

REQUIREMENTS

ELECTRICITY SAFETY (INSTALLATIONS) REGULATIONS 2009 – PRESCRIBED ELECTRICAL INSTALLATION WORK

October 2012

The Electricity Safety (Installations) Regulations 2009 became law on 1 January 2010.

For the purpose of Section 45 of the Electricity Safety Act 1998, 'prescribed electrical installation work' does not include –

- a) *the **repair or maintenance** of a single component part of an electrical installation; or*
- b) *the **replacement** of a single component part of an electrical installation by an equivalent component part at the **same** location.*

Generally where any prescribed electrical installation work involving the installation, alteration, repair or maintenance of prescribed electrical installation work is completed, a Certificate of Electrical Safety for prescribed electrical installation work is required to be issued and the work inspected by a licensed electrical inspector before connection to electricity supply.

However, Regulation 238(3) of the Electricity Safety (Installations) Regulations 2009 does not deem the repair or maintenance of a single component part of an electrical installation or the replacement of a single component part of an electrical installation by an equivalent component part at the same location prescribed electrical installation work therefore; does not require inspection. In effect it excludes the repair or maintenance (including replacement) of a single component part of an electrical installation. The term 'single component part', in general, means one part of an electrical wiring system, e.g. single switch or fuse on a switchboard assembly.

In effect, any electrical installation work covered by Regulation 238(3) does not require the responsible person (REC, licensed electrician etc.) to have the relevant electrical installation that is repaired, maintained or replaced in accordance with this Regulation to be inspected before use and re-connection to electricity supply by a licensed electrical inspector however, a Certificate of Electrical Safety for non-prescribed electrical installation work must be issued at the completion of that work.

Electrical Installation Workers should, when carrying out this type of work, clearly indicate on the Certificate of Electrical Safety for non-prescribed electrical installation work in the area for the description of electrical work that:

'THIS WORK HAS BEEN CARRIED OUT UNDER THE PROVISIONS OF REGULATION 238(3)'

Note: *A responsible person carrying out prescribed electrical installation work which involves the initial installation or subsequent alteration of that work must still issue a Certificate of Electrical Safety at the completion of that work and ensure that the work is inspected by a licensed electrical inspector.*

The commissioning and periodic testing of electrical equipment which does not involve the physical disconnection of any conductor or component part of an installation such as, residual current device, line isolation monitor, isolation transformer installed in cardiac/body protected areas as per AS/NZS 3003 or a high voltage circuit breaker is not deemed to be electrical installation work.

The following examples are intended to clarify some of the more common instances where Regulation 238 may apply and what type of Certificate of Electrical Safety must be issued when carrying out electrical installation work.

P – Prescribed electrical installation work in accordance with Regulation 238(1)

NP – Non-prescribed electrical installation work in accordance with Regulation 238(3)

MAINS CONNECTION BOX (FUSED OR NON-FUSED)	
Repair to cable at a mains connection box.	NP
Repair of connection at a mains connection box.	NP
Replacement of a single component consumers main connection box in the same location (e.g. to allow for fascia replacement or wall cladding installation).	NP
Replacement of a single component consumer's main connection box in a different location.	P
Replacement of 55-amp single component consumer's mains box with an 80-amp box in the same location.	NP
Replacement of a 55-amp single component box with 80-amp consumer's mains box in a different location.	P
Replacement of single component un-fused mains connection box with a fused mains box in same location.	NP

CONSUMER'S MAINS – GENERAL (INCLUDING, SUBMAINS OF MULTIPLE INSTALLATIONS)	
Repair to conductor insulation or conductor (e.g. joint in conductor at junction box).	NP
The replacement of a section of consumer's mains (or submains of a multiple installation) by use of a similar wiring system of the same current carrying capacity installed in exactly the same location (identical route).	NP
The replacement of an entire section of consumer's mains (or submains of a multiple installation) by use of a different wiring system .	P
The replacement of a section of consumer's mains (or submains of a multiple installation) of lesser or greater current carrying capacity than originally installed in exactly the same location (identical route).	P
The replacement of a section of consumer's mains (or submains of a multiple installation) of the same current carrying capacity installed in a different location (non-identical route).	P
The replacement of a section of consumer's mains (or submains of a multiple installation) of lesser or greater current carrying capacity than originally installed in a different location (non-identical route).	P

