

# energy

## Bulletin

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## Don't DIY – always use a licensed Electrical Contractor

In the past 10 years, 35 people have been electrocuted in Western Australia. Sixty per cent of these electrical fatalities involved the general public and twenty per cent were attributed to unlicensed people attempting their own electrical work.

EnergySafety's Don't DIY advertising campaign was launched by Western Australia's Commerce Minister Simon O'Brien, at the Fresh Start Home Show at the Perth Convention Centre on 19 October 2012.

The campaign comprises television, press and online advertising over a four week period to raise consumer awareness.

Apart from being illegal, unlicensed and DIY electrical work is dangerous for unqualified people. It is dangerous for other users or anyone else who subsequently comes into contact with the unsafe electrical installation or equipment.

The television advertisement advises consumers to use a licensed electrical contractor and also informs owners they should receive an Electrical Safety Certificate on completion.



KEN BOWRON  
DIRECTOR OF ENERGY SAFETY



The Hon. Simon O'Brien (right) with the Director of Energy Safety Ken Bowron at the Fresh Start Home Show.

# EnergySafety



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## Gas Appliance Rectification Programme – closing date for registrations

The Gas Appliance Rectification Programme is coming to a close. The closing date for registration with the programme is 31 December 2012. If consumers haven't registered their appliance by then and discover it needs to be replaced, it may be at their cost.

Consumers are encouraged to register prior to 31 December 2012 for a free safety check by completing an online form at [www.gasapplianceprogram.com.au](http://www.gasapplianceprogram.com.au) or call the appliance rectification call centre on 1800 110 464.

- To date over 25,000 appliances have been registered.
- Of those appliances assessed 8,500 qualified for free replacement and 2,000 for servicing with the remainder passing the safety check.

If consumers have already registered their old appliances, we request they be patient. With thousands of pre-1980 appliances to check we are working our way through the applications as quickly as possible.

If you find a pre-1980 appliance at a customer's home, please encourage them to register with the programme before 31 December 2012.

## Bulletin Email updates

EnergySafety has re-instated sending the Energy Bulletin via email. If you have previously subscribed to receive the bulletin via email, we still have your details.

To sign up to receive the Bulletin and updates electronically, please register at [www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)

This is also a timely reminder to ensure your contact details are current, including your email address.

To update your contact details, please contact the Licensing office via email [energylicensing@commerce.wa.gov.au](mailto:energylicensing@commerce.wa.gov.au) or on 9422 5282.



Government of Western Australia  
Department of Commerce  
EnergySafety

Test your RCDs every **3** months

Are you overdue? Do it NOW

No RCD means no second chance.



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# electrical focus

## Concerns over ceiling fires attributed to downlights

Fire safety and electrical safety regulators across Australia are concerned about building fires caused by heat from recessed lighting. Recently, "The West Australian" newspaper published an article exposing the dangers of this lighting. The Department of Fire and Emergency Services (DFES) attributes one fire per month to dichroic downlights.

Many of these fires are the result of the down lights being covered by ceiling insulation material causing trapping of heat. The type of luminaire (light fitting) of particular concern is the dichroic halogen recessed 'downlight' which operates at very high temperatures.

Research has shown that, in some cases, dichroic halogen globes can heat up to more than 300°C. If they are installed too close to combustible material or covered with insulation, ignition may result. Combustible material can include leaf litter and dust which accumulates or blows into roof spaces. Transformers supplying the lights can also suffer excessive temperature rise if covered by thermal insulation or installed too close to the fitting.

Recessed luminaires and their auxiliary equipment shall be installed in a manner designed to minimise temperature rise and prevent the risk of fire.

