

# energy

## Bulletin

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## Private overhead power lines

EnergySafety has produced a pamphlet on the safety of private overhead power lines and the responsibilities of property owners.

All poles, conductors and pole top fittings owned by the property owner, after the network operator's meter, are his/her responsibility. This is not a new requirement. It has always been the property owner's responsibility to maintain all electrical equipment they own which is beyond the network operator's meter (point of supply).

The publication also covers topics such as inspections of power lines and poles, life expectancy of wood poles and replacement options.

The pamphlet recommends that owners contact their licensed electrical contractor to have the safety of their private overhead power lines assessed.

When discussing these options with your customer, please encourage them to consider underground cables. Underground cables are far safer than overhead lines, eliminate the risk of starting bushfires and pose no danger of electrocution through contact with farm equipment.



Underground supply is far more reliable, not affected by weather or vegetation and requires no maintenance.

EnergySafety has also developed a guideline to assist electrical contractors called upon to assess private overhead power lines.

The pamphlet and guideline are available for download from the publications section of our website at [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)

A handwritten signature in blue ink that reads "Ken Bowron".

KEN BOWRON  
DIRECTOR OF ENERGY SAFETY

## Gas Appliance Rectification Programme

Registrations for the Gas Appliance Rectification Programme closed on 31 December 2012.

The project team is progressing through the registrations received to determine what action needs to be taken under the programme to ensure the appliances are safe to operate on the changed gas.

# EnergySafety



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## Up to 12 months practical experience required to obtain an Electrician's Licence (Qualifications Gained Overseas) Offshore Technical Skills Record

The pathway to gain an Electrician's Licence for an overseas trained electrician has changed.

An overseas electrician is now assessed against the Certificate III in Electrotechnology Electrician and issued an Offshore Technical Skills Record (OTSR) by a Trades Recognised Australia approved Registered Training Organisation (RTO).

An overseas electrician is required to undertake the Australian Context Training through a Western Australian RTO to obtain a Certificate III in Electrotechnology Electrician qualification.

An Electrician's Provisional Licence is issued to work under general supervision and is not restricted to an employer or supervisor to enable a candidate to gain up to 12 months on-the-job experience in electrical installing work under Australian conditions.

When all the off-the-job Units of Competency have been completed successfully and the on-the-job experience has been verified by the RTO and employer, an electrician is then required to pass the practical assessment.

An overseas electrician is issued an Electrician's Licence when the off-

the-job and on-the-job experience with a licensed electrical contractor has been completed and the Certificate III in Electrotechnology Electrician has been issued by an RTO.

### Who can provide general supervision?

Before the electrician with an Electrician Provisional Licence (EPL) commences any electrical work the Supervising Electrician must:

- Ensure there are no exposed live parts and the apparatus is safe, isolated (de-energised), tested as needed and is tagged.
- If the EPL carries out all or part of the isolation and certifying, to gain practical experience under Australian conditions, the EPL holder must have been assessed as competent in this task and the work must be carried out under the Supervising Electrician's direct and constant supervision.
- Ensure that the EPL does not carry out any live work (except as below) and there are no exposed live parts (e.g. greater than 50V AC or 120 V DC) that can be touched in or near the work area.
- Clearly instruct the EPL holder under his/her supervision on which tasks he/she is expected to do and which ones he/she should not be doing until he/she is instructed on how to do the tasks.
- Ensure that the worker understands the instructions.

- Attend the work place on a regular basis to monitor the progress of the work being undertaken. The frequency on face-to-face contacts between the supervisor and the worker may be gradually decreased as and when the supervisor is confident that the worker is competent to perform the required tasks safely.

A copy of this fact sheet in full is available on our website at [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au).

## Electrical Licensing Board

The new board members as at 1 February 2013 are as follows:

Mr K McGill – Chairman.

Mr G Wilton – representing the interests of electrical workers.

Mr G Kelly – representing the interests of electrical workers with restricted licences.

Mr P Beveridge – representing the interests of electrical contractors.

Mr P Tierney – representing the interests of large businesses, who are consumers of electrical services.

Mr M Andric – representing the interests of small businesses who are consumers of electrical services.

Mr F Hough JP – a residential consumer of electrical services.

Mr S Abdoolakhan – nominated by the Director of Energy Safety.

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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

## Service Apparatus Connect Scheme

### History

Network Operators are required to ensure installations connected to their network are safe. Incorrect connections, usually crossovers of the active and neutral conductors, if not detected by testing at the time of the connection, result in parts of the installation which should be at earth potentially being live. This places people in danger of electrocution. There have been a number of incorrect service connections made by both the Network Operators and electrical contractors.

Western Power and Horizon Power operated a system under the Service Connect Scheme which allowed electrical contractors to connect consumer mains into the Network Operator's underground service pillar, install the tariff meter, energise and do a test of the service apparatus but not energise the installation. Although the scheme required training of electricians, accreditation assessments and audits of compliance there were incidents of incorrect connections.

