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eNERGY bulletin

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

In this issue

Improving efficiency and safety

In Energy Bulletin Issue no. 81, I mentioned the establishment of the new Building and Energy Division of the Department of Mines, Industry Regulation and Safety (DMIRS).

Building and Energy is responsible for the technical regulation of building and electrical, plumbing and gas installations. It oversees the operations of the building, painting, plumbing, electrical and gas industries including the resolution of building service and payment disputes.

As part of Stage 1 of the transition, five directorates were created to oversee the management and operations of the new agency: Building Compliance, Gas and Plumbing Compliance, Electricity Compliance, Regulatory Services and Policy, Standards and Engineering.

As part of our aim for continual improvement, Stage 2 of the transition will see the Gas, Plumbing Compliance and Electricity Compliance come together as a new Utilities Compliance Directorate. While this change should lead to improved internal efficiencies, its interaction with industry will not change.

On 14 May 2018, new legislation effectively banning work on energised electrical equipment came in force. Legislation prescribing new requirements for the supervision of apprentices is also imminent.

I am pleased that industry showed a strong interest for the industry information sessions held across metropolitan and regional areas of Western Australia. It is imperative you maintain your knowledge of the legislation and Australian Standards. The amended Electricity (Licensing) Regulations 1991 can be downloaded from the State Law Publishers website at www.slp.wa.gov.au.

Since the beginning of the year four serious accidents requiring hospitalisation and two serious accidents requiring medical treatment only have been reported to Building and Energy. This is not a good start for the industry.

Before starting any electrical or gas fitting work, please remember that however experienced you might be these sources of energy can be lethal. Make sure you follow safe work practices at all times. Stay safe!

Ken Bowron
DIRECTOR OF ENERGY SAFETY

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Not Energy*Safety*... Building and Energy

Electricians and gas fitters phoning Energy*Safety* may have been surprised when the call was answered by someone identifying themselves from Building and Energy rather than Energy*Safety*.

With the amalgamation of the Departments of Commerce and Mines and Petroleum in January 2018 to form the 'Department of Mines, Industry Regulation and Safety', Energy*Safety* merged with the Building Commission to form the 'Building and Energy' Division. Building and Energy will oversee the standards for:

- electricity
- gas
- plumbing
- building

and will regulate the work practices of licensed:

- electrical and gas workers
- plumbers
- painters
- builders
- building surveyors

Addresses and badging on websites, stationery and email will soon be updated to reflect the new departmental arrangements. We request your patience as we make the changes.

Ken Bowron is the newly appointed Executive Director Building and Energy and Building Commissioner. He retains his statutory position of Director of Energy Safety.

New Building and Energy Inspectors

Building and Energy welcomes four new inspectors to the Electricity Compliance Directorate.

For the last 35 years, **Allan Attwood** has worked as an electrician, electrical contractor and electrical supervisor in the agricultural, construction, industrial, maintenance and oil and gas industries in New Zealand, Victoria and regional Western Australia.

Allan has experience with high voltage and domestic installations and until recently, was employed at an iron ore mining plant undertaking maintenance.

Jason St Martin commenced his electrical apprenticeship in Canada 35 years ago. He emigrated to Australia in 1989, after deciding the Perth climate was preferable to freezing Canadian temperatures.

Jason has worked as an electrician and an electrical contractor on industrial and domestic installations in both Canada and Western Australia. Much of his career has been spent overseeing power distribution networks at oil refineries where at one time he was appointed the Quality Assurance/Control Manager for a new refinery. He has also undertaken testing and commissioning of HV installations and managed teams of high voltage technicians in both countries.

Jason's last role prior to commencing employment with Building and Energy was as a trainer for electricians undertaking nationally accredited high voltage and arc-flash safety courses.

In his spare time, Jason volunteers with several mental health awareness groups, giving presentations and organising discussions on depression and suicide prevention.

Mark Doyle has worked in the electrical industry for 21 years, predominantly in the commercial, industrial and construction sectors in varying roles from apprentice up to senior management.

He previously held an electrical contractor's licence and carried out electrical work for new domestic installations and also undertook subcontracting work for industrial and commercial maintenance.

More recently, Mark has been working in the industrial breakdown and maintenance field including process control and instrumentation installation and repairs.

Neil McClarnon has 20 years experience working as an electrician and electrical contractor in the UK and Western Australia. In the UK, he was employed as an Electrical Inspector/Investigator for a network supply operator, where he carried out similar functions to those of a Building and Energy inspector.

Neil's last role was as a Senior Constable Police Officer for the Western Australia Police where he gained significant experience in a wide variety of investigations and had the opportunity to serve as a lead investigator for several complex coronial matters.

Neil looks forward to his challenging new role as Senior Electrical Inspector with Building and Energy.

Construction Contracts Act resources

The *Construction Contracts Act 2004* (CCA) establishes a process through which construction sector participants – including electrical workers and gas fitters – can access fast, cost effective dispute resolution services in respect of payment disputes under construction contracts.

Building and Energy has developed a series of short, accessible videos on the following topics concerning the CCA:

- Topic one: An overview of the CCA
- Topic two: How to make a payment claim under the implied provisions of the CCA
- Topic three: How to apply for adjudication
- Topic four: How to respond to an application for adjudication
- Topic five: The "determination" (or decision-making) process of the adjudicator

Each of these videos is supported by a corresponding fact sheet which provides more detailed information on the topics and answers common questions about the CCA. The videos and fact sheets are available on our 'Information on using the CCA' webpage at www.commerce.wa.gov.au/building-commission/information-using-construction-contracts-act.

Free contract management seminars

Building and Energy has partnered with HHG Legal Group to deliver a series of three information seminars on contract management. These free seminars will assist industry participants to understand common contractual issues and pitfalls that can arise on construction projects.

The seminars are suitable for electricians, gas fitters, plumbers, builders, painters and all other trade contractors providing goods and services on construction projects.

Each of the three seminars will be run twice throughout 2018/19 in Cannington:

- **Contract variations and time bars**
  Tuesday 5 June 2018 and Tuesday 4 December 2018
  4.30pm–6.00pm. Register here
- **Defects liability and warranties**
  Tuesday 17 July 2018 and Tuesday 5 February 2019
  4.30pm–6.00pm. Register here
- **Contractual disputes and debt recovery**
  Tuesday 28 August 2018 and Tuesday 9 April 2019
  4.30pm–6.00pm. Register here

Register for any of these seminars through the Eventbrite bookings page at buildingcommissionwa.eventbrite.com. For further information email BE.Events@dmirs.wa.gov.au.

Morley Galleria incident – Investigation outcome

Building and Energy has concluded its investigation into the explosion which occurred at the Morley Galleria Shopping Centre on 3 February 2015.

The intensive investigation found the following:

- Prior to the accident, water penetrated one of the transformers supplying the shopping centre, causing a low level fault. This caused the high voltage, high rupture capacity (HRC) fuses, which protected the transformer, in the combined fuse-switch unit (CFS) unit to operate.
- The HV fuses were installed in a Long & Crawford HV oil insulated CFS forming part of the electrical switchgear at the shopping centre.
- In trying to clear the fault, one of the fuses shattered. Shattering of this type of HRC fuses is not common and few instances are recorded.
- These fuses are designed to operate quickly for high fault currents. For low-level fault currents the HRC fuse will trigger the striker pin which will trip the CFS unit. In this case, the fault current was low; the pyrotechnic striker did operate but its pin failed to fully extend. There was a delay in the tripping, leading to the fuse overheating and its porcelain enclosure shattered.
- The shattering of the fuse separated it from its metallic end-caps. The fuse carrier assembly housing the HRC fuses showed damaged components.
- Electricians attended the site on 2 February 2015 to investigate the loss of electricity supply to a section of the shopping centre. They found that the fuse had shattered and sought assistance from another electrician who had more experience on this type of switchgear.
- On 3 February 2015, four electricians opened the CFS access cover to inspect the damaged fuse. While opening the cover, one of the separated end-caps was dislodged.
- The fuse end-cap sank in the oil tank and made contact between one of the "live" 11kV busbars and the earthed tank at the bottom of the CFS. This created an electrical short circuit and an electric arc, a catastrophic explosion and the expulsion of hot oil which ignited into a fireball inside the switchroom.
- The four electricians all received horrific burns from the explosion and subsequent oil-fuelled fire. They all managed to exit the HV switchroom. One died at the scene. Another was transported to hospital but died later that day. The two survivors spent months in hospital receiving treatment for severe burns.

