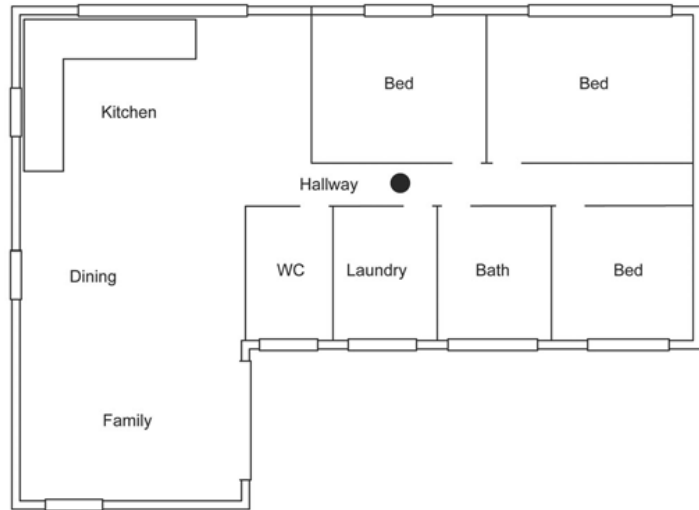


The Industry Association of Building and Property Inspectors in WA Inc – Inspect WA	
Position Paper 10 REV001. 2020 Title: Residential Current Devices (RCD's), Smoke Alarms and Electrical Testing in WA Residential Property's	
Subject	Residential Current Devices (RCD's), Smoke Alarms and Electrical Testing in Residential Property's
Association Position	<p><b>Carrying out an assessment of an electrical installation - other than for operational checks - is not allowed in Western Australia unless authorised by a licence or permit</b></p> <p><b>Smoke Alarms</b></p> <ol style="list-style-type: none"> <li>1. Under the regulatory environment which exists in WA, Building Inspectors can: <ol style="list-style-type: none"> <li>a. Note the number of Smoke alarms in a residential property and whether those Smoke Alarms are located in accordance with the BCA</li> <li>b. Note whether or not those alarms appear to be hardwired or not.</li> <li>c. Confirm non-technical operation. i.e. push the "test" button.</li> <li>d. Check the install / replacement date noted.</li> </ol> </li> <li>2. Building Inspectors are not permitted to <ol style="list-style-type: none"> <li>a. Attest to the Smoke Alarms being Compliant or not.</li> </ol> </li> </ol> <p><b>Residual Current Devices</b></p> <ol style="list-style-type: none"> <li>3. Under the regulatory environment which exists in WA, Building Inspectors can: <ol style="list-style-type: none"> <li>a. Note the number of RCD's in a residential property.</li> <li>b. Confirm non-technical operation. i.e. push the "test" button.</li> </ol> </li> <li>4. Building Inspectors are not permitted to <ol style="list-style-type: none"> <li>a. Attest to the RCD's or the number of RCD's being Compliant or not.</li> </ol> </li> </ol> <p><b>Circuit and Earth Testing</b></p> <ol style="list-style-type: none"> <li>5. Building Inspectors are not permitted to <ol style="list-style-type: none"> <li>a. Test Circuits</li> <li>b. Test Earth Leakage</li> </ol> </li> </ol> <p><b>Power points, lights, electrical equipment and appliances.</b></p> <ol style="list-style-type: none"> <li>6. Under the regulatory environment which exists in WA,</li> </ol>

