

energy

Bulletin

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Private Power Pole and Lines Campaign

Old and badly-maintained overhead private power lines pose a serious bushfire risk and can have disastrous consequences for the WA community.

EnergySafety has launched a state-wide education campaign to inform property owners with private power overhead power lines of their responsibilities.

The campaign started during the first week of October and spans more than four weeks ahead of the 2014 to 2015 bushfire season. It will feature:

- EnergySafety's revised information brochure that will be distributed to all electricity customers across WA (<http://www.commerce.wa.gov.au/publications/private-power-poles-and-lines-brochure>);
- newspaper advertisements appearing in The West Australian and selected regional and local papers as well as farming and agricultural industry magazines; and
- online advertising on major news sites.

EnergySafety's website also includes details of the campaign and information to consumers:

<http://www.commerce.wa.gov.au/energysafety/private-power-poles-and-lines-are-your-responsibility>.

As part of the campaign, property owners will be urged to contact electrical contractors to carry-out an assessment, repairs or replacements of their private poles and lines.

Government of Western Australia
Department of Commerce
EnergySafety

ARE YOU
BUSHFIRE
READY?

Private
power poles
& lines on
your property
are your
responsibility.

Protect your
family, home and
community.

www.EnergySafety.wa.gov.au

Private overhead power lines – a guide for electrical contractors is available on EnergySafety's website to assist electrical contractors when assessing private overhead power lines:

http://www.commerce.wa.gov.au/sites/default/files/atoms/files/guide_for_electrical_contractors_private_power_lines.pdf.

KEN BOWRON
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Completing Notices of Completion for work done on private power lines

Whenever you complete any electrical installing work involving private power lines, please remember that you are required to lodge a Notice of Completion (for all notifiable work) to the relevant network operator. It is essential that you provide adequate details of the work you have undertaken.

The following instructions are provided to assist electrical contractors with completing the Notice:


 Government of Western Australia
 Department of Commerce
 EnergySafety

Notice of Completion

No. 2981702

This Notice must be completed and sent to the relevant network operator at the required time, as prescribed in the *Electricity (Licensing) Regulations 1991*.

1 Details of installation, network operator and retailer

Owner/occupier name		Builder's name		Meter No. (if existing)	
Lot No.	Unit No.	Street No.	Street name	Suburb/Vicinity	Post code
Directions (please provide sufficient information)					
Network operator (name)	Ref No.	Electricity retailer (if new connection)	Ref No.		

2 Details of completed electrical work (indicate number of items in each category unless indicated otherwise)

Water heaters	Lighting points	10 amp socket outlets	Socket outlets >=15 amps	RCDs	Calc. maximum demand (amps)
Shower/heater/hot plates	Motors	Pipe/gas equipment	Air conditioning/refrigeration equipment	Smoke alarms	Consumer's mains size (sq mm)
Alternative electricity supply? (tick if you and provide description in comments)		Is there equipment in hazardous areas? (tick if yes)		Other fixed electrical equipment (show kW rating)	
For new connection (tick if other details in "comments")		Single phase 240v	Single phase 400v	Three phase	LT/CT testing
For existing connection (tick)		Single to multiphase	Subs to meters	New consumers mains	Temp. consumer's mains
Domestic	Commercial	Shopping centres	Light industrial	Mining	Underground
For multiple connection		No. of points of supply (NRSR n.3.9)	No. of units	No. of consumer services	
Comments: <i>Description of the work done e.g. replace overhead powerline with underground cable. Install new steel PA Pole.</i>					

1 2 3

1. Write the letter "P" under "Other fixed electrical equipment" (see note 1 in figure above).
2. Insert a tick ✓ next to "Overhead" (see note 2 in figure above).
3. Provide the details of the work you have completed under the "Comments" section of the Notice (see note 3 in figure above).

Did you know?

You can register to receive the Energy Bulletin electronically. Simply go to the EnergySafety website at www.energysafety.wa.gov.au, scroll to "Stay Informed" towards the bottom of the web page, click Energy Bulletin and then enter your email address. You will then receive an email from EnergySafety asking you to click on a link to confirm your email address.

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Alternative formats of this publication may be available to meet the needs of people with disabilities.

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electrical focus

EnergySafety's compliance policy

An analysis of prosecution statistics for the past two years revealed the two most common causes as either "negligence" or "inadequate (or lack-of) systems of work implemented by the electrical contractors".

The fundamental aim of the legislation is to ensure the safety of the community by offering two levels of protection. Firstly, the electrical worker has to ensure the work he undertakes is done safely and to a trade-finish. He/she is also required to check and test his/her work and ensure it complies with the legislation. The importance of verification and testing forms the cornerstone of electrical apprenticeships.

The second and important level of protection is offered by the electrical contractor, as the business which contracts out to consumers and profits from the work. He/she has to ensure his/her electricians are competent to do the work and has to implement proper systems to ensure checks and tests are done and consumers will not be put at risk by the work of his/her employees. The electrical contractor has total responsibility for the quality of the electrical work. Electrical contracting businesses must not rely solely on "checking the credentials" of its employees. This is reiterated during the mandatory training which electrical contractors complete prior to being issued with a contractor's licence.

Licensed electricians are trained to carry out checking and testing but sometimes, for reasons unknown, decide to skip this vital step or simply neglect to do so. A 'comprehensive checking and testing process' is set out in the Wiring Rules and AS/NZS 3017, for which electricians and electrical contractors are trained and are obliged to follow. It is always open to contractors to 'implement a company management plan'. Acceptable management plans must cover processes implemented by the contractor from the time he/she provides a quote for a job, though to design, procurement to completion of the job.

In an industry in which a small oversight may lead to loss of life, electrical contractors have an obligation to ensure adequate levels of supervision and controls are in place to monitor the work of their employees. There is very little room for mistakes. Electrical contractors are urged to develop adequate management systems to ensure the work is safe and meets the required Standards and all the required verification and tests are adequately completed. This will eliminate enforcement actions and ensure consumers are not put at risk by their work or those of their employees. The importance of self-auditing, independent testing and supervision cannot be overstated.

EnergySafety's compliance regime is not driven by a 'prosecution at all costs mentality'. The main objective of enforcement is to prevent repeated breaches of legislation.

Being industry-funded, the monies generated from the fines (from prosecution cases) go to Consolidated Revenues and are not used to meet the running expenses of the electrical safety regulator. Gathering evidence and compiling investigation reports is a painstaking exercise. So, there is no incentive for EnergySafety to favour this course of action. The fundamental aim is to change behaviour.

Very few electrical contractors are prosecuted for breaches of the legislation each year. Of the 4,657 electrical contractors currently licensed in WA, less than 0.6% were prosecuted last year. Similarly, only 22 electricians out of the 35,523 licensed electricians were prosecuted in 2013-14. This amounts to less than 0.1% of the total number. Considering the network operators are notified of more than 100,000 major jobs per year by electrical contractors, the prosecution action is minimal. This means that most operatives are doing the right thing.