### EnergySafety Audit

EnergySafety carried out an audit on Western Power's Service Connect Scheme. The published Audit findings can be found on EnergySafety's web page. The audit had nine key findings:

1. A high portion of electricians had not been trained in testing

service connections or trained in the latest revised testing procedures introduced by Western Power in 2008.

2. The revised testing requirements, particularly using an independent earth reference to test for active/neutral crossover, was not consistently used.
3. A large proportion of electricians, although registered on the scheme, had not made a service connection in the preceding 12 months.
4. Electrical contractors registered on the scheme are required to notify Western Power if an electrician commences or leaves their employ. This requirement was not strictly observed.
5. Electrical contractors are required to conduct annual audits of their electricians registered on the scheme. Only a small proportion of electricians had been audited.
6. Western Power's auditing process of participants registered on the scheme was inadequate.
7. The scheme required electricians to be audited by their employer. However, a large portion of electrical contractors registered on the scheme are sole-person enterprises. This confirmed most registered electricians were not being audited or checked appropriately.
8. There were instances where the electrician making the service

connection is the same person doing the test. As only a small percentage of electricians had been trained and assessed as competent, there were considerable concerns on attained safe testing outcomes.

9. The service connect test did not have a final test after the neutral conductor had been reinstated in the meter to ensure no earthed components were live.

### Response to the audit

Horizon Power has now withdrawn their Service Connect Scheme as well as their Contractor Connect Scheme, and will be carrying out all installation connections to their network themselves.

Western Power has introduced a new scheme called Service Apparatus Connect (SAC) Scheme. Key changes to the scheme include:

- Thorough registration and authorisation process;
- Clear definition on the types of work permitted under the scheme;
- Training and ongoing competency assessment of electricians;
- Electrical contractor having quality management systems to ensure compliance to SAC scheme requirements;
- Changes to the testing procedures and on how testing is to be conducted and recorded;
- Western Power undertaking a number of different audits:

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- Audits on electrical contractor management systems;
- Audits of electrical contractor procedures;
- Field audits of electricians that do service connect work.

Western Power has initiated the roll out of the new Service Apparatus Connect Scheme and will be transitioning electrical contractors and electricians onto the new scheme by 31 March 2013.

## Horizon Power discontinues electrical contractor connection schemes

Effective from 1 January 2013, Horizon Power discontinued its Service Connect, Contractor Connect, Contractor Authorised Changeover and Portable Builders Supply schemes after conducting an internal review. This follows EnergySafety's audit of Western Power's Service Connection scheme which also were used by Horizon Power.

The closure of these schemes was a decision taken by Horizon Power and was entirely independent to EnergySafety as incorrectly stated by Master Electrician's in a recent newsletter.

All authorisations issued under Horizon Power's Connection scheme which have entitled electrical contractors to fit meters, connect to the network and energise installations are withdrawn from 1 January 2013.

Henceforth, Horizon Power will perform these activities with trained and authorised contractor

employees. These authorisations are beyond the scope of the Service Connect and Contractor Connect schemes.

For further information on these changes, please contact Greg Will, Manager Customer Service, Horizon Power on 6310 1611.

## Are you aware of the proposed licensing changes for the National Occupational Licensing Scheme?

The Consultation Regulation Impact Statement (RIS) for electrical occupations under the National Occupational Licensing System (NOLS) was released on 15 July 2012. The Commonwealth Taskforce undertook a short consultation process, which was limited to one session for each affected occupation in each capital city, to discuss the proposed details.

The Department of Commerce/EnergySafety also conducted its own sessions starting on 27 September 2012, in metropolitan Perth and in the regional centres of Bunbury, Geraldton and Karratha. While the closing date for submissions to the Commonwealth Taskforce was Friday 12 October 2012, Western Australian stakeholders were encouraged to send their submissions to the Department beyond this date and until the end of October 2012. Over three hundred submissions were received as a result of this additional consultation.

The views expressed in these submissions have been collated and were used to inform the State Government. The Western

Australian Government's position has always been that it will wait until local stakeholders have had the opportunity to consider the details of the proposed reforms before deciding on how to best proceed.

If you are not aware of the proposals, you may view a video and a PowerPoint presentation on the Department of Commerce's website:

[http://www.commerce.wa.gov.au/ConsumerProtection/Content/AResources/Occupational licensing NOL i.html](http://www.commerce.wa.gov.au/ConsumerProtection/Content/AResources/Occupational%20licensing%20NOL%20i.html).

## Electrician prosecuted for failing to connect the earthing system correctly at his own property

An electrician recently pleaded guilty to carrying out unsafe and substandard electrical installing work at his own property.

The electrician's employer (an electrical contractor) had submitted a Notice of Completion to the network operator (Western Power) for the electrical work carried out by the electrician.

On receipt of a Notice of Completion, an electrical inspector carried out an inspection of the property and discovered that the earthing system in the shed was not connected to the installation's earthing system.

At the time of the inspection, the electricity supply to the shed was connected, which rendered the electrical installation unsafe and dangerous.

The checks and tests carried out by the electrician, who was also

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the nominee for the electrical contractor, were inadequate.

