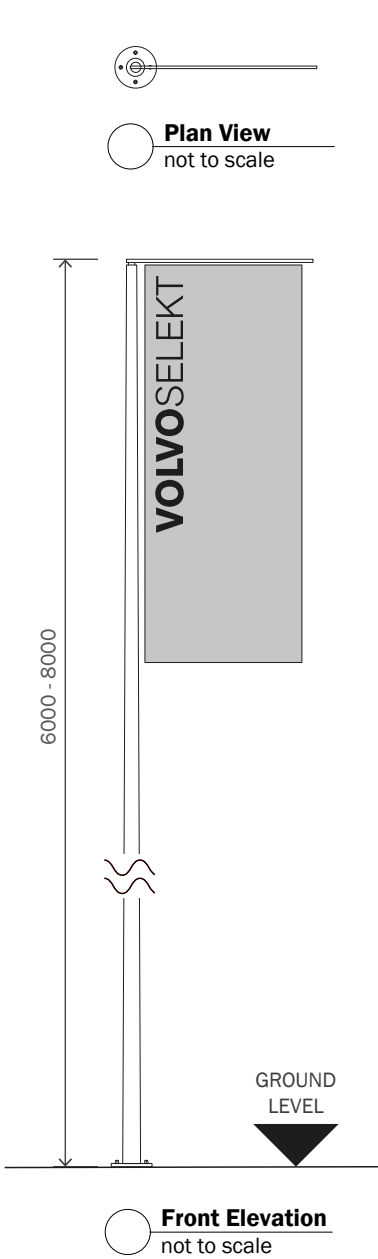
6.5 VOLVO SELEKT - FLAGPOLES

Bases and hinged base plates to be installed by main contractor, base requires 5-7 days curing time.

Merson Group will supply hinged base plates with an approximate 1 week lead time from receipt of order. Merson Group will connect to hinged base plate when on site for Installation.

Flag pole spacing should be a minimum of 2000mm between pole centre's and no more than 2500mm apart , these are to be in in clusters of three.

Merson Group are to install the first set of flags (only) and there after the dealership need to order through the Volvo Selekt network via David Chittenden (Bruce Greenwoods replacement).



Flagpole length	6m
Butt Diameter Ø (mm)	120
Top Diameter Ø (mm)	65
Banner Arm Length (mm)	1100
Banner Arm Ø (mm)	23
Base Fixing	Hinged
Base Plate Dimensions (mm)	180 x 180
Foundaation Required (w2 xd) (mm)	500 x 1000
Recommended Portrat Flag size (mm)	1000 x 2000
Maximum Wind Speed (mph Flagged)	50





# 7. ENTRANCE PORTAL



## 7.1 ENTRANCE PORTAL - DESIGN OVERVIEW

Constructed mainly from folded panels with woodtex LWO finish fixed to mild frame work.

Extruded aluminium section with acrylic diffuser installed to create Light Line.

Sign is to be fixed via resin anchor with nut into resin.

Concrete allowed to cure for 7 days prior to installation of sign.

