

openreach

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For Openreach People

SFY/HSH/D040

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Working on the Overhead Network

Health & Safety Handbook: Section 5 - Job Specific

About this document ...

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1 ***Working on the Overhead Network: Introduction***

This section of the Health and Safety Handbook deals with work carried out in the Overhead Network. Information relating to the use of the Safety Belt 11 can be found in Section [SFY/HSB/D042](#).

1.1 **The Manager's Role**

Work on the overhead network can only be undertaken by people who have been trained and assessed as being competent. Before any work is undertaken the person carrying out the work must be consciously confident in their own ability to carry out the task in hand on every occasion. This process starts with an [on-site risk assessment](#).

The basic skills required are:

- Guarding the work site
- Checking the Pole and attachments for Safety
- Safe accessing of the Pole
- Having been trained in the operational requirements to undertake the task in hand
- Awareness of safety of colleagues and the public whether on foot or in vehicles

BT also recommends that when you exit a stepped vehicle you should do so backwards, as this is a safer method of exiting a vehicle than exiting / climbing straight out of the vehicle. Ensure to make a thorough visual safety check before emerging.

1.2 **Working on poles**

All work carried out on poles (other than that carried out from a MEWP or free-standing scaffold), whether BT owned or owned by another company, must be done while secured to the pole. In all cases this will require the use of both the fall arrest lanyard and the work positioning belt; ladders used to access the pole will need to be correctly positioned and secured to allow for the full use of the belt.

2 *Before You Start Work*

2.1 What type of access equipment should I use?

In the vast majority of cases your training and experience will enable you to assess the potential hazards and make the correct choice of access equipment to safely carry out the work i.e., ladder or MEWP to minimise the risks entailed in carrying out work at height.

However sometimes appearances can be deceiving.

In the example shown below if this was a wall rather than a bank the joint would always be accessed from the street below using ladder or a mobile elevating work platform as the potential for a fall from the wall by a misplaced step would be obvious.



In fact, a bank can present the same H&S issues as a wall because the bank may give a false indication of solid footing and the risk of a fall is greater from a position where your footing is deceptive – where does the top of the bank stop and the slope start, does it have any holes or sharp objects in it?

Make sure your [on-site risk assessment](#) takes into account any potential hazards that may be encountered in any task you are about to undertake.

Planners should also take this sort of situation into account before locating equipment on areas of poles.

2.2 Guarding the work site

Before you start work use an Amber Rotating Beacon for short duration work or, prior to setting up or closing down, guarding equipment. Pedestrian barriers, cones and signs should be used to protect yourself and the general public. The general rule is that if you interfere with the free movement of pedestrian or vehicular traffic you must warn, sign and guard and, if necessary, light. The extent to which this is necessary will be determined by your on-site risk assessment. A ladder should only be erected in the carriageway if it is absolutely necessary to do so. A ladder erected / placed in the carriageway should, whenever possible, be protected by a vehicle. For more details on guarding see [Code of Practice \(CoP\)](#) or [Safety at Street works](#).

There may be cases where it will be necessary to have consultation with Police and / or Highways Authorities before starting work, due to exceptional traffic problems or particular road conditions. The Authority may require that traffic control measures will need to be used.

2.3 Personal Protective Equipment and Clothing

- Always wear Openreach corporate clothing and suitable wet weather clothing according to the conditions. In hot weather, shorts must not be worn for pole climbing. A full description of Personal Protective Equipment is given in [Health and Safety Handbook](#)
- You must wear Openreach approved boots which are designated as suitable for climbing
- A Safety Helmet must be worn at all times when working on, or near to a pole. The chin strap must be worn
- It is recommended that you wear Gloves when climbing poles, to protect against creosote, splinters and rough edges of pole steps. If rings are worn on the fingers they must be removed or taped, or gloves must be used
- Wear eye shields during all wiring work at the top of poles and at any time when airborne dust or dirt is a risk. Eye shields must be worn when using aerosol sprays at the top of the pole
- Wear your high visibility jacket outside a guarded site and when working in and or near the carriageway
- All details regarding the Safety Belt No 11 can now be found in Section [SFY/HSB/D042](#) of the Health & Safety Handbook

2.4 Weather Conditions

- You must assess and take into account the weather conditions before starting work on a pole
- Never work up a pole during a local thunderstorm
- In windy weather take special care when erecting, lashing or climbing the ladder and pole. Keep clothing buttoned up. Ask for assistance in very strong or gusty wind conditions. Be aware that strong wind can “snatch” at large items being carried so there is an additional manual handling hazard to consider as part of the on-site risk assessment
- In ice and snow, clear the ladder foot area and any coating of ice on the steps or on the exposed side of the pole. In severe conditions consider the use of a Platform Elevating

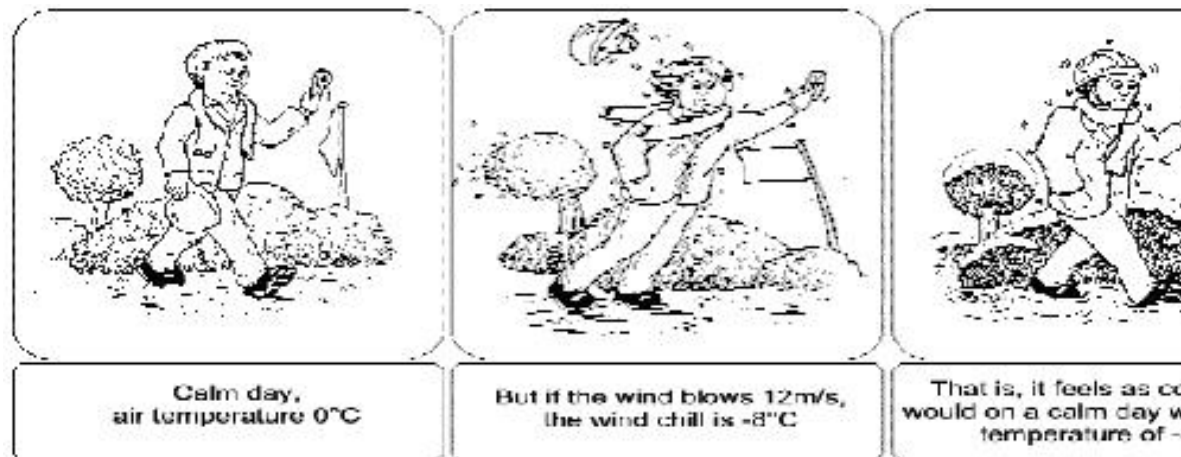
Below is an extract of the Beaufort Wind Scale to help you judge the wind speed as part of your on-site risk assessment:

Beaufort number	Wind speed at 10 m above sea level(mph)	Description	Land Conditions
0	less than 1	Calm	Calm
1	2	Light air	Wind motion visible in smoke.
2	6	light breeze	Wind felt on exposed skin. Leaves rustle.
3	11	Gentle breeze	Leaves and smaller twigs in constant motion.
4	15	Moderate breeze	Dust and loose paper raised. Small branches begin to move.
5	22	Fresh breeze	Smaller trees sway.
6	27	Strong breeze	Large branches in motion. Umbrella use becomes difficult
7	35	Near gale	Whole trees in motion. Effort to walk against the wind.

Note: In windy or stormy conditions, if in doubt, don't climb without seeking advice from your line manager

Remember the affects adverse weather can have on you:

Wind chill can gradually lower the core body temperature to the point where it no longer functions properly (hypothermia).



Finally, it's well known that cold weather can make muscles tighten up. Before handling and lifting an object, consider using a mechanical aid or get assistance first. If you have to lift perhaps one or two stretches of the arms, legs and back will increase your body's defence against a pulled muscle or a strain.

2.4.1 In very hot weather

Watch out for creosote seepage, which may make the pole slippery to hold. Poles will occasionally bleed in situ, and where these have to be handled or climbed avoid getting the creosote on your skin by wearing protective clothing. If the clothing gets contaminated with creosote such that it is likely to come through the clothing or gloves, change the protective clothing. It is advisable to carry spare protective clothing. Remember to wash any creosote off skin if contact occurs.

2.4.2 We all know the possible effects of exposure to the sun so “cover up!”

A sunny day makes most of us feel good but too much strong sunlight can be hard on the skin. The problem is caused by the ultraviolet - UV - rays in strong sunlight.

2.4.3 What are the dangers?

In the short-term sunburn can blister your skin and make it peel. In summer, even on cloudy days, enough UV can filter through to cause burning.

In the longer term the most serious effect is an increased risk of skin cancer later in life. This cancer is almost always easy to cure but it needs to be caught early. Also, too much sun could speed up the ageing of your skin, making it leathery, mottled and wrinkled.

2.4.4 What can I do about it?

You should protect yourself from direct sunlight and avoid intensive midday sun (11 to 3 pm) particularly if working outdoors in the summer

The best protection is to shade your skin from the direct sunlight by "Keeping Your Top On". Ordinary close woven clothing, such as a long sleeved work shirt and work trousers will stop most of the UV. Wearing your safety helmet will protect the top of your head.

BT also provides via the engineering stores catalogue, sun-block cream (Sun Protection Factor SPF 30) which can be used to protect those parts of your skin which you cannot cover up, e.g. your face and forehead, the back of your neck and the back of your hands. The Item Code for the cream is 003286.

2.4.5 You also need to check your skin:

The first warning sign is often a small scabby spot which does not clear up after a few weeks. Look for changed or newly formed moles or any skin discolouration. If you notice any of these things - check them out with your doctor. The smaller the spot the easier it is to cure so don't delay going to the doctor when you know you should.

Finally, don't forget to drink plenty of water regularly during hot days to avoid dehydration.

2.4.6 Further information

Two leaflets giving further information have been produced by the Health and Safety Executive and are available via the following links

Keep Your Top On - Health risks from working in the sun. Advice for outdoor workers: [HERE](#)

Sun Protection - Advice on reducing the health risks when working in the sun [HERE](#)

2.5 The Manager's Role

It is a management responsibility to carry out a dedicated check on all PPE, as per the A2410 / esiTest procedure.

3 Pole Testing and Inspections

Please refer to [EPT/OHP/C022](#) for further details.

3.1 Inspection and Testing

It is your responsibility before starting work on any pole, including those not owned by BT, to test the pole and any strut for soundness and make sure it is safe to climb. Hollow poles must never be climbed and therefore are not included in this general test.