The electrician pleaded guilty to the unsafe and substandard work and the magistrate issued a penalty of \$2,000 with court costs.

The electrical contractor was also charged and pleaded guilty to submitting the "Notice" for the defective and incomplete electrical work and was issued a penalty of \$2,000 with court costs.

## Serious "live work" accidents could have been avoided

In October and November 2012, EnergySafety investigated two electrical accidents where electrical workers received severe burns as a result of flashovers, while working on 'live' low voltage switchboards.

In the first incident, a worker was carrying out preparation work on a 'live' switchboard for the installation of current transformer (CT) metering. At the time of the accident, the worker was facing the open switchboard cubicle and had just retrieved a pair of pliers from the ledge of the switchboard when

the flashover occurred. The worker received serious burns to his upper body, arms and legs.

In the second incident, an electrician was working on a 'live' switchboard with the intent of terminating newly installed sub-main cables associated with a number of transportable structures. The electrician had removed the escutcheon plate from the switchboard and then operated the main switch (circuit breaker) which resulted in an active to earth fault (flashover) on the load side of the main switch. The worker received serious burns to both arms and one leg.

Both accidents are still under investigation by EnergySafety.

These accidents should serve as a reminder about the dangers of working "live". Unless it can be proven that the safety risk to those persons directly affected by supply interruption is higher than the risk to the electricians called upon to perform "live" work, there is no excuse for not disconnecting and isolating as a first step.

EnergySafety issued a Code of Practice for Safe Low-Voltage Work practices by electricians under Section 33AA of the *Electricity Act 1945*. It sets out the minimum requirements for a safe working environment for electricians.

The Code lists some circumstances where "live" work could be performed and prescribes strict requirements which must be met before such work is performed. These include a comprehensive risk assessment and supporting evidence to demonstrate that switching off the power cannot be tolerated, bearing in mind that in most cases, a short planned and well managed power interruption allows for the insertion of insulating barriers to allow the equipment to be worked on while adjacent equipment can remain energised.

Preliminary investigation into the above accidents indicate that the requirements of the 'Code' were not met in both cases. It is imperative that you familiarise yourself with the Code. Remember, most of the time, there is no excuse for working 'live'.

A copy of the Code of Practice Safe Low Voltage Practices by Electricians can be downloaded at the EnergySafety website [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)

## Have you updated your licensing details?

Have you changed residential/business addresses or your phone contact details recently? Are you aware the *Electricity (Licensing) Regulations 1991* requires you to inform the Electrical Licensing Board no later than twenty eight (28) days after you have changed addresses? This allows for important information, such as licence renewal notifications to be communicated to the licence holder.



Damage caused to the switchboard from the earth fault.

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If your phone or address details have changed, please contact EnergySafety's Licensing Office to ensure that your licence details are current. Updating these details can be easily done via one of the following methods:

1. Phone – please contact the Licensing Office on (08) 9422 5282.
2. Email – send an email to [energylicensing@commerce.wa.gov.au](mailto:energylicensing@commerce.wa.gov.au).
3. Post – “Notification of Change of Address” forms are available at our website under Publications [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)  
This application may be sent by Australia Post or lodged in person at the Licensing Office.  
Postal address: PO Box 135, Cannington WA 6987  
Physical address: L1, 303 Sevenoaks Street (cnr Grose Avenue), Cannington
4. Facsimile – send “Notification of Change of Address” forms to (08) 9422 5222.

Where electrical contractors' business or trading names have changed, please contact EnergySafety's Licensing Office on (08) 9422 5282.

Licensing Office hours are 8.30am – 5.00pm, Monday to Friday (excluding public holidays).

## Western Power pleads guilty to causing a bushfire with an estimated \$100 million in damages

Western Power pleaded guilty for failing to avoid or minimise any damage to property by not repairing or maintaining a damaged power pole south of a spur line on the Breakwater Drive, Two Rocks.

Western Power had earlier identified wood rot and a split at the top of the pole but did not complete the required maintenance work as scheduled.

As a result, on 16 January 2009, two “live” 22,000 volt conductors clashed and shorted out on one of the powerline spans. Falling hot metal globules ignited dry stubble on the ground, which resulted in a bushfire.

This bushfire burned 7,500 hectares of bushland, 2,500 hectares of pine plantation and a significant area of the Yanchep National Park.

This serious incident occurred due to a combination of errors and omissions by Western Power at all of the stages of inspection, maintenance and operation of its network.

Western Power had also failed to develop and implement adequate work procedures and practices for the operation of the powerline.

The network operator was issued with a penalty of \$12,500 with court costs.

## Code of Practice for Personnel Electrical Safety for Vegetation Control near Live Powerlines – Revised

In July 2012, EnergySafety gazetted a revised Code of Practice which details the minimum requirements for vegetation control work carried out near the “live” conductors of the overhead powerlines.

This Code is mandated under the *Electricity Regulations 1947*.

The Code was developed to ensure safe vegetation management work within the ‘danger zone’ surrounding any “live” overhead power line.