	<p>Building Inspectors can:</p> <p>a) <u>Complete a non-technical assessment</u> – i.e. only confirm operation or state “not operating”:</p> <p>The Association requires its Building Inspector Members to abide by the above position.</p>
Date Preparation Commenced	<p>April 2020</p> <p>REV001 October 2020</p>
Date Provisional Approval by Committee for Release to Members for Comment	October 2020
Final Approval by Committee and Release to Members	November 2020
Why was the Paper Released	<p>There were a number of key issues that contributed to the release of this Position Paper:</p> <ol style="list-style-type: none"> <li>1. There is a variety of legislative and regulatory requirements which related to Smoke Alarms and Residual Current Devices (RCD's) which need to be considered when a property is being sold. As a consequence these items are often referred to in Pre Purchase Building Inspections Reports. Further there are some building inspectors who are purporting to test power points, lights, circuits, smoke alarms and RCD's and record the results in Pre Purchase Building Inspection reports .</li> <li>2. There is inconsistency and confusion within the broader industry about what Building Inspectors can and cannot do in relation to this issue.</li> <li>3. The Building Code of Australia, which all Building Inspector Members of Inspect WA are conversant, identifies the need for and required location of Smoke Alarms. Hence, members are competent to comment on this item only.</li> <li>4. Apart from the physical number of Smoke Alarms, there is a host of additional requirements including the need for the Smoke Alarms to generally be hardwired (some exemptions apply), fully operational, meet minimum Australian Standards, be in “service” and in some cases be interconnected where more than one alarm is required.</li> <li>5. Prior to 1 January 2019 residential properties required to have a minimum of 2 RCD's protecting all power and lights in the residential property. Depending on the requirements of the individual property, there may have been a requirement for more than two RCD's. From 1 January 2019, all final electrical circuits require RCD's so it is likely that residential properties constructed after this date will require more than 2 RCD's, the final number being determined by the requirements of the property.</li> <li>6. Carrying out an assessment of an electrical installation - other than for operational checks - is</li> </ol>

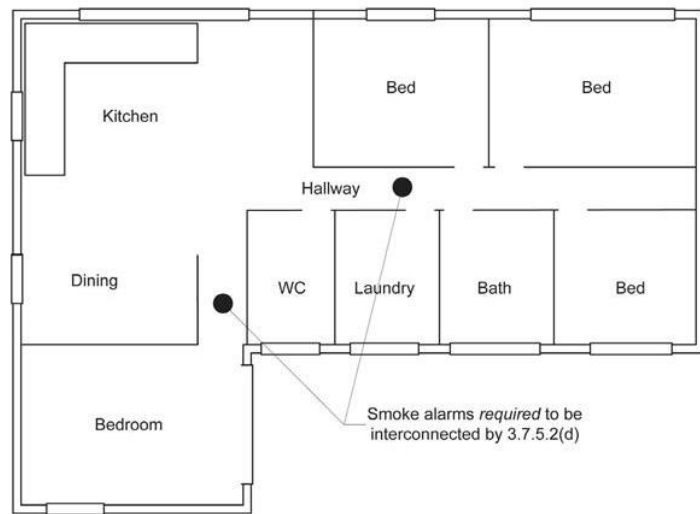
	not allowed in Western Australia unless authorised by a licence or permit. Unless a Building Inspector is a Licenced Electrical Contractor they are not permitted to undertake an assessment of electrical work. Non Licenced (Electrical) Building inspectors are permitted to test and record non-technical operational observations only.
Key References	
Electricity (Licensing) Regulations 1991	Part 3 — Licensing of electrical workers S 19. Electrical work prohibited unless authorised (1) Subject to this regulation, a person who, on or after the appointed day, carries out any electrical work commits an offence unless the carrying out of that work by that person is authorised by a licence or permit.
Building Code of Australia	<p><b>3.7.5.5 Installation of smoke alarms</b></p> <p><b>Explanatory information:</b> A smoke alarm can give spurious alarms if the atmosphere contains particles which obscure vision, such as could occur in a Class 10a <i>private garage</i> part of a building. NSW 3.7.5.2(a)(ii) therefore allows the use of a more suitable alarm, such as a heat alarm, in these locations. Where a Class 10a <i>private garage</i> is located beneath a Class 1a dwelling and is not associated with that dwelling, NSW 3.7.5.2(b) requires a heat alarm to be provided in the non-associated Class 10a <i>private garage</i> in accordance with NSW 1.1.4 in the NSW Additions. The NSW Addition also contains requirements for the interconnection of alarms and the provision of durable notices. NSW 3.7.5.2(a)(iv) requires alarms to be interconnected where there is more than one alarm. This only applies within a single dwelling. Therefore alarms in a Class 1a dwelling need not be interconnected with alarms in another dwelling.</p> <p><b>3.7.5.4 Location — Class 1b buildings</b> In a Class 1b building, smoke alarms must be located in— (a) every bedroom; and (b) every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and (c) each other storey. (see Figure 3.7.5.1, Diagram c)</p> <p><b>Figure 3.7.5.1</b> <b>Diagram a Class 1a building where all bedrooms are grouped together and served by a hallway</b></p>