The Wiring Rules (clause 4.5.2.3 of AS/NZS 3000:2007) provide four options to meet this requirement:



*Damage caused by a ceiling fire attributed to downlights.*

1. Use of a luminaire specifically designed and certified by the manufacturer to permit contact with combustible materials or enclosure or covering by thermal insulation material, as appropriate to the location of the luminaire; or
2. Installation of the luminaire within a suitable fire-resistant enclosure (as per the manufacturer's instructions); or
3. Provision of required clearances from combustible and thermal insulating material as specified by the manufacturer of the luminaire; or
4. Provision of the default clearances from combustible and thermal insulating material as specified in Figure 4.7 of the Wiring Rules.

### **Specifically designed luminaires**

Use of a luminaire specifically designed and certified by the manufacturer permits contact with combustible materials, enclosure, or covering by thermal insulation material, as appropriate to the location of the luminaire.

Very few luminaires on the market are designed and certified by the manufacturer.

Whenever, licensed electrical contractors select or are asked to install such luminaires they must ascertain that they have, in their possession, all the certification and specifications from the manufacturer. They should keep a copy of the documentation on record.

If you don't have the certification then install the luminaire to the default clearances specified in figure 4.7 of the Wiring Rules.

### **Installation of the luminaire within a suitable fire-resistant enclosure**

Once again, unless the luminaire manufacturer has certified that the enclosure is fire-resistant and is designed for that particular fitting, electrical contractors should not use this method. Before 2011, there was no appropriate standard for recessed luminaire barriers and no approved test for them.

On 20 October 2011, a new standard was prepared by Technical Committee EL-041 – AS/NZS 5110:2011 – Recessed Luminaire Barriers. The Standard provides classifications, construction and marking requirements and test procedures for recessed luminaire barriers, providing uniform compliance criteria for any barrier that may be called up by other Standards, codes, commercial contracts, building specifications or regulatory requirements.

Amendment 2 to AS/NZS 3000:2007, which should be released later this year, will include reference to this new Standard in Clause 4.5.2.3.

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It will specify that all barriers must be tested and classified in accordance with AS/NZS 5110.

**Provision of required clearances from combustible and thermal insulating material as specified by the manufacturer of the luminaire**

Some manufacturers specify clearances from combustible and thermal insulating material. Once again, if this method is chosen, the electrical contractor must keep the specification documentation on record and be able to produce it if asked by an electrical inspector.

**Provision of the default clearances from combustible and thermal insulating material as specified in Figure 4.7 of wiring rules**

This method is used most commonly by electrical contractors. However, EnergySafety is concerned about some of the defects encountered by inspectors during their inspections (photos below).

In summary, whenever installing recessed halogen downlights:

- the 200mm clearance from combustible insulation and building elements must be maintained at all times;
- the 50mm clearance to auxiliary equipment such as transformers must be maintained at all times;
- all transformers must be secured in place and installed in a location where they would not be subject to mechanical damage;
- structural members of the roof should not be sawed off to get the required clearances. This may damage the structural integrity of the house and put the occupants at great risk.
- unless the luminaire manufacturer specifies otherwise the space above the luminaire shall always remain clear.

Remember, the responsibility to ensure that the installation and all equipment installed meet the relevant Standards lies with the electrician and electrical contractor. If the luminaire is supplied by the home-owner or the builder or if no documentation is supplied with the downlight to ascertain that the clearance distances could be shortened or whether the barrier is adequate and suitable for that fitting, do not follow Clauses 4.5.2.3 (a), (b) and (c) of the Wiring Rules. Stick to Clause (d) ie. maintain the specified clearances at all times.