Even though prosecution action is only taken in a small number of serious cases, the defect rate experienced with major electrical installation work is of concern. In the 2013/2014 financial year, 28% of all work notified to network operators was inspected. These inspections revealed 16% had defects. Of these, some 3% were serious breaches of the regulations, demanding immediate corrective actions.

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On a more positive note however, it is pleasing to note that prosecution rarely results in repeat offences. So, prosecutions, however small the number may be, are acting as a good deterrent and are changing behaviour.

It is important to reiterate that the vast majority of breaches found do not result in prosecution actions. They are addressed simply by issuing an Inspector's Order requiring the defect to be rectified.

It is very rare for an electrician to continue to carry out defective electrical work once an Inspector's Order has been issued. In addition, electrical contractors employing electricians committing a serious breach may arrange for the electrician's work to be supervised and checked as appropriate. Defective work increases the contractor's costs and often results in a financial loss for the job in question or a blemish to their reputation. Why would a builder continue to use an electrical contractor prosecuted for a serious electrical safety defect that puts the public in danger of electrocution?

When an electrician has committed a breach, his work also becomes subject to 100% inspection until a satisfactory number of successful inspections has been achieved. This too is an important and effective deterrent. Electricians who have had this experience have sworn never to let it happen again. It is simply not pleasant to have each and every job inspected by an inspector. Builders are loath to engage electrical contractors with a blemished record as well. Any problems with the electrical installation fall back on to the builder, too.

Should electrical contractors have concerns about the technical understanding of any of its

employee electricians, they can require them to attend the 80-hour Electrical Trades Licensing Refresher Course which is offered by some participating RTOs. The course is subsidised, and can be taken either in a two-week block or in evening sessions. The outcome is virtually a re-run of the Capstone Assessment undertaken at the end of an apprenticeship and, if passed, confirms the minimum competency level required has been achieved. Nearly every licensee who has taken the course has passed and has given it high praise.

EnergySafety is charged with administering certain laws of Western Australia and in doing so is bound by the Department of Commerce policy and the requirements set out by the Director of Public Prosecutions. Failure to act when confronted with clear evidence of a serious breach of regulations would amount to official corruption under the CCC legislation.

Infinity cable product recall

EnergySafety in conjunction with Consumer Protection and Building Commission issued a media release on 27 August 2014 on the recall of Infinity cables. The national recall has been coordinated by a taskforce chaired by the Australian Competition and Consumer Commission (ACCC).

EnergySafety has urged home and business owners that have had electrical wiring work carried out in 2012 or 2013, to contact their builders or electrical contractors to determine the brand of electrical cable installed in homes or business premises.

The sub-standard cables, imported by Infinity Cable Co Pty Ltd (in liquidation), were sold in WA during 2012 and 2013. The Infinity cables were marked with the brand name Infinity or Olsent. All supplies are being recalled after samples failed to meet electrical safety standards due to poor quality plastic insulation coating. Testing has found that the cables will degrade prematurely and, if the cables are disturbed, the insulation could break and expose live conductors – resulting in possible electric shock or fires.

If you have purchased and installed these cables you need to confer with your cable supplier. The cable supplier will arrange for the inspection of the wiring and remediation of any installed cable supplied free of charge to the consumer.

In Western Australia, the cables were sold by Masters Home Improvement and John Danks & Sons (trading as Home Timber & Hardware, Plants Plus and Thrifty-Link Hardware). Please visit their websites for information on returns and stores that sold the Infinity cable.

As required under Regulation 62 of the Electricity (Licensing) Regulations 1991, electrical contractors and electricians who find this cable must notify the owner or occupier of the installation and the relevant network operator.

The recall notice can be viewed at www.recalls.gov.au and further information and Frequently Asked Questions are available at www.accc.gov.au. For general enquiries contact EnergySafety on 6251 1900 or energysafety@commerce.wa.gov.au. Information can also be found on our website at www.energysafety.wa.gov.au.

Q & A with Robert Allan Foyles – recipient of the 2014 EnergySafety Apprentice Award

EnergySafety would like to congratulate the recipient of the 2014 EnergySafety Apprentice of the Year award, Robert Allan Foyles, pictured with Peter Wright, EnergySafety's Chief Electrical Inspector (Supply). The award was presented at NECA WA's annual industry Excellence Awards night held on 23 August 2014. NECA's Excellence Awards honour those working in the electrical and communications industry who have demonstrated work practices of an excellent standard throughout the year.

After winning this award, the editor of the Energy Bulletin interviewed Robert which is reproduced below.

Q: How did your nomination eventuate?

I initially expressed interest with my field officer to enter the apprentice of the year competition for the NECA WA awards. This in turn led into me being nominated and applying for the EnergySafety apprentice of the year.

Q: Why did you decided to undertake an electrical apprenticeship?

I was attracted to the electrical industry simply because I find electricity fascinating. I grew up in a family that was very science oriented and have always possessed good skills 'using my hands'. I have felt that I wanted to do a trade as I have a passion for creating and building, and love to see an end result that I can be proud of.

My love for all things science and my basic manual skills were major influences for me becoming an electrician, as I consider the physics behind electricity intriguing. This coupled with the fact that the electrical industry is vast and ever changing with countless possibilities made the decision easy.

Q: Can you tell us what you believe are some of the important electrical safety tips you have taken with you, from on and off-the-job training?

There are two very important safety practices that I believe are the most significant of all when dealing with electricity. Firstly always following the correct isolation procedure for de-energisation of electrical equipment and wiring systems before commencing any work. Following this procedure is imperative to ensure no danger exists from electrocution. Possibly the most important tip in the process is to "Test before you touch".

Secondly performing the correct verification testing process in accordance with AS/NZS 3017 before energisation of new or altered installations is crucial to ensure no damage can be done to the installation or people within it.

Q: What are your career plans for 2015?

In 2015 I intend to continue my employment with my host electrical company while undertaking further study of the industry focusing on Certificate 4 in Electrical Instrumentation. Ultimately 2015 for me will be about building my skills and experience as a licensed tradesman.

Q: What is the most valuable piece of advice you would give to apprentices who have just embarked on their apprenticeship journey?

To all new apprentices I would say, "Apply yourself", learn all you possibly can from your off-the-job training. When you possess an adept technical understanding of the way electricity works it will compliment your learning ability for your on the job practical training. Stick at your apprenticeship, although four years may seem like a long time it will pass before you know it.



EnergySafety's Peter Wright with award recipient Robert Allan Foyles

New Senior Electrical Inspector

EnergySafety welcomes our new Senior Electrical Inspector, Kris Green. Kris has worked in many areas of the electrical industry including domestic, construction, mining and power generation. Kris's most recent role was as an electrical supervisor within the mining and processing industry. Kris now looks forward to the new challenges of working at EnergySafety.

EnergySafety electrical inspectors connect with industry

The Traders 500 Electrical Expo was held on Thursday, 28 August 2014 in the Robinson Pavilion at the Claremont Show Grounds.

The Traders 500 Electrical Expo is the only Australia-wide event solely for those in the industry and offers the chance for industry professionals, representatives, contractors and their staff to catch up on the latest products, technologies and services and ensure they keep up to date with what's new.