Damage to bushland after the Two Rocks bush fire.

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DC solar connector that has melted due to incorrect crimp termination.

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It specifies the minimum standards required for mobile plant, tools and equipment used in vegetation arrangement work near “live” overhead power lines and provides the basic technical material necessary for service providers to develop work procedures, related training and awareness programs.

The Code provides electrical safety information to be utilised along with other occupational safety and health requirements, which enable workers to:

- Assess whether it is safe to carry out pruning, cutting, maintaining or trimming vegetation near power lines.
- Prune, cut, maintain or trim vegetation in a manner that is safe for themselves, other workers and the general public.
- Comply with Regulation 316A.

A copy of this Code can be downloaded from the EnergySafety website [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)

## DC solar connectors failing due to incorrect crimp tool

Electricians are reminded to use the correct tools when working on solar installations.

Network operator inspectors have come across installations where DC solar connectors have failed due to the incorrect crimp tool being used.

Electrical contractors are using pliers or other similar substitutes on solar installations rather than using the correct crimping tools to provide reliable crimps when terminating solar connectors.

Precision cutting, stripping and crimping tools have been specifically designed for correctly fitting the DC wires and connectors that are specific in the solar industry. They have been designed to ensure that the electrical connections have good contact points by securely attaching the connectors to the end of cables by

crimping the metal connector collar tightly around the end of the wire.

As secure connections are so important in the installation of photovoltaic systems, using the correct crimping tool is essential. The use of pliers or similar tools is an unacceptable practice.

## Western Power’s Personal Protective Clothing Requirements

Western Power has advised that its Personal Protective Clothing (PPC) requirements, as set out in the Work Practice Manual Section 3.1, is mandatory for the Network Total Workforce (NTW), inclusive of Electrical contractors involved in the Service Apparatus Connection Scheme (SACS) and Contractor Connect Schemes.

These PPC requirements have formally been introduced as of 1 January 2013. Compliance to the PPC requirements is to be achieved by 30 June 2013.

As of 1 July 2013 Western Power will be conducting field assessments against the requirements of work practice 3.1. Identified non-compliance with the PPC requirements could result in individuals or crews being requested to leave the work site and if required work being suspended until compliance issues are resolved.

As an Electrical Contractor working on or near the Western Power network you are responsible for wearing the correct level of PPC for the task you are undertaking. You are urged to make this a top priority to eliminate any potential risks to yourselves and others.

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For full details of the PPC requirements please refer to the Work Practice Manual which is available on the Western Power website: [www.westernpower.com.au](http://www.westernpower.com.au).

Further enquires may be directed to:

Andrew Manning  
Operational Technical Excellence  
Work Practices Section  
Western Power  
T: 9326 4064  
E: [operational.standards@westernpower.com.au](mailto:operational.standards@westernpower.com.au)

## **Electrical contractor prosecuted for submitting a “Notice” for incomplete electrical work that was not carried out by the company**

An electrical contractor recently pleaded guilty to submitting a Notice of Completion for notifiable electrical work that had not been completed by his company.

The offence arose after an electrician, who was not an employee of the electrical contractor, carried out electrical work at his own property.

The electrician then engaged the services of an electrical contractor with Service Connect accreditation, to connect the underground consumer’s mains to the network operator’s pillar and also install the Kwh meter at the main switchboard. The installation was left de-energised (SPD fuses removed).

The electrical contractor recorded the tests results and noted that the MEN link was connected and submitted a Notice of Completion for the service connecting work he had carried out.

The electrician then carried out the final checking and testing of the installation (i.e. house) after the consumer’s main was terminated by the electrical contractor.

As the electrician was not working for an electrical contractor at the time, he asked another electrical contractor, to submit the Notice of Completion in order to complete the requirements for the notifiable

electrical installing work (ie. the house wiring).

The electrical contractor then signed the Notice of Completion for the electrical work carried out at the property, even though his company had not carried out any electrical work or checking and testing of the installation and submitted it to the network operator.

On receipt of the Notice of Completion, a Western Power inspector carried out an inspection of the property and identified the following serious defects:

- Failure to install a multiple earth neutral (MEN) connection ([link](#)) at the main switchboard.
- No overcurrent protection device provided for the sub-mains supplying the two distribution switchboards (i.e. sub-boards), located inside the residence.
- Load neutral conductor not terminated at the distribution switchboard’s neutral bar ([link](#)).

Investigation found that during the testing of the installation, the electrician carried out the following defective work:

- He disconnected the MEN connection and failed to reinstall it.
- He failed to terminate the load neutral at the internal sub-panel and installed two main switches instead of circuit protection between the main switchboard and internal distribution switchboard.

The electrical contractor who submitted the “Notice” was fined \$15,000 with court costs.