Please see the Pre-Climb check in [EPT/OHP/C022](#).

You must not excavate unless you are trained and equipped to do so and all the requirements of safe digging have been observed. See [Excavation](#) in the Health and Safety handbook.

- Poles marked "D" or "SD" must never be climbed.
- You should also look for any other attachments or signs, e.g. A1024 label which indicate that a defect relating to the pole has been reported.
- Poles marked with a green "C" label can be climbed, providing certain conditions are complied with, refer to [EPT/OHP/C022](#) for full details of the Shallow Climable process.

Test one - "check wire heights"

It is essential, PRIOR to climbing or working on any pole, to measure the clearance of ALL wires and aerial cables attached to that pole, where they cross the carriageway.

The first action is to make a visual check to determine if the lowest point of the cable occurs at a point above the carriageway. If the lowest point is above the carriageway the engineer should take a height measurement at the edge of the road on the side where the wire is lowest. If still in doubt, take another measurement on the opposite side of the carriageway.

If this reading is 5.2m or above, then work may continue (subject to checks on other wires and other safety checks).

Note: PLEASE NOTE, in exceptional circumstances, a wire/cable may have lost its span tension resulting in a pronounced dip. In these instances the lowest point must be measured.

Note: ALSO NOTE- the check height of 5.2m is applicable to all carriageways, including high load routes.

If this necessitates measuring from the carriageway this should only be attempted when the speed, visibility and the level of traffic permit. If it is not possible to measure the wire height because it is unsafe, assume the wires to be low and refer the work to the Control.

Joint User Poles - Measure all BT wires on Joint User poles which cross the carriageway. Whilst it is highly unlikely, there may be low electricity wires which also cross the carriageway. The minimum installation height for electricity wires is 5.8m, and they are installed at greater tensions than BT plant, so they are unlikely to dip below BT wires or cables.

If it is suspected that electricity wires MAY be low, in the first instance, make a visual comparison with BT wires that have been checked. Only measure the clearance of electricity wires if a visual comparison does not give a clear result. Measure (low voltage power lines only) using Rods Clearance Complete or Rods telescopic 7m (see below). Always wear Gloves IR when doing so.

If after measuring, a power cable is identified as low, i.e. below 5.2m, contact the relevant electricity supply company (DNO).

Please dial 105 from your mobile phone to be directed to your local DNO.

If a clearance of less than 5.2m above the carriageway is found on any of the wires, including electricity cables, the pole must not be climbed.

Instead the job should be referred back to the relevant Control, for remedial action. This may include the use of an elevating platform or other means of access.

Test two – “use your eyes”



Use the three metre mark in the manner shown to check that a pole is set at the correct depth. Stamp aside or cut away, grass or growth at the foot of the pole. For all poles (except SC poles) the top of the 3m mark should be no more than 1.8m clear of the ground.

Hedgerows - check a pole that is set in a hedgerow or similar for hedge cutter damage, usually found at a height of 1.5 to 3 metres

Non-wooden poles - hammer and probe tests do not apply. Give these poles a very close visual inspection.

Test three - Hammer test



Tap the pole lightly with a 1lb hammer all around the pole at the ground line, making reference taps 600-900mm up the pole.

Listen for a change in the tone to the dull or dead note indicating decay. If you are not sure, dig down about 300mm and repeat the tests on the exposed wood

Test four - "use your probe"



If the hammer test or anything else makes you suspect the pole is decayed, prod it lightly with a Probe, testing the area you suspect. If the wood is good, the tip of the Probe will be held. If the wood is rotten, the tip of the Probe will push in easily and the surface wood will scrape away easily.

Remember do not climb any pole that fails the tests.

3.2 Additional checks before climbing

For information about Stays, Struts and Gallows Poles please refer to [EPT/OHP/C022](#).

3.2.1 Missing stays

Raise an A1024 for all missing or damaged stays.

3.2.2 Poles with excessive lean

Please refer to [AEI/AEC/B180](#)

3.2.3 Joint user poles

For further information on joint user poles please see [EPT/OHP/C032](#) and section 13 of this document.

REMEMBER –All work on Joint User Poles, whether DNO or BT owned, MUST have 2 men in attendance. Also, it is mandatory to complete the [written On Site Risk Assessment](#) checklist before starting work.

- Can the ladder be erected without having to rest it against any cable running up and down the pole?

- Is there 500/800mm vertical separation between the low voltage power wires and the BT wires?
- Are lighting and other electrical fittings at least 50mm from all BT wires and fittings?
- Some (DNO's), joint user poles are fitted with a bandage. These poles must be tested in the normal way, except that the top edge of the bandage is regarded as ground level. Do not interfere with the bandage.
- Only use a ladder 7A (blue ladder).

If you are unsure, or in any doubt about the soundness of a pole, seek advice don't climb it. Remember, always be alert - damage to poles may happen in unusual ways. Woodpeckers, gunshots, and vehicle damage are just some examples. In addition to the inspection and testing of the pole, the area around the pole must also be assessed for any hazards which could cause serious injury in the event of a fall from the pole or the ladder.

3.2.4 Pole inspection and testing - defects and actions.

The only people authorised to attach "D", "H", "Z", "SD" and "C" labels to poles are pole testers. You can request a test by telephoning 0800 0858262, 0330 1233304 or users in N Ireland 028 3833 3093

Please see [EPT/OHP/C022](#) for further details.

3.3 Additional Labelling requirement to verify the pre-climb check

Please see [EPT/OHP/C022](#) section 8 for further details.

3.4 EXISTING "D" POLES IN THE NETWORK Guidance notes for Engineers & Controls

The following notes are issued to assist Engineers & Field Controllers when a "D" Label is found on a Pole. The notes are for guidance only and in no way supersede or replace any BT ISIS or Safety Guide.

This guide will help you to help Asset Assurance to verify the Pole and ensure Records are collected and corrective action taken to solve the "D" issue. This

Briefing should be considered alongside the **Request Test ISIS EPT/NNS/V010**.

Please read carefully: The guide will save you time and reduce the visits made by testers to poles which could be found to be in good order or already in the system as a D Pole waiting to be changed.

The Asset Assurance programme office accepts all responsibility for Poles identified as D, other than criminal/vehicular damage in the network. They are also an important part of ensuring an accurate and complete pole inventory.

Please remember “D” “SD” “C” “H” and “Z” labels may only be attached to poles, or removed from poles by Qualified Pole Testers

Any unauthorised person who attaches or removes a “D” “SD” “C” “H” or “Z” label on a pole may be subject to the disciplinary procedure.

Where a Pole is found with a Red “D” label attached, the Asset Assurance programme office will require the Year, Length & Class (**See ISIS EPT/OHP/B058**) and Test Label information (Colour and date punched out of last Test). All this information should be entered on the CSS job notes or be available when requested. This enables accurate Pole Validation on the Pole Database and can potentially save another visit by a Pole Tester as a Request Test just to verify Pole Labels.

Potential problems also emulate around the wording entered onto CSS notes. Occasions which cause jobs to be passed back and forth and questioned for more notes are where the CSS notes contain the words "Pole is D". This then is questioned as to whether the Field Engineer makes the judgement as their opinion that the Pole should be "D" or if there is an actual red "D" label nailed on the pole.

Information on CSS notes needs to clearly state that the “Pole is marked with a "D" label”.

If not and the Engineer suspects the pole is "D" then a specific reason for their request needs to be entered to aid the Asset Assurance process as per the Request Test ISIS EPT/NNS/V010.

To ensure the information is accurate it is strongly recommended that requests are made from site.

Faded 3m markings and fitting an aluminium strip

Further information can be found in ISIS EPT/OHP/C022 section 5.

Repair Process for Damaged Wooden Poles (Poles marked D for Damage)

Please see [EPT/OHP/C022](#) section 18.

3.5 Near Miss/Pole Collapse

BT poles rarely if ever collapse without some environmental or physical influence. Where these instances should occur they must be reported as a near miss via the Network Repair Team on 0800 169 5098 (UK) 0800 917 0287 (NI) if out of hours call 0800 374 541 (UK) 020 3668 9659 (NI) and also to the National Pole Testing Control (UK) 0330 1233304 option 1 (NI) 028 3833 3093 for recording and further investigation where applicable onward cascade to Openreach Plant Safety Team for investigations to take place.

If requested by Openreach Plant Safety the pole must be recovered and set aside from the normal recovered poles to enable examination at a later date. Poles must be clearly labelled to indicate retention is required. Where possible all parts of the pole should be kept. When reporting the incident the location of the pole must be advised to the pole testing management team.

4 ***Poles with MiiS antennas, Microwave dishes and Poles in the vicinity of Mobile Masts***

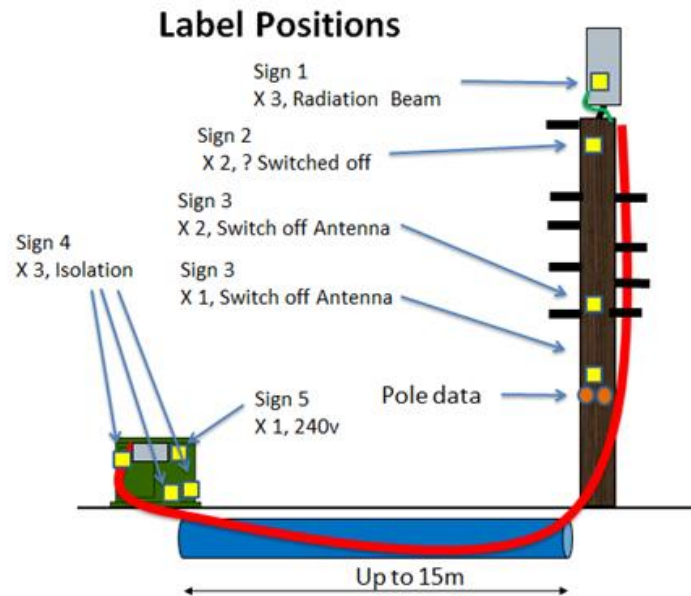
4.1 Mobile infil infrastructure Solutions (MiiS)

Warning: Mandatory safety: Before climbing a pole with an MiiS antenna attached you must SHUT DOWN the site. Before shutting down the site you must obtain permission from the respective Mobile operator by calling the Network Operators Control to inform them you need to work on the pole and will be powering down the site. There will be a label on the front of the MiiS cabinet Openreach compartment door giving the Mobile operators name, contact number and site reference. The details on the cabinet and power down process are given below. Once you have finished your work at the pole top you need to turn the power back on and call the mobile operator again to advise that you have completed your work and have turned the power back on.