EnergySafety staff Jess Guilfoyle, Alex Curtis, Sonia Kaur and Matthew Peacock

EnergySafety's electrical inspectors and staff were available to answer queries and touch on issues such as reporting dangerous installations to the network operator. Staff from licensing also attended, to assist electrical workers update their contact details.

Your exciting opportunity to join EnergySafety as a Senior Electrical Inspector

EnergySafety's Electricity Compliance Directorate is currently seeking several Senior Electrical Inspectors for the Cannington, Bunbury and Kalgoorlie offices. A pool recruitment process for permanent positions will run until 15 July 2015. Applications will be assessed on a monthly basis, with suitable applicants to be offered positions as opportunities become available until 30 September 2015.

As a Senior Electrical Inspector, EnergySafety can offer you:

- A great remuneration package, including an Attraction and Retention Incentive (ARI) allowance.
- A well-established learning and development program.
- An improved work/life balance through our commitment to flexible working arrangements and attractive leave options.

- The rare opportunity to contribute toward helping to improve safety in the field.
- A proactive and innovative workplace where your ideas and experience are valued.
- A wealth of variety in your day to day work.
- The opportunity to set standards of practice and develop strategic direction to guide the Energy and Safety industries in Western Australia.
- Substantial provision of tools to help you do your job, including a laptop, mobile phone and access to a vehicle for business purposes.

EnergySafety is seeking candidates who possess the following attributes:

- Unrestricted electricians with strong electrical experience across a broad range of skill sets.
- Motivated by career development.
- Motivated by the desire to make a difference in the community by ensuring safety as a priority.

- Comfortable predominately working in an office environment with some travel for worksite visits.
- Strong written communications skills and the ability to negotiate.
- Supervision or managerial experience, with the ability to see the bigger picture in a situation.
- The ability to understand and interpret codes of practice and regulatory frameworks.

For more information on the job and how to apply, please refer to the www.jobs.wa.gov.au website. You are also strongly encouraged to contact our Chief Electrical Inspector Utilisation, Peter Johnston on (08) 6251 1936 for a confidential discussion.

Rottnest Island inspections

EnergySafety wishes to remind electrical contractors carrying out electrical work on Rottnest Island, of their responsibilities to ensure their completed electrical work is safe and complies with the Regulations.

As part of planned inspections of the island, a recent visit by EnergySafety’s inspectors revealed several instances of defective work.

As a courtesy to the site’s authority Rottnest Island Authority, electrical contractors who plan to carry out electrical installing work on the island are asked to notify Rob Smithson, Project Manager at Rottnest Island Authority before they commence work by:

Phone: 08 9372 9709
 Fax: 08 9432 9301
 Mobile: 0434 079 217
 Email: Robert.Smithson@rottnestisland.com

While Rottnest Island Authority is the controlling body on site, EnergySafety is the relevant network operator for Rottnest Island, for the submission of Preliminary Notices and Notices of Completion for notifiable electrical installing work.

Please submit them to:

Mail: EnergySafety
 Electricity Compliance Directorate
 Locked Bag 14
 CLOISTERS SQUARE
 WA 6850

Fax: (08) 6251 1903

Electrical contractors **must** also report instances of electric shocks to EnergySafety on the 24 hour accident/incident reporting line 1800 678 198 while defective work should be reported to EnergySafety on 6251 1900.

Electrical Safety Certificates must also be issued to the person requesting the electrical work to be carried out.

Submitting a Notice for unsafe work – \$30,000 fine

An inspection carried out by a Western Power inspector, following receipt of a Notice of Completion, found some serious defects in the installation. It revealed that the electrical contractor had failed to earth the remote metallic metering enclosure of a switchboard and also failed to terminate a socket outlet in the ensuite of a unit while carrying out an electrical “fit out”.

It was fortunate that at the time of the inspection, the installation had not been energised. Otherwise, it could have led to an electric shock or fatality had anyone come in contact with the exposed “live” parts.

The investigation by Western Power found the electrician responsible for carrying out the defective work, did not have a “checking and testing” procedure to follow when verifying the installation for compliance with the Wiring Rules.

If the electrician had adequately checked and tested the installation, it is likely he would have identified the defects and corrected them before he notified his employer that the work had been completed and before the Notice of Completion was submitted to Western Power.

The electrical contractor pleaded guilty in Perth Magistrate’s Court for submitting the Notice of Completion to Western Power for electrical installing work that was unsafe and not complete and received a fine of \$30,000 with court costs of \$666.90.

In the past two years, twenty two electrical contractors have been prosecuted for submitting Notices of Completion for the same offence. It is important that electrical contractors develop adequate systems and verification test sheets for employee electricians to follow. They should also have adequate systems in place to ensure that the electricians are following the processes implemented and all installations comply with the Wiring Rules and are safe.

Standards update

New Installation Standards

Standard	Published Date
‘AS/NZS 3004.1: 2014 Electrical Installations – Marinas and boats Part 1: Marinas’	27 June 2014
‘AS/NZS 3004.2: 2014 Electrical Installations – Marinas and boats Part 2: Boat installations’	27 June 2014

Amendments

Standard	Published Date
‘AS2293.1:2005 – Emergency escape lighting and exit signs for buildings Part 1: System design, installation and operation’	8 August 2014

Advertising for electrical work on social media

EnergySafety has received several complaints about electrical contractors who have been advertising for electrical work on social media (eg Facebook, Instagram, Pinterest, You Tube, Linked In, Twitter, MySpace, Tumblr, Flickr etc) without displaying their electrical contractor's licence number.

This comes after EnergySafety reminded electrical contractors of the requirements for advertising for electrical work in the 'Energy Bulletin' Issue No. 66 ('No EC number with advertisements on the Perth Gumtree website') and Issue No. 62 ('Scrutinising your advertising').

Under Regulation 45(1) of the Electricity (Licensing) Regulations 1991, your electrical contractor's licence is required to be **conspicuously** displayed in **any** advertisement advertising your electrical contracting business, including letterheads, business cards, newspaper advertisements, invoices, quotations, billboards, business premises signage, vehicle signage, business directories (eg "Yellow Pages") and the internet. Internet advertising extends to company websites, advertising websites (eg Gumtree, Look Local) and social media.

EnergySafety has also received complaints about persons or electricians advertising for electrical work on social media without holding an electrical contractor's licence.

In one instance, an electrician had posted a message on Facebook in which he claimed to hold an electrical contractor's licence and was available to do 'cashies'.

This matter is currently being investigated by EnergySafety as the electrician does not hold an electrical contractor's licence.

Where you come across advertisements for electrical work which do not comply with the Regulations, please report the matter to your relevant network operator, or, if the relevant network operator cannot be identified, to EnergySafety.

To confirm whether an individual holds an electrical licence, please refer to EnergySafety's website www.energysafety.wa.gov.au where you can conduct a search on all licensed operatives.

Unsafe and substandard electrical work

Electrical contractors are reminded of the importance of enclosing all cable joints in junction boxes. An electrical contractor was recently prosecuted in Perth's Magistrate's Court for failing to enclose the cable joints associated with power and lighting final sub-circuits in a junction box located in the ceiling space.