**Legend for Figure 3.7.5.1 Diagram a:**

**Smoke alarm**

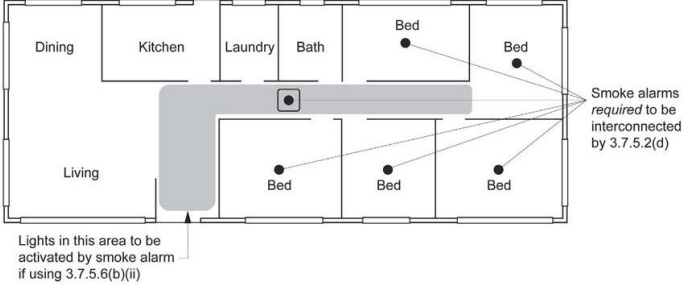
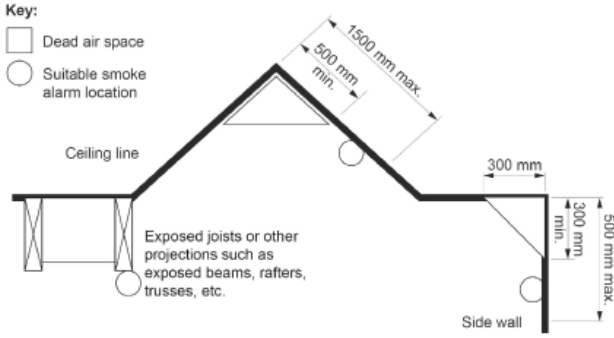
**Diagram b Class 1a building where bedrooms are located in separate areas**



**Legend for Figure 3.7.5.1 Diagram b:**

**Smoke alarm**

**Diagram c Class 1b building where multiple bedrooms are served by a hallway**

	 <p><b>3.7.5.5 Installation of smoke alarms</b></p> <p>Smoke alarms <i>required</i> by 3.7.5.3 and 3.7.5.4 must be installed on or near the ceiling, in accordance with the following:</p> <p>(a) Where a smoke alarm is located on the ceiling it must be—</p> <p>(i) a minimum of 300 mm away from the corner junction of the wall and ceiling; and</p> <p>(ii) between 500 mm and 1500 mm away from the high point and apexes of the ceiling, if the room has a sloping ceiling.</p> <p>(b) Where (a) is not possible, the smoke alarm may be installed on the wall, and located a minimum of 300 mm and a maximum of 500 mm off the ceiling at the junction with the wall</p>  <p>Diagram 1 – Installation of smoke alarms to avoid dead air space</p>
<p>WA Building Regulations 2012</p>	<p>56. Requirement to have smoke alarms or similar prior to transfer of dwelling</p> <p>(1) If an owner of a dwelling transfers the ownership of it, the owner must, to the extent practicable, ensure that at the time of the transfer —</p> <p>(a) the dwelling has smoke alarms installed so that the dwelling and the alarms comply with the requirements of regulation 60(2); or</p> <p>(b) if an approved alternative building solution applies in relation to the dwelling — the solution is in effect.</p> <p>Penalty for this subregulation: a fine of \$5 000.</p>
<p>Australian Standard for residential smoke alarms – AS 3786</p>	<p>Refer to the BCA for the relevant edition of AS 3786 that applies to your dwelling at the time of installation of the smoke alarms. Your local government may have a copy of the Standard that you can view at their front counter or library, or you can purchase a copy from SAI Global at</p>