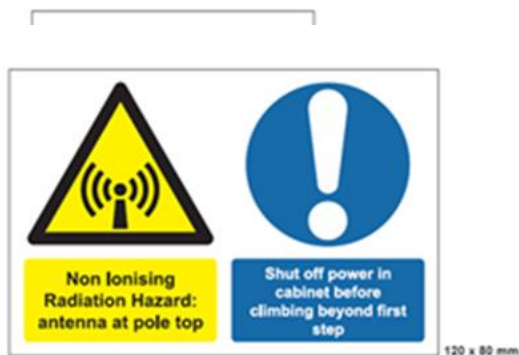
Note: This process requires two-person working at all times. The role of the second person is solely to remain at the cabinet to prevent energisation whilst work is being carried out at the pole.

4.1.1 Identification of an MiiS pole with an antenna

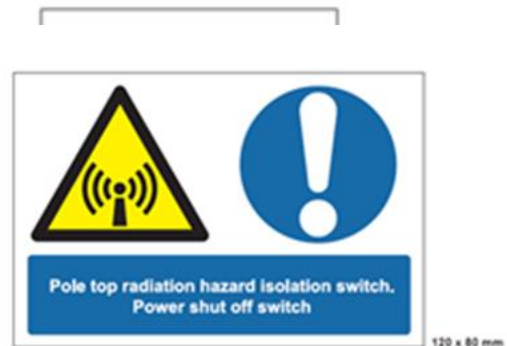
Poles and cabinets used for MiiS will have the following health and safety labels attached:



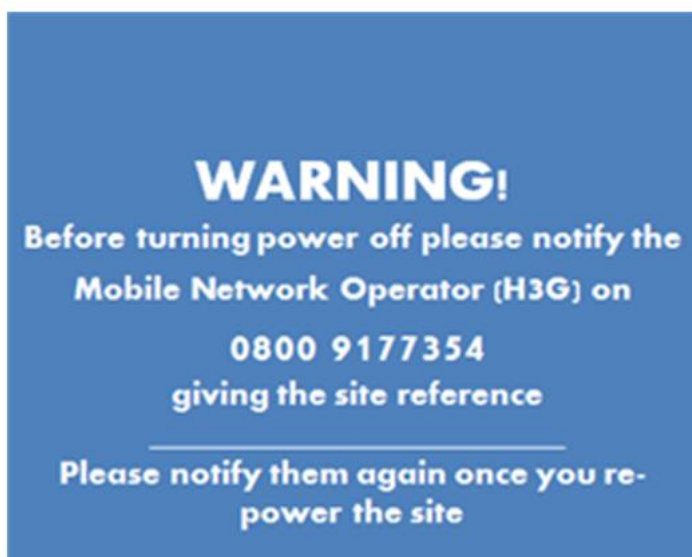
Mobile operator's signs will be similar to the sign below and affixed to the outside of the Openreach compartment door.



Sign 3



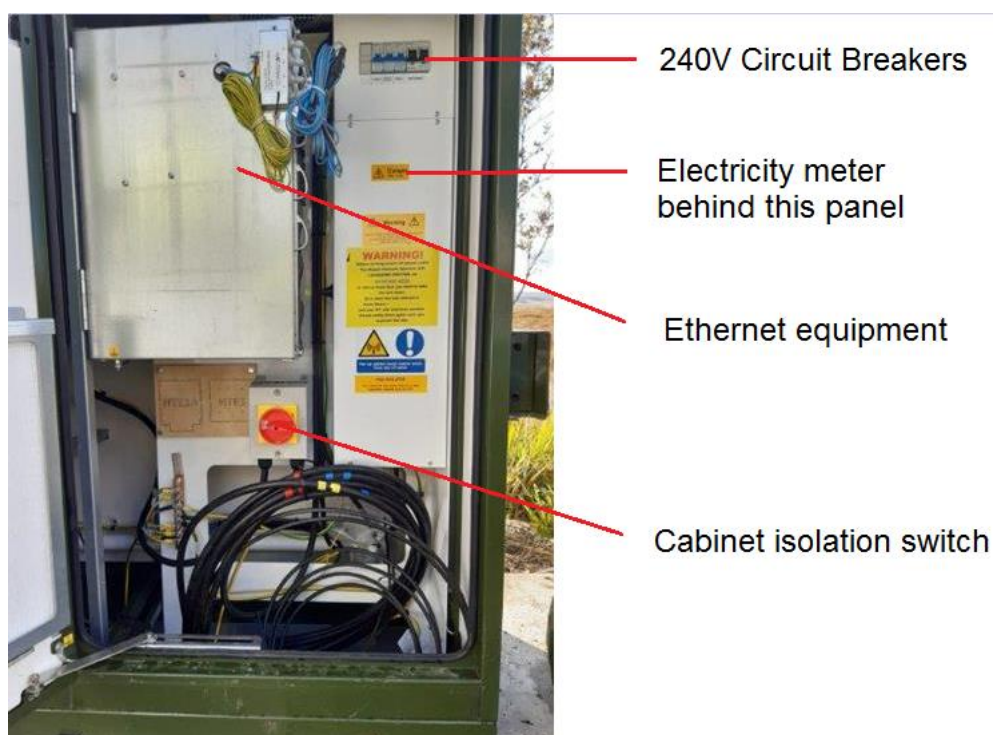
Signs 4 & 5



4.1.2 The MIIS Cabinet

The MIIS cabinet has 3 doors. The two doors on the ends of the cabinet house the Mobile operators equipment while the large door on the front of the cabinet gives access to the Openreach equipment including the site shut down switch, ventilation fans and filter, DC power supply, Ethernet access equipment, electricity meter, and circuit breakers. See below:





Engineers entering the BT active power areas of the MiiS cabinet, need to be aware that the cabinet operates with dual voltage supplies (240Vac and 50Vdc), and be aware that isolating one supply will not necessarily turn off power to all the components within the cabinet.

The Cabinet has 3 isolation switches (Red switch on a yellow casing) , one behind each door, these switches will isolate all the MNO's equipment and the cooling fans, and this is achieved by switching off the power to the 50v DC Eltek PS (power supply).

Note: This will not switch the 240v Mobile operator's modem off as it is 240v, this can be switched off if required from the Circuit Breakers (top right).

Note: Before powering down the cabinet please ensure that you have notified the customers Lockdown Control or Network Operating Centre (NOC) using the phone number in the cabinet. If this is a planned visit then you will have received a permit number to carry out the work and should quote this number. If the visit is for emergency repairs then you will need to phone the Lockdown Centre or NOC, advise them that you require an emergency lockdown and wait for them to call you back to confirm the lockdown and give you a permit number. Failure to follow this procedure without the Customers knowledge will cause the customer to raise a T2R request when the site is powered down.

4.1.3 Before climbing an MiiS Pole

Upon arrival at site the usual 'On Site Risk Assessment' must be carried out, see health and safety handbook "[Risk Assessment](#)" for further information. This should take into account hazards such as, weather conditions, surrounding access conditions to the MNO cabinet (mud, water, slippery-surfaces etc.), and conditions within the cabinet (i.e. water ingress, damage to electrical insulation, general condition, etc.).

If there are any concerns that an identified hazard or risk is beyond the scope of the individuals' training and experience, then immediate reference must be made to their Line Manager at the earliest convenience.

Engineers who are required to climb a MiiS pole will receive notification in their task. They will be made aware of the associated Hazards in the Notes. This will be in conjunction with the information displayed on the pole.

In the meantime, engineers should refer to the instruction signage on the pole base and at the ladder points. They must conduct them accordingly which will support the safe system of work required.

For more information please see the PDF attached to ISIS [EPT/ANS/A056](#) and also [de-energisation of an MiiS structure](#).

4.1.4 Pre-climb/Pre-work checks

All engineers should complete all pole tests in line with ISIS [EPT/OHP/C022](#).

<p>Warning: If you are in any doubt, DO NOT CLIMB OR PROCEED and call your relevant control/ line manager.</p>
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4.1.5 Training Requirements

Those needing to access to the 3rd party mains, located in a separate power compartment within the cabinets must have attended the G39/1 training course.

It has been agreed that this simple but vitally important Safety/switching task does not require Volume Engineers to be G39 trained.

4.1.6 Completion of Works

On completion of any works, turn back on the isolation switch in the cabinet and check with the MNO that the antenna is functioning.

4.2 Microwave dishes

Where a BT pole is supporting solely a radio transmitter/antenna it will be necessary for non-radio team members to seek co-operation from the radio team to ensure the pole can be worked upon safely. The radio team can be contacted via the link or the email address below.

[Who we are \(bt.com\)](#)

sd.operations.control@bt.com

The radio team will, when necessary, arrange a joint meet with one of their field team who will provide a RF badge (monitor), to be used whilst climbing; provide on site coaching on its use, the alarms and action to take should the alarm sound.

It may also be beneficial for non-radio team members working on these poles to complete the 2-hour WBT on learning home RF1001, although it is not essential as support will be provided onsite by the radio team.

4.3 Working in the vicinity of Mobile masts

Electromagnetic fields (EMFs), specifically radiofrequency (RF) fields, are produced by the antennas associated with base stations, phone masts and towers.

On occasion, Openreach may be required to work at height close to these phone masts/towers where existing poles are located.



Example of a Mobile Phone Mast



Example of a Lattice Tower Cell Site

4.3.1 Identifying a Phone Mast

Phone Masts are a metallic structure, normally 13 metres in height (this can vary). They will have either a protruding top, or multiple antennas as shown below. Typically, these masts will be in the vicinity of multiple cabinets, these cabinets should be labelled with the name and contact details of the Mobile Network Operator which owns the Phone Mast.



