CUSTOMER WORKS GUIDE

FOR UP TO 4 LOW VOLTAGE CONNECTIONS AND LOAD INCREASE

Scottish & Southern
Electricity Networks

INTRODUCTION

This guide provides information on the works you need to do, in preparation for your connection to be completed.

WHAT IS A CONNECTION ?

A connection is a new electricity supply for our domestic, commercial or industrial customers.

In an emergency situation call 105 immediately for help

POWER CUT?
CALL 105

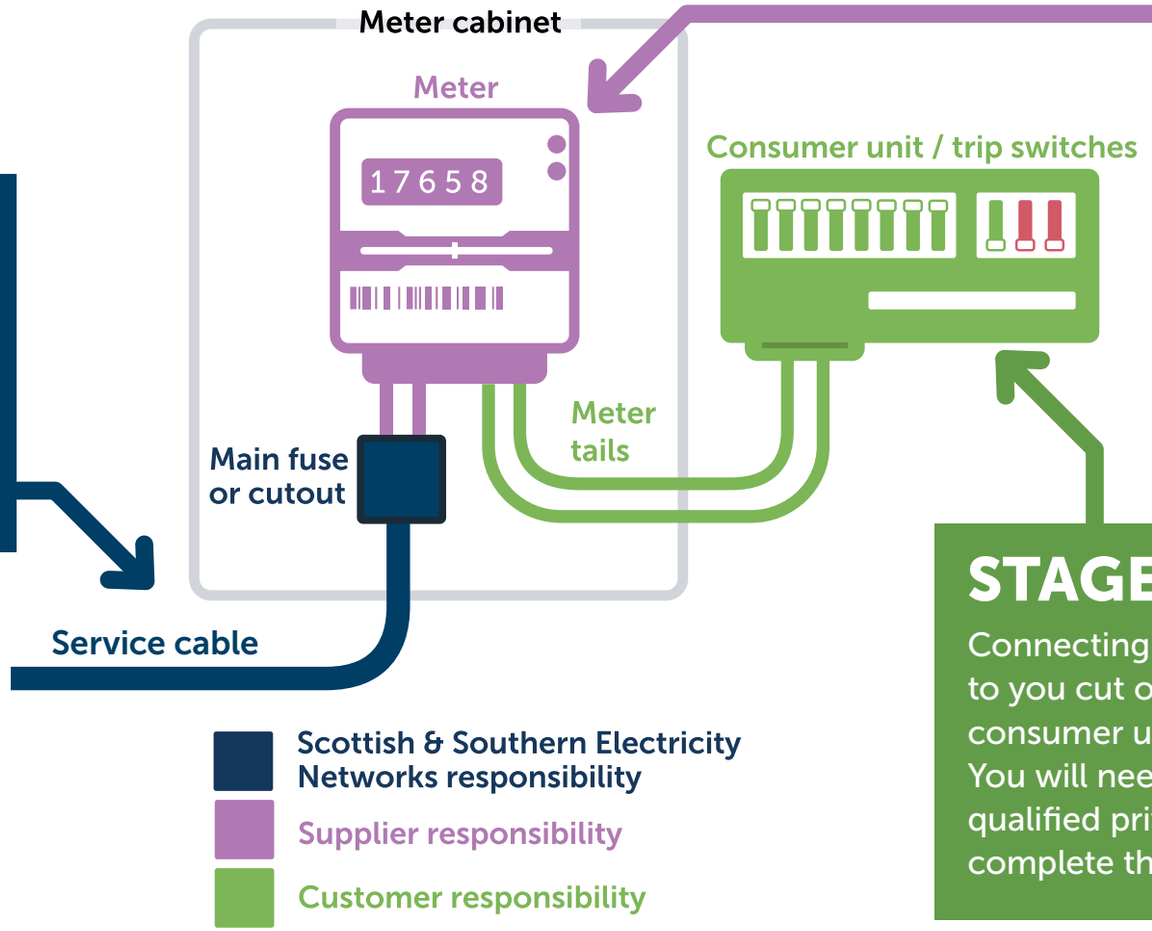
CONTENTS

THREE IMPORTANT STAGES TO COMPLETION

There are three important stages to your connection, please take a look at the steps below;

STAGE 1

This is the work that we will complete for you. We will install and connect your electricity cable and cut out/fuse.