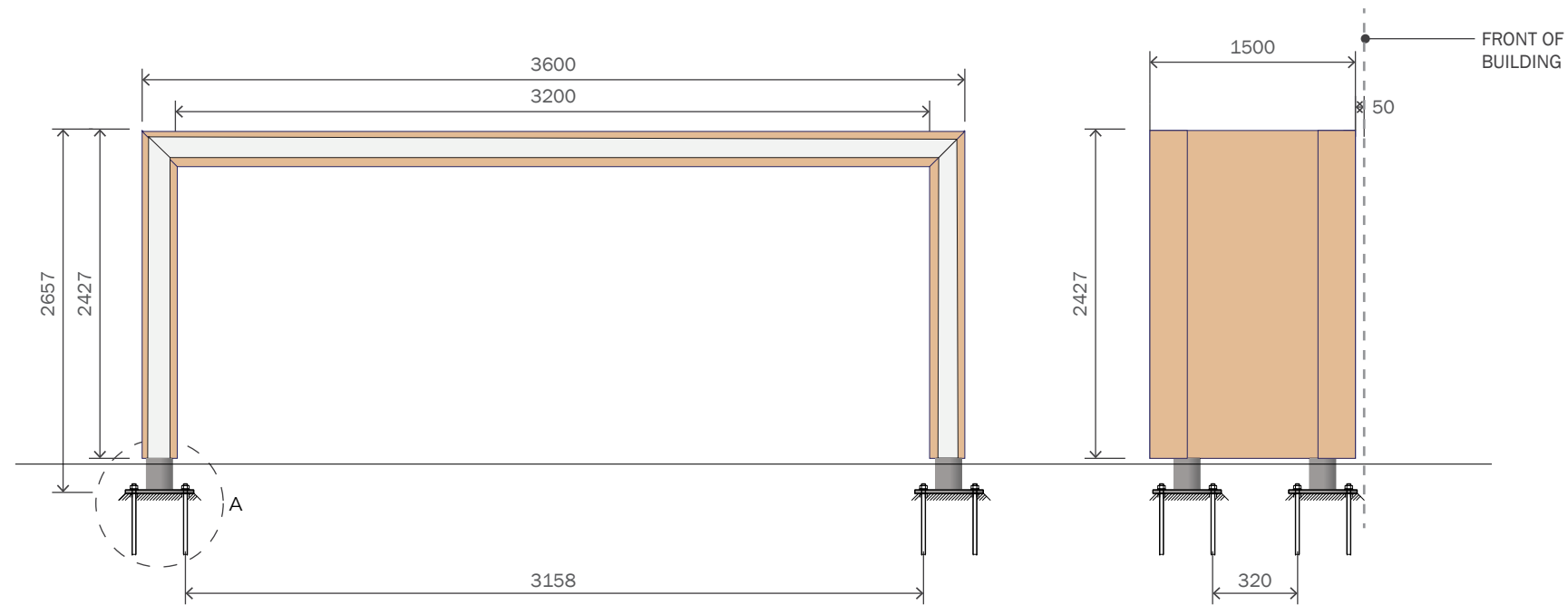
Power cable to be supplied to the left hand side only and into a supplied junction box. 5 amp power supply required.

Drainage tubes are included. If you are providing a drainage system please contact with Chris Mclean at Merson Group on 07733119228.

Foundation details information can be found on page 29.