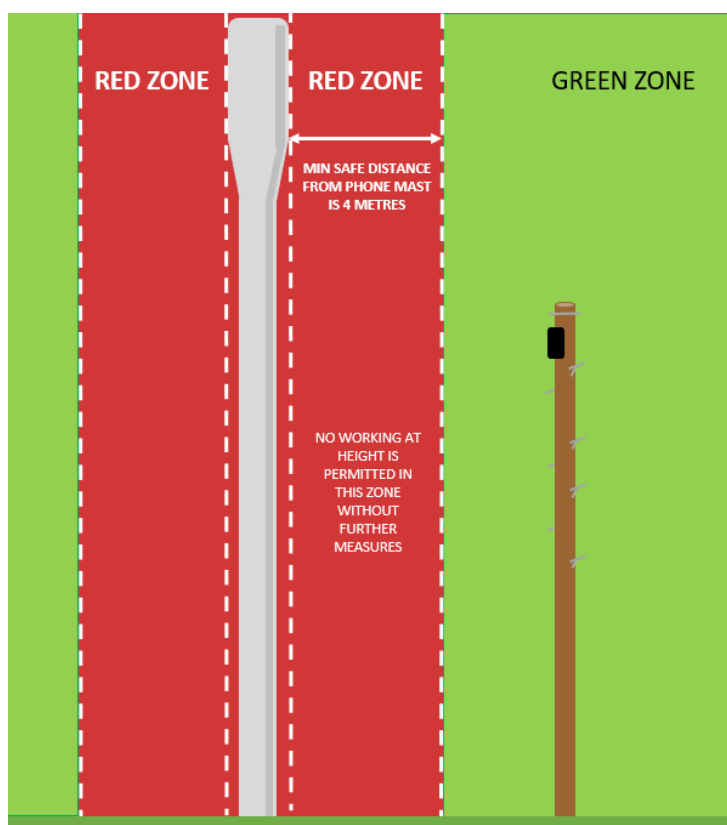
Example of a Mobile Phone Mast



Contact Details Examples

4.3.2 4-metre Exclusion Zone

A “Red/Green curtain zone approach” is to be implemented to enhance safety while working at height near Mobile Phone Masts. The “Red zone” is a 4-metre area around the outermost antenna, in which no working at height must be performed without further measures. Anything outside of this 4-metre curtain is classed as the “Green zone” and normal working at height procedures apply. See below.



Red / Green curtain zone

No working at height within the red zone. This includes MEWPs, any types of scaffolding, ladders, or any other types of access.

4.3.3 Actions for Engineer

In addition to your usual pre-climb/works check when working at height, where it is not possible to achieve a minimum separation distance of 4 metres from the outermost antenna, you must contact the Author or the Approver of this document to seek co-operation to ensure the pole can be worked upon safely.

When necessary, a joint meeting will be arranged, an RF badge (monitor) will be provided to be used whilst climbing / accessing the Pole; on-site coaching on its use will also be provided and an explanation of the alarms and action to take should the alarm sound.

WBT TNRF1001 must be completed if not supervised by a member of the Overhead Policy Team or the Safety Team.

4.3.4 Further mandatory actions

4.3.4.1 A1024

If a Pole is situated within a position where the 4-metre working at height exclusion zone cannot be achieved then an A1024 must be submitted, Defect code: 542 remedy code: 316.

4.3.4.2 Labelling of Pole

A warning label must be affixed to any Pole within the vicinity of a Mobile Phone mast.

The label is available via eASC.

Timber Poles: I/C 117880.

Hollow Poles: I/C 117881.



RF warning label for Timber Poles



RF warning sticker for Hollow Poles

5 ***General Climbing and raising equipment to the Working Position***

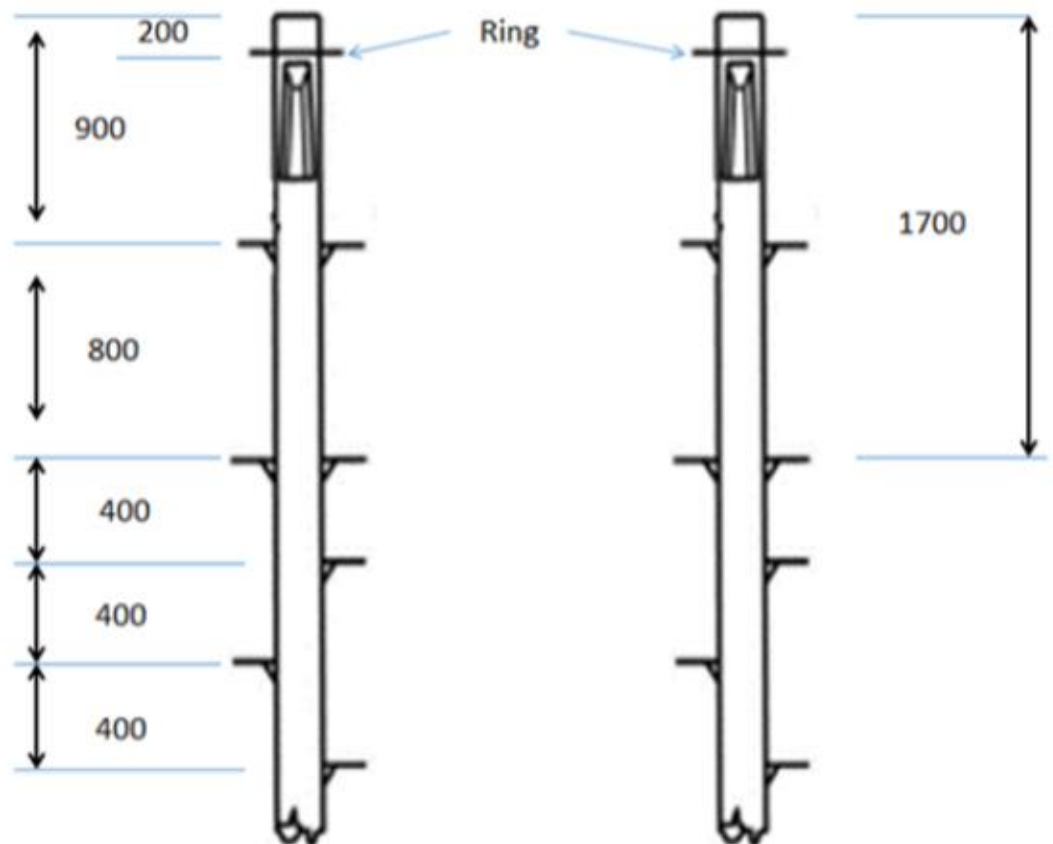
You must have both hands free for climbing. To carry your tools to the working position, you must use a Belt Pocket and /or a Tool bag for OH or Tool Bass. Using a sash line, hoist the tool bag to the working position. If this method is used tie one end of the sash line to the tool bass and tuck the other end loosely under your belt. This is to make sure that, if the sash line snags, it will fall free without putting you in any danger. Only hoist the bag once you are settled in the working position.

Check the section on access equipment for the correct ladder to be used. Remember poles marked "D" can only be worked on from a Platforms Elevating or Tower Scaffolding.

- Secure the ladder using TETRA.
- Whenever possible aim to climb on the side of the pole from which you intend to work. Look for problems before you start.
- Climb unencumbered.
- Use the ladder climbing technique of moving foot and hand on the same side together.
- Grip the ladder rungs, not the stiles.
- When your shoulders are about the same level as the top of the ladder, you must lash the ladder to the pole.

- Full details of using the Belt Safety 11 and the Fall Arrest Lanyard are in SFY/HSB/D042.
- When you reach the pole steps, you can use them as hand holds and steps. However you must test every step before you put your weight on them.

Fig below shows the typical stepping arrangement on poles but some variations may be encountered.



6 Overhead Wiring and Cabling

Any major unbalanced change in pole head loading such as cutting away several drop wires or a sudden shock load such as a vehicle snagging a sash line, could result in a pole collapse and risks to the WTM aloft and or the general public.

Provide additional stays permanent or temporary as appropriate to compensate for any large change in the pull or direction of pull, of wires or aerial cable. This will avoid any risk of pole collapse, particularly if there is undetected decay in the pole. Take the strain on a temporary termination before cutting wires or cables. Release the temporary termination slowly to avoid jerking and lower the wire or cable by sash line. For the recovery of ringed or lashed cable take all the cable down before disturbing the suspension wire. Operations of this kind must not start until those concerned have been warned and those aloft have confirmed that their safety belts are fastened. With pole recovery do not release stays (including temporary ones) until everyone has descended the pole.

6.1 Points on erecting wire

Remember to examine existing house attachments as well as pole fittings. Replace or recover any corroded or insecure item before starting other work. Do not use "Spikes Insulator" for new work or renewals. If you come across any existing Spikes Insulator recover them if it is practical and safe to do so. Be sure that your ropes and other equipment for erecting wire and cables are in good condition. Tension wires, especially drop wires, from the pole, not the building end. Work from a secure position on the pole, whenever possible, work opposite the line of the wires being worked on, to ensure that you can see what is happening as wires are tensioned.

When working from a ladder, always ensure that the ladder is secure, for detailed advice see Access Systems Section SFY/HSB/D041 in Health & Safety Handbook.

Always follow the correct procedures for erecting wire and cable across a road. In particular:

- Observe the limitations for solo working.
- Never lay drop wire across a road and climb dragging the free end behind you.
- Use the proper sash line procedure.
- At a road crossing, trap your sash line with one foot while you remove slack ready to pull up (to prevent the line being raised into the air before the road is clear of traffic).
- Be sure to wear eye shields when cleating wires, or handling springy wires.
- When cutting, hold the wire to prevent the ends springing towards you, and turn back the free ends of cut wires and coils, against risk of injury during subsequent handling.
- When stripping insulation from wire ends use the correct tool. Direct the stripping action away from your body. Use emery cloth where you have to clean cadmium copper wire.

6.2 Span Length

Please refer to EPT/ANS/A011 for further details.

6.3 Drop-wire loadings on Poles

Please refer to [EPT/ANS/A011](#) for further information.

Hollow Poles – earlier stainless steel hollow poles are limited to 20 drop wires. The current galvanised steel poles are now available in Light & Medium classes (see marking on drop wire ring inside pole) These poles can take the same equivalent Light or Medium wood pole loading, again dependent upon location - see EPT/ANS/A011

6.4 Points on Aerial Cabling

Before you start any work on a suspension wire or aerial, do an on-site risk assessment, this should include an examination of the suspension wire and fittings from the pole at each end of the span. This also applies for self-supporting aerial cable terminations. Take special care where part of a suspension wire span may be exposed to corrosion, for instance at a railway crossing. For access to the cable span itself use whichever is the most practical, either a Platforms Elevating, Kits Staging of scaffolding, or lower the cable to the ground. The use of rigging chairs and similar devices is strictly prohibited. Where an air cylinder is used to supply air to an aerial cable, secure it in an inconspicuous position to reduce the possibility of vandalism.