	www.saiglobal.com The Standard can also be viewed at the Department of Commerce's WorkSafe library in Cannington
Electricity Regulations 1947	<p>12A. Installation of residual current devices</p> <p>(1) In this regulation — final subcircuit means a final subcircuit to which a socket outlet, lighting point or directly-connected hand-held appliance is connected.</p> <p>(2) Residual current devices are installed in accordance with this regulation in relation to residential premises, or common property relating to residential premises, if all of the following apply —</p> <p>(a) the number of residual current devices installed on the premises is at least —</p> <p>(i) 1, if the premises have 1 final subcircuit; and</p> <p>(ii) 2, if the premises have more than 1 final subcircuit;</p> <p>(b) if 2 or more residual current devices are installed on the premises, lighting points connected to final subcircuits are distributed between the devices;</p> <p>(c) each residual current device complies with AS/NZS 3190:2016 Approval and test specification — Residual current devices (current-operated earth-leakage devices);</p> <p>(d) each residual current device has a maximum rated residual current of 30 mA;</p> <p>(e) each residual current device protects not more than 3 final subcircuits;</p> <p>(f) each residual current device is installed at the switchboard at which each final subcircuit protected by it originates.</p>
AS/NZS 300	<p>AS/NZS 300 was released on June 26<sup>th</sup> 2018. AS/NZS 3000:2018 will commence on January 1st 2019.</p> <p>The new standard requires an RCD to be installed on every final sub circuit in the electrical installation of a residential premise. This includes circuits protecting hard-wired appliances such as ovens, air conditioners, etc. This affects all new residential building works and will result in more RCD's being installed on new properties. The requirement <b>is not retrospective</b> and will apply only to dwellings built after January 1st 2019.</p>
Correspondence received 30/07/2020 from: <b>Jamie Reinhardt</b>   Electrical Inspection Manager Utilisation Building and Energy Division	<p><b>From:</b> REINHARDT, Jamie &lt;<a href="mailto:jamie.reinhardt@dmirs.wa.gov.au">jamie.reinhardt@dmirs.wa.gov.au</a>&gt;  <b>Sent:</b> Thursday, July 30, 2020 4:57:36 PM  <b>To:</b> Gary Arnold &lt;<a href="mailto:Gary.Arnold@waei.com.au">Gary.Arnold@waei.com.au</a>&gt;  <b>Cc:</b> Loren Laurie &lt;<a href="mailto:L.Laurie@waei.com.au">L.Laurie@waei.com.au</a>&gt;; PEACOCK, Matthew &lt;<a href="mailto:matthew.peacock@dmirs.wa.gov.au">matthew.peacock@dmirs.wa.gov.au</a>&gt;; MCCLARNON, Neil &lt;<a href="mailto:Neil.McClarnon@dmirs.wa.gov.au">Neil.McClarnon@dmirs.wa.gov.au</a>&gt;  <b>Subject:</b> [EXTERNAL] Assessment of electrical installations</p> <p>CAUTION: This email originated from outside of Western Power. Do not click links or open attachments unless you</p>

recognise the sender and know the content is safe. If you are unsure, please use the suspicious email button or contact the IT Service Desk.

Good afternoon Gary,

Thank you for your enquiry into the behaviour of building inspectors who conduct basic electrical assessments as part of their building inspection reports.

In brief, the law in Western Australia prohibits persons from carrying out electrical work unless authorised by a license or permit.

The legislation administered by Building and Energy for electrical work in Western Australia is the *Electricity (Licensing) Regulations 1991* – the Regulations.

The Regulations are freely available from the State Law Publishers website:

[https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc\\_42159.pdf/\\$FILE/Electricity%20\(Licensing\)%20Regulations%201991%20-%20%5B07-n0-00%5D.pdf?OpenElement](https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc_42159.pdf/$FILE/Electricity%20(Licensing)%20Regulations%201991%20-%20%5B07-n0-00%5D.pdf?OpenElement)

I refer to regulation 4A of the Regulations, and in particular 4A(1)(b) which defines electrical work as:

1. 4A. Term used: electrical work

(1) In these regulations —

***electrical work*** means —

(a) work —

- (i) on electrical machines or instruments; or
- (ii) on an electrical installation; or
- (iii) on electrical appliances or equipment,

to which electricity is supplied or intended to be supplied at a nominal pressure exceeding 50 volts alternating current or 120 volts ripple free direct current; and

(b) work comprising an assessment of an electrical installation to ensure that the

