

# Electrical testing RA 031

Consequence	5	10	15	20	25
	4	8	12	16	20
	3	6	9	12	15
	2	4	6	8	10
	1	2	3	4	5
Likelihood					

- Unacceptable – Stop activity
- Adequate – Monitor for continual compliance
- Acceptable – No further action / monitor

Risk Assessment:	031 Electrical testing
Assessors Name:	Gabriela Balint
Signature:	<i>Balint</i>
Date:	January 2022
Review:	January 2023

## Location:

Likelihood	1 = Very unlikely	2 = Unlikely	3 = Fairly likely	4 = Likely	5 = Very likely
Consequence	1 = Insignificant	2 = Minor	3 = Moderate	4 = Major	5 = Catastrophic

Hazard	Who can be harmed & how	Risk Rating			Control measures in place	Residual Risk		
		L	C	R		L	C	R
Failure to isolate	Operatives and others in the vicinity. Serious injury potential / fire / electric shock / fatality etc.	4	4	16	Prior to undertaking work on electrical circuits / systems / equipment etc. to ensure that it is physically isolated and any stored energy dissipated. <ol style="list-style-type: none"> <li>1. Identify correct isolation point or device.</li> <li>2. Check condition of voltage indicating device —i.e. test lamp or two-pole voltage detector.</li> <li>3. Switch off installation/circuit to be isolated.</li> </ol> Verify with voltage indicating device that no voltage is present.	2	4	8
Electrocution	Operatives and others in the vicinity. Serious injury potential / fire / fatality etc.	3	5	15	Use of testing equipment to verify if equipment is live. All equipment that requires calibration is checked and documented on a regular basis. Company policies and procedures are followed at all times together with regular work in progress inspections and testing which is undertaken and recorded.	1	5	5

Fire	Operatives and others e.g. property owners / users / other trades etc. Serious injury potential / fatality etc. through asphyxiation, burns etc.	4	5	20	<p>Work only undertaken by competent persons who are aware of the dangers posed by overloading circuits.</p> <p>Fire procedures / controls in place</p> <p>Prior to undertaking work on electrical circuits / systems / equipment etc. to ensure that it is physically isolated and any stored energy dissipated.</p> <p>Operatives to undertake a visual inspection wiring to check for cracked or damaged cabling.</p> <p>Any damage or concern to be reported to line manager.</p> <p>Exposed wires to be terminated to prevent accidental contact.</p>	2	5	10
Defective wiring	Operatives and others e.g. property owners / users / other trades etc. Serious injury potential / fire / fatality etc.	3	5	15	All electrical testing is undertaken by competent electricians or if being trained, supervised by a competent person. All electrical testing is planned in advance and documented. Regular work in progress inspections and testing is undertaken and recorded. All defective wiring etc. will be isolated if deemed too dangerous to leave in operation.	1	5	5
Damaged plant and equipment	Persons using plant and equipment. Serious injury potential through contact with electricity.	3	4	12	All plant and equipment is inspected prior to use and at regular intervals in line with company procedures. Any defective equipment is removed from service and placed in quarantine for repair or replacement.	1	4	4

Use of incorrect or sub-standard materials	Operatives and others e.g. property owners / users / other trades etc. Serious injury potential / fire / fatality etc.	3	5	15	All electrical testing is undertaken by competent electricians or if being trained, supervised by a competent person. All electrical testing is planned in advance and documented. Regular work in progress inspections and testing is undertaken and recorded. All materials deemed to be defective will be documented on the condition report.	1	5	5
Unsuitable test engineers	Operatives and others e.g. property owners / users / other trades etc. Serious injury potential / fire / fatality etc.	2	5	10	All electrical testing is undertaken by competent electricians or if being trained, supervised by a competent person. All electrical testing is inspected at regular intervals to ensure compliance with legal, regulatory, accredited bodies, company and client requirements. Sub-contractors are assessed prior to engagement to ensure competence requirements are met.	1	5	5

**This risk assessment is applicable to dead testing only. Live testing is only to be conducted where absolutely necessary and a separate site-specific risk assessment will need to be in place together with the relevant permit to work, ensuring all controls outlined are in place.**