The maximum span length for any Aerial Cable should not exceed 68 metres.

6.5 Clearance above Ground

Please refer to [EPT/ANS/A013](#) for minimum heights and carriageway definitions.

7 *High Voltage Sub-stations*

There are three musts:

- The electricity undertaking's "authorised person" must be present and in control.
- You must follow their instructions or any permit to work conditions.
- You must be familiar with the precautions in EPT/PPS/B012, EPT/PPS/B013 and EPT/PPS/B014.

Remember to keep well clear of switchgear, transformers, etc. and to keep to any marked safe path.

Only use non-metallic access equipment.

7.1 Hot Stations and Sites

These require additional precautions, notably for work on cables within the zone of the Rise-of-Earth Potential (Hot Zone).

Generally this zone is now to be calculated, at BT's request, by the relevant supply owner and will be held on a Hot Site Register / Plan. If in doubt of the extent of the zone, contact your line manager for clarification; see EPT/PPS/B012, EPT/PPS/B013 and EPT/PPS/B014 for detailed information.

7.2 BT faults at high voltage power line crossings

See EPT/PPS/B046 and EPT/PPSB026 for information on underground crossings of high voltage lines. Please see section 13 of this document for further information.

8 ***Working in the Hours of Darkness (WITHOD)***

It is acknowledged that working in the hours of darkness or other low ambient light conditions presents potential risks beyond those encountered in normal daylight hours. Consequently there is a need for anyone who is required to undertake work in these situations to adopt and follow stringent safe systems of work. The safety of all the people involved, including anybody else who might be affected by the work, must be the primary priority when completing the mandatory [on site risk assessment](#) of the task and location, and must take precedence over other considerations. Once the risk assessment has been carried out, the decision made by the individual whether it is safe to carry out the task is final and cannot be overturned. As a result of the risk assessment individuals may wish to put themselves in to “Enhanced Duty of Care” at their specific location for a suitable period of time. The procedures outlined provide the field engineer with the key points to be remembered when working in the hours of darkness or other low ambient light conditions.

Training & Competency

Engineers working with the lighting kit must have successfully completed Training Course ORSAF006 to demonstrate competency in setting up and using the equipment before using it for any ladder or pole work.

MEWP operators and Ground Support Person (GSP) must have attended the Training Course ORSAF008, Working in the Hours of Darkness with MEWP's.

On site Risk Assessment

Field engineers must complete an on-site risk assessment. An individual has the absolute final decision on whether work can be undertaken through the risk assessment. No other person can overturn the individual risk assessment. Engineers unable to complete work should enter full reasons on their notes when handing the job back to control. The job will be re-issued during daylight hours and subsequent engineers who are allocated the work should be advised of the nature of the original risk assessment. A further risk assessment on site must be undertaken (things may have changed since the previous visit).

Areas of High Risk

Field engineers will be informed of a High Risk area (including HOD sites) by a hazard warning note on CSS, in the notes field of their Work Manager or by their manual control. Engineers must put their personal safety first in line with current "**Hours of Darkness**" location processes.

Risk Areas - Total Exclusions

The following areas / jobs must not be undertaken in the hours of darkness or other low ambient light conditions:

- There shall be no long ladder work.
- Work is not permitted where it would require carrying ladders, or other equipment such as drop wire dispensers or lighting sets over rough or unmade ground or carrying the equipment where ground conditions cannot be checked or adequately illuminated.
- Climbing of poles over 10 metres.
- No work must be performed which would require turning on the pole.
- No new drop wire erection across "A" or "B" class roads over 30 mph.
- No checking the height of wires across carriageways other than single carriageways.
- Where pedestrians would need to enter the carriageway.
- Any work on joint user poles.
- No work on power crossings.
- Work in the vicinity of overhead power distribution lines at end user's premises where there is a risk of contact between the power lines and the individual or their equipment, including erecting and moving ladders.

- No activity on overhead wires which requires erection over structures (sheds buildings, high walls and fences, greenhouses, etc.).
- No clearing of obstructions or tree pruning during the hours of darkness. This includes manoeuvring through branches to gain access.
- No work involving temporary raising of drop wires with a Prop Telescopic.
- When using a MEWP no work is allowed where overhead power lines are present on either side of the road.
- MEWP's must not be used in the "Mobile" mode only from a fixed operating position.
- MEWP's should not be used where it is not possible for the operator and the GSP to communicate verbally with each other.
- No working on poles from a MEWP over 10 metres high.

Risk Areas - Singleton Exclusions.

The following 3 work areas must not be undertaken by a Singleton Field Engineer:

- All Total Exclusions.
- Back Courts.
- Industrial Complexes, Petrochemical Works, Registered Sites.

Engineers should carry out an appropriate on-site risk assessment to determine if assistance is required, or if the job should be furthered, when working in the following situations:

Cabling / working on walls when repeated moving of the ladder would be required.

When working on walls and the ladder is in any location with high levels of pedestrian traffic, to the point where they may not see the guarded work site.

Risk Areas - Other Considerations.

- Multi-span drop wires must be erected one at a time.
- Cut and draw or sash line methods only to be used for the erection, renewal or recovery of drop wire at road crossings.
- Carriageway & Footway working must conform to guidance in other sections of the H&S Handbook, NR&SWA & TMA. (Pedestrians must not have to enter the carriageway under 1 metre SLG rules.)
- Roof Working - Risk Assessments regarding the structure of the roof, access arrangements and the ability of lighting equipment to highlight any hazards must be undertaken.

Problems with the lights when aloft

If either light starts to dim then you must descend as soon as possible.

If either light fails you must descend immediately being extra vigilant as you do so. MEWP operators must have a safety backup torch to enable them to view the MEWP controls when returning to the stowed position on the vehicle.

Floodlight Positions

For working from a ladder that is against a house or a pole, the Floodlight 24 V should be positioned and used as follows. The Helmet Safety Lamp or Helmet Safety Light with all 8 LEDs illuminated should be used when positioning the Floodlight and working aloft.

Setting up the Site before Climbing

The floodlight can be carried using the shoulder strap while carrying out these activities.

Before climbing, all standard tests and checks **MUST** be undertaken. Use the floodlight to illuminate the general area to carry out a site specific risk assessment of the area and the pole, including likely walking routes. Visually check the ground conditions, pole markings and any other trip-hazards that are evident. Be aware of prevailing traffic conditions with particular care being taken where there may be obstructions (i.e. bends, road signs, etc.) to a clear line of sight between the individual measuring drop wire heights and the drivers of vehicles. If the prevailing traffic speed, road conditions or possible obstructions are such that a driver may not see the individual in the road and be able to slow down and stop safely, work must not proceed. The individual carrying out this assessment can decide that the work may need to be done at other times of the day and/or require assistance from another engineer.

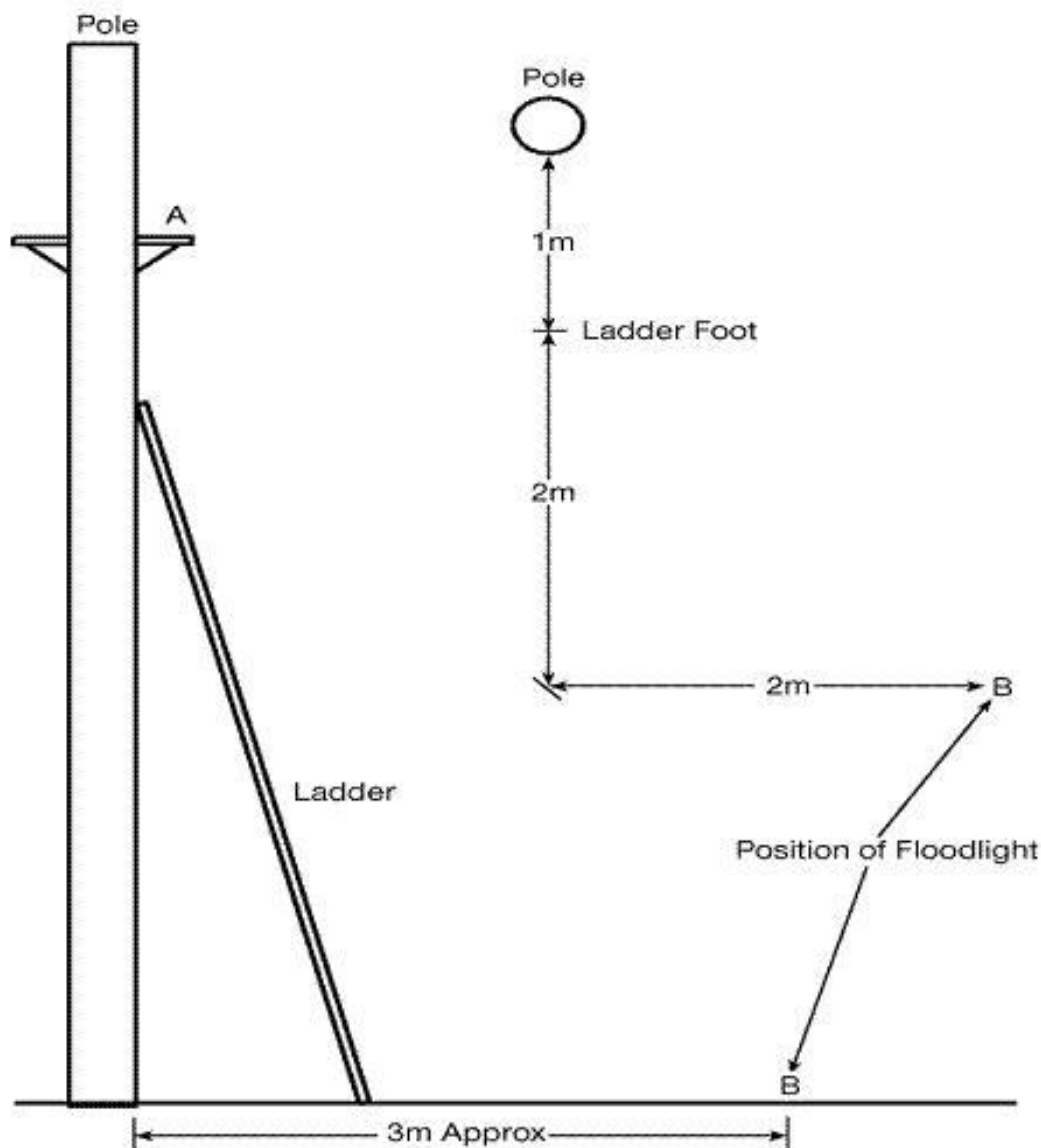
Wire Height measuring to ensure that the individual wires can be seen position the floodlight with the beam shining upwards to illuminate the wires being measured and to avoid dazzling on-coming traffic. This will enable you to work with the measuring rod, the helmet light being used to illuminate the measurements on the rod. Extreme care should be taken when working in the carriageway at all times and especially in the hours of darkness, extra care should be taken when assessing the traffic flow, including awareness of any cyclists in the area. It is also mandatory that the appropriate protective clothing is worn at all times whilst working on or near a carriageway.