A homeowner in Tuart Hill had engaged the services of an electrical contractor to carry out the electrical work for a new domestic premise. After the electrical work was completed, the homeowner was dissatisfied with the quality of the workmanship of the electrical contractor and requested his friend, an electronic technician, to carry out an inspection of the installation. On inspection, the technician found that all the wiring connections were exposed and immediately reported the defective work to Western Power.



Unenclosed junctions found in the ceiling space

As per Clause 3.7.3 of AS/NZS 3000: 2007 "Wiring Rules", joints shall be enclosed to provide adequate protection against relevant external influences.

If the electrical contractor had carried out a visual inspection of the installation, he would have identified that the cable joints were not correctly terminated and that a junction box had not been provided to enclose the wiring joints.

Had someone entered the ceiling space, he/she could have made contact with the unenclosed cable joints and could have received a fatal electric shock.

An inspection of the installation carried out by a Western Power inspector identified other less serious defects, including a sheathed cable in the plaster/cement render wall near the kitchen, which was not protected from mechanical damage and wiring systems in the ceiling space which were not supported at suitable intervals to prevent undue sagging of cables.

On completion of the inspection, the Western Power inspector issued an Inspector's Order for the defective work to be rectified.

As the contractor who carried out the electrical work was in a dispute with the property owner over payments, he did not return to the

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site to carry out the remedial work and the property owners engaged another electrical contractor to carry out the work.

While carrying out the remedial work associated with the Inspectors' Order, the second electrical contractor noticed that an oven circuit had not been installed at the sub-board and went into the ceiling space to investigate, where he found the two phase neutral cable and its protective earth in a junction box.

When he removed the cover of the junction box, the contractor found one phase cable and its protective earth had been connected while the other phase cable and its protective earth had been taped up.

To make the installation safe, the contractor disconnected the power circuit (that the oven was connected to) and rearranged the oven circuit back to the sub-board and connected it to its own circuit breaker.

It was only after this discovery that the contractor was informed by the property owners that they had received electric shocks from the oven.

Further investigation by Western Power also revealed the electrical contractor had failed to submit a Notice of Completion to Western Power within the required time frame.

This matter was brought before the court. For carrying out the unsafe and substandard electrical work and for failing to submit the Notice within the required time, the electrical contractor pleaded guilty and was convicted and fined \$8,000 with court costs of \$666.90.

2014 Electrical Installation Inspectors Conference

On 22 July 2014, over one hundred representatives from the network operators, government agencies and the electrical industry attended EnergySafety's annual Electrical Installation Inspectors' Conference at Technology Park Conference and Function Centre in Bentley.

Guest presenters spoke on diverse range of topics including updates on relevant Australian standards, inspection and investigation practices and electrical design concepts.

The conference was well received with favourable feedback from many attendees.

Electrical supervisor leaves two apprentices and an electrical permit holder to work unsupervised around "live" wires and equipment

An electrical contracting business owner and nominee was recently prosecuted for failing to provide adequate supervision to two fourth year electrical apprentices and an electrical worker's permit holder on two separate occasions at an installation in Cannington.

Investigation by Western Power found the electrical supervisor met with a fourth year electrical apprentice and an electrical permit holder at the site for approximately one hour, before leaving to go to another site where he spent the remainder of the day.

Before leaving the site, the electrical supervisor instructed the apprentice to carry out electrical installing work, which included "live" work (terminating a three phase cable at the "live" switchboard).

Neither the apprentice nor the electrical permit holder checked the other end of the "cable" as they assumed it had already been terminated and was left safe.

The conditions on the electrical worker's permit as stipulated by the Electrical Licensing Board required that electrical installing work could only be carried out while under the supervision of a licensed electrician, in accordance with Regulation 50 of the Electricity (Licensing) Regulations 1991 and while employed by the holder of an electrical contractor's licence or in-house electrical installing worker's licence.

Some days later, the electrical supervisor instructed another fourth year electrical apprentice to attend the same site to install lighting fittings. The fourth year apprentice was accompanied by a first year apprentice. The electrical supervisor did not attend the site at any time during the apprentices' work activities.

During the course of the day, the fourth year apprentice was made aware of an electric shock that an apprentice ceiling-fixer had received from an unterminated cable. The apprentice tested the cable and found that it was "live".

The unterminated "live" cable, was the three phase cable which the electrical permit holder had terminated at the unit switchboard while previously on site.

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This matter came to the attention of Western Power after the electric shock received by the apprentice ceiling fixer was reported.

In Perth Magistrate’s court, the electrical supervisor pleaded guilty to two breaches of failing to ensure effective supervision for the two fourth year apprentices and the electrical worker’s permit holder.

The electrical supervisor was fined \$18,000 and court costs of \$781.90.

EnergySafety has previously highlighted the importance of effectively supervising apprentices in the “Energy Bulletin” Issues 51, 56, 58, 60, 65, 66, 67.



Electrical contractors are reminded that they and the supervising electrical worker have the responsibility to ensure that electrical apprentices under their supervision carry out electrical work safely. EnergySafety’s “Safety Guidelines for Electrical Worker’s” details the level of supervision required for apprentices carrying out various electrical work.

EnergySafety’s Code of Practice “Safe Low Voltage Work Practices by Electricians” also details the conditions under which “live” work can be carried out safely.

Correction to article from Electrical Focus No. 66





In Electrical Focus No. 66, an article was published about an electrical contractor who was fined \$20,000 for failing to submit a Notice of Completion for notifiable electrical installing work to the relevant network operator. The article should have read that the contractor *had* submitted a Notice of Completion for the notifiable work and the electrical installing work was defective and not complete. EnergySafety apologises for this error.

Product recalls

PRODUCT	IDENTIFICATION	SAFETY RISK	CONTACT DETAILS
<p>Gensafe 6KVA 13HP petrol generator powered by Honda GS6KVAWC</p> 	<p>The affected models were available for sale between 1 November 2013 and 21 July 2014 and were supplied through Sydney Tools online and at all branches. The recall covers models GS6KVAWC, GS8KVAWC, GS8VAEWC, GS4KVAWC, GS8KVAEWC, GS35KVAWC and GS3KWAWC</p>	<p>A recall was issued on 28 July 2014 as the RCD may not operate correctly as a neutral link has not been fitted, therefore there is a risk that a consumer could receive an electrical shock which could result in a serious injury or death</p>	<p>Telephone: (02) 9569 6133</p> <p>Website: www.sydneytools.com.au</p>
<p>Officeworks Ltd Insystem Power Pack USB Wall Charger</p> 	<p>The affected models have a packaging code BR094780 and Model No. MS10071223 and were available for sale between 19 July 2013 and 2 August 2014</p>	<p>A recall was issued on 5 August 2014 the charger can overheat which can cause the casing to melt, therefore allowing access to “live” circuits. There is a fire risk and also a risk that a consumer may receive an electric shock</p>	<p>Telephone: 1300 633 423</p> <p>Website: www.officeworks.com.au</p>