	<p>installation and any work done on the installation complies with the requirements of these regulations.</p> <p>The assessment of an electrical installation is defined by the Regulations as electrical work.</p> <p>I refer to regulation 19(1) of the Regulations which prohibits electrical work unless authorised:</p> <ul style="list-style-type: none"> <li>- a person who carries out any electrical work commits an offence unless the carrying out of that work by the person is authorised by a licence or permit</li> </ul> <p>In other words, the assessment of an electrical installation - other than for operational checks - requires a licence or permit.</p> <p>A person who holds an electrical worker's licence, and therefore being a person who is authorised to carry out electrical work, has successfully completed service under an apprenticeship or a recognised skills formation program. This may take typically four years duration. They have also satisfied the Electrical Licensing Board that they have had such experience and/or training as is required to be issued such a licence. That person is then registered and their work can be monitored and they can be advised of developments within the industry.</p> <p>The consequence of someone who is not trained and recognised as being adequately experienced, dealing with something as dangerous and potentially fatal as electricity is of the highest degree of seriousness.</p> <p>In recent years, there have been numerous fatalities, which were a direct result of persons carrying out unlicensed electrical work. The Regulations are designed to discourage such activities.</p> <p>I provide the following responses to the specific examples you have provided – i.e. where an electrician's licence is required and where an electrician's licence is not required:</p> <ol style="list-style-type: none"> <li>1. Email from Elias Oostveen to Peter Huber on 18 July 2020 about scope of inspection</li> </ol> <p>Our inspection agreement states the following in respect to electrical:</p> <p><i>The inspection shall comprise a non-invasive, <b><u>non-technical type assessment</u></b> of the elements listed in the scope to the interior and exterior of the building, and the site within 30 metres of the</i></p>
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*building and within the site boundaries including fences.  
Inspection is subject to safe and reasonable access.*

#### **SCOPE of Inspection**

- General Purpose Outlets (power points) operated using a Polarity Tester **electricians licence not required to confirm operation**
- Lights: Operated and dimmed if applicable. **electricians licence not required to confirm operation**
- Smoke Alarms: Operated with the test button. **electricians licence not required to confirm operation**
- RCD's (Residual Current Device): Operated with the test button only. **electricians licence not required to confirm operation**
- Testing of appliances and equipment: **electricians licence not required but must be competent to carry out testing of appliances**
- Oven: Operated to inspect (if applicable) display, starting to heat up, grill starting to heat up, fan and light; inspected items tested either individually or as a group at inspectors discretion (this is not a full function test). **electricians licence not required to confirm operation**
- 

I understand the service that building inspectors would like to provide, however carrying out an assessment of an electrical installation - other than for operational checks - is not allowed in Western Australia unless authorised by a licence or permit.

The assessment of an electrical installation - other than for operational checks - must be carried out by licensed persons.

Happy to discuss further if required.

Kind regards

**Jamie Reinhardt** | Electrical Inspection Manager Utilisation  
Building and Energy Division

**Department of Mines, Industry Regulation and Safety**

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Government of Western Australia  
Department of Mines, Industry Regulation and Safety

*We're working for  
Western Australia.*

		<p>We acknowledge Aboriginal and Torres Strait Islander people as the Traditional Custodians of this land on which we deliver our services. We pay our respects to elders and leaders past, present and emerging.</p> <p>DISCLAIMER: This email, including any attachments, is intended only for use by the addressee(s) and may contain confidential and/or personal information and may also be the subject of legal professional privilege. If you are not the intended recipient, you must not disclose or use the information contained in it. In this case, please let me know by return email, delete the message permanently from your system and destroy any copies. Before you take any action based upon advice and/or information contained in this email you should carefully consider the advice and information and consider obtaining relevant independent advice.</p>
Key Definitions		
Electricity (Licensing) Regulations 1991	"electrical work"	means work on electrical machines or instruments, on an electrical installation or on electrical appliances or equipment to which electricity is supplied or intended to be supplied at a nominal pressure exceeding 50 volts alternating current or 115 volts direct current whether or not the thing on which the work is performed is part of, or is connected to or to be connected to, any distribution works or private generating plant and, where work is performed on any appliance, whether or not electricity is supplied or may be supplied thereto through an electric plug socket or socket outlet;
	"licence"	means a licence under these regulations and when used in Part 3 means an electrical worker's licence and when used in Part 4 means an electrical contractor's licence or a licence to carry out electrical work that is in-house electrical installing work for the purposes of Part 4;
	"permit"	means a permit under Part 3;
Other		
Key Issues for Consideration		<p>Checking the install / replacement date of smoke alarm involves opening the device. Opening the device can be problematic as some installations are inadequately fixed, and or the device itself could be faulty or damaged after opening / handling.</p> <p>Where the inspector wishes to check the install / replacement date, InspectWA recommends first gaining permission from the homeowner, outlining all care taken but no responsibility accepted should issues arise from checking the install / replacement date.</p>