CONSUMER'S MAINS – UNDERGROUND ELECTRIC LINES	
Repair to conductor insulation or conductor (e.g. joint in conductor at junction box).	NP
The replacement of consumer's mains by use of a similar wiring system of the same current carrying capacity installed in exactly the same location (identical route).	NP
The replacement of consumer's mains (or submains of a multiple installation) by use of a different wiring system .	P
The replacement of consumer's mains of lesser or greater current carrying capacity installed in exactly the same location (identical route).	P
The replacement of consumer's mains of the same current carrying capacity installed in a different location (non-identical route).	P

CONSUMER'S MAINS – PRIVATE OVERHEAD ELECTRIC LINES	
Repair to severed or damaged overhead conductor (e.g. approved joint in conductor).	NP
Restraining overhead conductor.	NP
Replacement of single component aerial component hardware (e.g. insulator, cross-arm brace, stay, pole cap, etc.).	NP
Re-securing aerial component hardware (e.g. tightening insulators, cross-arm braces, struts, pole caps etc.).	NP
Replacement of more than 20% of overhead conductor by use of a similar wiring system in the same route location in a high bushfire risk area – <i>only where permitted by an ESV exemption.</i>	NP
Replacement of more than 20% of overhead conductor by use of a different wiring system in the same route location in a high bushfire risk area – <i>only where permitted by an ESV exemption.</i>	P
Replacement of less than 20% of overhead conductor by use of a similar wiring system in the same route location in a high bushfire risk area.	NP
Replacement of less than 20% of overhead conductor by use of a different wiring system in the same route location in a high bushfire risk area.	P
Replacement of a single component circuit protective devices of same current carrying capacity at the same location (e.g. circuit breaker, fused mains box).	NP
Installation of a circuit protective device for the first time at origin of circuit (e.g. circuit breaker, fused mains box).	P
Replacement of a pole in the same location, which constitutes less than 20% of the total number of poles in the line in a high bushfire risk area.	NP
Replacement of a pole in a different location, which constitutes less than 20% of the total number of poles in the line in a high bushfire risk area.	P
Replacement of a pole in the same location, which constitutes more than 20% of the total number of poles in the line in a high bushfire risk area – <i>only where permitted by an ESV exemption.</i>	NP
Relocation of an existing pole in a high bushfire risk area – <i>only where permitted by an ESV exemption.</i>	P
Installation of a new pole in a high bushfire risk area – <i>only where permitted by an ESV exemption.</i>	P
Replacement of a cross arm.	NP
Temporarily staking defective pole, using approved re-instatement technology - <i>only where permitted by an ESV exemption.</i>	NP

MAIN EARTHING SYSTEM	
Disconnection/reconnection of existing conductor termination at earth electrode.	NP
Repair to earthing conductor.	NP
Replacement of an earth conductor of the same size and in the same location.	NP
Replacement of an earth conductor of larger or smaller size and in the same location.	P
Replacement of an earth conductor of same size and in different location.	P
Installation of an earth electrode for the first time.	P
Replacement of an earth electrode in same location, this would include installing an earth electrode where the water pipe had been used as the earth electrode.	NP
Replacement of an earth electrode in different location.	P

METER ENCLOSURE AND CUSTOMER PROVIDED EQUIPMENT (EQUIPMENT NOT OWNED BY ELECTRICITY SUPPLIER)	
Replacement of meter box enclosure in same location.	NP
Replacement of meter box enclosure in different location.	P