The Director, Electricity Compliance issued an Inspector's Order requiring the complete isolation of electricity supply prior to opening the lid of any HV oil-insulated combined-fuse switches. The Order was issued to all licensed electrical contractors in Western Australia and property owners likely to have HV oil-insulated combined-fuse switches on their property. This Order remains in place. The Order can be viewed at www.commerce.wa.gov.au/publications/oil-insulated-high-voltage-hv-combined-fuse-switches.

Building and Energy considered whether a breach of the *Electricity Act 1945* had occurred. In this case there is no prima facie case that any person had contravened the Act and associated Regulations.

WorkSafe has also completed its investigation into this incident and is not taking any legal action in relation to the event. However, during the investigation a potential breach was identified for which a prosecution is being taken against the entity providing Shopping Centre management services, in relation to materials that were in the switch room.

Industry information sessions

On 9 May 2018, Building and Energy completed the last of 10 industry information sessions held across metropolitan and regional areas of Western Australia.

Electrical workers and contractors were briefed about:

- the upcoming new Wiring Rules;
- regulations for live electrical work; and
- supervision of apprentices.

Around 1,500 electrical licensees attended these sessions. Copies of the presentations are available to view on the Building and Energy website at www.commerce.wa.gov.au/energysafety/events-0.

Industry information session

Watch video**: Proposed Wiring Rules Changes** – In this session, committee Chairman Gary Busbridge takes us through the DR AS/NZS 3000 proposed changes.

Watch video**: Q&A Wiring Rules Part 1** – Committee Chairman Gary Busbridge tackles industry questions on the DR AS/NZS 3000 proposed changes. Topics include general enquiries, solar and battery energy storage and electrical equipment.

Watch video**: Q&A Wiring Rules Part 2** – Committee Chairman Gary Busbridge tackles industry questions on the DR AS/NZS 3000 proposed changes. Topics include electrical installations, earthing, switchboards, segregation, testing and more.

Watch video**: Q&A Wiring Rules Part 3** – Committee Chairman Gary Busbridge tackles industry questions on the DR AS/NZS 3000 proposed changes. Topics include RCDs in relation to application, lighting, equipment and more.

Further information is available on the Building and Energy website at www.commerce.wa.gov.au/energysafety/new-wiring-rules .

The new Wiring Rules are coming soon

SAI Global has released a summary of the proposed major changes to the Wiring Rules prepared by the Chairman of Committee EL-001. A publication date for the new Wiring Rules has not yet been announced but is expected soon.

Once published the standard will be mandated in legislation.

The following sessions are based on the draft Standard DR AS/NZS 3000:2016 and are run in alliance between SAI Global and Wiring Rules committee Chairman, Gary Busbridge from Clipsal by Schneider Electric.

New live work regulations

New requirements for working on energised electrical equipment apply as of 14 May 2018, when changes to the Electricity (Licensing) Regulations 1991 (the Regulations) and a new Code of Practice for persons working on or near energised electrical equipment (the Code) came into effect.

The new Regulations ban work on or near energised electrical equipment except in special circumstances where there is no reasonable alternative. In such cases, working on or near energised equipment may only be carried out after a rigorous risk assessment and formulation of a safe work method statement.

The Regulations and Code were published in the Government Gazette on 14 November 2017 and 1 December 2017 respectively, following consultation with industry earlier in 2017.

A copy of the Code can be downloaded from the Building and Energy website at www.commerce.wa.gov.au/publications/code-practice-persons-working-or-near-energised-electrical-installations.

The Occupational Safety and Health Regulations 1996 (OSH Regulations) have also been amended, requiring de-energising electrical installations before entering or working in roof spaces. These amended OSH Regulations were published in the Government Gazette on 14 November 2017.

Building and Energy has prepared a letter signed by the Director of Energy Safety to inform electricity customers about the new laws, which strictly limit work on or near energised electrical equipment to exceptional circumstances. Electrical contractors and electricians are encouraged to provide a copy of this letter to their customers when quoting and performing electrical work.

Further information is available on the Building and Energy website at www.commerce.wa.gov.au/energysafety/working-or-near-energised-electrical-installations.

Ensuring your work on transportable structures complies

Electrical contractors carrying out electrical installing work on transportable structures are reminded that under Regulation 52BA of the Electricity (Licensing) Regulations 1991, Preliminary Notices, Notices of Completion and Electrical Safety Certificates are not required if the transportable structure is being constructed (at its place of manufacture) and won't be connected to a supply of electricity at this construction site.

However, where electrical installing work is carried out on a transportable structure where it is intended to be connected to the electricity supply, the regulations applicable to the submission of Notices and Electrical Safety Certificates (i.e. Regulations 51, 52 and 52B) must be complied with.

The Licensing Regulations define a transportable structure as a structure that can be moved from one site to another and on which notifiable work may be carried out.

In addition, the whole of the transportable installation wiring is to be checked and tested and certified that it is safe and complies with the Regulations.

Premises for sale or rent – RCD requirements

Part IV of the Electricity Regulations 1947 requires all residential premises be fitted with a minimum of two RCDs protecting all general purpose power and lighting circuits if the property title is to be transferred or the dwelling is offered for rent or hire and cites the current Wiring Rules version AS/NZ 3000:2007.

The forthcoming new edition of the Wiring Rules will require all sub-circuits in residential installations to be RCD protected, including circuits supplying fixed appliances such as water heaters, stoves, pool pumps and spas.

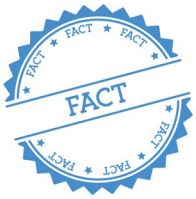
However, it is not proposed to change the existing requirements of Part IV to reflect the new Wiring Rules. It will continue to be necessary for rental and for-sale properties to have at least two RCDs protecting all lighting and general purpose power circuits.

The wording of Part IV will be amended in due course to enable the present requirements to continue.

Did you know?

A nominee is **not** required to comply with a direction given to them by their employer in relation to electrical work if the nominee reasonably considers the work would not be carried out in accordance with these regulations if they were to comply with the direction.

– Regulation 38A of the Electricity (Licensing) Regulations



Safety and health management – how does your business rate?

Looking to how you can improve the safety and health management of your employees and work areas of your electrical contracting business? WorkSafe offers employers the opportunity to undergo an assessment rating on how they are meeting safety and health requirements while also highlighting areas for improvement.

The WorkSafe Plan, which is modelled on a scheme originating from WorkCover Corporation in South Australia, is available for businesses operating under Western Australian safety and health legislation. It comprises five sections, each of which describes the performance indicators used to determine whether each standard has been met. These include:

- Management commitment.
- Planning.
- Consultation and reporting.
- Hazard management.
- Training and Supervision.

Formal Certificates of Achievement can be awarded if a business is meeting set standards. Assessment must be overseen by an experienced and qualified assessor in safety and health procedures who has, as a minimum, current certification as Principal or Lead OSH Auditor for safety and health management systems (i.e. RABQSA, IRCA or equivalent) and has attended an information session on how the WorkSafe Plan operates (please contact WorkSafe on 1300 307 877 for dates of the upcoming information sessions).