STAGE 2

Installing your meter to the cut out/fuse. You will need to contact your chosen supplier, more information about this is found on page 4

STAGE 3

Connecting your meter tails to you cut out/fuse and your consumer unit/trip switches. You will need to contact a qualified private electrician to complete these works.

YOUR ON SITE CHECKLIST AND INSTRUCTION GUIDE

This check list and instruction guide provides advice and guidance on preparing for your connection.

Steps	Responsible party	Tasks to be completed	Points to consider	Your to do list
Phase 1, work to be completed at your property before we arrive.				
1a, Are you ready for the work to start?	Applicant	If you are ready for your work to start and be completed within the next 30 days, please make payment by calling us on 0800 197 5527.	If you are not ready for the work to start, your quote is valid for 90 calendars days.	☐ Accept and pay for your quote when you're ready.
1a, This is work you need to complete after accepting and paying for your quote.	Land owner/ electricity account holder	**What you need to do now** Register your postal address - If your property is a new building, you need to register your address with Royal mail or plot to postal. Once your address has been registered we can book a date for the work to be completed and we will issue you with your meter point administration number (MPAN) within 72 hours. You will need this before you can choose an electricity supplier. Please contact your electricity supplier- once you have received your MPAN from us, please contact your chosen supplier (who you will pay your bills to) and book an appointment for your meter installation. This appointment needs to be booked for after we (SSEN) have installed your service cable and cut out/fuse.	You will not be able to book your meter installation until we have provided you with your MPAN.	☐ Register your postal address. ☐ Contact your chosen supplier and book an appointment for after we (SSEN) have completed our work.
1b, Prior to us attending.	Land owner/ electricity account holder	**Book your electrician** Please book an appointment with your electrician to connect your consumer unit/fuse box to your new meter. This appointment will need to be booked in for after your meter installation appointment. Your electrician will be required to, If applicable, install either an: isolator, residual current device (RCD) or fused switch (subject to the electricians design and in accordance with electrical regulations). Prepare the meter tails from the consumer unit/isolator/residual current device/fused switch ready for connection to the electricity meter. Connect your existing/new consumer unit(s) to the sub main or consumer unit tails.		☐ Contact your electrician and book an appointment for after your meter installation appointment.
1b, Prior to us attending.	Land owner/ electricity account holder	**Digging and cable trenches** If you/your contractors are digging on site then please have this completed before the date we are due to come and complete your connection. You need to have the joint bay (refer to pages 9 and 10), cable route dug out and have your service duct and yellow unbranded or SSEN vinyl tape in place. Please send photos to your project manager once this has been completed.	For guidance on trenches, depths and joint bays, please refer to page 9. If we are digging your trenches and joint bay for you then we will advise you of this date.	☐ Contact your contractor and advise them of when digging need to be completed by. ☐ Lay unbranded or SSEN vinyl tape. ☐ Place barriers around all holes dug. ☐ Lay/install ducting. ☐ Lay sand along the trench route. ☐ Make sure all water is pumped out of the hole/s dug.

Continued on next page

YOUR ON SITE CHECKLIST & INSTRUCTION GUIDE CONTINUED

This check list & instruction guide provides advice and guidance on preparing for your connection.