## Prosecutions for breaches of electricity legislation

1 October to 31 December 2012

<b>Name (and suburb of residence at time of offence)</b>	<b>Licence No.</b>	<b>Legislation and Breach</b>	<b>Offence</b>	<b>Date of Offence</b>	<b>Fine (\$)</b>	<b>Court Costs (\$)</b>
Johannes Botha (Duncraig)	EW154871	Regulation 33(1) E(L)R 1991	Carrying on business as an electrical contractor while not authorised by an electrical contractor's licence	Between 11/10/10 and 1/11/10	5,000.00	653.80
		Regulation 49(1) E(L)R 1991 (3 breaches)	Carried out unsafe and substandard electrical work			
Joel Albrey (Bunbury)	EW138629	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	Between 01/08/10 and 12/10/10	2,000.00	575.00
David Kember (North Perth)	EW136782	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	Between 27/08/10 and 03/09/10	5,000.00	653.80
Steven Petkovic (Sorrento)	EW142342	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	07/08/10	3,000.00	575.00
Allan Casey (Busselton)	EW137891	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	20/10/10	5,000.00	575.00

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## Notice of Intent on EnergySafety website

Further to the article in the Energy Bulletin 60, EnergySafety intends trialling a Notice of Intent (NOI) which is downloadable from the EnergySafety website ([www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)).


The NOI is to advise the gas supplier of a likely significant future gas load that may impact on their supply infrastructure and enable them to monitor the progress of the gasfitting work being carried out.

The NOI will initially be required to be submitted on a voluntary basis until the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 are amended.

An NOI will only need to be submitted for a gas installation to the gas supplier when any one or more of the following complex installation types is applicable:

- Multi-residential (16 or more residential units).
- Multi-storey (Three or more storeys).
- Consumer piping size greater than 32mm nominal diameter.
- Class I (large commercial or industrial) installation.
- Gas rate greater than 1 000MJ/h.

Each of these criteria and the gasfitting work terms will be further explained on the website.



Government of Western Australia  
Department of Commerce  
EnergySafety

## NOTICE OF INTENT

This Notice should be duly completed and sent to the relevant gas supplier at the project planning/design phase and well before the work is commenced (six weeks minimum where possible), if any complex installation type listed applies. It is to be submitted on a voluntary basis until the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 mandate such a requirement.

**COMPLEX INSTALLATION TYPE** (Please mark appropriate boxes. Only if a box is marked, send completed Notice to gas supplier)

Multi-residential (16+)    Multi-storey (2+)    Consumer piping nom. size greater than 32mm    Class I    Gas rate greater than 1,000MJ/h

---

**2 DETAILS OF INSTALLATION AND GAS SUPPLIER**

Owner/Occupier name:			Builder's Name:		
Phone/Fax:			Phone/Fax:		
Email:			Email:		
Lot No.	Unit No.	Street No.	Street name	Suburb/Town	Postcode

Directions (please provide sufficient information)

Gas supplier (name)	Meter No. (if existing)	Proposed commencement date	Proposed completion date
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**3 FIXED INSTALLATION DETAILS** (Please mark appropriate boxes. For 'other', state gas type and operating pressure.)

Gas type:	<input type="checkbox"/> NG	<input type="checkbox"/> LP GAS	<input type="checkbox"/> OTHER:
Operating pressure (kPa):	<input type="checkbox"/> 1.25	<input type="checkbox"/> 2.75	<input type="checkbox"/> OTHER:

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**4 GASFITTING WORK** (Please mark appropriate boxes.)

<input type="checkbox"/> NEW	<input type="checkbox"/> PIPE WORK	<input type="checkbox"/> INSTALLATION	<input type="checkbox"/> COMMENCED SUPPLY
<input type="checkbox"/> ADDITIONAL	<input type="checkbox"/> APPLIANCE	<input type="checkbox"/> COMMISSIONING	<input type="checkbox"/> REPAIR

---

5 TYPE A (DOMESTIC/COMMERCIAL) APPLIANCES				6 TYPE B (INDUSTRIAL) APPLIANCES	
Description	No.	Make/Model	MJ/h	DESCRIPTION:	
WATER HEATER				GAS RATE (MJ/h):	
COOKING APPLIANCE				<input type="checkbox"/> PRE ASSEMBLED	
SPACE HEATER				<input type="checkbox"/> ASSEMBLED ON SITE	
BAYONET				<input type="checkbox"/> CONVERSION	
SPA/POOL HEATER				TYPE B GAS INSPECTOR NO.: GI	
OTHER					

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**7 MOBILE INSTALLATIONS** (Please do not write in this area of the Notice of Intent)

**COMPLETE AND SUBMIT THIS NOTICE ONLY IF A "COMPLEX INSTALLATION TYPE" IS APPLICABLE.**

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**8 GENERAL INFORMATION** (Please mark appropriate boxes. If "yes" marked provide details.)