The three certificates awarded are:

- Silver – minimum standards met.
- Gold – progressing to achieving the highest standards.
- Platinum – highest standards met.

WorkSafe maintains a list of suitable assessors at www.commerce.wa.gov.au/worksafe/find-worksafe-plan-assessor. If your business has a large number of employees and/or has offices/workshops in several locations, please contact WorkSafe directly to discuss arrangements.

Solar panel dealer in hot water for not informing customers to "cool off"

A dealer employed by solar panel manufacturer One Stop Solar Energy has pleaded guilty to nine breaches of the Australian Consumer Law.

M.D Sahfiqur Rahman was charged with offences related to three customers who signed agreements for the purchase and installation of solar panels between August and November 2015.

At the point of sale, the three customers were not informed of their right to terminate the sales agreements during the 'cooling off period'. One customer was also not immediately provided with a copy of the sales agreement as is required.

The Australian Competition and Consumers Commission protects customers who are approached by door-to-door sales persons, classified as unsolicited consumer agreements.

If a door-to-door salesperson offers an unsolicited consumer agreement to a customer, they must follow rules in Australian Consumer Law regarding their method of approach, the information they provide and the customer's prerogative to cancel the transaction during the cooling off period.

A salesperson is required to inform customers that the sales transaction can be cancelled for any reason within 10 business days, foregoing any penalties.

Mr Rahman was found guilty in Perth Magistrates Court on 16 February 2018 and was convicted and fined $3,000 with court costs of $1,500 and was also required to pay $7,000 in compensation. Two of the customers had been reimbursed prior to Mr Rahman's court appearance while the third was awaiting the court's decision on compensation.

100% renewable energy solution to Kalbarri's power shortages

By mid-2019, Kalbarri will house Western Australia's largest 100% microgrid.

Kalbarri currently receives electricity from Western Power's 140km rural 33kV feeder line originating in Geraldton.

The aerial line, located on the coast, is highly susceptible to mechanical damage from destructive winds, heavy rainfall and wind-blown salt and sand. These environmental factors severely affect reliability with regular power outages as a result.

To address this issue, Western Power entered into a $6.8 million construction contract for a microgrid, which the network operator designed and will manage on completion. Carnegie Clean Energy in a joint venture with Lend Lease was successful with their tender.

The microgrid will comprise solar photovoltaic (PV) panels on Kalbarri residences and a 4.5MWh battery, providing 5MW of peak capacity and 2MWh of battery storage. These will be integrated into the existing Kalbarri Wind Farm, which already supplies the town with a third of its power.

Western Australia Treasurer and Minister for Finance, Energy and Aboriginal Affairs Ben Wyatt expects the installation to boost tourism in the area and subsequently, the businesses of retailers, while also enhancing the amenities of Kalbarri residents.

Construction on the microgrid is expected to start in November 2018.

Western Australia on its way to having Australia's largest wind-solar precinct

Construction on the 20MW Emu Downs solar farm has been completed with the facility becoming operational in December 2017. Located near Cervantes, the solar farm is now the largest of its kind in Western Australia with 75,000 solar panels distributed over 70 hectares, topping Greenough River's 10MW solar farm located to the south-east of Geraldton.

The $50 million Emu Downs solar farm was built by energy infrastructure company APA Group next to the existing 80MW wind farm. $5.5 million of funding was won from Australia's Renewable Energy Agency (ARENA) large-scale solar competitive funding round in 2016.

With construction of another 130MW wind farm to the north of the facility (Badgingarra) to be completed in 2019, the area is set to become one of the largest renewable energy precincts in Australia.

Did you know?

Solar (PV) arrays and wind turbines are on track to replace fossil fuels worldwide by 2038.
– Ecogeneration, ''Solar PV and wind are on track to replace all coal, oil and gas within two decades"

Lodging HV submissions online

Since 21 April 2018, Registered Mine Managers can lodge online notifications of high voltage installations via the Department of Mines, Industry Regulation and Safety 'Safety Regulation System'.

Prior to the commencement of work on any proposed high voltage (HV) installation on a Western Australian mine site, details of the installation must be provided to an Electrical Inspector (mines inspectorate) under r.5.18(2)(a) of the Mines Safety and Inspection Regulations 1995.

For substantial changes to a HV installation, a design submission is also required to determine whether the design is suitable and for an inspection of the installation to be scheduled.

Resources Safety will conduct a process check for completeness of the major components of the design in accordance with mandatory Australian Standards (e.g. AS2067: 2016 'Substations and high voltage installations exceeding kV a.c.') but, will not issue an approval for the design or undertake a detailed engineering evaluation.

For more information, please visit www.dmp.wa.gov.au.

Code of Practice targeted to FIFO workers

WorkSafe has prepared a Code of Practice stemming from the recommendations and findings of Western Australia's Legislative Assembly's Education and Health Standing Committee report from the inquiry into the mental health of fly-in fly-out (FIFO) workers in the resources industry.

The Education and Health Standing Committee 'Report No. 5 - The impact of FIFO work practices on mental health' presented to the Legislative Assembly on 18 June 2015 identified an absence of substantial data on suicides amongst workers employed in FIFO arrangements.

Key findings in the report include:

- a higher rate of mental health problems amongst FIFO workers (30%) compared to that of the general population (20%) (identified in three recent studies); and
- FIFO workers at the highest risk of mental illness and suicide were males aged between 18 and 44 with contributing factors including isolation from family and friends and fatigue from long shifts.

Based on the high risk demographic profile and the increase of mental distress found amongst FIFO workers, WorkSafe prepared the 'Code of Practice - Mentally healthy workplaces for fly-in fly-out workers in the resources and construction sectors'. The Code provides a framework for employers with FIFO work arrangements and focuses on:

- managing psychosocial hazards (e.g. alcohol and bullying in the workplace, aggression and work-related stress) with risk management processes;
- intervention for employees subjected to work-related stress or exposed to psychosocial hazards; and
- creating mentally healthy workplaces that promote good health and wellbeing and supports recovery of employees.

WorkSafe recently released the Code for a period of public feedback with submissions currently being reviewed.

Are your contact details up to date?

If you have visited the Building and Energy website to download Issue no. 81 January 2018 of the Energy Bulletin because you haven't recently received an electronic copy, it could be because the Office does not have your current email address.

To update your details:

1. Phone the Building and Energy Licensing Office on 6251 2000; or
2. Email energylicensing@dmirs.wa.gov.au.

All current and previous issues of the Energy Bulletin can be viewed online at the Building and Energy website at www.commerce.wa.gov.au/publications/energy-bulletin.

Did you know?

A restricted licence **does not** authorise the licence holder to carry out the installation or alteration of fixed wiring.

– Regulation 20(5) of the Electricity (Licensing) Regulations 1991

Your technical questions answered

Q: Our company (electrical contractor) mainly carries out regular compliance work for real estate agencies. We have just started using eNotices for issuing our customers with Electrical Safety Certificates. Is there an option available for our clients to have a guest login for eNotice to retrieve these certificates?
A: No, clients of electrical contractors cannot get a guest login for their customers to use eNotice. When using eNotices to lodge Electrical Safety Certificates, the best way a customer can receive a copy of the Certificate is via email from the contractor. Alternatively, the Notice can be printed and posted. A copy of the Certificate must be supplied to the customer within the required time of 28 days.

Q: I am new to using eNotice and need assistance completing a Notice. Do I select 'New Installation' or 'Alteration or Addition' for these installations?
a) Changing overhead consumer mains to underground consumer mains. Is this classed as a 'new installation' or 'alteration addition'?
b) The electrical "fit-out " of a shop?
A: In both instances, 'Alteration/Addition' is the correct option.