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PRODUCT	IDENTIFICATION	SAFETY RISK	CONTACT DETAILS
Fluke Australia Fluke BC1735/EELV Power Adaptor 	The affected models were sold nationally and have a date code of 03140 engraved on the side of the adaptor	A recall was issued on 6 August 2014 as the housing fastening points of the adaptors may be loose, which could result in the separation of the housing. A consumer is at the risk of receiving a potential electric shock	Telephone: (02) 8850 3333 Website: www.fluke.com.au
Fantoosh Telco Pty Ltd International Travel Adaptor	There was a CE sign on the box and on the adaptor	A recall was issued on 21 August 2014 as the adaptors do not meet the safety criteria for AS/NZS 3820: 2009 Essential Safety Requirements for Electrical Equipment. A consumer may be exposed to "live" parts, which may result in an electric shock, fire or short circuit	Telephone: 1300 135 348 Website: www.fantooshtelco.com
SRG Leisure Retail Pty Ltd 4 Outlet Powerboard Model No.'s LA025A or LA025B 	The affected models were available for sale between 1 January 2002 and 1 August 2014	A recall was issued on 21 August 2014 as the product does not comply with Australian and New Zealand's safety requirements concerning resistance to fire and a secure connection to inserted plugs	Telephone: Customer Interaction Centre 1300 175 010
Breville domestic 1.6L glass kettle BKE260 	The affected models were available for sale between 1 November 2010 and 25 August 2014 and have the manufacturing codes 1044 to 1425. The kettle has a charcoal coloured lid, handle and base	A recall was issued on 28 August 2014 as the kettle was not manufactured to Breville's material specification. The handle may loosen and detach from the kettle, which could cause a risk of injury to a consumer from scalding	Telephone: 1300 727 424 Website: www.breville.com.au
Olsent 4 Outlet Powerboard 	The affected models are marked with the model number LA025B and the electrical approval number SAA111929EA and were available for sale between 1 September 2011 and 12 September 2014	A recall was issued on 15 September 2014 as the electrical contacts of the sockets are poorly aligned and the plastic enclosure does not meet the flammability requirements of the relevant standard. There is a risk of overheating and fire	Telephone: 1300 337 707 Website: www.masters.com.au

Prosecutions for breaches of electricity legislation

Between 1 July and 30 September 2014

Name (and suburb of residence at time of offence)	Licence No.	Legislation and Breach	Offence	Date of Offence	Fine (\$)	Court Costs (\$)
Keith Gower (Koondoola)	EW102429	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	Between 26 May and 30 July 2012	4,000.00	666.90
Keith Gower T/ As Keith Gower Electrics (Koondoola)	EC001004	Regulation 52(1) (a) E(L)R 1991	Failing to deliver a Notice of Completion to the network operator within the required time frame	26 May 2013	4,000.00	
Vincenzo Lanza (Bibra Lake)	EW110885	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	15 September 2012	5,000.00	886.15
Michael John Watson (York)	EW109634	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	Between 25 and 27 February 2012	10,000.00 *	666.90 *
	EC002786	Regulation 51(1) E(L)R 1991	Failing to submit a Preliminary Notice to the network operator within the required time frame	21 February 2012		
		Regulation 52(1) E(L)R 1991	Failing to submit a Notice of Completion to the network operator within the required time frame	2 March 2012		
		Regulation 52B E(L)R 1991	Failing to provide an Electrical Safety Certificate to the person requesting the electrical work to be carried out	27 March 2012		
		Regulation 52C(1)(b)(i) E(L)R 1991	Failing to check and test the electrical work after completion to ensure it was safe	27 February 2012		

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<i>Name (and suburb of residence at time of offence)</i>	<i>Licence No.</i>	<i>Legislation and Breach</i>	<i>Offence</i>	<i>Date of Offence</i>	<i>Fine (\$)</i>	<i>Court Costs (\$)</i>
<i>Amity Electrical Services Pty Ltd (Carine)</i>	<i>EC008252</i>	<i>Regulation 52(3) E(L)R 1991</i>	<i>Submitting a Notice of Completion to the network operator for notifiable work that had not been completed</i>	<i>24 May 2012</i>	<i>30,000.00</i>	<i>666.90</i>
<i>Asher Lindquist (Wattle Grove)</i>	<i>EW130772</i>	<i>Regulation 50(1) E(L)R 1991 (2 breaches)</i>	<i>Failed to provide adequate supervision for electrical apprentices and an electrical permit holder</i>	<i>16 May 2012</i>	<i>18,000.00</i>	<i>781.90</i>
				<i>22 May 2012</i>		

Legend NLH No Licence Held
EA Electricity Act 1945
E(L)R Electricity (Licensing) Regulations 1991
* Global Fine or Costs issued

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focus

AS/NZS 1596: The storage and handling of LP Gas

This standard covers the requirements for the installation of LP Gas storage containers and the pipework and fittings up to the outlet of the first regulator in consumer gas installations. AS/NZS 5601.1 Appendix L is normative and LP Gas installations must comply with the requirements of AS/NZS 1596.

The 2014 edition of AS/NZS 1596 was published on 19 May 2014 and immediately adopted in Western Australia. However, EnergySafety deems the 2008 edition as complying with the 2014 edition until 19 November 2014. After 19 November 2014, strict compliance with the 2014 edition is required.

There have been many changes between the 2008 and 2014 edition. Several of these are related to New Zealand and specific installations and are not relevant to general gas fitters. The following are some of the changes that general gas fitters need to be aware of:

Figure 1.1(A) and Figure 1.1(B)

These serve to indicate the coverage of AS/NZS 1596 and relevant standards and have been updated.

Clause 1.4.12 Dangerous goods

The definition has been updated to reflect current standards.

Clause 1.4.27 Hazardous area

The definition has been updated to reflect current standards.

Clause 1.4.31 Ignition source

The exclusion for vehicles as an ignition source has been removed from the definition but has been included in the relevant clauses of the standard.

Clause 1.4.56 Significant trafficable area

This is new and serves to define an area where there is a risk of impact from vehicles but with no protection methods.

Clause 2.4 Groups of temporary structures

The minimum separation distance between groups of temporary structures (eg marques) in which LP Gas is used has been reduced from 15 m to 10 m, but the separation area must now be clear where previously it could contain temporary structures.

Table 2.1 Minor storage

The maximum total (combined indoor and outdoor) quantity in multi-storey attached dwellings up to and including 3 storeys (20 kg) is now per dwelling. It previously was not per dwelling.

The maximum total (combined indoor and outdoor) quantity in multi-storey attached dwellings over 3 storeys (10 kg) is now per dwelling. It previously was not per dwelling.

The maximum quantity in protected and public places for indoor areas (10 kg per 10 m² floor area up to a maximum total quantity of 30 kg) has been separated from outdoor areas to clarify requirement.

Clause 3.1 Scope of section (General requirements)

This scope previously exempted minor storage from the requirements of the section, minor storage is now subject to the requirements of this section.

Section 3.3 Electrical equipment

This has been deleted.

Clause 3.6.1 General (Firewalls and vapour barriers)

The requirement for ignition sources to be above the level of the hazardous area for an LP Gas release point rather than 0.5 m above the wall has been added.