Steps	Responsible party	Tasks to be completed	Points to consider	✓ Your to do list
Phase 1 continued, work to be completed at your property before we arrive.				
1c, Prior to us attending.	Land owner/ electricity account holder/ Your electrician	**Your cut out/meter location** Please refer to page 6 and 7 for information on where you can and cannot put your meter. **External meter position** - Please buy and install a British standard compliant electric meter box complete with a hockey stick (the hockey stick protects the SSEN cable rising from ground level to the box) where you are having your meter. You will need to make a hole in the bottom left hand side of the meter box. This is where our electricity cable will enter the meter box. For more information on meter box's and sizes please go to page 8. **Internal cut out/meter location** - If your meter is going to be installed inside your property, please refer to page 5 and 6 for information on where you can and cannot put your meter. You will need to purchase a meter board that we (SSEN) will install for you. Single phase 300mm tall by 300mm wide board or for Split/three phase 600mm board tall by 450mm wide board. Please see page 9 for more information about the back board position and space required.	Please see the link to a meter box supplier: meterboxes.co.uk/pages/electric-meter-boxes For fire safety, you cannot install a recessed meter box in a timber framed building. When purchasing a meter box, you will require the following minimum internal space: Single phase service - 500mm tall by 300mm wide. Split/three phase service - 600mm tall by 450mm wide. However, if you are considering additional isolators or equipment, you will require a slightly larger box as shown on page 8.	☐ Purchase and install meter box. ☐ Purchase and install hockey stick. ☐ Purchase meter board.
1d, Prior to us attending	Your electrician	**Drilling wall(s)** Internal meter positions only. Where required, drill the external wall(s) to allow our cable to enter your building(s). This hole needs to be 450mm from the FFL to the outside cable, please refer to page 9 for more information.	For a single phase service cable to enter a building, please drill a 25mm diameter hole. For a split/three phase service cable to enter a building, please drill a 50mm diameter hole. To stop water from getting in or causing damage to other services, always drill from the inside of the building to the outside. Please do this at a 45 degree angle drilling to the finished floor level. The external hole must be below ground level so the service cable can go into the property from the bottom of the hole. If you are not ready when we arrive there will be an abortive charge.	☐ Holes drilled ready for the service cable to be fitted by us (internal meter position only).
Phase 2, is work we, SSEN will complete.				
2, Morning of electrical works.	SSEN	**What we will do** Install your single or split/three phase supply to the new board.	We will contact you 5 days and 24 hours prior to the date of work, make sure you are on track with the tasks. If for any reason you will not be ready, please let us know as soon as possible so we can assist or to reschedule.	☐ On site excavations completed. ☐ On site digging is completed.

WHERE YOU CAN AND CAN'T PUT YOUR INTERNAL CUT OUT METER

INTERNAL CUT OUT / METER LOCATION

IT MUST BE:

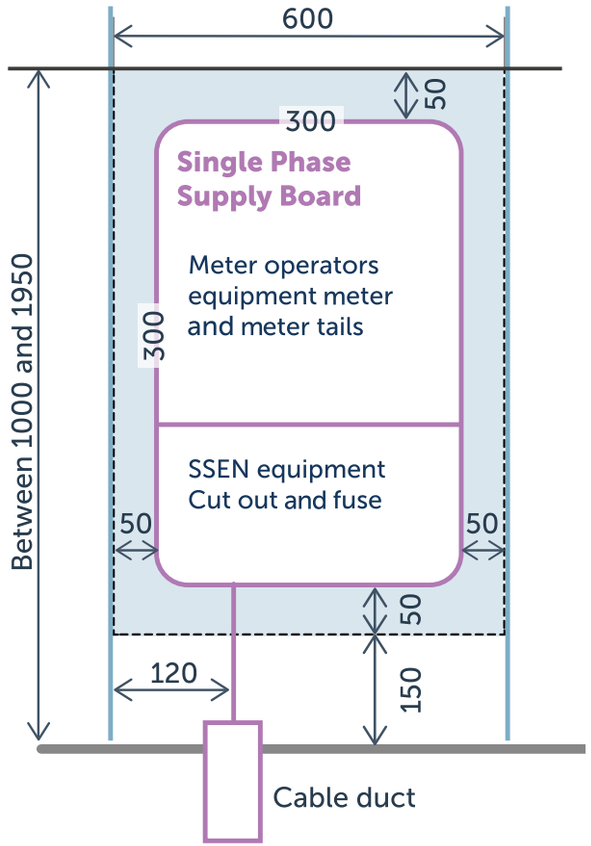
- Located on the inside face of an external wall.
- 300mm away from water and your gas meter in a well ventilated area.

IT MUST NOT BE:

- More than 1.85m from the top of the ceiling & 450mm from the ground.
- Not in a kitchen, utility room, bedroom, bathroom, basement or wood frame buildings.
- Not on a ceiling or under the stairs with less than 2m head room.
- On a partitioned stud dry-lined wall.