Q: I am looking for some guidance relating to socket outlets in engine compartments. I have looked up AS 3004.2:2014 for classified zones where there is a chance of high pressure hoses bursting which could cause flooding to the engine compartment. I believe that the socket-outlets in an engine compartment are required to have an IP rating of IP56, but can find no reference to this in AS 3004.2:2014.

There is a socket-outlet installed in the upper part of the engine compartment of the boat directly underneath the floor of the boat. The engine compartment is accessible by lifting a hatch in the rear deck.

There is also an additional hatch in the floor of the galley and the socket-outlet is of the standard household type mounted on standard surface boxes.
A: Clause 2.8.3 Installation in special locations of AS 3004.2.2014 "Electrical Installations - Marinas and Boats - Boat Installations' should cover the engine compartment of the boat as it stipulates that socket-outlets installed in locations subject to rain, spray or splashing (open deck) shall be enclosed in IP56 enclosures, as a minimum, when not in use. When the appropriate plug is connected, the outlet shall maintain IP56.

Socket-outlets installed in areas subject to flooding or momentary submersion shall be in IP67 enclosures, as a minimum, while also maintaining IP67 when an appropriate plug is inserted.

As for socket-outlets in the galley area, these shall be located so that appliance cords can be plugged in without crossing above a galley stove, sink or across a traffic area.

Q: I've noticed that on Inspector's Orders there is a column for defect category with the defect category being a number followed by a letter. Where can I find information on what these defect categories are?
A: The defect categories are used by network operator inspectors to summarise major defects (e.g. equipment not earthed, RCDs not installed etc) and are used in accordance with their internal Inspection System Plans. Details of these categories are not provided to electricians as they are for internal use only.

Q: In the context of facility management and solar (PV) companies advertising to complete electrical work (but most likely using subcontractors), could you please provide a couple of example scenarios that demonstrate how, from an electrical contractor's licencing view point, this should and should not work. In particular, we want to better understand the need for an electrical contractor's licence and displaying the electrical contractor's licence number in advertising.
A: The Electricity (Licensing) Regulations 1991, Regulation 33(2)(b) states that a person does not carry on business as an electrical contractor if he or she undertakes to have the work done by an electrical contractor. Examples of this are:

- A home building company will sell a house. During the prestart meeting, they will discuss the location of electrical equipment and additional points without being an electrical contractor. The building company then will engage an electrical contractor to complete the work. As the building company is not an electrical contractor, there is no need to have an electrical contractor's licence number displayed in their advertising.
- A solar (PV) company can sell a "fully installed" solar package and then engage an electrical contractor to install the equipment. Once again, there is no requirement for the solar (PV) company to display an electrical contractor's licence number if the work is carried out by an electrical contractor.

- A facilities management company will state they can perform preventative maintenance, building management and have 24 hours facilities response capability. Provided the management company engages an electrical contractor, there is no requirement for them to have an electrical contractor number is their advertising.
- When someone buys a split system air-conditioning unit from a store and the store arranges for a refrigeration company to install it. In most instances, the refrigeration company will not have an electrical contractor's licence and will then engage an electrical contractor to install the final sub-circuit for the air-conditioning unit. Once again, there is no need for the store or the refrigeration company to display an electrical contractor's licence number.

The above examples all show that there are companies that will advertise and/or arrange for electrical work to be carried out without being the holder of an electrical contractors licence. Regulation 33(2)(b) allows this. However, if such companies advertise another company's (or subcontactor's) electrical contractor's licence, implying they are an electrical contractor, they may be in breach of Regulation 33(1).

Q: One of my regular electricians (not a nominee) is unable to lodge eNotices even though he is a registered eNotice user. Whenever he attempts to lodge an eNotice Notice of Completion, it keeps appearing in DRAFT mode and he is unable to certify them. Why is this happening?
A: An eNotice - Notice of Completion can only be lodged by the nominee of an electrical contractor. Please refer to the table below for what functions each type of eNotice user can perform.

Q: I stopped working as an electrical contractor two years ago and let my licence expire but now I would like to start up my business again. Do I need to submit another 'Application for an Electrical Contractor's Licence'?
A: No, you do not need to provide another 'Application for an Electrical Contractor's Licence'. Restoring an expired electrical licence can be easily done online at the Building and Energy website at www.commerce.wa.gov.au/energysafety. You also have the option of manually completing a 'Restoration of Name to the Electrical Licensing Register' form which is available to download from our website.

Q: How do I make a change to an eNotice that I recently lodged?
A: For detailed instructions on how to amend an eNotice, please visit the new 'Amending a lodged eNotice' page on the Building and Energy website at www.commerce.wa.gov.au/energysafety/amending-lodged-enotice. Please also remember there are time limits for amending eNotices. Preliminary Notices can be amended at any time up to the point the Notice of Completion is lodged while Notices of Completion and Electrical Safety Certificates can be amended up to seven calendar days after lodgement.

Q: Is a 230V ac plug-in battery charger mounted on a mobile trailer classified as an installation or an appliance?
A: The battery charger is classified as an appliance.

Types of eNotice users

Functions	Nominee	Electrical Contractor	Electrician (not nominee)	Administration
Register	✓ Self	✓ Self	✓ Self	By EC
Draft PN, NOC, ESC	✓	✓	✓ Note 2	✓ Note 2
Lodge PN	✓	✓	✓ Note 2	✓ Note 2
Lodge NOC	✓	Note 1		
Lodge ESC	✓	Note 1	✓ Note 2	
User Management		✓		✓ Note 2

Note 1: Where an Electrical Contractor is also a Nominee, he/she must register in eNotice under their Electrician licence in order to be able to lodge Notices of Completion and Electrical Safety Certificates.

Note 2: Electrical Contractor must authorise these functions via the User Management facility.

Functions that can be performed by each type of eNotice user

Q: I have just started working as an electrical contractor. The nominee I hired recently resigned after two weeks and did not complete the electrical work he had commenced. What is my responsibility for this incomplete electrical work?
A: Under Regulation 38 of the Electricity (Licensing) Regulations 1991, you are required to notify the Licensing Office of the cancellation of the nomination.

As your company only had the one nominee, your electrical contractor's licence is suspended until the time another nominee is appointed. Only on the appointment of a new nominee can the work be completed and Notices of Completion lodged to the relevant network operator and Electrical Safety Certificates provided to the person requesting the work to be carried out.

Until then, if the work needs to be urgently completed, you could engage or employ the services of another electrical contractor to complete the work or fulfil the function as a nominee.

Caution required

In what has been a grim start to the year, between 1 January and 31 March 2018, Building and Energy has received reports of:

- **573** electric shocks;
- **four** serious accidents requiring hospitalisation; and
- **two** serious accidents requiring medical treatment only.

Every electrical worker must be constantly vigilant about the dangers involved in working with electricity.

The danger is real.

Upcoming events

27 and 28 June 2018
Energy and Mines Australia Summit
Pan Pacific Hotel, 207 Adelaide Terrace, Perth
8.30am to 5.50pm.

Topics of interest for electricians include energy risks in mining, benefits of integrating renewables on grid-connected mine sites, saving costs and carbon emission with energy storage, power constraints for mines in the eastern goldfields.

Visit australia.energyandmines.com for more information.

6 September 2018
Clean Energy Council's Australian Energy Storage Leadership Series
Brookfield Place, Level 15, 125 St Georges Terrace, Perth
9.30am to 4pm.

This session includes presentations on energy storage and the grid, market opportunities and trends and large-scale utility storage.

Visit www.cleanenergycouncil.org.au for more information.