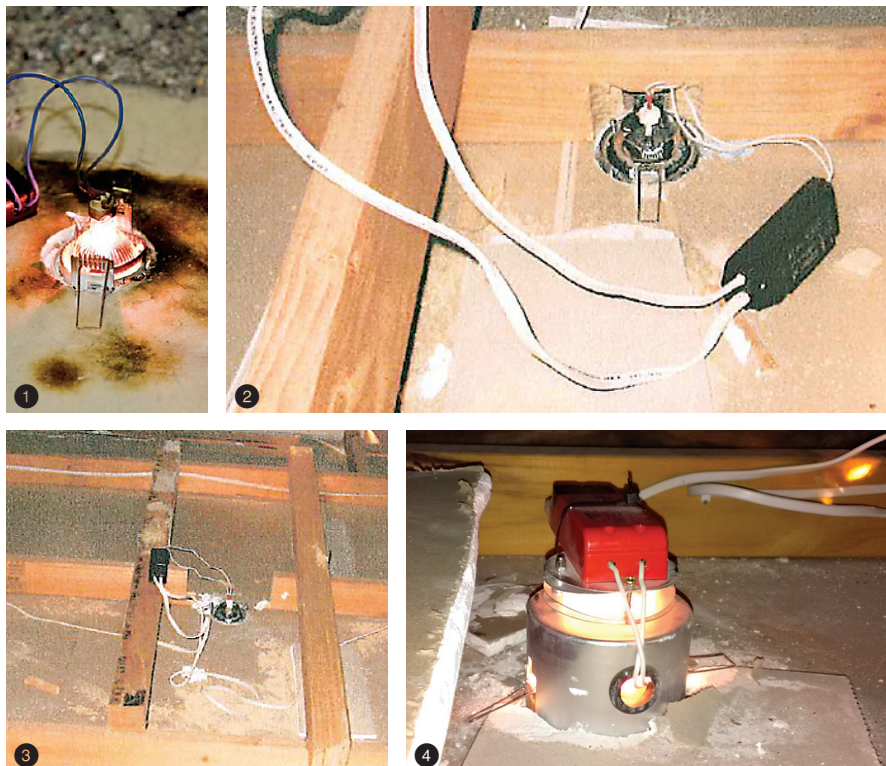
While the Wiring Rules currently allow for smaller clearances (100mm) if the recessed luminaire uses incandescent instead of dichroic lamps, Amendment 2 once published, will require 200mm for all types of lamps.

Once this amendment is in force, whenever recessed luminaires are installed, there will be an additional requirement for a permanent and legible warning sign to be installed in the roof space adjacent to its entry point in a visible position to a person entering the space.

As a reminder, under the Electricity (Licensing) Regulations 1991, if you come across any defect such as incorrectly installed downlights while doing other work at a premises, you are required to report it to the network operator.

Recently, an electrician was convicted for carrying out defective electrical installing work at a property in Cottesloe, including:

- Failing to install recessed luminaires (dichroic downlights) within the minimum clearances from combustible materials.
- Leaving access to the “live” conductive parts of lighting transformers.



1. Dichroic luminaire that has been installed too close to combustible thermal insulation material.
2. Dichroic luminaire that has been installed too close to a timber beam (beam altered to fit fitting) with the transformer not secured to the beam.
3. Cables not adequately secured. Also the roof structure has been altered and may be compromised.
4. Transformer installed on top of the luminaire barrier (no 50mm clearance).

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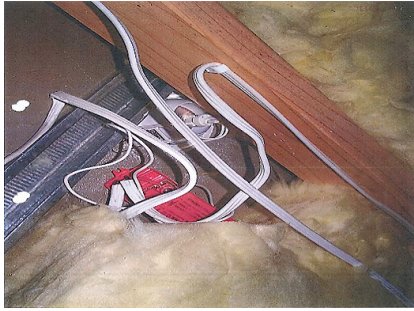
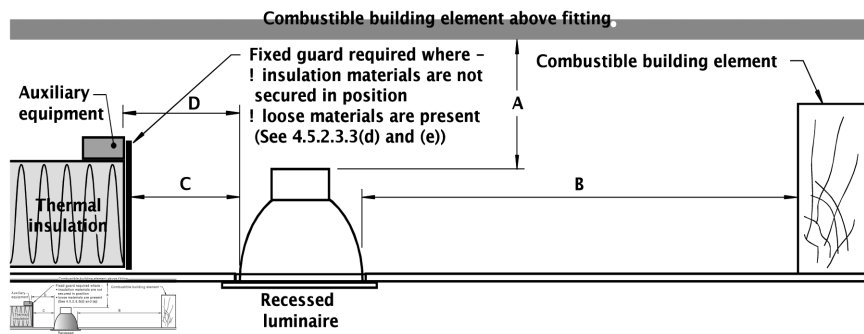


Figure 1: Photograph showing a recessed luminaire not installed with minimum clearances from combustible materials and the transformer not adequately secured.