Any comments or details (include likely or used variation/exemption or dispensation)?  Yes  No \_\_\_\_\_

Does any part of the existing gas installation not comply with the regulations?  Yes  No \_\_\_\_\_

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<p><b>9 CERTIFICATION OF GASFITTING WORK</b> (Please do not write in this area of the Notice of Intent)</p> <p>'Complex installation type' – Meaning of terms are as follows:</p> <ul style="list-style-type: none"> <li>• 'Multi-residential' – A development having 16 or more sole occupancy units.</li> <li>• 'Multi-storey' – Means three (3) or more storeys, excluding mezzanine or parking areas.</li> <li>• 'Consumer piping nom. size greater than 32mm' – Piping of nominal diameter greater than 32mm.</li> <li>• 'Class I' – An industrial/commercial gas installation containing a Type B gas appliance.</li> <li>• 'Gas rate greater than 1,000 MJ/h' – The total nominal gas consumption of all installed appliances exceeds 1,000 MJ/h.</li> </ul>	<p><b>10 DECLARATION OF SUBMITTER OF NOTICE OF INTENT</b></p> <p>Name: _____</p> <p>Business Name: _____</p> <p>Business or residential address: _____</p> <p>Phone/Facsimile Number: _____</p> <p>Email Address: _____</p> <p>Registered Gas fitter's details (Complete if applicable): No.: GF _____ Class(es): _____</p> <p>I declare that it is intended to carry out gasfitting work which is the subject of this notice in accordance with the Gas Standards Act 1972 and its regulations.</p> <p>SUBMITTER'S SIGNATURE: _____ DATE: _____</p>
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Where none of the installation types shown are applicable, an NOI is not to be submitted. An NOI will only need to be submitted for a gas installation to the gas supplier when any complex gas installation criterion is applicable.

The NOI should be submitted to the gas supplier at the project planning and design stage and well before the construction or commencement of installation (six weeks minimum where possible) by the gas installation designer, be they a registered gas fitter, builder, plumbing contractor, architect, strata company or any other body or person planning/designing a complex gas installation.

In the interim period until the regulations are amended to mandate the submission of the NOI, confirmation of the adequacy of the gas supply for complex installations must be obtained from the gas supplier, before gasfitting work is planned and/or commenced.

The NOI if duly completed and submitted, is expected to assist in this process.

## Commissioning and servicing gas appliances

It is disappointing that gas fitters/plumbers undertaking the work at a prominent building in the Perth CBD did not know to purge air from a gas installation, nor were able to commission the large number of gas appliances installed.

It is the responsibility of the gas fitter/plumber installing a gas installation and appliances to commission gas appliances and demonstrate to the owner, the operation of those appliances. There is clearly a lack of knowledge or experience creeping into the industry which is disappointing from a Regulator's point of view.

On a similar note there is a large number of mining camps in Western Australia with integral kitchens providing meals continuously to the workforce. Many of these camps contain gas fired commercial catering appliances. Without a preventative maintenance program on these appliances they do eventually break down. Reports are filtering through to EnergySafety of inappropriate fixes by not only the catering staff but also repairs being undertaken by persons not holding a gas permit.

Ad hoc repairs in these instances have led to gas leaks and in extreme cases fires, placing catering staff in a hazardous environment.

As a gas fitter/plumber, if you are unfamiliar with the service and maintenance of a particular piece of equipment and it has become unserviceable, it is strongly recommended that you place an out of service tag on the faulty catering equipment and call in the manufacturer's service agent to undertake the repairs.

A reminder that under the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999:

### **Regulation 23 Servicing of a consumer's gas installation**

- (1) When a gas fitter services a consumer's gas installation the gas fitter must record the service information.
- (2) The service information must be
  - (a) clearly and legibly displayed in a permanent form on a badge or label attached to the consumer's gas installation; or
  - (b) recorded in accordance with the approval under sub-regulation (3).
- (3) The Director may, in a particular case or class of case, approve in writing another means of recording service information for a consumer's gas installation.
- (4) In this regulation –
 

Service information, in relation to the servicing of a consumer's gas installation means –

  - (a) the date servicing took place; and
  - (b) the identification number endorsed on the permit or authorisation held by the registered gas fitter who did or supervised the servicing.

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On another occasion an EnergySafety Senior Gas Inspector noticed a local butcher offering LP Gas Spit Roast BBQs for hire. On closer inspection it was found that the LP Gas Spit Roast BBQs were not approved. "Do not use" labels were attached and an Inspector's Order issued to the butcher prohibiting the hire and use until they were approved to the relevant Australian standard. Further testing by a Type A inspector found major defects resulting in the appliances being unable to meet the basic requirement of the approval process, therefore they were destroyed.

Energy Bulletin Issue No. 59 outlines the requirements and approval process of custom built Type A gas appliances. EnergySafety would like to remind gas fitters to be aware of spit roaster BBQs being offered for hire and look to see if they are approved and in a safe working condition. All Type A appliances prior to being sold or hired are required to be approved and fitted with an appropriate data plate.



*Example of an unapproved Spit Roaster BBQ*

## Spit Roast BBQ

There has been two recent incidents involving LP Gas Spit Roast BBQs.

On Christmas Day, a lady required medical attention due to burns she suffered attempting to ignite a LP Gas Spit Roast BBQ. Further investigation found the appliance was not approved and had been hired from a

local catering company without any operating instructions.