12 September 2018
Clean Energy Council's Perth Installer Night
Technology Park Function Centre, 2 Brodie-Hall Drive, Bentley
5pm to 8pm.

Accredited installers are invited to join the Clean Energy Council's Accreditation team and guest speakers to learn about recent industry developments and trends. This session is worth 50 CPD points for eligible attendees.

Visit www.cleanenergycouncil.org.au for more information.

What's wrong with these installations?

Inspector's Orders have been issued by inspectors for the defects shown in the photographs below. From these examples, see if you can correctly identify the defect and also find the relevant clause from AS/NZS 3000: 2007 "Wiring Rules". The answers are provided on page 17 (test yourself).

Image A:

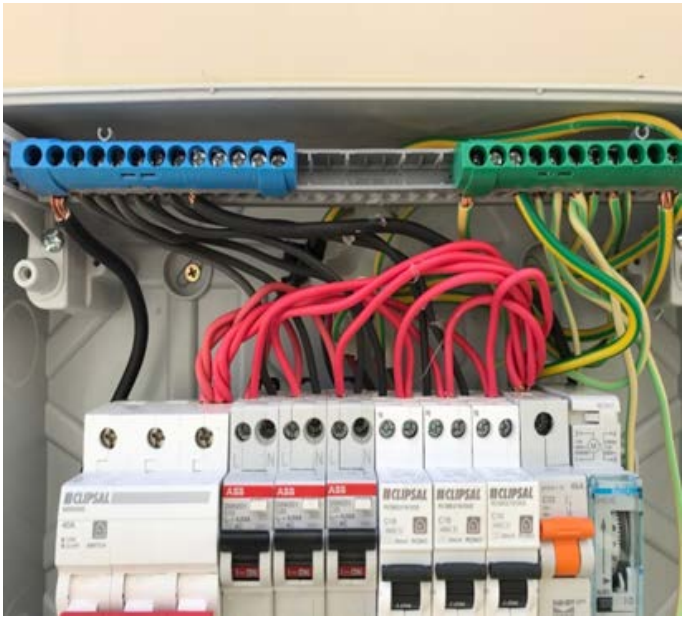


Image B:

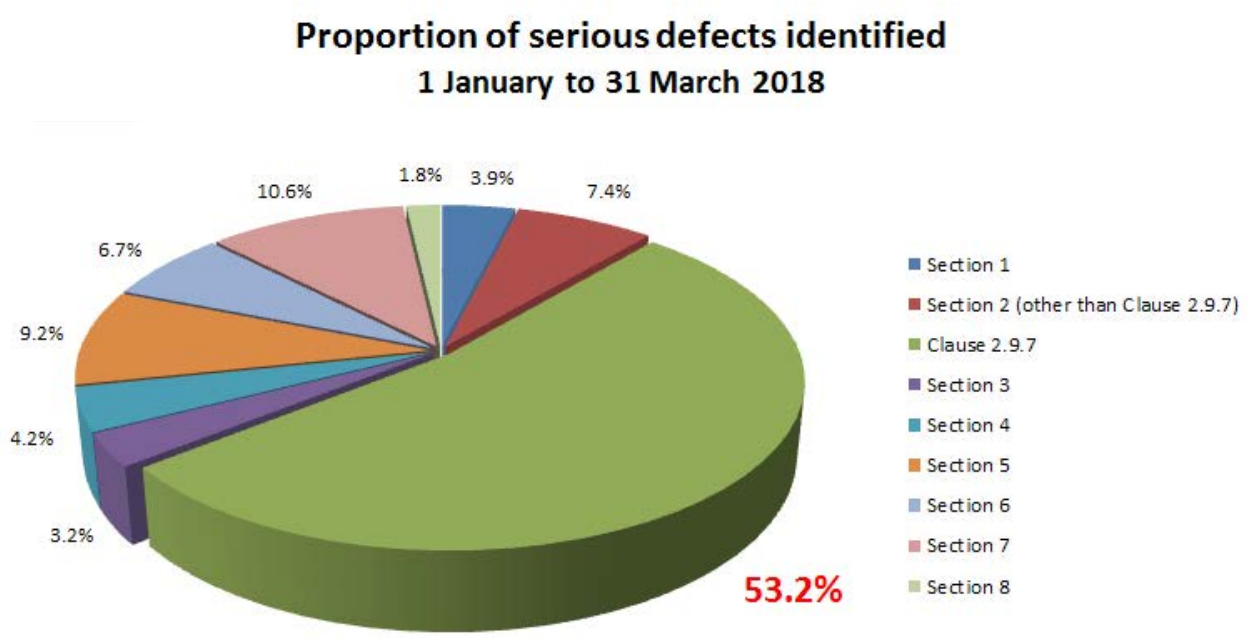
Image C:

Standards update

Standard	Published date	General queries
AS/NZS 3003: 2018, Electrical Installations - Patient area	26 March 2018	AS/NZS 3003: 2011, Electrical installations - Patient areas'

Serious defects – 1 January to 31 March 2018

Serious defects taken identified by Inspector's Orders issued by Building and Energy and network operator inspectors between 1 January and 31 March 2018 are shown in the following chart and table.
A summary of the defects this period is as follows:
Number of non-serious defects = 1,130
Number of serious defects = 284
TOTAL = 1,414



Pie chart showing the proportion of serious defects from Sections 1 to 8 of AS/NZS 3000: 2007, Wiring Rules

The dominance of Clause 2.9.7 breaches once again indicates that electrical contractors must pay greater attention to switchboard sealing requirements. Building and Energy is looking to take appropriate enforcement action if such breaches continue at the present rate.

Section	Clause	Serious defects identified
Section 1 - Scope, Application and Fundamental Principles Scope. application, referenced documents, definitions, fundamental principles, design of an electrical installation, selection and installation of electrical equipment, verification (inspection and testing) and means of compliance	1.5.1	Protection not provided against shock current, excessive temperatures or explosive atmospheres
	1.5.14	Protection not provided against external influences
	1.5.3	Protection not provided against electric shocks
	1.5.4.1	No protection provided against dangers that may arise from contact with parts of the electrical installation that are live in normal service.
	1.5.4.2	Protection not provided against dangers that may arise from contact with parts of the electrical installation that are live in normal service
	1.5.4.4	Protection by barriers or enclosures not provided for live parts
	1.5.5.4(b)(ii)	Conductive parts within enclosure not protected by an insulating barrier
	1.7.1	Selection and installation of equipment is unsafe or not installed to manufacturer's recommendation
Section 2 - General arrangement, control and protection General, arrangement of electrical installation, control of electrical installation, fault protection, protection against overcurrent, additional protection by residual current devices, protection against overvoltage, protection against undervoltage and switchboards	2.2.1.1(b)	Circuits not arranged to account for load and operating characteristics of equipment in relation to circuit component rating
	2.5.1.2	Submains and final subcircuits not protected by an overload device
	2.6.2.1	The current rating of the RCD is less than the maximum demand of the protected circuits
	2.6.2.4	RCD protected final subcircuits not arranged as required
	2.6.3	Additional RCD protection not provided for final subcircuits
	2.6.3.1	Additional protection by RCDs with a maximum rated residual current of 30 mA not provided for final subcircuits of lighting points, socket-outlets or directly connected hand-held electrical equipment
	2.6.3.1(a)	Final subcircuits for socket outlets not provided with 30mA RCD protection
	2.6.3.2.1	Additional protection by RCDs with a maximum rated residual current of 30 mA not provided
	2.9.3.1	Live parts are not arranged so that basic protection is provided by enclosures, in accordance with the provisions of Clause 1.5.4
	2.9.7	Switchboard wiring does not minimise spread of fire
Section 3 - Selection and installation of wiring systems General, types of wiring systems, external influences, current-carrying capacity, conductor size, voltage drop, electrical connections, identification, installation requirements, enclosure of cables, underground wiring systems, aerial wiring systems and cables supported by a catenary	3.4.4	Current-carrying capacity of conductors is not coordinated against the protective device
	3.6.2	Voltage drop between the point of supply and any point on the installation exceeds 5% of the nominal voltage
	3.7.1	Electrical connections between conductors and conductors and other electrical equipment do not provide electrical continuity
	3.9.3	Support and fixing of wiring system does not meet requirements
	3.10.2.1	Incorrect type of wiring enclosure used to protect cables
	3.10.2.3	The wiring enclosure is not installed to prevent water or rain entering
Section 4 - Selection and installation of appliances and accessories General, protection against thermal effects, connection of electrical equipment, socket-outlets, lighting equipment and accessories, smoke and fire detectors, cooking appliances, appliances producing hot water or steam, room heaters, electric heating cables for floors and ceiling and trace heating applications electric duct heaters, electricity converters, motors, transformers, capacitors, electrical equipment containing liquid dielectrics and batteries.	4.1.2(a)	Selected and installed electrical equipment not functioning properly under expected external influences
	4.1.2(c)	Selected and installed electrical equipment not operating safely when properly assembled, installed and connected to supply.
	4.1.2(d)	Selected and installed electrical equipment fails to ensure there is no danger from electric shock, fire, high temperature or physical injury in the event of reasonable expected conditions (i.e. overload, abnormal operation, fault or external influences)
	4.5.1.1	Location of lampholders does not protect against damage