Additional Observations	
Disclaimer	This document is not intended to be Legal Advice. The document is only intended for Members of. The Industry Association of Building and Property Inspectors in WA. Where appropriate, readers of the document should seek their own independently legal advice

Signed Chairman

The Industry Association of Building and Property Inspectors in WA – Inspect WA

November 2020

## 2. Public Release Template



### Public Release – Position Paper 10a REV001.2020 – November 2020

**The Industry Association of Building and Property Inspectors in WA Inc – Inspect WA is pleased to announce the release of its Position Paper on RCD's, Smoke Alarms and Electrical Circuits**

#### **Background**

There were a number of key issues that contributed to the release of this Position Paper:

1. There is a variety of legislative and regulatory requirements which related to Smoke Alarms and Residual Current Devices (RCD's) which need to be considered when a property is being sold. As a consequence these items are often referred to in Pre Purchase Building Inspections Reports. Further there are some building inspectors who are purporting to test power points, lights, circuits, smoke alarms and RCD's and record the results in Pre-Purchase Building Inspection reports.
2. There is inconsistency and confusion within the broader industry about what Building Inspectors can and cannot do in relation to this issue.
3. The Building Code of Australia, which all Building Inspector Members of Inspect WA are conversant, identifies the need for and required location of Smoke Alarms. Hence, members are competent to comment on this item only.
4. Apart from the physical number of Smoke Alarms, there is a host of additional requirements including the need for the Smoke Alarms to generally be hardwired (some exemptions apply), fully operational, meet minimum Australian Standards, be in "service" and in some cases be interconnected where more than one alarm is required.
5. Prior to 1 January 2019 residential properties required to have a minimum of 2 RCD's protecting all power and lights in the residential property. Depending on the requirements of the individual property, there may have been a requirement for more than two RCD's. From 1 January 2019, all final electrical circuits require RCD's so it is likely that residential properties constructed after this date will require more than 2 RCD's, the final number being determined by the requirements of the property.
6. Persons who carry out any electrical work commit an offence unless the carrying out of that work by that person is authorised by a licence or permit. It is accepted that "testing" and electrical appliance (Smoke Alarms or RCD's) is defined as electrical work. Providing any assessment as to whether or not the electrical appliance is compliant or not would also be considered electrical work.
7. Unless a Building Inspector is a Licenced Electrical Contractor they are not permitted to undertake an assessment of electrical work. Non-Licenced (Electrical) Building inspectors are permitted to test and record non-technical operational observations only.
8. Checking the install / replacement date of smoke alarm involves opening the device. Opening the device can be problematic as some installations are inadequately fixed, and or the device itself could be faulty or damaged after opening / handling. This potentially could hold the inspector liable for repairs.

9. Where the inspector wishes to check the install / replacement date, InspectWA recommends first gaining permission from the homeowner, outlining all care taken but no responsibility accepted should issues arise from checking the install / replacement date.

**The Associations position is: Carrying out an assessment of an electrical installation - other than for operational checks - is not allowed in Western Australia unless authorised by a licence or permit**

### **Smoke Alarms**

7. Under the regulatory environment which exists in WA, Building Inspectors can:
  - a. Note the number of Smoke alarms in a residential property and whether those Smoke Alarms are located in accordance with the BCA
  - b. Note whether or not those alarms appear to be hardwired or not.
  - c. Confirm non-technical operation. i.e. push the “test” button.
  - d. Check the install / replacement date noted.
8. Building Inspectors are not permitted to
  - a. Attest to the Smoke Alarms being Compliant or not.

### **Residual Current Devices**

9. Under the regulatory environment which exists in WA, Building Inspectors can:
  - a. Note the number of RCD’s in a residential property.
  - b. Confirm non-technical operation. i.e. push the “test” button.
10. Building Inspectors are not permitted to
  - a. Attest to the RCD’s or the number of RCD’s being Compliant or not.

### **Circuit and Earth Testing**

11. Building Inspectors are not permitted to
  - a. Test Circuits
  - b. Test Earth Leakage

### **Power points, lights, electrical equipment and appliances.**

12. Under the regulatory environment which exists in WA, Building Inspectors can:
  - a. Complete a non-technical assessment – i.e. only confirm operation or state “not operating”:

The Association requires its Building Inspector Members to abide by the above position.

Committee  
Inspect WA  
October 2020