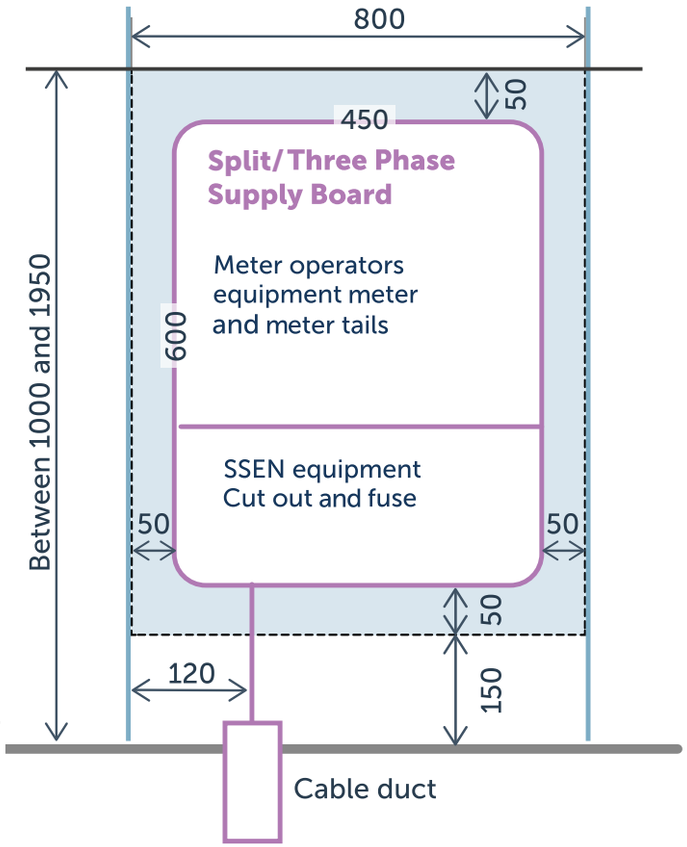
SINGLE PHASE SUPPLY

Wall space required for single phase supply.



SPLIT/THREE PHASE SUPPLY

Wall space required for split/three phase supply.



Floor level

ALL SIZES ARE IN MM

WHERE YOU CAN AND CAN'T PUT YOUR EXTERNAL CUT OUT METER

EXTERNAL CUT OUT / METER POSITION

YOU MUST:

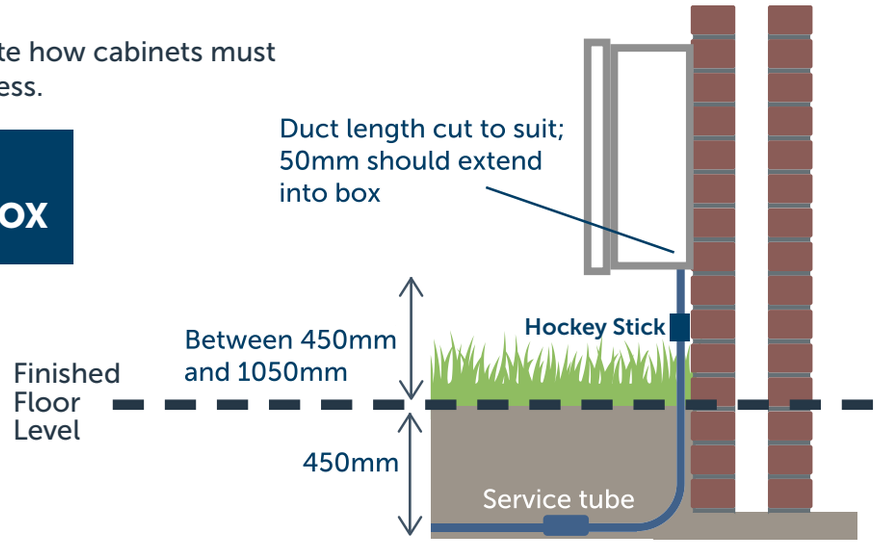
- Supply the meter cabinet and install the hockey stick or cable cover. Details of sizes and where to purchase these are on page 8.
- Label your electricity meter box if you have more than one supply going into the building.
- You will need to make a hole in the bottom left hand side of the meter box. This is where our electricity cable will enter the meter box.