Section	Clause	Serious defects identified
Section 5 - Earthing arrangements and earthing conductors General, earthing functions, earthing system parts, earthing of equipment, earthing arrangements, equipotential bonding, earth fault-loop impedance, and other earthing arrangements.	5.1	Other earthing arrangements have reduced the integrity of the electrical installation earthing system
	5.1.2	Selection and installation of earthing conductors do not meet requirements
	5.3.1	Equipment is not earthed to meet requirements
	5.3.4	Main earth terminal/connection or bar not installed to meet requirements
	5.3.5	MEN connection not installed to meet requirements
	5.3.5.2	MEN size does not meet requirements
	5.3.6.1	Connection of electrical installation earthing system to general mass of earth by earth electrode not as required
	5.3.6.4	Location of earth electrodes does not meet requirements
	5.3.6.4(a)	Connection of main earthing conductor to earth electrode is not accessible
	5.4.1.1	Exposed conductive part/s of electrical equipment not effectively earthed as required
	5.4.6	Structural metalwork and/or conductive building materials not effectively earthed as required
	5.5.1.2	Connection of main earthing conductor to electrode does not meet requirements
	5.5.1.2(d)	Connection of main earthing conductor to earth electrode unprotected against corrosion
	5.5.3.4	Exposed conductive part/s of switchboard enclosure not effectively earthed
	5.5.3.5	Unprotected consumers mains not earthed in accordance with requirements
	5.6.2	Equipotential bonding arrangements do not meet the requirements of Clauses 5.6.2.2 to 5.6.2.6
	5.6.2.1	Equipotential bonding arrangements do not meet the requirements of Clauses 5.6.2.2 to 5.6.2.6
	5.6.2.6	Equipotential bonding of electrical equipment and conductive parts associated with swimming or spa pools not arranged as required
Section 6 - Damp situations General, baths, showers and other fixed water containers, swimming pools, paddling pools and spa pools or tubs, fountains and water features, saunas, refrigeration rooms, sanitization and general hosing-down operations	6.2	Electrical equipment installed in locations containing baths, shower or other fixed water containers does not meet requirements
	6.2.4.2	Socket-outlets installed within 0.3 m of the floor of a bathroom, laundry or similar location where the floor is likely to become wet or in certain conditions in classified zones
	6.2.4.3	Switches and other accessories installed within 0.3 m of the floor of a bathroom, laundry or similar location where the floor is likely to become wet or in certain conditions in classified zones
	6.3.4.3	Socket-outlets installed within 0.3 m of floor or other horizontal surfaces in wet areas (Zones 0 or 1)
	6.7.4	Selection and installation of electrical equipment does not meet requirements
Section 7 - Special electrical installations General, safety services, electricity generation systems, electrical separation (isolated supply), extra-low voltage electrical installations, high voltage electrical installations, hazardous areas (explosive gas or combustible ducts) and specific electrical installation standards	7.3.2	Selection and installation of electricity generation systems does not meet requirements
	7.3.4.1	Electricity generation system not provided with an isolating switch in accordance with Clause 2.3.2.2
Section 8 – Verification General, visual inspection, testing and date of initial energisation of an installation.	8.3	Installation not tested in accordance with Clause 8.3.3 before being placed into service
	8.3.3	Mandatory testing on low-voltage electrical installation not carried out after completion of, or in association with visual inspection
	8.3.6.2	Insulation resistance results from testing carried out between conductors of consumers mains and submains and live and earthed parts does not meet requirements
	8.3.7	Polarity does not meet requirements

NLH: No Licence Held

Reporting defects

If you come across an unsafe installation or equipment, you have an obligation under Regulation 62(1) of the Electricity (Licensing) Regulations 1991 to undertake the following:

- Report the defective work to the owner/occupier.
- Let the owner/occupier know the defective work is required to be reported to the network operator.
- Report the defective work to your relevant network operator (where the network operator cannot be identified, the relevant network operator is Building and Energy).
- If you are carrying out work on behalf of your employer (electrical contractor or In-house licence holder), your employer must also be made aware of the defective work.

Network operator contact details can be found on the inside cover of books of Preliminary Notices and Notices of Completion, as well as on our website at www.dmirs.wa.gov.au/energysafety.

Answers to 'what's wrong with these installations?' from page 13

A. AS/NZS 3000: 2007 "Wiring Rules", Clause MEN connection not installed to meet requirements.

B. AS/NZS 3000: 2007 "Wiring Rules", Clause AS/NZS 3000: 2007 "Wiring Rules", Clause 3.3.2.1 - Wiring system not protected from ambient temperatures and solar UV.

C. AS/NZS 3000: 2007 "Wiring Rules", Clause 3.10.1.1 - Insulated, unsheathed cables were not enclosed in a wiring enclosure throughout their entire length ***and*** Clause 3.10.3.7 - Conduit installed in direct sunlight not protected against effects of solar radiation.

Network operator contacts

The current contact numbers for Western Australian network operators are listed below. Please note the addition of Indian Ocean Territories Power Service.

Network operator	Reporting electric shock/ accidents	General queries
BHP Billiton Newman	1300 632 483 - Option 4	1300 632 483 - Option 1
BHP Billiton Nickel West	9026 5262	9026 5262
Horizon Power	13 23 51	13 23 51
Rio Tinto	1800 992 777	1800 992 777
Western Power	13 13 51	13 10 87
Indian Ocean Territories Power Service (IOTPS) (for Christmas and Cocos (Keeling) Islands)	9164 7111	9164 7111

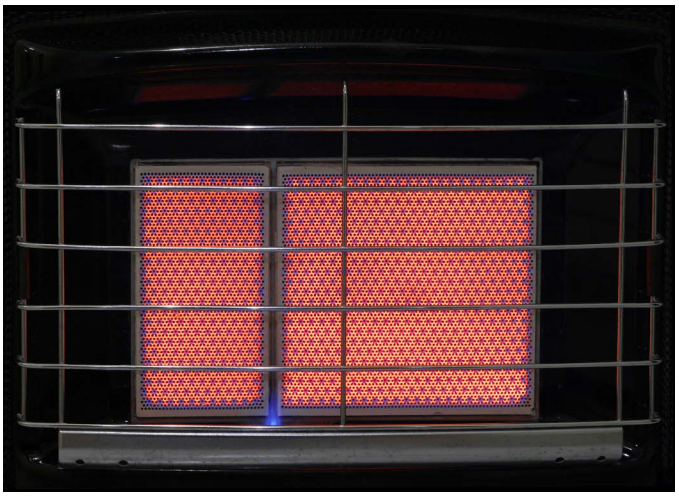
Gas heater service reminder

Building and Energy has been reminding Western Australian home owners and occupiers to have their gas heaters serviced by a licensed gas fitter in the lead-up to winter.