- **Pole testing** all visual & physical checks of the pole must be carried out, the floodlight and helmet light being used to fully illuminate the pole.

Position for Pole Climbing

In line with the ladder position, place the floodlight (B) approximately 3 m from the foot of the pole and 2 m offset to one side. Direct the beam at the working steps (A). Position the ladder and adjust the light as necessary so that the full length of the ladder and the areas around its footing and the pole head are illuminated. These floodlight positions provide the best light as they minimise

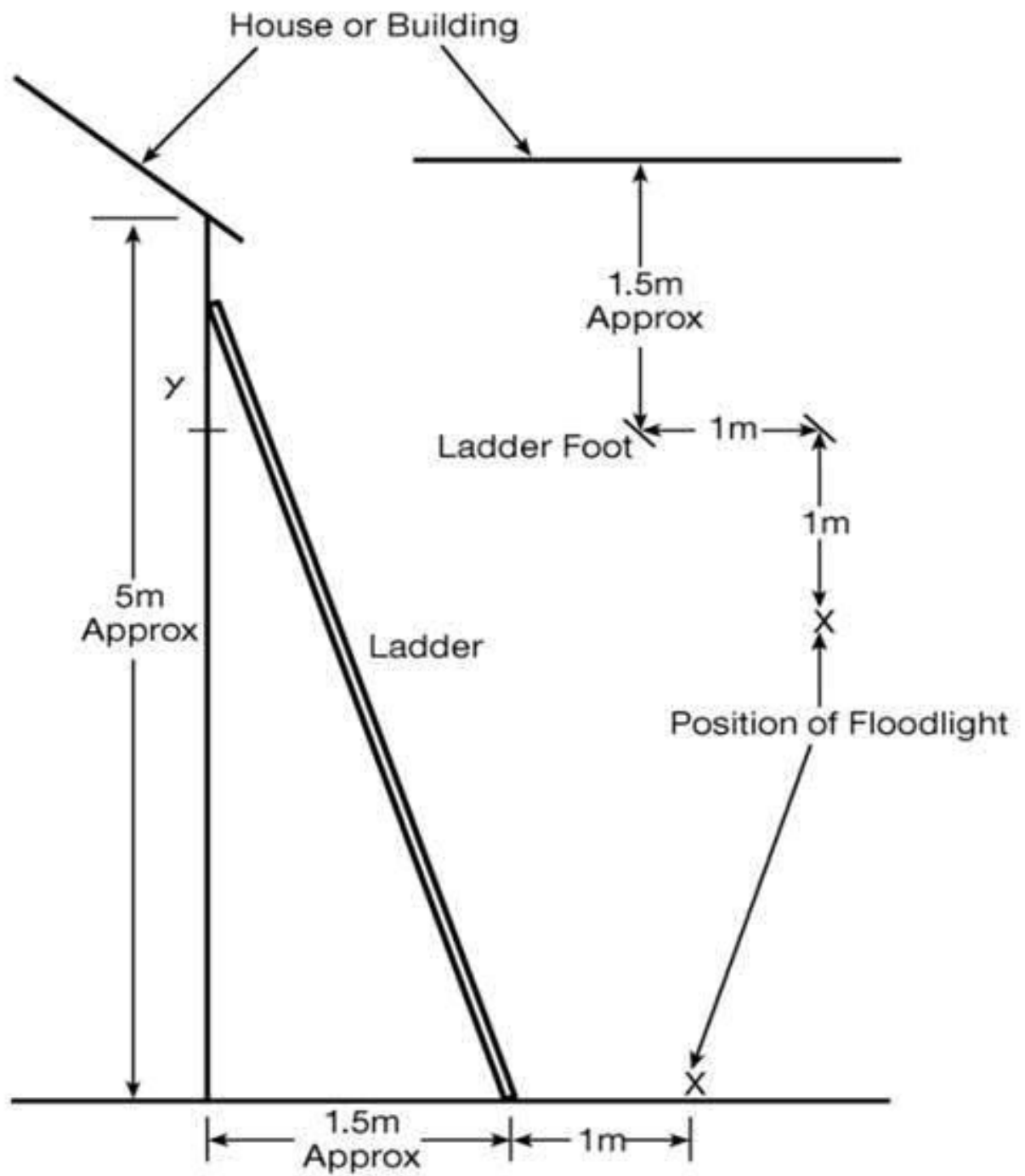
the shadow cast from the technician's body. These positions are not overly critical and some variation is possible and may be required dependent on the worksite. Suitable guarding should be used to maintain pedestrian safety.



Position of Floodlight at Pole

Position for Ladder against a Wall

Place the floodlight (x) approximately 1 m back and 1 m offset from the point where the foot of the ladder is to stand. Direct the light beam $\frac{2}{3}$ of the way up the wall (y) to where the top of the ladder will rest. Position the ladder and adjust the light as necessary so that the full length of the ladder and the areas around its footing and top are illuminated. Ladder stability devices must be used as appropriate.



Position of Floodlight for ladder against a wall

Use of a MEWP

Upon arrival on site, park away from the expected work area to allow a thorough check of the area for hazards, prior to moving the MEWP into position. Activate the vehicle roof mounted amber beacons (ARB's) as necessary. Position the vehicle such that when working on the pole the boom does not project into the unguarded carriageway. Before operating the MEWP, road works guarding must be put in place, e.g. Keep Left/Right sign at the outside corner of the vehicle, cones – lead in / exit taper and around vehicle and “Road Works Ahead” & “Road Narrows” signs for drivers approaching in each direction.

Equipment

The following equipment has been developed for use to illuminate a ladder, a pole, customers' premises and the immediate area when working aloft or at ground level.

Workstar (I/C 082862) & Floodlight 2 24V (I/C 127918) (Legacy)

The primary use of the floodlight is to provide illumination for the activity of ascending and descending poles and ladders. It can also be used as a general work light at ground level. The floodlight should be used to perform a visual inspection of the ground conditions around the site and work area, and also to illuminate the pole and carry out a visual inspection as part of the pole test. It should also be used to identify any wires crossing a carriageway so that their height above the carriageway can be checked prior to climbing the pole. The floodlight, combined with the Helmet Light, should be used while carrying out the remainder of the pole tests.

■ **Workstar Features:**

- 2 light modes: Full/Half
- Long run time on full charge up to 7 hours
- 110 degree pivoting head
- Battery status indicator
- Battery charging indicator

■ **Specifications:**

- Light output: 2200 / 1000 lumens
- Light source: 10 LED
- Run time: 3h high / 7h low
- Battery: 7.4v 4500mAh Li-Ion
- Full Charge time: 7 hours (mains) - 9 hours (12v car charger)
- Dimensions: L306 x W258 x H457
- Weight: 1.9kg

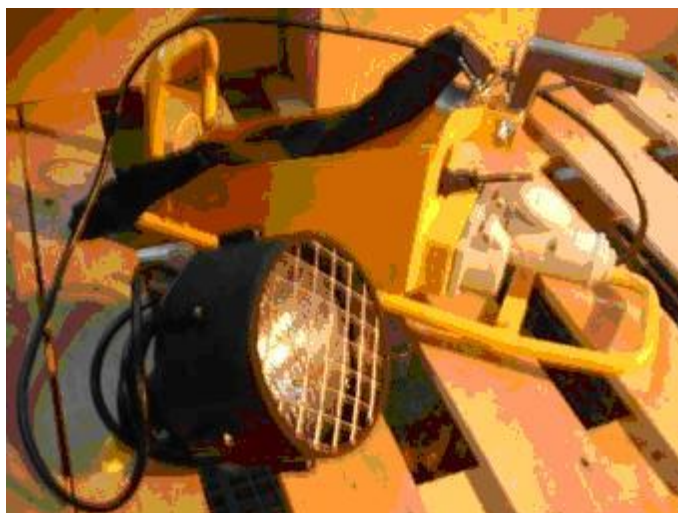


Workstar - item code 082862

Floodlight 2 24V Features (Legacy – *this kit is still OK to use provided it is in serviceable condition*)

The lamp is a 60 W sealed beam unit with a longitudinal diffused beam. The level of intensity does not cause visual discomfort when the lamp is viewed directly. Little or no effect to vision is experienced as the eyes readjust to the ambient light level after direct exposure. The floodlight has an ON/OFF switch, an integral carrying handle & a shoulder strap. The lamp can be angled 90 degrees above and 20 degrees below the horizontal and it can rotate through 360 degrees. 1 or 2 auxiliary 24V sockets are also provided to power a Hand lamp Fluorescent 1 or other 24V tools.

The mk.2 has a removable lamp head which can be attached to a standard road sign stand.