YOU MUST NOT:

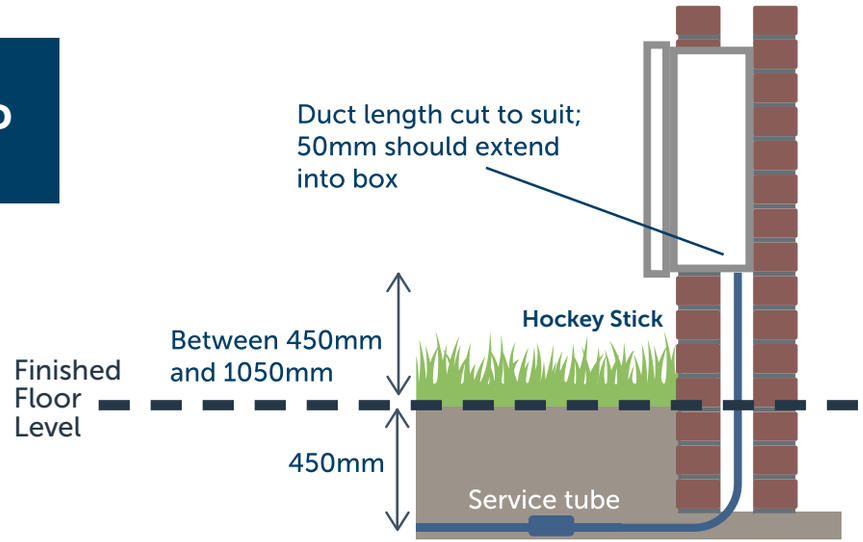
- Put your meter in a locked cabinet, bin storage or behind a locked gate.
- Put your meter in the path of a fire exit. There must be 1m clearance.
- Install a recessed meter cabinet into a timber framed property.

The diagrams below illustrate how cabinets must be installed enable safe access.

THIS IS FOR AN EXTERNAL METER BOX



THIS IS FOR AN EXTERNAL RECESSED METER BOX



METER BOXES AND SIZE INFORMATION

Single phase
Meter boxes sizes

HEIGHT	560MM
WIDTH	400MM
DEPTH	210MM
HOCKEY STICK	40MM

Split/three phase
Meter boxes sizes

HEIGHT	750MM
WIDTH	520MM
DEPTH	210MM
HOCKEY STICK	50MM

Link for meter box suppliers
meterboxes.co.uk/pages/electric-meter-boxes

The table below gives details of suggested meter box providers. Other suppliers including builder's merchants can also supply these products. This information has been taken from the suppliers published information.

	Supplier		Suitable for Timber Framed Buildings
	Tricel	Mitras	
Recessed Type			
Large recessed	✓	✓	✓
Medium recessed	✓	✓	✓
Cavity cable entry via a hockey stick or polyduct	✓	✓	✗
Cable entry on the face of the wall via hockey stick (medium box only)	✗	✓	✓
SSEN cable on face of wall covered by a cable guard	✓	✓	✓
Surface Mounted Type			
Large surface	✓	✓	✓
Medium surface	✓	✓	✓
Cable entry on the face of the wall via hockey stick (medium box only)	✗	✓	✓
SSEN cable on face of wall covered by a cable guard	✓	✓	✓

EXCAVATIONS - CABLE TRENCHES AND JOINT HOLES

The drawing included with our connection offer shows where you are required to dig and fill cable trenches and joint holes. Cable trenches must be dug to the dimensions shown in the diagram on the right and table below. You need supply the builders sand to surround the cable or duct by 75mm on all sides.

YOU MUST - Place barriers around all holes that have been dug to make sure no one falls in.

YOU MUST - Have a water pump available to remove any water from the holes you have dug. You will need to make sure there is no water in the hole on the day that we (SSEN) come to install the cables.

IMPORTANT

While excavating if you at any point damage any of our underground cables you must report it to the emergency service centre immediately by calling 105.

POWER CUT? CALL 105

You need to make sure all soil is at 1 meter away from the joint bay, so it doesn't fall back in.

If you are digging near an electricity or BT pole, leave a 1m space between the pole and the hole you have dug. If your cable is being moved next to or up the pole, then please dig the remaining 1m out the day before we (SSEN) are due to arrive.