## 7.2 ENTRANCE PORTAL - 3.6M

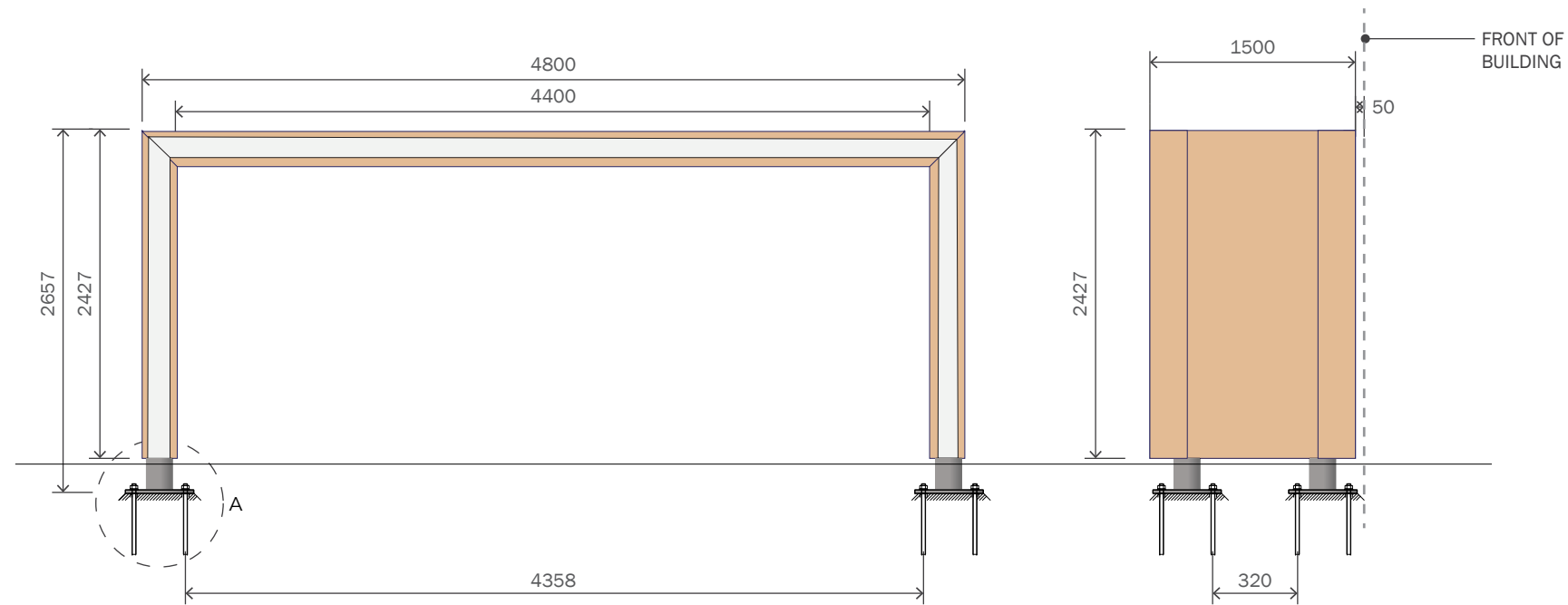


**Power consumption:** 4 OFF 150W, 12V PSU REQUIRED

**Total Weight:** 728kg.