This resulted in:

- The company receiving an infringement for breaching the *Gas Standard Act 1972*;
- ongoing litigation between the company and the victim; and
- an Inspector's Order issued prohibiting the use of the appliance until it is approved by a Type A Appliance Inspector.

## Unregistered gasfitting work

There is a growing concern at EnergySafety as to the number of complaints being received regarding the performance of some gas fitters/plumbers or persons perceived to hold an appropriate gasfitting permit.

A complaint normally stems from a recently installed gas appliance not working to the consumer's expectations or a smell of gas. The consumer either calls the gas supplier or the manufacturer's agent. As a result of an inspection, it is quite frequently reported that there is no Notice of Completion left with the consumer, nor is there a compliance badge in the gas meter box or under the hood with an LP Gas Installation. There is no invoice or receipt and the job has been undertaken for cash.

In a recent incident a consumer purchased a cooktop from a prominent retailer at a car park appliance clearance sale. The consumer then engaged a person advertising services to do plumbing and gasfitting work on Gumtree. The installation was completed and in this particular case the cooktop was not tested or commissioned by this person. Cash was handed over and that was the last the consumer saw or heard of this person.

When visited by the gas supplier's inspector the cooktop was found to be an LP Gas cooktop and had not been converted for Natural Gas. The consumer was then given an Inspector's Order to have that portion of the gas installation redone and the cooktop converted to Natural Gas to ensure the gas installation was safe and compliant.

In another incident of similar nature, no notice, no badge and for cash, a consumer engaged a gas fitter to install a new cooker, an amount was agreed and the installation undertaken. The gas fitter allegedly used second hand materials, did not connect the cooker in accordance with the installation instructions, left a leak, took the cash and moved on.

Where these instances are reported to EnergySafety time and resources are devoted to investigations to rein in these offenders, not only does it create a slur on the industry, it also threatens the livelihood of those gas fitters and plumbers that are registered and ensure gas installations are safe and compliant.

## Gas appliances in alfresco areas

With summer in full swing, it's timely to remind gas fitters of the requirements when installing gas appliances in patios and alfresco areas. EnergySafety receives many calls from gas fitters and home owners querying the requirements.

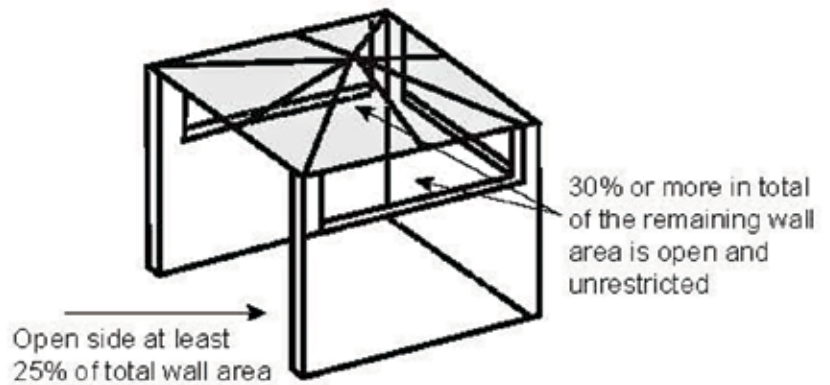
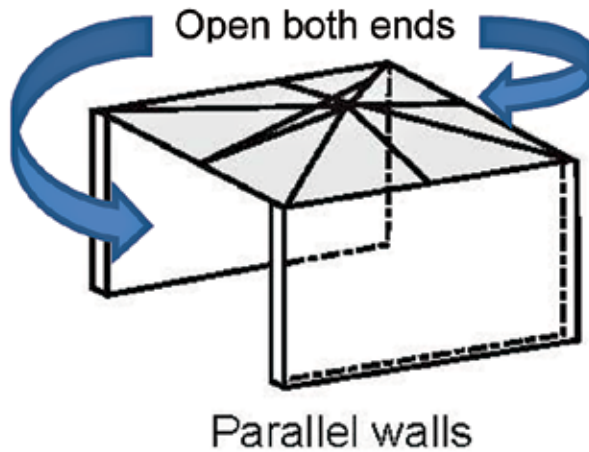
## Things to consider prior to installation

- **What appliances are to be installed** – the gas fitter must ensure the appliance(s) are suitable for installation in the proposed location. For instance domestic outdoor gas barbecues and portable patios heaters are designed, manufactured and certified for domestic outdoor use only. Consult the appliance manufacturer's installation instructions and the appliance data plate for clarification.
- **Is the proposed location appropriate for the installation of the appliances** – Inspect the area and determine whether it is an indoor or outdoor area. Consult AS/NZS5601.1:2010 Appendix I "Appliances in Outdoor Areas" for guidance.
- **Is the appliance(s) suitable for installation in the area** – Now the status of the location has been determined the gas fitter compares the requirements of the appliance(s) to ensure the appliance can be installed.



