

# Safe Work Method Statement

## Electrical Rewire

Routine	✓	Non-Routine	
New	✓	Revised	

<b>Job Description</b>	Remove existing cabling and replace with new in part or all of electrical installation in building		
<b>Project/Site</b>	<Site Address>	<b>Date</b>	<date>
<b>PPE Required for task</b> (refer PPE for Site on SSSP as Hi-Viz and Hard Hat may be required)	Ear Muffs, Safety Glasses, Steel-toe Boots, Gloves, Dust Masks, Knee Pads		
<b>Plant/Equipment Required</b> (edit list as required per site)	Power drill, battery drill, hand tools, cable roller. If using conduit/trunking will also require hacksaw, conduit cutters, conduit glue. If concrete block walls may require Hammer drill. Ladder/s or Scaffold. Torch		
<b>Signage Required</b>	Electrical Work in Progress sign		

SEQUENCE OF BASIC STEPS	POTENTIAL HAZARDS/RISKS	HAZARD/RISK CONTROL METHOD
<b>Carry out risk assessment (Job Safety Analysis) prior to commencing work</b>		
Isolate incoming power supply to switchboard	Network Contractors	Meet contractor when they get to site. Observe the isolation
	Other people on site	Use Electrical Work in Progress sign. Notify all property occupants and anyone at property of power isolation. Tell people must NOT go anywhere near area where you are working or point of power supply isolation
	Electric Shock	Test using test prove test method to ensure that power supply correctly isolated. If incoming power isolated at Master Switch inside meter box, ensure correct safety lock off device fitted to ensure cannot be relivened by anyone but yourself. Check hot water supply feed to ensure is isolated
Investigate existing cabling within property and cable paths	Steel Conduit	Test steel conduit is not live prior to working on it. If there is exposed copper touching the conduit it may give an electric shock if touched
	Old style TPS	Some old style TPS cabling contains copper oxide. Wear gloves when using and also safety glasses. You must avoid contact with the skin and eyes
	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded(ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
	Ceiling Cavities and Underfloors	Wear overalls, safety goggles, dust mask, and gloves to protect self from dust/debris/surfaces. Have method of lighting for area (eg torch) so you can see obstacles
	Rodents	Ensure have torch so can see any evidence of past or current rodent activity. If there are large amounts of rat urine and/or faeces you do not have to do the work if you feel it is unsafe. Ensure you wear your PPE (gloves, disposable overalls, face mask)
	Trip and/or Impact Hazard	Ensure you light the area where investigating cables so can see any objects that may cause impact harm or you to trip
	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
Label Cabling prior to disconnection	Future Fire Risk	Ensure all cabling is accurately labelled to ensure no future fire risk from incorrect circuit loading when put board back together
	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded(ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
Disconnect cabling from MCBs, isolators, sockets, and fittings	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
	Muscle Fatigue	When doing repetitive work, stop, take a few minutes, stretch the effected area
	Abrasive and/or sharp surfaces	Be aware of sharp tips on copper when cables removed from board. Ensure any exposed edges of cabinet metal frames are smooth or shielded(ie will not cut skin or damage cable)
Remove old cabling	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded(ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
	Trip and/or Impact Hazard	Ensure you light the area where working so can see any objects that may cause impact harm or you to trip. Look around you prior to pulling to minimise risk of impact injury
	Physical strain	Brace yourself prior to pulling cabling. Bend with your knees not your back. Be aware of your surroundings prior to applying pull force so no impact injury when pulling