### 7.3 ENTRANCE PORTAL - 4.8M

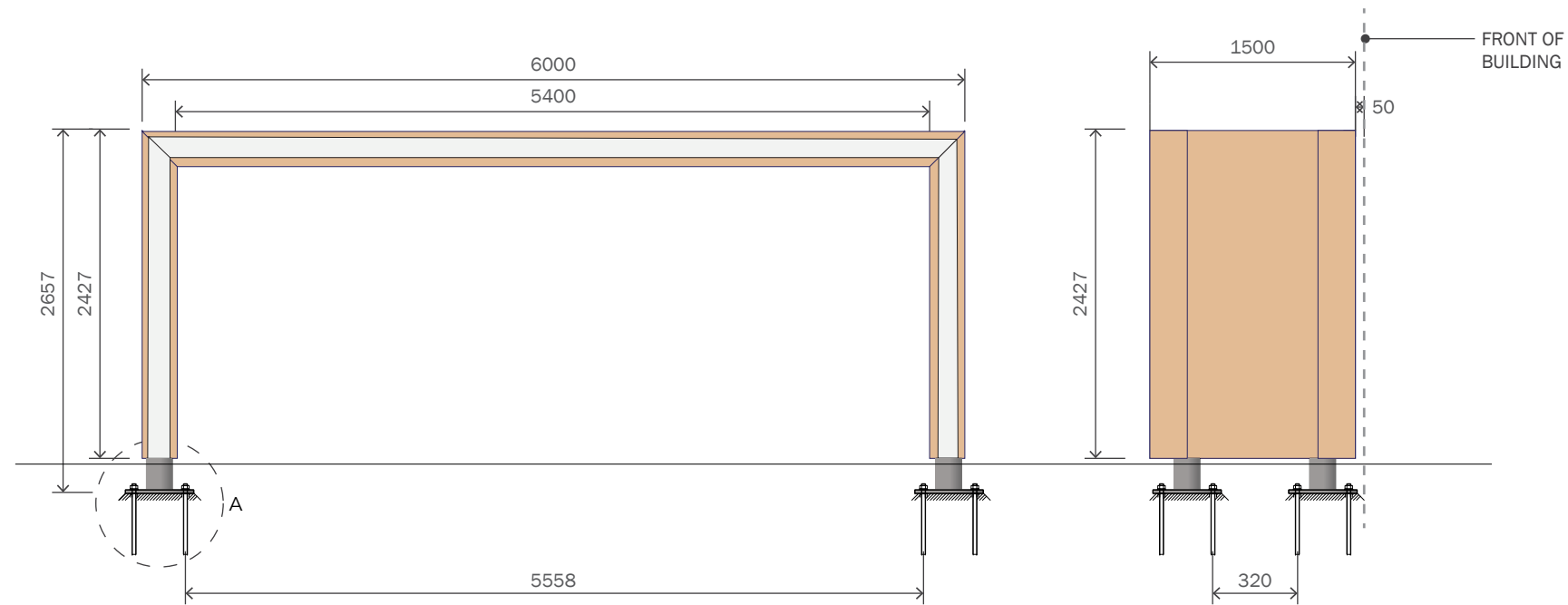


**Power consumption:** 4 OFF 150W, 12V PSU REQUIRED

**Total Weight:** 824kg.



## 7.4 ENTRANCE PORTAL - 6M



**Power consumption:** 