Clause 3.6.4 Thermal screens

The approval to use thermal screens to provide for the protection of facilities or personnel from heat radiation in the event of a fire has been added.

Clause 4.3.1 Regulators

The requirement to mount the regulator with the outlet above the cylinder valve has been changed to require the regulator to be mounted so that any liquid will drain back into the cylinder.

Clause 4.4.3 Prohibited locations for cylinders

Now prohibits the installation of cylinders in the ground without the approval of the technical regulator.

Clause 4.4.4.2 Volumes of LP Gas indoors – cylinders

Exhibition centres are no longer included in this clause and are now covered by the minor storage provisions.

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Clause 4.4.5 Cylinders outdoors

Weep holes in masonry walls are no longer considered as entry points into a building.

Clause 4.4.6 Hazardous area requirements

An opening (like a door or window) is not considered a hazard if it is at least 150 mm above the cylinder valve of an exchange cylinder or 500 mm above the cylinder valve of an in-situ fill cylinder.

Table 4.1 Cylinder location

The reference to distance to an ignition source has been removed from the table however, these requirements remain in clause 4.4.6.

Figure 4.2 and Figure 4.3

These figures indicate clearances from cylinders to openings into buildings and drains. They are only called up in reference to cylinders located under openable windows. However, in Western Australia the clearances to openings into buildings and drains are required irrespective of whether the cylinder is located under an openable window.

Clause 4.4.9 Cylinders in enclosure or recess

This is a new clause covering the requirements for the installation of cylinders in an enclosure.

Clause 4.4.11 Installing cylinders

Cylinders are required to be restrained to prevent falling. This applies to all cylinders in an area likely to be subject to flooding, seismic activity, and in Western Australia, cyclones. Cylinders in other areas greater than 200 L or less than 25 L are not required to be restrained. EnergySafety has produced a guideline with further recommendations for bush fire prone areas that may also be considered.

See <http://www.commerce.wa.gov.au/publications/lp-gas-cylinder-safety-bushfire-prone-areas>.

Clause 4.5.5.3 Mechanical ventilation

Cylinder stores that are mechanically ventilated are now required to be continuously ventilated when occupied.

Sections 5 to 13 have not been included in this article as they cover specific installations or areas generally covered by gas suppliers.

Appendices

Many appendices are not relevant to general gasfitting. Of those that are, the following changes have been made:

- Appendix D Industrial mobile space heaters from the 2008 edition has been deleted.
- Appendix Q Impact protection is a new appendix and provides guidance on an assessment method to determine the impact protection requirements of LP Gas containers due to exposure to collision by vehicular traffic.

Important Information

Gas fitters need to be aware that LP Gas in some new cylinders may suffer odorant fade. This is where the odorant in the gas is removed by the cylinder and may result in the LP Gas not having the characteristic odour. In such cases, LP Gas leaks may not be detectable by smell.

New NOD trialled

ATCO Gas Australia Pty Ltd (ATCO) the network provider for Natural Gas in Western Australia trialled a new format Inspector's Order/ Notice of Defect (IO, NOD).

What did the original NOD comprise? Since the inception of the regulations, if non-compliant gasfitting work was identified by an inspector the gas fitter responsible may have received a NOD (printed on pink coloured paper). Details of the non-compliance/s were identified with references to appropriate clauses or sections within the standards or codes.

The trial for the new format of the NOD is in two pages, it incorporates the same information previously given however, photographs are included highlighting the non-compliances with photo(s) of the gas installations at the gas consumer's property. The NOD may also be emailed to the gas fitter providing the gas fitter has registered his/her email address.

Feedback from gas fitters receiving the trialled new format NOD has been positive. In reviewing the NOD received by gas fitters, a copy is assessed by gas inspectors at EnergySafety and, if needed, the gas fitter is contacted to discuss the NOD. This may result in further disciplinary action dependent on the outcome of this discussion.

Ideally, EnergySafety would prefer that gas fitters completed their work free of defects, however this new process may overcome some of the negativity and areas of ambiguity of the non-compliance when the gas inspector assesses and discusses the non-compliance/s with the gas fitter.

Commercial LP Gas installations

There is an emerging trend of concern to EnergySafety in that larger or commercial LP Gas installations remote from Perth are being installed by gas fitters with insufficient knowledge of the fundamental technical requirements of these installations.

This article discusses two such gas installations where the gas fitters had gained their experience predominantly working on Natural Gas installations or smaller 45kg LP Gas exchange cylinder installations. The first installation was located at a restaurant at Fitzroy Crossing where a combined two stage regulator had been installed upside down. The gas manifold fabricated locally was not of the accepted standard. Inside the kitchen two gas appliances had been disconnected and removed, but the open ends had not been plugged or sealed off.



Fitzroy Crossing where a regulator was incorrectly installed upside down

In the second instance at a large mining camp in the Pilbara, the gas fitter had fitted a standard Jeavons regulator fitted with an OPSO supplying the gas installation from 2 x 7.5kl bulk tanks. Prior to the regulator an aluminium basket filter was installed.

On this gas installation the size of the gas load would call for a two stage gas system, the first stage regulator (usually coloured red – refer to Application Map

for examples) would be installed above the bulk tanks and have an outlet pressure set at either 70kPa or 140kPa. The second stage regulator/s installed closer to the gas load outside the buildings to have a set point to deliver 2.75kPa at the gas appliances.



Mining camp in Pilbara with the incorrect regulator and filter fitted



Correct installation showing first stage regulator

The pressure points used for pressure testing and setting the regulators are to be of the self-sealing type, not the standard low pressure test points found on Natural Gas meter positions. What inexperienced gas fitters may not understand is that the vapour pressure inside the LP Gas bulk tanks increase as the surrounding ambient temperature rises.

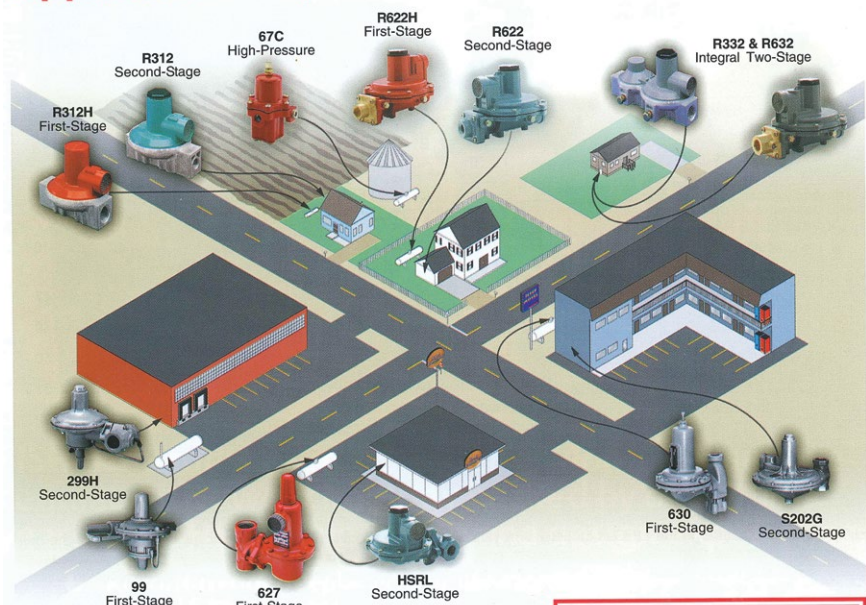
Approximate LP Gas vapour pressures @

10°C = 600kPa
15°C = 700kPa
20°C = 800kPa
30°C = 1060kPa
38°C = 1350kPa
43°C = 1520kPa

As you can see from the above table LP Gas bulk tanks and gas cylinders in Western Australia are subjected to elevated air temperatures which result in very high vapour pressures inside the fuel container or tank.