Example of a barbecue data plate of an "Outdoor Appliance"

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Diagrammatic examples of Outdoor Areas

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Examples

Installation 1

A rectangular covered Alfresco area has two sides open to outdoors. A client wants to install a domestic outdoor gas barbecue in this area.

**Appliance** – Outdoor gas barbecue (Certified for Outdoor Use Only)

**Location** – AS/NZS5601.1:2010 Appendix I “Appliances in Outdoor Areas” fig.I2 indicates a covered area with two open sides is deemed an outdoor area.

**Result** – Outdoor appliance in an outdoor area – **Installation may proceed.**

Installation 2

A rectangular covered Alfresco area has two sides open to outdoors but these openings are fitted with café blinds. A client wants to install a domestic outdoor gas barbecue in this area. The client says they will open blinds when the appliance is in operation.

**Appliance** – Outdoor gas barbecue (Certified for Outdoor Use Only)

**Location** – AS/NZS5601.1:2010 Appendix I “Appliances in Outdoor Areas” fig.I2 indicates a covered area with two open sides is deemed an outdoor area. But

with the blinds installed on the openings, they can no longer be considered openings as they can be closed with the use of the café blinds.

**Result** – Outdoor appliance in an indoor area – **Installation may not proceed**

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Gas appliances certified for outdoor use are not subject to the stringent testing for emissions (products of combustion) as is the case with indoor gas appliances. For this reason outdoor appliances must be operated outdoors in well ventilated areas and meeting the requirements of AS/NZS5601.1:2010 ensures adequate ventilation is present for safe and correct operation of gas appliances located in alfresco/patio areas.

EnergySafety is aware that property owners often mistakenly modify what once was a compliant outdoor location by installing fitting café blinds or doors on openings. This action often results in the area becoming non-compliant and potentially unsafe. Should a gas fitter become aware of a non-compliant gas installation, the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* (Reg. 42A) requires a gas fitter to **notify the consumer and the gas supplier**. When informing the property owner, make them aware of the possible hazards and ramification of operating gas appliances in non-compliant locations. These can include:

- detrimental effect on health (eg. carbon monoxide poisoning);
- fire; and
- insurance cover put at risk should an incident occur.

EnergySafety produces a publication titled **“Safe locations for using gas barbecues and gas patio heaters”**. This publication can be downloaded from EnergySafety’s website at [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au) and outlines the requirements for these areas. Gas fitters are encouraged

to download a copy for reference and forwarding to prospective clients when required. Informing the client of the requirements prior to arriving on-site may pave the way for smoother job all round.

**Remember**, if in doubt contact the gas supplier or EnergySafety.

## Gas installations in multi-storey residential buildings

An initiative is currently being undertaken to ensure that gas installations in existing multi-storey residential buildings conform to the *Gas Standards Act 1972* and its regulations.

This came about from the realisation that a number of gas installations in existing multi-storey residential buildings had gas appliances and in particular water heaters that were not in complying locations. This was due to the urgent replacement of the original open-flued instantaneous water heaters that had been banned from bathrooms and toilets many years ago.

EnergySafety is the Western Australian gas technical regulator carrying out the task of assisting Strata Companies and their Strata Managers and the individual owners/proprietors achieve safe and compliant gas installations in their multi-storey buildings and residential units.

Where a gas fitter encounters an existing non-conforming installation in any multi-storey residential building and has been requested to install a replacement gas appliance then this must be located in a conforming location.

Sometimes this is not considered possible and there is no specific variation/exemption or dispensation available either on-site or on the EnergySafety website. The gas fitter then needs to contact a designated gas inspector to further assist in gaining compliance for the particular residential multi-storey building. If a gas inspector is not readily available, then the individual owners/proprietors of the residential unit or their tenants may be inconvenienced for some time with the gas service or the appliance isolated and inoperable.

To head off such a scenario, Strata Companies and their Strata Managers and the individual owners/proprietors of the residential unit are strongly encouraged to have their multi-storey residential building gas installations surveyed well beforehand.

This survey can be carried out by a registered gas fitter at the request and expense of the Strata Company or the Strata Manager or the individual owners/proprietors of a residential unit.

As part of the survey, the registered gas fitter must determine if replacement gas appliances can be installed in compliant locations and if this is not possible complete and submit the downloadable form entitled “Application for Multi-storey Residential Building Dispensation” found on the EnergySafety website at [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au).

On receipt of this application, EnergySafety will contact the gas fitter and assist them in gaining compliance with the installation of future replacement gas appliances or in obtaining a dispensation for the particular residential

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multi-storey building. These dispensations can however only be granted after a risk assessment has been carried out to establish that there is no reduction in safety.

Dispensations are generally issued by EnergySafety to the building Strata Company via the Strata Manager and displayed near each of the residential

unit gas installations within the particular multi-storey residential building. They are also listed on the EnergySafety website under 'Dispensations for specific multi-storey residential building gas installations'.

This should all occur well before the breakdown and replacement of any gas appliance is required in a residential unit of a multi-storey

residential building as there will then be minimal inconvenience resulting to the individual owners/ proprietors or their tenants.

For further information please contact:

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