4 OFF 150W, 12V PSU REQUIRED

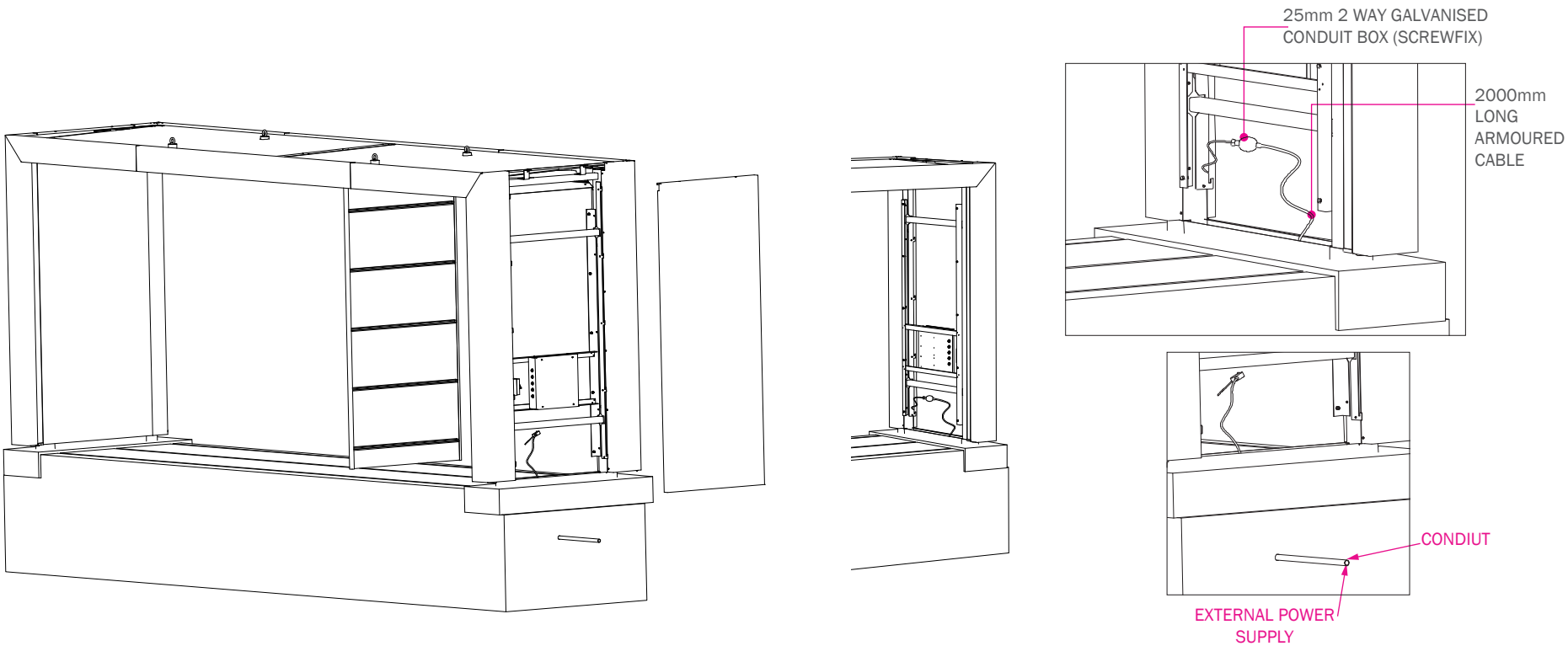
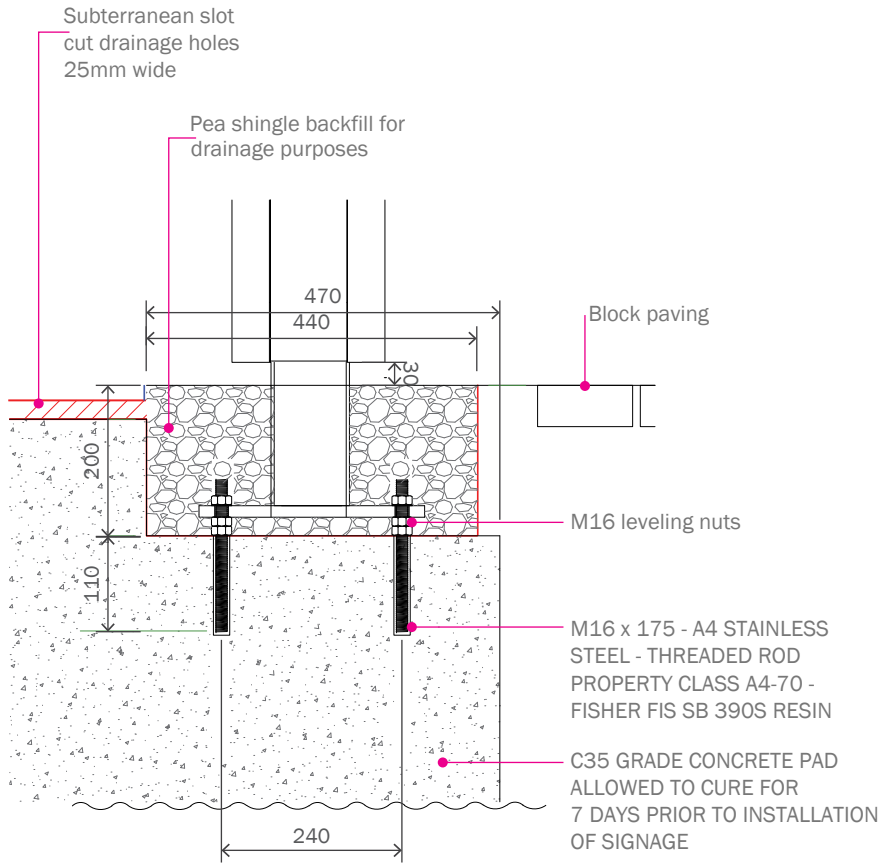
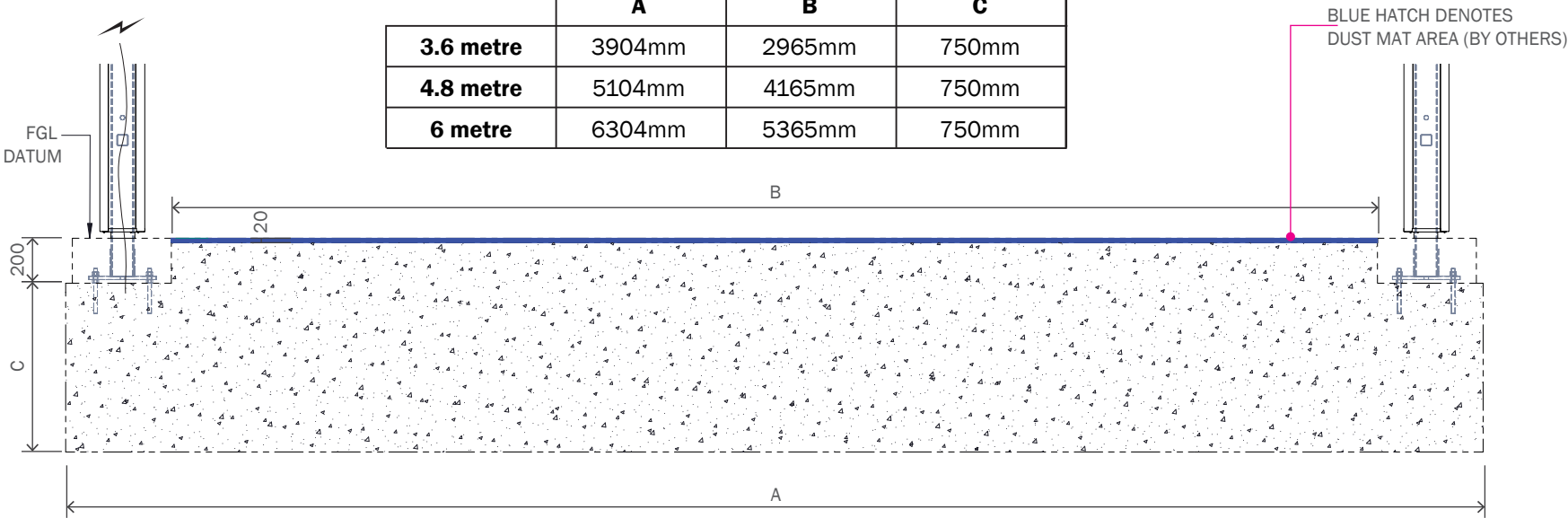
**Total Weight:** 903kg.