Continued over page

Application Map



Features*

- Corrosion-Resistant and Wear-Resistant Materials
- High Capacity Relief
- Stainless Steel Inlet Screen
- Easy Installation
- Large Drip-Lip Vent
- Improved Regulation
- Built-in Gauge Taps

* Features Vary By Model

Fisher Regulator Color Code

First-Stage	Red
Second-Stage	Palm Green
2-PSI Service	White*
Integral Two-Stage	Gray
Pounds to Pounds	Red
Industrial	Black or Gray

*R622E and R652E are green with white closing caps

Picture of the Application Map courtesy of Fisher Emerson

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On this installation at the mining camp the aluminium filter had a maximum operating pressure of 600kPa (6 Bar) and the Jeavons regulator rated at approximately 800kPa (8 Bar). Fortunately, EnergySafety gas inspectors noticed these non-compliances during the mild weather in autumn and placed an Inspector's Order on this gas installation. The installation has since been rectified in time for summer.

It is incumbent on the gas fitters to ensure gas installations are compliant prior to signing off the Notice of Completion. On these two installations the gas fitters had unwittingly exposed workers, staff and themselves to a potentially dangerous situation.

As a gas fitter taking on work involving multiple 45kg exchange cylinders or bulk tank installations, you need to be conversant with both AS/NZS 5601.1 2013 gas installations and AS/NZS 1596:2014, The Storage and handling of LP Gas.

There are also information bulletins and buyers guides produced for the LP Gas industry by the component manufacturers. EnergySafety strongly recommends you are fully conversant with these publications before attempting the larger LP Gas installations.

Apprentice prosecuted for unlicensed gasfitting

An apprentice was recently prosecuted in Perth Magistrate's Court for carrying out gasfitting work while not holding a Western Australian restricted gasfitting permit.

The apprentice carried out gasfitting work for a number of consumers. EnergySafety received complaints from consumers relating to poor gasfitting work. This investigation led to the prosecution of the apprentice.

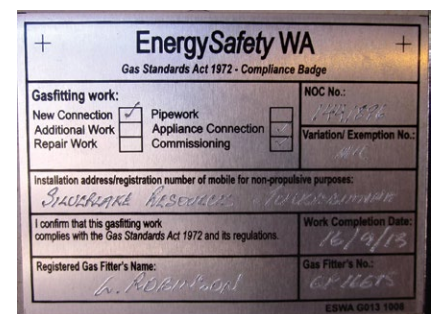
Plumbing and gasfitting apprentices are advised (by the Registered Training Organisations) in their first year of their apprenticeship to obtain a restricted gas fitting permit to allow them to work on gas installations supervised by their employer. This is further re-enforced by gas inspectors visiting the training colleges and speaking with the apprentices and again at tool box meetings with their employers.

The Perth Magistrate's Court convicted and fined the apprentice \$5,500 with court costs of \$12,779.40 for unlicensed gasfitting work, for misleading statements and for failing to comply with a request under section 14(d).

The compliance badge

When completing gasfitting work, the gas fitter is required to submit a Notice of Completion (NOC) not only to the person requesting the work but also to the gas supplier/network operator if known. At the same time, the gas fitter is required to place a completed Compliance Badge on the gas installation (Regulation 28. Obligations on completion of gasfitting work). The preferred location for the compliance badge is in the gas meter box, or in the case of an LP Gas installation, under the hood of the pressure regulator that is usually mounted near the cylinders.

There have been instances where the compliance badge has not been filled out correctly. There have also been a number of instances where a badge becomes illegible over time. To avoid this, a badge should be filled out using a ball point pen or preferably inscribed with an engraver. Please note, a felt tipped pen (permanent marker) is not suitable as the ink breaks down over time and the information thus becomes illegible.



Engraved compliance badge

There is plenty of evidence that those compliance badges marked up using a ball point pen or engraver have stood the test of time and are still legible after a great number of years.

Verifying meter information

Importance of gas meter numbers

The meter number (see Figure 1 in green) is the unique identifier for the consumer's gas supply, corresponding to their account with the retailer and the equipment owned and maintained by ATCO Gas Australia linked to that property address.

When working on multi-occupancy dwellings, gas meter identification can sometimes present challenges for gas fitters. A recent example has highlighted issues that can occur if the gas meter number is not verified.

In this example a meter box labelled number 3 which contained a meter that supplied Unit 13. The gas fitter may then draw the (incorrect) conclusion that the meter supplies Unit 3. To avoid confusion please check the meter number before doing any work.

Checking gas meter numbers

Gas fitters can verify the correct meter number and installation in a number of ways:

1. If available, refer to the customer's gas bill and verify that the meter number on the back of the bill relates to the correct address corresponding to the physical meter.
2. If the bill is not available, contact the customer's retailer to verify that the meter number and address corresponds to the physical meter.
3. If the retailer information is unknown, contact ATCO Gas Australia on 13 13 52 and a Customer Service Representative will take the Gas fitter through the required steps to confirm and verify the correct information.
4. If there is any confusion over the consumer's correct gas installation, the gas fitter should conduct a test on the appliance and confirm the meter test dial (see Figure 1 in red) is registering for the correct installation.

If after checking, the meter number is suspected of being incorrect compared to the customer's bill or corresponding address, please call ATCO Gas Australia on 13 13 52.

Clipping of pipework

Section 5.8 of AS/NZS 5601.1 sets out the requirements for supporting consumer gas piping. Table 5.5 gives the maximum support device spacing while Table 5.6 gives the minimum single rod hanger rod diameter.

The minimum rod hanger diameter for pipe with a nominal diameter from 100 mm to 125 mm is 16 mm. We have been advised that single rod hangers that comply with this requirement are unavailable, however 12 mm diameter single rod hanger pipe supports are available.

A note to Table 5.6 allows the reduction in the hanger rod diameter to the next smaller size, that is in this case, from 16 mm to 12 mm, where two hangers are used.

It is EnergySafety's interpretation that the requirements of AS/NZS 5601.1 are complied with where two 12 mm diameter single rod hangers are used to support pipework (nominal diameter from 100 mm to 125 mm); provided the maximum separation between supports does not exceed half the distance specified in Table 5.5.