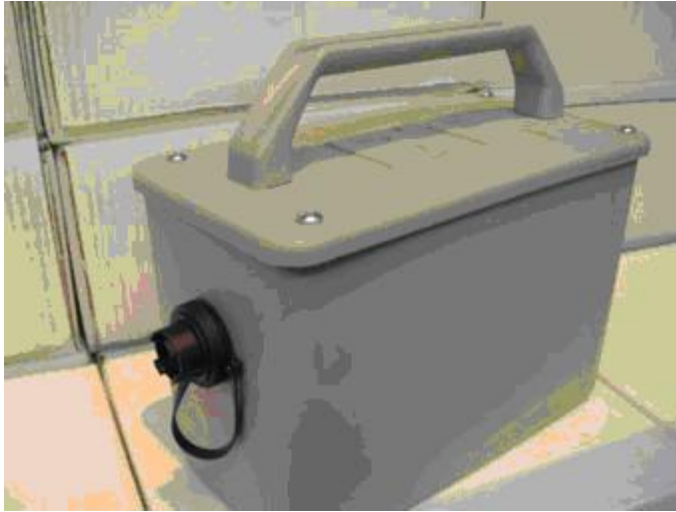


Battery Charger 7 24V (I/C 192130)

This charger is provided solely for use with the Floodlight 2 24V battery. The Battery must not to be used for more than 2 hours continuously. After use it should be charged for 10 hours (i.e. overnight). Every 2 weeks it needs to be charged for 48 hours (i.e. over a weekend). If not used it must be charged for 1 week every 6 months.



- Battery Portable 2 24V (I/C 192128)
for use with the Floodlight 2 24V.



Hand lamp Fluorescent 1 24V (I/C 127917)

This is a general purpose light for work at ground level. It is equipped with a 16 W fluorescent lamp equivalent to a 100 W domestic lamp. Polycarbonate housing protects the lamp that has a masked segment that can be rotated to avoid glare.



Helmet Safety Light (I/C 127919)

This is for use when working aloft or at ground level during the hours of darkness or other low ambient light situations. The light head is vertically adjustable and has 8 LEDs that provide the illumination. The ON/OFF switch is combined with a brightness control. The 1st press lights 2 LEDs, 2nd press lights 4 and the 3rd press lights all 8, **this setting must be used whilst climbing**. 3 alkaline batteries LR03 1.5V (i/c 192320) must be used, these fit in the light head. Elasticised straps are attached to the light and should be attached to the Helmet Safety by tucking the side straps under the helmet safety as shown below. If preferred, the light can be clipped to the helmet using helmet safety clips (I/C 047790).



Helmet Safety Lamp (Obsolescent)

This is for use when working aloft or at ground level during the hours of darkness.

The lamp head is vertically adjustable and has storage space for a spare bulb. The ON/OFF switch is combined with a focus control. The light beam may be varied from a spot to a flood pattern. The lamp is a halogen type and an alkaline battery 3LR12 4.5v (I/C 192319) must be used.

Elasticised straps are attached to the lamp head and battery case. These straps clip to the safety helmet rim, the battery case being positioned at the back of the helmet.

Torch Safety I/C 127591

This is required for use by the MEWP operator as a back-up light when working aloft. The torch has an angled head and may be clipped to clothing/ MEWP safety harness for hands free use. Uses 2 D Cell batteries.

Please see link below for tool box talk on WITHOD,

[WITHOD Tool Box Talk](#)

9 *Emergency Work at Night*

During the hours of darkness overhead work may not be practicable. In any event, it must never be attempted unless the on-site risk assessment is first carried out, the work site is adequately lit and it may be subject to special procedures depending on the type of work and the location.

Emergency work, generally where the conditions of the overhead plant could be a danger to the public, should be enough to remove the hazard. An example of emergency work would be where a pole has collapsed and has fallen into the road and the Police have called out BT people to make the area safe.

10 *Tree Cutting*

Where tree cutting is being considered refer to ISIS SFY/HSB/D094.

11 *Detection of Concealed Electrical Cables*

Concealed electrical cables are frequently located behind fascia boards or hidden in rendering and walls. These cables will nominally carry 230 Volts and up to 150 Amps for domestic premises where the cable is before the electricity meter.

This is sufficient power to cause fatal injuries should a drill, cleat or other tool or fixing, strike the cable. Given that these operations often occur whilst working at height on a ladder, there is also a risk of falling from the ladder after receiving an electrical shock or burn.

11.1 Hazard Identification

Electrical cables in the vicinity of the work area.

Before starting work check to see whether the property is provided with electrical service via underground or overhead cables. Overhead cables are much more likely to be found in rural areas.

If an overhead cable serves the property, look to see where that cable attaches to the building. Is the location in close proximity to the work area? Look to see where the cable goes after fixing to the wall, can the route of the cable be clearly seen or is it obscured by foliage, decoration or hidden behind a covering such as render, fascia boards or spar.

Look for evidence of any other hidden cables that may carry electricity, these could include cables for security systems such as burglar alarms and exterior lighting.

If the property's walls have a covering, ask the customer if they know of any cables that may be hidden beneath the surface. Repairs to existing rendering may have been made to cover the route of a new cable and new rendering may conceal existing cables.

11.2 Control Measures

Before starting work it is important to carry out the on-site risk assessment, the first stage of this is to look and see the location of the cables. If the cables subsequently become hidden, a locator must be used to track the course of the cable along the walls of the property.

It is important that you have been briefed/ trained in the use of the locator before using it. Check that the locator is complete, the operating instructions are present and that it has been checked through the esi-test procedure.

Confirm that the locator is operating correctly by carrying out the following checks: -

- Is the locator damaged?
- Does it give the normal green light signal when switched on?
- Are the batteries in good condition?
- Are spare batteries available for use?
- Has the locator been through the yearly esi-test procedure?
- Use the locator to trace a known live electrical source such as the cable feeding a light switch at the customer premises.

If the locator fails to operate correctly you should inform your line manager, then you must consider if the work activity can be undertaken safely without it. Can confirmation be obtained that beyond all reasonable doubt there are no cables present along the drop wires route.

The route of the drop wire should be fully planned before starting work, consult with the customer to check that the route is satisfactory. Remember to look out for other signs that cables may be present, crossing or coming close to the route. Once agreed, if there is evidence to suggest that hidden cables may be present, the locator should be used to check that no cables are present along the route of the drop wire.

If cables are found, the drop wire route should be changed to take a different course.

Remember, if you strike a live electricity cable while working from a ladder, it may be more than a shock or a burn that you receive and the results of these or falling from the ladder could be fatal.

DO NOT MAKE ANY ASSUMPTIONS – ALWAYS carry out a visual inspection and check using your locator. It is part of your onsite risk assessment. Remember Prove- Test- Reprove.

If you are unsure?

- Seek guidance from your line manager before you continue
- DO NOT take any chances

- Alternatively, contact Safety Services for advice

11.3 References:

11.3.1 ISIS

EPT/OHP/B011 - Overhead Distribution Erection and Re-tension of Drop wire

EPT/PPS/B026 - Protection of Telecommunication Lines from Power Lines

EPT/PPS/B046 - Work on Overhead BT lines in the Vicinity of Power

11.3.2 Health and Safety Handbook

SFY/HSB/D010 - Hand Tools, Soldering Irons, Drills and Mechanical Aids

SFY/HSB/D020 - Working at Customer Sites

SFY/HSB/D041 – Climbing Practices

Bosch GMS 120 Professional Multi-detector [Quick start guide](#)



Bosch user guide

12 Reference Guide

EPT/PPS/B012	Rise of Earth Potential at Electricity Stations
EPT/PPS/B013	Cabling and Wiring at Electricity Stations
EPT/PPS/B014	Working Practices at Electricity Stations
EPT/PPS/B037 & EPT/PPS/B038	Joint Use of Poles
EPT/PPS/B046	Work on Overhead BT Lines in the Vicinity of Power Working in Low Ambient Light Conditions (WITHOD)Details on this can be found in the relevant section of:- SFY/GRA/A003

NWK/NNS/V080	A1024 Advice of Plant Requiring Attention
SFY/HSN/A001	Health and Safety Handbook - contents page from where the following can be accessed: First Aid - SFY/HSN/C013 Personal Protective Equipment - SFY/HSN/D011 Access Systems - SFY/HSN/D030

13 Overhead Power

As the effects of contact with mains power lines are so serious it is absolutely imperative that contact with such power lines is effectively prevented. The basis for this lies in "the built-in" safety standards for line construction, mainly by maintaining minimum clearances between Openreach lines and power lines. However, this must be backed up people observing joint user working methods.

For details on separation, low voltage, high voltage and DNO contact numbers, please follow the link below to the "Overhead Power Glove Box Guide" <http://snip.bt.com/powerfacts>

13.1 High and Low Voltages. - Definitions.

Low voltage (LV), power lines are those not exceeding 1000 volt ac between conductors and not exceeding 600 volts ac between conductors and earth, or those not exceeding 1500 volts dc between conductors and not exceeding 900 volts dc between conductors and earth.

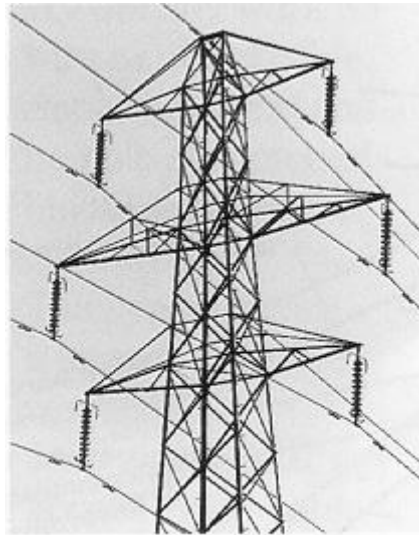
The low voltage power lines normally encountered are single phases, 240 volts ac to earth.

High voltage (HV) power lines are those carrying a voltage in excess of low voltage.

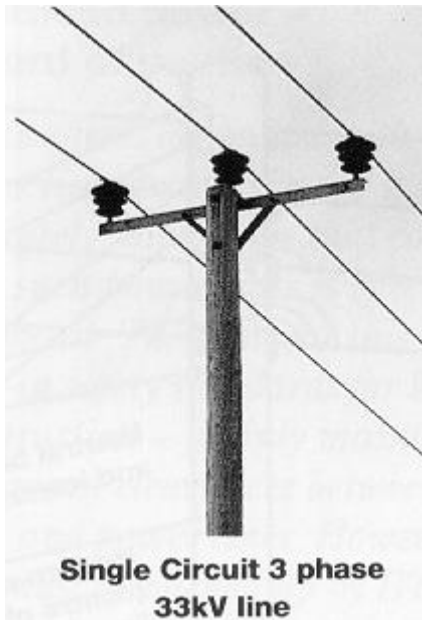
Power lines other than those described above should be treated as high voltage.