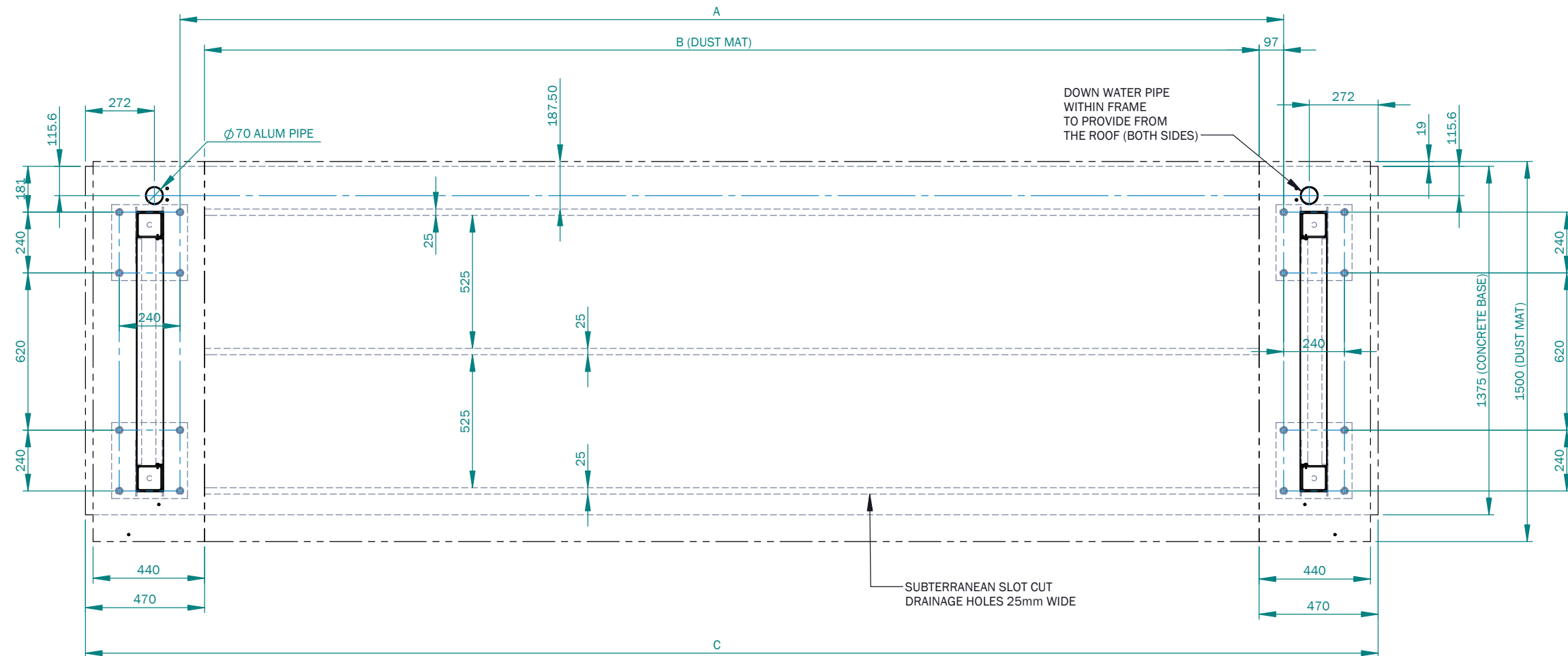
7.5 ENTRANCE PORTAL - FOUNDATIONS

Sign is to fixed via resin anchor with nut into resin.  
Concrete allowed to cure for 7 days piror to installation of sign.

	A	B	C
3.6 metre	3904mm	2965mm	750mm
4.8 metre	5104mm	4165mm	750mm
6 metre	6304mm	5365mm	750mm



## 7.6 ENTRANCE PORTAL - DRAINAGE DETAILS



	<b>A</b>	<b>B</b>	<b>C</b>
<b>3.6 metre</b>	3158mm	2965mm	3904mm
<b>4.8 metre</b>	4358mm	4165mm	5104mm
<b>6 metre</b>	5558mm	5365mm	6304mm





MERSON GROUP  
2 YOUNG PLACE  
EAST KILBRIDE  
GLASGOW  
SCOTLAND  
G75 0TD