The electrician had failed to carry out adequate checking and testing on completion of the electrical installing work, which would have identified these serious defects.

The electrician pleaded guilty to the defective work and the Magistrate convicted and fined him a penalty of \$5,000 with costs.

The electrician's employer (electrical contractor) was also convicted for submitting a Notice of Completion to the network operator when the completed work had not been checked and tested to ensure it was safe. The Magistrate convicted and fined the company a penalty of \$5,000 with costs.



Dimensions (mm)	Old clearance	Old clearance	New Clearance for all lamp types
	Incandescent lamps	Halogen lamps	
A –Clearance above luminaire	50	200	200
B –Side clearance to combustible building element	100	200	200
C –Side clearance to bulk thermal insulation	50	200	50
D–Clearance to auxiliary equipment (transformer for example)	50	50	50

Above: The proposed new figure 4.7 from Amendment 2 of the "Wiring Rules".

## Gas installer convicted for carrying out unlicensed and defective electrical work

A gas installer was recently convicted for carrying out unlicensed and defective electrical installing work and carrying on business as an electrical contractor at a property in Kendenup.

This matter came to the attention of network operator, Western Power, after a network officer, who had been carrying out an unrelated electric shock investigation, reported that unlicensed electrical work had been carried out at the property.

An investigation revealed the services of the gas installer (who did not hold an electrical worker's or electrical contractor's licence), had been engaged to replace a hot water system (HWS).

Electrical installing work was required for the installation, but rather than engaging an electrical contractor, the gas installer carried out the electrical work himself (installed a new socket outlet to supply the gas ignition for the HWS).

The Inspector identified a serious defect. The socket outlet had been connected to an existing socket outlet using non-complying cabling with an uninsulated bare earthing conductor.

The gas installer pleaded guilty to breaches of Regulations 19(1), 33(1) and 49(1) of the Electricity (Licensing) Regulations 1991 and the Magistrate convicted and fined him \$11,000.

## Q & As – “Notices”

EnergySafety still receives many Preliminary Notices and Notices of Completion not duly completed, providing insufficient details of the exact location of the installation or are illegible.

All “Notices” are to be signed and dated by the correct operative (ie. nominee) and must be completed with legible handwriting.

If Notices are faxed to EnergySafety, please ensure the telephone number is transmitted automatically by your facsimile machine. This will allow us to reply to the facsimile in the event that the transmission is not legible.

The following Q & As have been prepared to assist electrical contractors.

### **Q: Where do I submit “Notices”?**

**A:** It is a requirement of the Electricity (Licensing) Regulations 1991 that duly completed Notices be delivered to the relevant network operator.

If no connection to a network is involved “Notices” shall be delivered to EnergySafety.

It is the responsibility of the electrical contractor carrying out the electrical work to identify the relevant network operator.

### **Q: What address do I provide when the installation is for a remote location?**

**A:** Given that notices delivered to EnergySafety concern areas not serviced by a network operator (ie. remote or isolated), additional details in the “Directions” section should be supplied. The name of a road and a locality/suburb is insufficient.

If the location of an installation is not readily identifiable from the address details provided, a Notice will be viewed as not duly completed.

To enable inspections to be carried out, locations outside town boundaries require both the lot and street number to be supplied, with the street name and nearest suburb or town.

A telephone number or email address for the onsite customer and distance of the nearest cross street or intersection is the minimum additional detail required.

If these details are not available, then GPS coordinates for the entrance to the property involved would be acceptable. A telephone number or email address for the onsite customer is also required.