Learn to identify High voltage routes, typically shown in the following photographs.

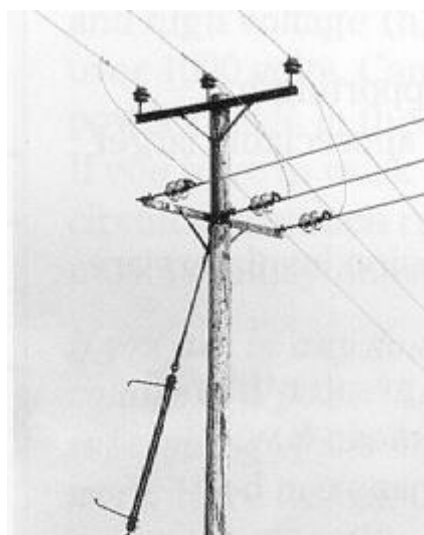
Typical HV power lines:



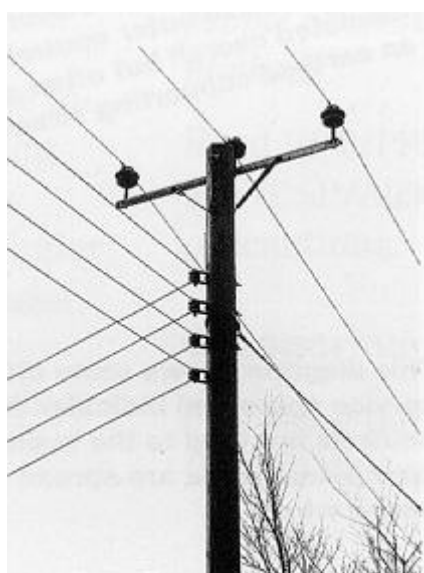
**Double Circuit
132kV Line**



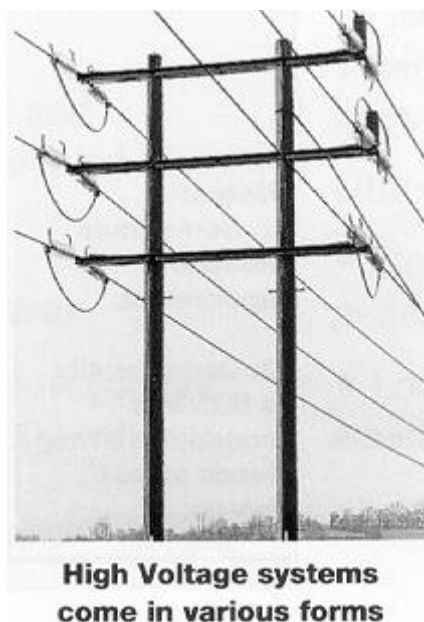
**Single Circuit 3 phase
33kV line**



**Tee-off pole, 3 phase
11kV line**



11kV and low voltage lines



If you are in any doubt as to the voltage of a power line when you do your on-site risk assessment, ask your line manager before starting work. High voltage lines can usually be identified by the following:

- Steel towers mean HV - generally over 66kv or above.
- Look for the danger notice which every HV pole should carry.
- Insulators supporting HV conductors are appreciably larger than those used for lv.
- Dish type tension insulators are peculiar to HV.
- Span lengths greater than 45 metres usually mean HV, although HV spans can be shorter.
- 11KV lines use two shed insulators and 33KV lines use three shed insulators.

Remember: if in doubt, ask.

13.1.1 Safety rules to follow for safe working conditions

Rods Pruning are designed to be used away from power lines. They are uninsulated and any contact between the rods and power cables could have serious consequences. Do not use them near overhead power distribution.

Never use steel core rope near power lines, **whatever the voltage**.

Do not touch or allow wires or rods to come into contact with a cradle guard under a high voltage line.

Do not run an overhead circuit above or near to a lamp standard.

Be sure you know and follow the clearances, construction methods and regulations, for any wiring job you are given.

Be particularly sure you know when the power lines must be made dead before BT overhead work is undertaken, see EPT/PPS/B046, and B026

Safety is ensured by appropriate plant standards, clearances and safe working methods. It is important that BT people concerned are able to recognise sub-standard conditions and are conversant with the precautions to be followed.

13.1.2 Joint user agreement

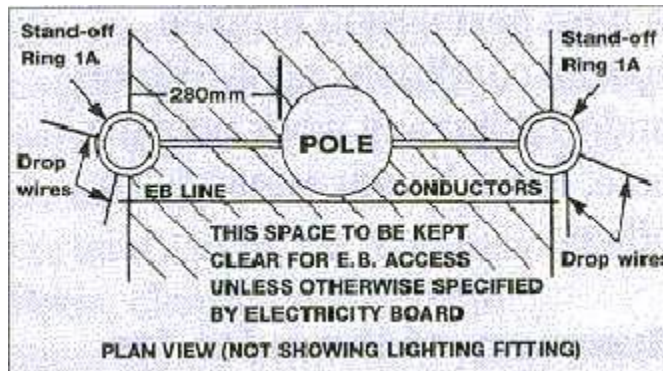
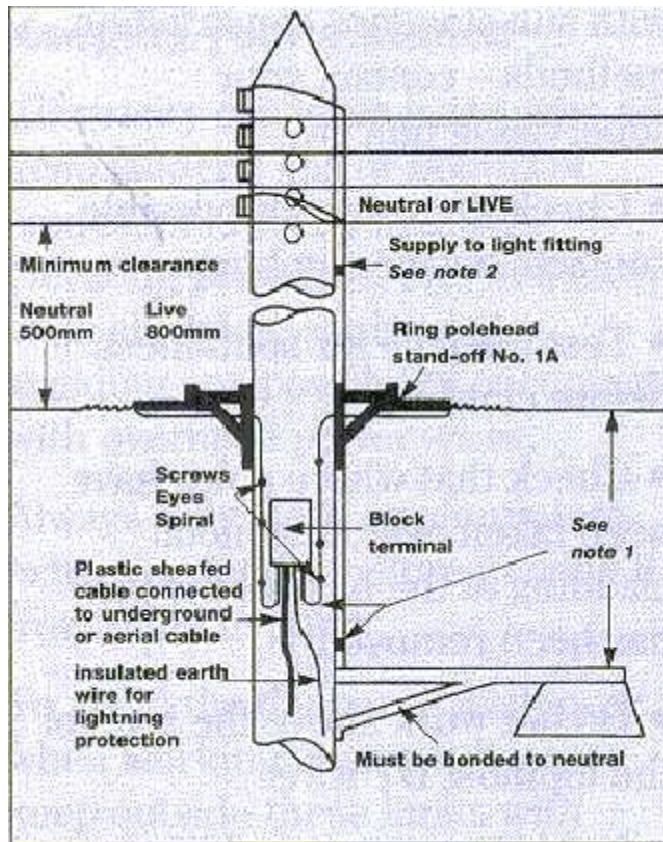
Every single joint user pole has to have a licence to attach (J on the pole). If not, you will need to check if we have a licence in place with the wayleave team via email archive.ripple@openreach.co.uk

Please see the following link for information

[..\Joint User poles\620 - Joint User Agreement for Fibre Attachments \(2\).docx](#)

13.1.3 Low voltage poles

The basis of the joint construction on low voltage routes is shown in the following sketches.



Notes:

1. At least 50mm separation must be maintained between:
 - ◆ (a) All BT plant and vertically run power cables.
 - ◆ (b) All BT plant and all parts of lamp fittings.
2. Overhead supply to lamps may be PVC insulated and sheathed or concentric neutral cable. Any other cable must be guarded by plastic, metal tube or wooden capping for a distance of not less than 500mm either side of the BT attachments. The lighting bracket, sensor, any associated metal clad switch or fuse box and any metal capping or tube must be bonded to the neutral conductor.

3. The distance between the BT earth electrode and the electricity supply earth must be at least 3 metres.

13.1.4 Summary of rules for working on joint user poles

- Before you work on a JUP you must have had the relevant instruction, have the skill recorded and have been checked by your supervisor within the last 2 years.
- BT circuits are only attached below power conductors.
- Only carry out such work in daylight.
- Do not climb a joint user pole with sub-standard construction methods.
- Check the route for possible contacts before climbing.
- Test the pole before climbing.
- Check that where Poles have been taken over, any metal cladding at the base of the pole has been removed.
- Always use a ladder 7A (blue ladder).
- Do not work above the level of the topmost BT wire.
- Ladders must not project above the topmost BT wire.
- Do not leave ladders unattended when erected.
- Do not touch metalwork associated with power equipment or stays.
- Always have a second person present – this applies to both electricity company and BT owned poles (this needs to be an Openreach person and not a member of public or the property owner)
- Think about the hazards – Use the RISK & HAZARD WORKSITE ASSESSMENT sheet to identify the hazards and record your control measures (i/c 061461)
- When your role is to act as a Ground Support Person (GSP), your responsibilities are:
 - To look out for hazards from the ground and warn the engineer working on the JUP or in the Mobile Elevating Work Platform (MEWP) of any danger.
 - To bring the MEWP to a low level in the event of an emergency.
 - To complete the handshake sign off.

IMPORTANT: Joint user poles refer to both BT and DNO owned poles. The voltage on these poles should be LOW VOLTAGE ONLY.

As a GSP you must not leave site, work on another task or do any part of the active task.

13.2 Power contacts - further precautions.

Report even a suspected power to the support office immediately so that the lines that may be affected can be disconnected at the MDF if necessary.

Buildings collapsing or catching fire, burnt telephones or continuous bell tinkling are likely indications of power contacts.

When disconnecting lines at an MDF wear Gloves IR and use a suitable extractor. Display a warning sign.

When working on an outside wall close to power wiring, which seems in poor condition, do not touch it or any metal parts. Wear Gloves IR if the wall is wet or if in doubt.

13.3 DNO Emergency Contact Numbers

Please dial 105 from your mobile phone to be directed to your local DNO.

In all instances be prepared to quote the following information.

- Address of pole (give as much information as possible)
- Pole Number (if available)
- Defect

The Electricity Supply Company will then give out an incident number which must be recorded in the job notes field for audit trail purposes.

END OF DOCUMENT