SWITCHBOARD – MAIN (INCLUDING SWITCHBOARDS INSTALLED IN INDIVIDUAL OCCUPANCIES OF MULTIPLE INSTALLATIONS)	
Relocation of an existing main switchboard.	P
Replacement of a main switch with another switch of the same current rating in the same location, this includes when a main switch is replaced with a circuit breaker that is correctly rated to provide over current protection of the consumers mains.	NP
Replacement of a main switch with another switch of different current rating in the same location.	P
Installation of an additional main switch (e.g. to allow for off-peak tariff equipment connection).	P
Relocation of main switch on the main switchboard.	P
Replacement of the main neutral link with another link of the same current carrying capacity in the same location.	NP
Replacement of the main neutral link with another link of different current carrying capacity in the same location (e.g. replacing existing neutral link with limited connecting terminals to allow for additional circuits).	P
Replacement of an existing main switchboard assembly with another main switchboard assembly in the same location (e.g. replacing panel and frame type switchboard with a circuit breaker type switchboard).	P
Replacement of main switch with a combined residual current device (RCD) / miniature circuit breaker type (MCB).	P
Repair of a consumer's mains conductor termination (i.e. on the line side of a main switch or at a neutral link).	NP
Installation of single component surge protection device on the line side of a main switch.	P
Replacement of single component surge protection devices on the line side of a main switch in the same location.	NP
Installation of single component surge protection devices on the load side of a main switch in the same location.	NP

EQUIPMENT IN HAZARDOUS AREAS (INCLUDING PROTECTION EQUIPMENT ASSOCIATED WITH HAZARDOUS AREAS)	
Repair to conductor insulation or conductor in hazardous areas (e.g. joint in conductor).	NP
Repair to conductor connection at electrical equipment in hazardous areas.	NP
Replacement of single component electrical equipment of the same current rating and/or hazardous area classification characteristics where the cable termination does not involve re-routing of the original cable - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	NP
Replacement of single component electrical equipment of the same current rating and/or hazardous area classification characteristics where the cable termination involves re-routing of the original cable.	P
Replacement of single component electrical equipment of different current rating and/or hazardous area classification characteristics - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	P
Replacement of single component control, isolation or protection devices of the same current rating and/or hazardous area classification characteristics in the same location - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	NP
Replacement of single component control, isolation or protection devices of the same current rating and/or hazardous area classification characteristics in a different location - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	P
Alteration of a cable route in a hazardous area.	P
Replacement of a single component of protection equipment associated with hazardous areas of the same current rating in same location - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	NP
Replacement of protection equipment associated with hazardous areas of the same current rating in a different location - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	P
Alteration of single component protection equipment associated with hazardous areas - <i>where permitted in accordance with AS/NZS 2381.1:1999 or AS/NZS 60079.14.</i>	P

HIGH VOLTAGE EQUIPMENT	
Repair to high voltage conductor insulation or conductors.	NP
Repair to high voltage conductor connections at equipment.	NP
Replacement of single component high voltage electrical equipment of the same current rating where the cable termination does not involve re-routing of the original cable.	NP
Replacement of single component high voltage electrical equipment of the same current rating where the cable termination involves re-routing of the original cable.	P
Replacement of single component high voltage electrical equipment of the same current rating and same protection characteristics (e.g. circuit breaker).	NP
Replacement of single component high voltage electrical equipment of the same current rating and different protection characteristics (e.g. circuit breaker).	P
Replacement of single component high voltage control, isolation or protection devices of the same current rating in the same location.	NP
Replacement of single component high voltage control, isolation or protection devices of the same current rating in a different location.	P
Replacement of a section of high voltage cable by use of a similar wiring system of the same current carrying capacity and same fault level rating in exactly the same location (identical route).	NP

HIGH VOLTAGE EQUIPMENT (Continue)	
Replacement of a section of high voltage cable by use of a different wiring system .	P
Replacement of a section of high voltage cable of the same current carrying capacity and same fault level rating to a different location (non-identical route).	P
Replacement of one of the following single components of high voltage equipment of the same current carrying capacity and fault level rating (where applicable) in the same location: <ul style="list-style-type: none"> • Lightning Arrester • Overhead conductor support structure • Overhead conductor support structure cross-arm • Fuse assembly • Transformer • Insulator • Power factor correction equipment (capacitor bank) • Insulating mediums (oil) within transformer, circuit breaker, capacitor bank etc. 	NP
Replacement of commutator brushes on high voltage motor – by use of tools.	NP
Replacement of slip rings on high voltage motor.	NP
Maintenance of slip rings or commutator/s on high voltage motor.	NP

