



KEY PLAN
SCALE 1:5000

5024100 Eastleigh Borough Council
One Horton Heath - Electric Vehicle Charging Points Example Cable Calculations

Houses

EVCP SP&N kW	External Earth Fault Loop Impedance Ze Ω	Length in meters	Protective Device Size Amps	Protective Device Type	Cable Size mm	Cable Type	Grouping	Installation Method
7.2	0.35	up to 25m	32	MCB Type B	6	3Core XLPE/SWAL/SH	No	Buried within a duct externally. Internally on perforated cable tray or clipped direct
7.2	0.35	26 - 55m	32	MCB Type B	10	3Core XLPE/SWAL/SH	No	Buried within a duct externally. Internally on perforated cable tray or clipped direct

Flats

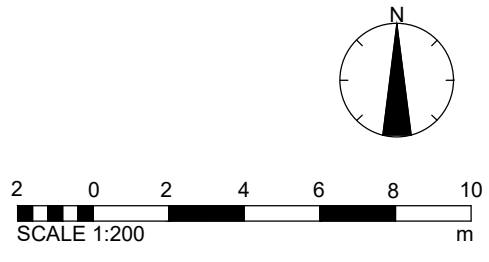
EVCP SP&N kW	External Earth Fault Loop Impedance Ze Ω	Length in meters	Protective Device Size Amps	Protective Device Type	Cable Size mm	Cable Type	Grouping	Installation Method
7.2	0.35	up to 45m	32	MCB Type B	10	3Core XLPE/SWAL/SH	3	Buried within a duct externally. Max 3 cables per 150mm OD duct. Internally on perforated cable tray
7.2	0.35	46 - 80m	32	MCB Type B	16	3Core XLPE/SWAL/SH	3	Buried within a duct externally. Max 3 cables per 150mm OD duct. Internally on perforated cable tray
7.2	0.35	81 - 100m	32	MCB Type B	25	3Core XLPE/SWAL/SH	3	Buried within a duct externally. Max 3 cables per 150mm OD duct. Internally on perforated cable tray

Notes

- The cable length is from the consumer unit within the dwelling to the EVCP.
- Do not install a cable that is longer than advised as it will fail the calculation, generally on voltage drop.
- The EVCP installation within the flats allows for the internal cable installation on perforated cable tray as noted on Ridge drawings for Block C, D and E. On each floor the 3No dwellings are to share the horizontal EVCP cable tray, into the riser where all EVCP cabling is installed on a single vertical tray. At ground floor a maximum of 3No EVCP cables are to be installed in each 150mm buried duct.
- The EVCP installation within the houses allows for the internal cable installation to be on perforated cable tray or clipped direct. At ground floor level the EVCP are to be installed in a 75mm duct for each dwelling.
- All ducts are twin walled ducts.
- Ducts are buried at a minimum of 450mm to the top in pedestrian areas and 600mm to the top in vehicular areas.
- Do not install any other services within the duct unless noted above.

RIDGE

EXTRACT 01



EXTRACT 01

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EXTERNAL REFERENCES:

- THIS INFORMATION & RIDGE & PARTNERS LLP CIVIL 3D & ASSOCIATED 3D OUTPUTS ARE BASED UPON THE FOLLOWING INFORMATION FROM THE DESIGN TEAM
- ARCHITECT REFERENCE:
 - AXIS MASON DRAWING No. 4101-AXM-00-00-DR-A-0500 REV. T3 (DATED 11/09/2023)

SURVEY REFERENCE:

- SURVEY DWG No. ENCONE-HH-FEB21 (FEBRUARY 2021)
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THIS INFORMATION IS CURRENT PRIOR TO CONSTRUCTION

LEGEND

- | | |
|----------------------|---|
| EV DUCT ROUTE 0-5m | HOUSES - 100mm DUCT |
| EV DUCT ROUTE 5-10m | FLATS - 150mm DUCT FOR UP TO 3 CABLES PER DUCT. |
| EV DUCT ROUTE 10-15m | WHERE MORE THAN 3 UNITS SERVED PER RUN AN ADDITIONAL DUCT IS TO BE PROVIDED |
| EV DUCT ROUTE 15-20m | |
| EV DUCT ROUTE 20-25m | |
| EV DUCT ROUTE 25-30m | FLATS - 150MM DUCT FOR UP TO 3 CABLES PER DUCT |
| EV DUCT ROUTE 30-35m | MORE THEN 3 UNITS SERVED PER RUN AN ADDITIONAL DUCT IS TO BE PROVIDED |
| EV DUCT ROUTE 35-40m | |
-
- | | |
|--|---|
| | SACRIFICIAL EV CHARGING POST SLAB 100mm THICK. DUCT TO BE TURNED UP TO THE CENTRE OF THE SLAB AND CAPPED OFF AND THE SLAB CAST IN SITU. |
| | PROPOSED ATTACH TO WALL |

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EASTLEIGH
BOROUGH COUNCIL

IN ASSOCIATION WITH:

PROJECT:
PROPOSED RESIDENTIAL DEVELOPMENT
ONE HORTON HEATH
FIRST RESIDENTIAL PARCEL

TITLE:
EV DUCT ROUTE
SHEET 3

TECH:	CSE:	Chris Lewis I have reviewed this document (01/04/2025)	ICSE:	SCALE: 1:200	@ A1
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