### **Q: What details of the electrical work (notifiable work) should I include in the “Notices”?**

**A:** It is important to ensure that the details of completed electrical work stated on the Notice of Completion reflects the actual work carried out.

Electrical contractors submit a Preliminary Notice to notify the relevant network operator of proposed electrical work. These details copy through to the Notice of Completion.

If the actual work carried out is different to that stated in the Preliminary Notice, the electrical contractor must amend the Notice of Completion accordingly.

Submitting a Notice of Completion describing electrical work carried out that differs from actual is a breach of the Electricity (Licensing) Regulations 1991.

### **Q: What if there is more than one electrical contractor on site?**

**A:** Where an installation includes work carried out by other electrical contractors, a separate Notice of Completion needs to be submitted by each electrical contractor for the part of the installation they carried out.

## Exemptions not required for the submission of “Notices” at mine sites for specific work

EnergySafety continues to receive requests for exemptions from the submission of Preliminary Notices and Notices of Completion from electrical contractors and in-house licence holders carrying out notifiable work at mine sites.

On 17 May 2011, the Electricity (Licensing) Regulations 1991 were amended so that in the majority of cases, an exemption is no longer required and provides standing exemptions from the requirement to submit a Preliminary Notice or Notice of Completion to the network operator for specific types of work.

In the majority of cases an exemption will not be required from the submission of “Notices” for mine site work, so long as it does not involve:

- an initial connection to distribution works or a private generating plant;
- an alteration to a main switchboard;
- an alteration to service apparatus or distribution works;
- the installation or removal of a private generating plant; or
- the alteration of the capacity of a private generating plant.



## Where to send high voltage installation submissions

EnergySafety receives many queries resulting from confusion about where to direct high voltage submissions.

Section 7 of the WA Electrical Requirements (WAER) outlines the general requirements for high voltage installations to be designed, constructed, maintained and operated by competent individuals, so as to ensure the safety of employees, equipment, property and the community.

Proposed HV installations must have the details certified as complying with all the relevant requirements of the Electricity (Licensing) Regulations 1991 by a professionally qualified electrical engineer.

The technical details required in submissions are listed in Section 7.4. The name of the person responsible for the operation of the installation must be included.

These details must be submitted to the relevant network operator before equipment is purchased and construction commences.

In the case of mine sites, submissions are to be directed to the Department of Mines and Petroleum in accordance with the Mines Safety and Inspection Regulation 1995, Regulation 5.18.

Where there is no network operator or mine site installation and EnergySafety is the default network operator, HV proposals are not required to be submitted to EnergySafety or any other party. However, the installation must comply with the requirements of the Electricity (Licensing) Regulations 1991 and WAER. Notwithstanding the electrical work must be certified by the electrical contractor once completed.

## Mining company and electrical supervisor plead guilty to employing and ineffectively supervising an unlicensed electrical apprentice

A mining company was recently convicted for employing, engaging and instructing a first year electrical apprentice (who did not hold an Electrician's Training Licence at the time) to carry out electrical work when not authorised by a licence at a mine site.

EnergySafety first became aware of the incident when they were advised by the company that a first year apprentice had received an electric shock from an underground 1,000 V AC pump terminal block at the mine site.

At the time of the shock, the apprentice and his supervising electrician had been investigating the failure of an underground pump.

The electrician had incorrectly assumed that the pump motor being worked on by the apprentice was the isolated faulty motor.

The apprentice received an electric shock when he was attempting to remove insulation tape from the cable connections within the pump terminal box.

When the electrician went to retrieve some tools, the trainee received a phase to earth electric shock to his left hand when the associated water catchment hopper's float switch actuated, which powered the motor the trainee was working on.

If the electrician had followed industry procedures and provided effective supervision of the apprentice and had isolated and tagged the circuit (including a test that the electricity supply was isolated), this incident would not have occurred.