With heaters being idle for many months over summer it is important to have them serviced to ensure they are working properly.

Air filters, air ways, fans and burners can become blocked by lint and dust, especially if the heater has been stored in a garden shed or similar over the summer which can lead to overheating, burner problems and producing carbon monoxide gas.

Consumers are advised to visit the Building and Energy website for further information at www.commerce.wa.gov.au/energysafety/gas-appliances.



Reminder for eNotice users

Regulation 28 of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 (the Regulations) requires a registered gasfitter to attach an approved badge or label in an approved place on completion of gasfitting work. Subregulation 28 (6) provides for the Director of Energy Safety (the Director) to exempt a registered gasfitter from this requirement in a particular case or class of case.

The following policy is effective from **16 April 2018**.

The Director has determined that subregulation (2) and (3) do not apply if:

- an eNotice is submitted; and
- the gas installation, domestic or commercial, is supplied with natural gas.

For clarity, an approved badge is still required to be attached in accordance with subregulation 28 (2) to an installation in the following cases:

- if a paper-based Notice of Completion is submitted;
- all LP Gas installations (domestic, commercial and industrial);
- all industrial natural gas installations;
- marine craft;
- caravans;
- mobile catering installations; and
- LP Gas, Forklift, CNG, and LNG mobile vehicle installations.

To register for eNotice or for further information visit the gas eNotice web page at www.commerce.wa.gov.au/energysafety/gas-enotice.

Non-complying fan assisted water heaters and flue terminal installations

Building and Energy and gas supplier installation inspectors regularly inspect and identify new and replacement gas appliance installations whereby water heaters and appliance flue terminal locations did not comply with current requirements

The installations are being tubed out, fitted off and then commissioned by gas fitters who either do not have a current copy of AS/NZS 5601.1:2013 Gas Installations Part 1: General requirements (AS/NZS 5601.1), knowledge of the current requirements, or choose not to carry out installations in accordance with AS/NZS 5601.1.

The main area of non-compliance is where water heaters are installed under a covered or recessed area and balconies which are only open on one side, or water heaters that are installed adjacent to return walls or screens. Appliances installed in this type of location must meet the

requirements of AS/NZ 5601.1 clause 6.9.4 which states as follows:

Where the *flue terminal* of a *balanced flue appliance, room-sealed appliance*, a *fan-assisted appliance* or the *flue terminal* of an *appliance* designed for *outdoor* installation is to be installed under a covered area, or in a recess, one of the following options shall be applied to achieve ready dispersion of combustion products and avoid nuisance:

- the covered area or recess shall be open on at least two sides and the terminal shall be located to ensure a free flow of air across it is achieved; or
- in the case of a *fan-assisted appliance* only, when one side is open, the *flue terminal* shall be within 500mm of the opening, and discharging in the direction of the opening. There shall be no other *flue terminals, gas meter*, electricity meter, fuse box or openings into the building along the wall within the 500mm distance. The *flue terminal* shall be located to ensure that a free flow of air is achieved.

The following is a sample of some of the answers provided when gas fitters are questioned as to why they have installed the appliance in a non-compliant location:

- That's where the drawing/plan showed it.
- That's where the bricklayer installed the wall box for the water heater.
- That's where the owner wanted it.
- I thought it was ok there.
- I didn't know it could not be located there.
- I don't have a current copy of AS/NZS 5601.1 .

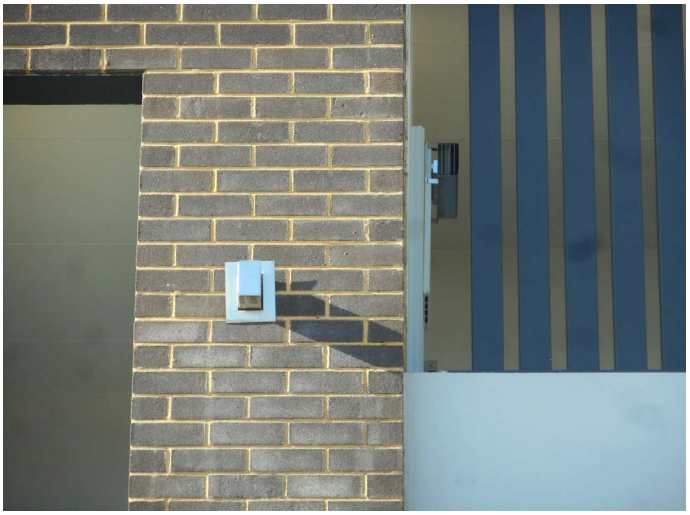
Gas fitters should be aware that it is the **gas fitter** who submits the Notice of Completion for the appliance commissioning and is responsible for compliance of the installation.

Where the gas fitter is unsure if the installation meets the requirements they should seek advice from a gas inspector before proceeding with the installation. This may result in having to relocate the appliance, use a different type of appliance or install a flue diverter to the appliance.

Where an installation is found to be non-compliant, the gas fitter will receive a Notice of Defect and be responsible for rectifying the installation. This may also be subject to disciplinary action by Building and Energy which could include an infringement penalty.

The following photos show examples of how some water heater installations on balconies have been made compliant.

Fan assisted water heater with sideways draft diverter



Compliant flue terminals

Complying flues with sideways draft diverters

Compliant flue installed through awning adjacent to louvres

Prosecutions for breaches of gas legislation

Between 1 January and 31 March 2018

Name (and suburb of residence at time of offence)	Licence number	Legislation and Breach	Offence	Date of offence	Fine ($)	Court costs ($)
Stuart Gray (Baldivis)	GF12402	Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 r. 18(2)(a)(ii) r. 28(2) r. 28 (3)	• Failing to ensure the gas installation was safe to use on completion of gasfitting work; • Failing to attach an approved badge upon completion of gasfitting work; • Failing to give a notice of completion to the gas supplier and the person for whom the gasfitting work was done	18 May 2016	4,100.00 Costs: 625.00	119.35

Summary of infringements for breaches of gas legislation

Between 1 January and 31 March 2018

Legislation and breach	Offence	Number of infringements	Fine ($)
r. 18(2)	Failing to ensure gas installation complies with prescribed requirements	2	1,200.00
r. 20(1)	Installing appliance, apparatus or part contrary to instructions or recommendations of manufacturer or designer	1	600.00
r. 26(1)(a)	Failing to ensure gas installation meets requirements as to pressure testing and is gas-tight	2	1,200.00
r. 28(3)	Failing to give notice of completion of gasfitting work within required time	3	1,200.00
r. 30	Failing to rectify defects and give notice of rectification within required time	13	5,200.00
	Total	**21**	**9,400.00**

Drainage plumbing diagram requirements

Drainage plumbing diagrams (DPDs), also known as as-cons or flimsies, are an important part of the plumbing industry for drainage maintenance, alteration and building additions or construction. These diagrams depict the as-constructed layout of drainage pipework below ground.

Many plumbers have seen or used these diagrams that may be 50 or even 100 years old, their longevity demonstrating how important these diagrams are to the plumbing industry.