	Cable Burn (future electric shock/fire risk)	Lubricate cabling to ensure that TPS cables rubbing together does not cause "cable burn". Cable burn damages the insulation of the cable and can pose a future fire or electric shock risk
	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
Cut access panels and drill out new cable paths	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded (ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
	Power Tools	Only operate power tool if current test tag. Check lead and tool are in safe working condition prior to use. Ensure all safety guards are in correct position. Only operate if have been shown and understand safe operation guidelines. Select correct power tool for task. Wear correct PPE
	Battery Tools	Check tool in safe working condition prior to use. Ensure any safety guards are in correct position. Only operate if have been shown and understand safe operation guidelines. Select correct tool for task.
	Trip and/or Impact Hazard	Ensure you light the area where working so can see any objects that may cause impact harm or you to trip. Look around you prior to pulling to minimise risk of impact injury
	Working at Height	Ensure appropriate height equipment being used (ladders only for short duration work). Never work on top step of ladder. If extension ladder maintain 3 points of contact. Apply 1:4 rule. Use scaffold rather than ladders. Ensure you have mobile scaffold erection training prior to use. Follow checklist for erecting mobile scaffold. Check for approved safety tag for non-mobile scaffold.
	Dust/Debris	Wear goggles and dust mask. If dust coming from concrete, masonry, block work dampen area prior to doing abrasive work. Wear disposable overalls
	Asbestos	If you encounter any Asbestos containing materials stop work and refer to DNA Electrical Asbestos policy. Only continue works if within our Policy. If not advise DNA Electrical project manager. Site may need to be cleared by licenced removalist
	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
Run cabling through new cable path	Future Fire Risk	Ensure all cable joins are done safely and correctly as per electrical safety regulations to remove future fire risk from incorrectly protected cable join
	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded (ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
	Cable Drums	Ensure cable drums are properly in cable roller prior to pulling cable. Cable pulled off a drum not in a cable roller could cause injury to other people or damage to property
	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
	Physical strain	Brace yourself prior to pulling cabling. Bend with your knees not your back. Be aware of your surroundings prior to applying pull force so no impact injury when pulling
	Power Tools	Only operate power tool if current test tag. Check lead and tool are in safe working condition prior to use. Ensure all safety guards are in correct position. Only operate if have been shown and understand safe operation guidelines. Select correct power tool for task.
	Cable Burn	Lubricate cabling to ensure that TPS cables rubbing together does not cause "cable burn". Cable burn damages the insulation of the cable and can pose a future fire or electric shock risk
Strip cabling	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
	Muscle Fatigue	When doing repetitive work, stop, take a few minutes, stretch the effected area
	Abrasive and/or sharp surfaces	Twist and fold copper as necessary. Be aware of sharp copper tips for cut/scratches. Do not flick cuttings. Keep work area tidy of copper strippings
	Working at Height	Ensure appropriate height equipment being used (ladders only for short duration work). Never work on top step of ladder. If extension ladder maintain 3 points of contact. Apply 1:4 rule. Use scaffold rather than ladders. Ensure you have mobile scaffold erection training prior to use. Follow checklist for erecting mobile scaffold. Check for approved safety tag for non-mobile scaffold.
	Debris	Keep area tidy of copper strippings
Connect cabling into sockets, isolators, and	Working at Height	Ensure appropriate height equipment being used (ladders only for short duration work). Never work on top step of ladder. If extension ladder maintain 3 points of contact. Apply 1:4 rule. Use scaffold rather than ladders. Ensure you have mobile scaffold erection training prior to use. Follow checklist for erecting mobile scaffold. Check for approved safety tag for non-mobile scaffold.
	Battery Tools	Check tool in safe working condition prior to use. Ensure any safety guards are in correct position. Only operate if have been shown and understand safe operation guidelines. Select correct tool for task.
	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.

Connect cabling into sockets, switches, and fittings	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded(ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
	Fire (future risk)	Ensure sufficient force is applied to the terminal screws to ensure good connection, however do not over tighten to cause damage to cabling and potential for fire risk. Ensure copper is folded over so will not break and well twisted if multicore to ensure good contact and copper wont' break causing fire risk. Ensure insulation only stripped back far enough for good termination and no copper exposed
	Trip Hazard	Stop and look where going prior to moving. Maintain tidy site and keep all tools and materials in the one place that is not in the main work area.
Fit off main phase into main switch and feed all RCDs and MCBs. Fit off earth and neutral bars	Muscle Fatigue	When doing repetitive work, stop, take a few minutes, stretch the effected area
	Hand Tools	Use only the correct tool for the task, store safely in tool belt with any sharp edges pointing down.
	Unconnected cables (Future electric shock or fire risk)	Check on completion to ensure ALL CABLES are correctly terminated into the correct MCB, RCD, earth or neutral bar, or isolator.
	Poor termination (Future electric shock or fire risk)	Ensure copper inside cabling is folded over and twisted well if multicore to ensure copper does not break and lose termination causing future risk of fire or electric shock
	Loose or Over tightened terminal screws (future fire or electric shock risk)	Ensure terminal screws into MCBs, RCDs, earth/neutral bars, isolators are tightened with sufficient force that they will not come out due to vibration or movement. Pull on cables to check this. However, ensure terminal screws are not overtightened whereby the copper may break and cause loss of safe termination. Terminal screws should be tightened to the point of moderate (not excessive) resistance
	Abrasive and/or sharp surfaces	Be aware of sharp tips on screws, can cut skin or damage cabling (file away any exposed screw tips). Be aware of rough edges on timber framing for splinters, remove splinters from edge of timber if possible. Ensure any exposed edges of cabinet metal frames are smooth or shielded(ie will not cut skin or damage cable). Cable ties can cause cuts. Wear gloves to protect hands
Testing of board and throughout prior to relivening	Tester unit (incorrect test results)	Ensure tester is calibrated annually and batteries are not too low
	Muscle Fatigue	When doing repetitive work, stop, take a few minutes, stretch the effected area
Labelling	Future electric shock risk	Ensure all circuit breakers are accurately labelled so the building occupant can quickly and safely isolate electricity to circuits and areas as necessary. Ensure main earth is clearly labelled
	Muscle Fatigue	When doing repetitive work, stop, take a few minutes, stretch the effected area
Reliven & Final Testing	Electric Shock	Ensure switchboard cover is correctly installed and there is no way anyone can access live parts of the installation without using a tool to remove the switchboard cover. Ensure you and others stand back from board when turn on main switch incase a mistake during wiring causes a short
	People (potential electric shock)	Ensure all property occupants are well away from Network connection contractor when he/she relivens and also well away from switchboard incase there is an error which causes a short
	Tester unit (incorrect test results)	Ensure tester is calibrated annually and batteries are not too low

Task Analysis Completed by	<Name>
Date	<date>