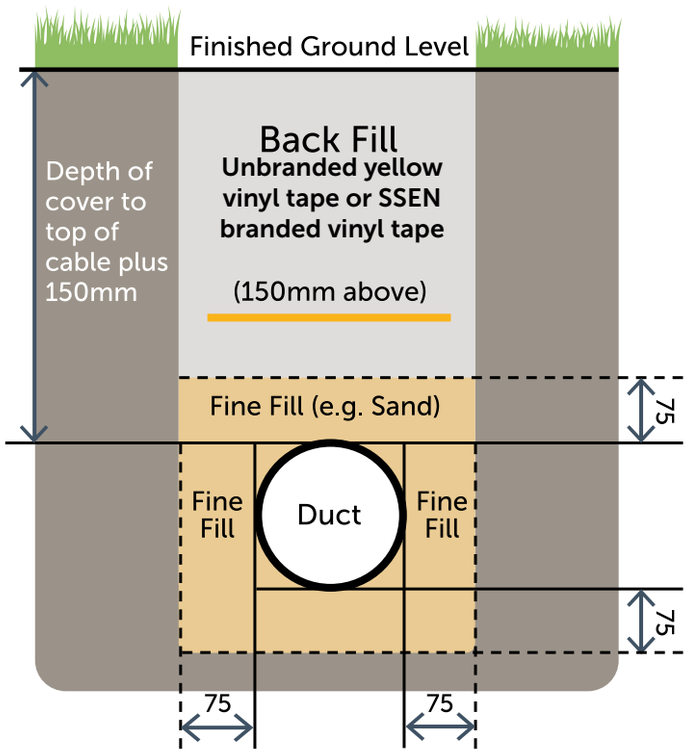
CABLE TRENCH DEPTHS

Ground type	Depth to top of cable / duct
Unmade, cultivated, or footpath	450mm
Driveway or road	600mm
Agricultural	1000mm

CABLE TRENCH JOINT HOLE

Dimensions for joint holes are given in the table below. The drawing included with our connection offer shows which joints(s) we will be making.

Straight joint	Breech joint	Pot end
2m by 1.2m	2.5m by 1.2m	0.9m by 0.9m



CABLE TRENCH EXAMPLES

HOW TO COMPLETE DUCTING AND TRENCH BACKFILLING ON SITE

DUCTING

The drawing provided with our quote shows where you are required to install ducting. You must supply and use **BLACK** electrical ducting manufactured to the ENATS 12-24 standard, minimum class 2. Ducting can be purchased from any builders merchants. Minimum internal diameters of ducting are given in the table below. Please make sure you provide a draw wire or rope within the laid ducting so that we can pull the cable through.
Do not use the draw string that comes with the ducting, please buy 6/8mm BT cord/blue nylon cord. You can buy this from any builders merchants. You can use the cord that comes with the duct to pull the BT cord through.

Cable type	Minimum **internal** duct diameter
Single phase service cable	50mm
Split/three phase service cable	100mm
Main low voltage cable	150mm

Every job is different, please check the ducting size you need with your project manager.

For single phase service cables you are required to install a 50 mm internal diameter **BLACK** electrical duct, from the joint position at the mains cable to the meter box.

For split/three phase service cables a 100mm internal diameter **BLACK** duct can be used, although it is recommended a 100mm duct is used for lengths greater than 20m.

Ducts should be laid straight where possible with a minimum number of bends and shall be marked with unbranded yellow vinyl tape or SSEN branded vinyl tape.

Please refer to your design with regards to installing your ducts. Where bends are required please discuss with your Connections project manager.

Vinyl tape examples

It is important that you install a draw rope in the ducting to allow us to pull the cable through. You will be responsible for clearing the ducting if it gets blocked. Following cable installation, the ducts should be sealed by the developer.

SERVCE TERMINATIONS AT UPPER LEVELS

We always connect our cut out/main fuse at ground level. If you have a connection that is on the first floor or above you must provide and install a suitable external or internal box for the cut out/main fuse and service cable to go in to.

If the cut out/main fuse is going to be located internally then this must be places in a common area of the building, to make sure it is accessible at all times.

We will not run our cable in walls, lofts, lift shafts, or other cavities not specifically designed to contain cables.

TRENCH BACKFILLING AND REINSTATEMENT

We will cover the laid mains cable with sand before leaving site. The sand will need to be provided by yourself. Unless reinstatement is being completed by us you will be responsible for backfilling and completing reinstatement of the holes you have dug out.

The amount of sand you need to purchase is 4 tonne per 100 meters.

All reinstatement in public footways and highways must comply with the new roads and street works act 1991, ‘specification for the reinstatement of openings in highways’ and national joint utilities group.

For further guidance please refer to the specification for reinstatement of the opening in highways (SROH) England or specification for reinstatement of the opening in roads (SROR) Scotland.

SAFE WORKING PRACTICES

WORKING TOGETHER SAFELY.