On 14 December 2016 the Plumbers Licensing and Plumbing Standards Regulations 2000 (the Regulations) were amended, requiring all DPDs be lodged with the Plumbers Licensing Board (PLB) at the same time as submitting the related certificate of compliance.

This includes drainage plumbing that connects to a water services provider for sewerage other than the Water Corporation as well as where the drainage plumbing connects to an apparatus for the treatment of sewage, such as a septic tank or an anaerobic treatment unit.

What this means for licensed plumbing contractors

1. All drainage plumbing that is installed, altered or extended after 14 December 2016 shall be drawn diagrammatically as per the DPD 'guidelines' and submitted with the relevant certificate of compliance to the board within five days of completing all work indicated on the certificate.
2. The traditional 'Cut & Seal' is now classified as major plumbing work and will require a DPD, as the definition of minor plumbing work has also been amended to remove the definition relating to the alteration of less than 5m of existing drainage plumbing. This means all alterations are major plumbing work and the alteration must be shown on a DPD.
3. If the licensed plumbing contractor who submitted the certificate of compliance does not include a DPD, a PLB inspector or staff member will contact the licensed plumbing contractor to request a DPD. All licensed plumbing contractors are reminded that an infringement of $500 or penalties up to $5,000 in the Magistrate's Court apply for failing to submit a DPD when required.

4. When DPDs are submitted they shall be in the approved form and in accordance with the 'Drainage plumbing diagrams: Submissions and requests guidelines'. To access these guidelines visit www.commerce.wa.gov.au/building-commission/drainage-plumbing-diagrams. A3 and A4 templates can also be downloaded from this page.

If you require any additional information or have a question concerning DPDs or any other plumbing compliance or prescribed plumbing standards issue please contact the PLB Technical Advice Line on 1300 360 897. An officer will be available to assist on this number on weekdays between 8:30am to 4.30pm.

The WaterMark Certification Scheme

The WaterMark Certification Scheme (WMCS) is a mandatory certification scheme for plumbing and drainage products to ensure they are fit for purpose and appropriately authorised for use in plumbing and drainage installations.

The Australian Building Codes Board (ABCB) manages and administers the WMCS as a national scheme. The Plumbing Code of Australia (Volume Three of the National Construction Code) requires certain plumbing and drainage products to be risk assessed and authorised (listed on the Product Database) for use in a plumbing or drainage installation. These materials and products are tested, certified and authorised for use through the WMCS. In February 2013 management and administration of the Scheme transferred to the ABCB. Following a review of the existing Scheme and stakeholder consultation an improved version of the Scheme was launched on 1 July 2016. The Manual for the WMCS outlining the rules for the improved Scheme, was published in June 2017 and the improved scheme was commenced on 1 August 2017.

The Joint Accreditation System of Australia and New Zealand (JAS-ANZ) accredits Watermark Conformity Assessment Bodies (WMCABs), who in turn evaluate and certify plumbing and drainage products.

WMCABs are responsible for evaluating new products to an approved specification for inclusion on the WaterMark Product Database (WMPD). If a new product cannot be evaluated to an approved specification, a new or amended product specification can be submitted for the ABCB Office to review and approve. Once approval is obtained, the WMCAB can undertake an evaluation of the new product.

Which products require certification?

It is important to note that not all plumbing and drainage products require WaterMark certification and authorisation. All products proposed to be used in a plumbing and drainage installation require a risk assessment to be undertaken.

A comprehensive listing of products previously subjected to a risk assessment and determined as requiring WaterMark certification is contained on the WaterMark Schedule of Products (WMSP). Likewise, the WaterMark Schedule of Excluded Products (WMEP) details products that have been predetermined by risk assessment as not requiring WaterMark certification for example basins, baths and shower bases. Materials and products listed on the WMEP may require evidence of suitability to determine if they are fit for purpose and made to a standard. The ABCB will keep the WMSP and WMEP updated as new products undergo risk assessment and as specifications are approved for use or suspended.

Products not included on the WMSP or WMEP, which are proposed to be used in a plumbing or drainage installation are required to be assessed in accordance with the requirements of Appendix 3 of the Manual for the WaterMark Certification Scheme. These requirements include a risk assessment of the product, conducted by a WMCAB, to determine if WaterMark certification is necessary.

Licensed plumbing contractors are reminded that it is currently their responsibility on submission of a compliance certificate to ensure all materials and products are compliant with the provisions of the Plumbing Code of Australia.

Details on the WMCS can be found on the ABCB website at www.abcb.gov.au/Product-Certification/WaterMark-Certification-Scheme.

If you require additional information on the WMCS or any other plumbing compliance issue please contact the PLB Technical Advice Line 1300 360 897.

Where is your PL number?

Regulation 25 of the Plumbers Licensing and Plumbing Standards Regulations 2000 (the Regulations) states that a licensed plumbing contractor or permit holder must ensure that the number of the licence or permit appears in any advertisement relating to the business for which the licence or permit is, or is intended to be, used. This includes advertising on vehicles.

Regulation 25A of the Regulations also states that a licensed plumbing contractor or permit holder must ensure that the number of the licence or permit appears in any business document relating to the business for which the licence or permit is, or is intended to be, used.

Unfortunately, this is only incumbent on the licensed plumbing contractor or permit holder, which means that a builder, handyman or bathroom renovator may advertise for plumbing work without displaying a PL number. Remember, advertising for plumbing work does not mean that the advertiser is actually carrying out unlicensed plumbing

work. A licensed plumbing contractor more than likely carries out the work on their behalf.

If a situation is identified where there is not a PL number in an advertisement by persons who are not plumbers and it is brought to the attention of the Plumbers Licensing Board, an inspector will contact the person in question and explain that plumbing is a licensed trade. It will also be explained to them that plumbing work must be carried out and certified by appropriately licensed persons and that it would be appropriate to include their licensed plumbing contractor's PL number in all advertising for plumbing work.

Proposed plumbing regulation reforms information sessions

Building and Energy is running free information sessions in metropolitan and regional areas to discuss proposed changes to plumbing regulation in Western Australia.

This is an opportunity for stakeholders to find out more about the proposals and provide any feedback to the Department.

The proposed reforms are outlined in detail in a Consultation Regulatory Impact Statement (CRIS) published by the Department on 1 May 2018 at www.commerce.wa.gov.au/building-commission/plumbing-review.

Location	Venue	Date	Time	Register
Bunbury	Master Builders Association	30 May 2018	4.30-6.30pm	Register here
Kalgoorlie	Quest Yelverton Kalgoorlie	30 May 2018	4.30-6.30pm	Register here
Broome	Broome Lotteries House	12 June 2018	3.30-5.30pm	Register here
Karratha	Welcome Lotteries House	13 June 2018	4.30-6.30pm	Register here
Port Hedland	Lotteries House South Hedland	14 June 2018	4.30-6.30pm	Register here
Geraldton	Master Builders Association	20 June 2018	4.30-6.30pm	Register here
Albany	Master Builders Association	20 June 2018	4.30-6.30pm	Register here
Esperance	Shire of Esperance	21 June 2018	4.30-6.30pm	Register here

Summary of infringements for breaches of plumbing legislation

Between 1 July 2017 and 31 March 2018

Legislation and breach	Offence	Number of infringements	Fine ($)
r. 9(1)	Carrying out plumbing work without a licence	5	5,000.00
r. 41(1)	Failing to give a notice of intention to the Board within the required time	44	26,400.00
r. 42(1)	Failing to give a certificate of compliance to the Board within the required time	38	38,000.00
r. 44(1)	Failing to give a multi-entry certificate of compliance to the Board within the required time	63	12,600.00
r. 105	Failing to notify the Board of a change in address or phone number within the required time	2	400.00
	Total	**152**	**82,400.00**