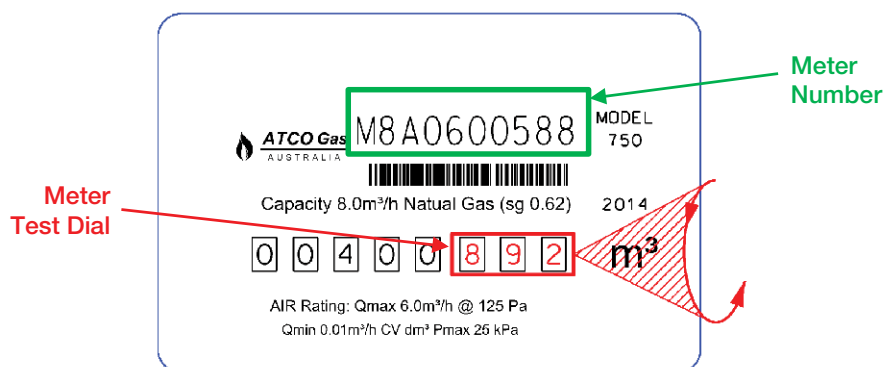


Figure 1: Typical Meter Identification Information on ATCO Gas Australia Gas Meters

Natural Gas reaches Yankep and Two Rocks

Homes and businesses in both Yankep and Two Rocks have Natural Gas available due to the expansion of the ATCO Gas Australia network into these Northern Coastal Suburbs. Existing LP Gas consumers who wish to convert their home or business to Natural Gas may do so by contacting local gas fitters to undertake this work.

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The following guidelines are provided for the approval of gas appliances converted from LP Gas to Natural Gas:

Regulation 502 (2)(a) Using a manufacturer's approved conversion kit

An appliance installed in a consumer's gas installation must not be modified after manufacture for the purpose of enabling it to use gas of a different type unless it is modified –

- (a) In accordance with the manufacturer's instructions using a conversion kit specifically approved for that purpose.

A gas fitter can carry out the conversion and commissioning of an appliance using a manufacturer's conversion kit and procedure. An inspector's approval or re-certification of this type of appliance is not required as the original appliance certification would be for use with both gases and their respective components.

On completion, the gas fitter must complete a Notice of Completion (NOC) noting "*new connection and commissioning*" and noting in Section 8 "*the installation has been converted from LP Gas to Natural Gas*".

When the manufacturer's approved conversion kit is not available

There may be instances where a manufacturer's conversion kit and procedure is not available for older gas appliances. If this is the case most appliances can still be converted. In these circumstances the gas fitter should seek advice from ATCO's gas inspectors as these appliances may require approval before being permanently connected.

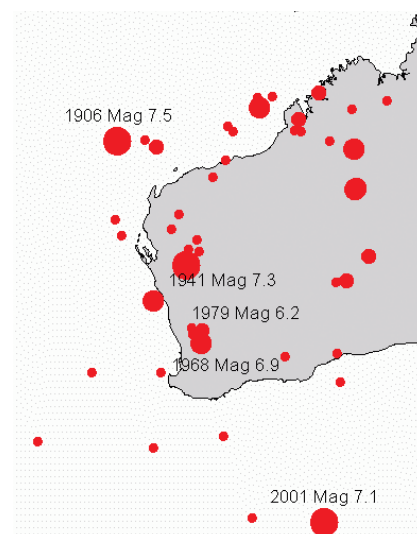
There are Independent Type A gas appliance inspectors available to undertake the approval process. See further details at EnergySafety's website www.energysafety.wa.gov.au

Checking of the entire gas installation

The regulations also require the gas fitter to re-commission the whole of the gas installation checking that the minimum gas pressure (needed for safe operation of all gas appliances) meets these requirements. This is particularly important because for a given capacity, natural gas needs pipe sizes that are generally larger than for LP Gas. This does not automatically mean that pipes have to be replaced but pipe sizing must be checked for adequacy.

Seismic shut-off valves

Western Australia is thought of as at low risk from earthquakes, however from time to time suffers significant earthquakes as shown by the following figure.



In recognition of this risk some insurance companies are requiring automatic seismic shut-off valves be fitted to the gas supply to installations before they will insure those installations.

These valves have been developed in California to detect earthquakes and isolate the gas supply to consumer gas installations reducing the risk of fire and damage to that installation.

To be installed in California these valves must comply with the requirements of the American Society of Civil Engineers (ASCE) standard ASCE 25-06 Earthquake-Actuated Automatic Gas Shut-off Devices. However AS/NZS 5601.1 in Table 4.3 requires automatic shut-off valves to comply with the requirements of AS 4629 and be certified.

A comparison between the two standards indicates that the maximum allowable leakage rate of an ASCE 25-06 valve is greater than that of an AS 4629 valve. However, the additional safety offered by having an ASCE 25-06 valve fitted to the supply when compared to the potential risk where no valve is fitted provides sufficient justification to permit the installation of these valves.

Consequently the Director has issue a global variation number GV/E 14/090 to allow seismic shut-off valves complying with ASCE 25-06 or ASCE 25-97 to be installed in consumer gas installations.

As usual any NOC covering the installation of such a valve must have GV/E 14/090 noted in section 8 of the NOC and on the Compliance Badge.

Prosecutions for breaches of gas legislation

Between 1 July and 30 September 2014

Name (and suburb of residence at time of offence)	Licence No.	Legislation and Breach	Offence	Fine (\$)	Court Costs (\$)
James Tuckey (Wembley)	NLH	GSA 1972 S13A(2)	Carried out gasfitting work while not holding a certificate of competency, permit or authorisation allowing him to do so	4,000	12,779.40
		ECA S14(d)	Failing to comply with a request of an inspector	1,500	
Jason Walker (Donnybrook)	GF10162	GSR R18	Failing to ensure gas installation complies with prescribed requirements	2,600	591.93
		GSR R20(1)	Installing appliance, apparatus or part contrary to instructions or recommendations of manufacturer or designer		
		GSR R28(2)	Failing to attach approved badge or label to gas installation upon completion of work		
		GSR R28(3)	Failing to give notice of completion of gasfitting work within required time		

Summary of infringements for breaches of gas legislation

Between 1 July and 30 September 2014

Legislation and Breach	Offence	Number of Infringements	Fine (\$)
GSA S13A(2)	Engaging in an operation or carrying out work or process, of a kind prescribed to be nature of gasfitting work otherwise than in a prescribed capacity without a permit of certificate of competency	7	7,000
GSR R18(2)	Failing to ensure gas installation complies with prescribed requirements	8	4,800
GSR R23	Failing to record service information in required manner	1	400
GSR R24(1)	Failing to ensure prescribed activity is carried out in accordance with specified standard or code	1	5,000
GSR R26(1)(a)	Failing to ensure gas installation is gas-tight	3	1,800
GSR R28(2)	Failing to attach approved badge or label on completion of work	5	2,000
GSR R28(3)	Failing to give notice of completion of gasfitting work within required time	9	3,600
GSR R34(1)	Failing to keep records of employed gas fitters in required manner	2	1,500
	Total:	36	26,100

Legend NLH No Licence Held

GSA Gas Standards Act 1972

GSR Gas Standards (Gasfitting & Consumer Gas Installations) Regulations 1999