IMPORTANT

If you damage our cables you must report it to the Emergency Service Centre immediately, by calling 105

OVERHEAD LINES

Particular care must be taken when operating or handling mechanical equipment, cranes, scaffolding or ladders close to our overhead lines. You should always seek guidance before any work takes place on site from your appointed Connections project manager, who will ensure that all your works are carried out safely and in accordance with Health and Safety Guidance Instruction GS6 - Avoidance of Danger from Overhead Electric Power lines www.hse.gov.uk/pubns/gs6.htm.

UNDERGROUND CABLE AND CABLE TRACE/LOCATION

The drawing included with your quote will not show you exactly where our cables are located. Before we attend to complete our work, you will need to carry out your own cable location trace. Your competent contractor should be using **SafeDig** and utility records and use a cable avoidance tool to locate any cables at your property.

If you need to get a copy of our cable records please contact Linesearch Before you Dig service (lsbud.co.uk).

You must hand-dig trial holes to establish actual positions of existing cables before using a mechanical digger. Please follow the Health and Safety Executive (HSE) Guidance Note GS6 if working near overhead lines, and the HSE Guidance Note HSG47 if working near underground cables.

NEW ROAD AND STREETWORKS ACT

All digging work in the public highway must be carried out by SSEN, our contractors or your won contractors who are fully licenced under the New Roads and Street Works Act 1991. The New Roads and Street Works Act 1991 require us to notify local authorities and other utility companies before we begin work to install our equipment. This is to ensure works are carried out to nationally agreed standards.

Please note we will only raise notifications after you have accepted our quotation and we have agreed with you a scheduled date to deliver the works.

The following are the minimum period of notice we are required to give:

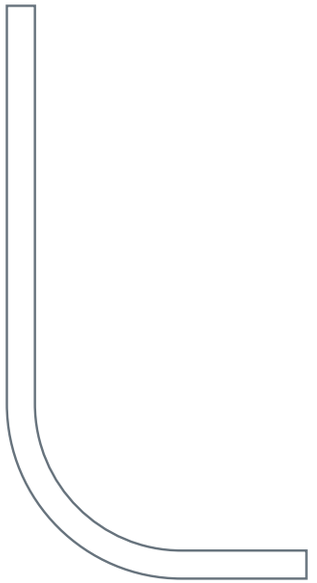
- 3 days for minor works (works with a planned duration of 3 days or less).
- 10 days for standard works (works with a planned duration of between 4 and 10 days).
- 3 months for major works (works requiring a temporary traffic order and with a planned duration of 11 days or more).

GLOSSARY

TERM	DEFINITION
FFL	Finished floor level.
Inspection pits	Open areas of trench where the depth of the contained duct can be measured and the use of sand and marker tape can be witnessed.
Joint bays	The hole in which the joint to a cable will be made.
IET Wiring Regulations BS7671	Wiring regulations for domestic and commercial electrical installations - https://electrical.theiet.org/bs-7671/.
PME	PME (Protecting Multiple Earthing) is a type of earthing that an electrician can recommend for your property. This will protect you, your home and your equipment from damage.
Reinstatement	To refill the holes you have dug.
SafeDig	SafeDig is a service which shows our clean and wastewater pipes on a map.
Single phase service	Typically a small domestic or commercial supply, less than or equal to maximum 23kVa.
Split phase	Typically a medium domestic or commercial supply, which is a maximum of 46kVa.
Three phase service	Typically a large domestic or commercial supply, maximum of 69kVa.
ENATS 12-14	Technical Specification for Plastic Ducts for Buried Electrical Cables, an official ENA document.

HOCKEY STICK

A piece of plastic pipe in the shape of a hockey stick which is used to protect the cable between the ground and the meter cabinet.



HOCKEY STICK SIZES

Single phase	38MM External diameter
Split/three phase	44MM External diameter

ENGAGE WITH US

For any queries or to request further information, please contact us on:

connectionscustomerservices@sse.com

www.ssen.co.uk/connections

twitter.com/ssencommunity

facebook.com/ssencommunity

instagram.com/ssencommunity

linkedin.com/company/ssencommunity

More information:

New electricity supplies - SSEN

Call us on:

0345 0260325

Email us on:

Connectionscustomerservices@sse.com

Scottish & Southern Electricity Networks | Powering our community