STANDBY / COGENERATION EQUIPMENT	
The replacement of a section of a wiring system by use of a different wiring system .	P
The replacement of a section of an identical wiring system of the same current carrying capacity installed in exactly the same location (identical route).	NP
The replacement of a section of a wiring system of the same current carrying capacity installed in a different location (non-identical route).	P
The replacement of a section of a wiring system of lesser or greater current carrying capacity than originally installed in exactly the same location (identical route).	P
The replacement of a section of a wiring system of lesser or greater current carrying capacity than originally installed in a different location (non-identical route).	P
Repair to conductor insulation or conductors.	NP
Repair to conductor connections at electrical equipment.	NP
Replacement of single component electrical equipment of same current rating (e.g. protection, control, etc.).	NP
Replacement of single component electrical equipment of different current rating.	P

STAND ALONE POWER SYSTEMS	
Repair to conductor connection at electrical equipment.	NP
Replacement of single component electrical equipment of same current rating (e.g. protection, control, etc.).	NP
Replacement of single component electrical equipment of different current rating.	P
Repair to conductor insulation or conductor.	NP
The replacement of a section of a similar wiring system of the same current carrying capacity installed in exactly the same location (identical route).	NP
The replacement of a section of a wiring system by use of a different wiring system .	P
The replacement of a section of wiring system of lesser or greater current carrying capacity than originally installed in exactly the same location (identical route).	P

STAND ALONE POWER SYSTEMS (Continue)	
The replacement of a section of wiring system of the same current carrying capacity installed in a different location (non-identical route).	P
The replacement of a section of wiring system of lesser or greater current carrying capacity than originally installed in a different location (non-identical route).	P

ELECTRIC FENCES (SECURITY PURPOSES)	
Repair to conductor insulation or conductor.	NP
Repair to conductor connection at electrical equipment.	NP
Replacement of single component electrical equipment of same current rating (e.g. energizers, ancillary, protection, control equipment, etc.).	NP
Replacement of single component electrical equipment of different current rating (e.g. energizers, ancillary, protection, control, equipment etc.).	P
The replacement of a section by use of a similar wiring system of the same current carrying capacity installed in exactly the same location (identical route).	NP
The replacement of an entire section of a wiring system by use of a different wiring system .	P
The replacement of a section of wiring system of lesser or greater current carrying capacity than originally installed in exactly the same location (identical route).	P
The replacement of a section of wiring system of the same current carrying capacity installed in a different location (non-identical route).	P
The replacement of a section of wiring system of lesser or greater current carrying capacity than originally installed in a different location (non-identical route).	P
Installation or alteration of fence.	P
Replacement of fence in same location.	NP
Replacement of fence in different location.	P
Replacement of physical barrier in different location.	P
Installation or alteration of physical barrier in same location.	NP
Replacement of physical barrier in same location.	NP

ELECTRO MEDICAL EQUIPMENT	
Repair to conductor insulation or conductor.	NP
Repair to conductor connection at electrical equipment.	NP
Replacement of electrical equipment of same current rating (e.g. socket outlet, residual current device, line isolation monitor, circuit breaker, isolating switch, isolating transformer, EP terminal, theatre lighting, etc.).	NP
Replacement of electrical equipment of different current rating (e.g. socket outlet, residual current device, line isolation monitor, circuit breaker, isolating switch, isolating transformer, EP terminal, etc.).	P
Installation of electrical equipment (e.g. socket outlet, residual current device, line isolation monitor, circuit breaker, isolating switch, isolation transformer, EP terminal, etc.).	P
Alteration of electrical equipment (e.g. socket outlet, residual current device, line isolation monitor, circuit breaker, isolating switch, isolating transformer, EP terminal, theatre lighting, etc.).	P