Approximately a year before the incident, EnergySafety's Electrical Licensing Board had advised the mining company to submit the apprentice's Electrician's Training Licence application.

It was only after the electric shock incident that the apprentice submitted an application for an Electrician's Training Licence. The trainee had been carrying out electrical work without holding an electrical worker's licence.

The mining company pleaded guilty for employing and instructing the unlicensed apprentice to carry out electrical work and the Magistrate convicted and fined the company \$2,500 along with costs of \$575.

The electrician also pleaded guilty to not effectively supervising the apprentice and the Magistrate convicted and fined him \$5,000 with costs of \$575.

## 2012 Installation Inspectors Conference

On 24 July 2012, EnergySafety held its annual Inspectors Conference at Ascot Racecourse. This event provides the ideal networking opportunity for electrical inspectors throughout the state, as well as ensuring all inspectors have up to date information on changes to relevant standards and regulations affecting the electrical industry.

Attendees at this year's conference included electrical inspectors from EnergySafety, Western Power, Horizon Power, NickelWest, BHP Billiton Iron Ore, Rio Tinto, Indian Ocean Territories Power Authority as well as representatives from the Department of Fire and Emergency Services (DFES), the Department of Mines and Petroleum and WorkSafe.

## Prosecutions for breaches of electricity legislation

1 June to 30 September 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>
Anthony Luckham Carr (Mount Barker)	NLH	Regulation 19(1) E(L)R 1991	Carrying out electrical installing work while not authorised by licence or permit	22/07/10	11,000	Nil
		Regulation 33(1) E(L)R 1991	Carrying on business as an electrical contractor while not authorised by an electrical contractor's licence			
		Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work			
Darren Burvill (Milpara)	EW130476	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	08/07/10	3,500.00	Nil
Nicholas Chamberlain (Warnbro)	EW140172	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	17/06/10	3,000.00	653.80
Billy-Jo Day (Australind)	EW165374	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	14/06/10	5,000.00	575.00
Jayson Doran (Gidgegannup)	EW124166	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	29/07/10	500.00	345.00
Stephen Hartley (Eaton)	EW122629	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	07/04/10	5,000.00	649.70
Ryan Lee (Jandakot)	EW146565	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	13/05/10	5,000.00	649.70
Steven Sliskovic (Jolimont)	EW146393	Regulation 49(1) E(L)R 1991	Carried out unsafe and substandard electrical work	09/06/10	5,000.00	575.00
Peter Bagley (Boulder)	EW133159	Regulation 50(1) E(L)R 1991	Did not effectively supervise an electrical apprentice	22/06/10	5,000.00	575.00

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<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>
Carlowen Pty Ltd T/As GBF Underground Mining Company (Subiaco)	IH050446	Regulation 53(3) E(L)R 1991	Employing, engaging and instructing an electrical apprentice to carry out electrical work while not authorised by an electrician's training licence	22/06/10	2,500.00	575.00
Doran Consolidated Pty Ltd (Gidgegannup)	EC008580	Regulation 52C(1) (b)(i) E(L)R 1991	Submitted a Notice of Completion to the network operator when the completed electrical installing work had not been adequately checked and tested to ensure it was safe	29/07/10	1,000.00	345.00
Precision Cabling Systems Pty Ltd (Malaga)	EC006711	Regulation 52C(1) (b)(i) E(L)R 1991	Submitted a Notice of Completion to the network operator when the completed electrical installing work had not been adequately checked and tested to ensure it was safe	09/06/10	5,000.00	575.00

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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# gas focus

## Clarification of previous articles

Gas Focus number 59 contained two articles “6 Star Rating houses and gas bayonet points” and “Information for Industrial gas fitters of Type B Gas equipment” that have resulted in a number of calls to EnergySafety requesting clarification of our position on these issues. The following outline the current EnergySafety guidelines on the most requested clarifications.

## Use of bayonet points with space heaters

EnergySafety has no intention of prohibiting the use of bayonet points with space heaters. The article was informing gas fitters of the 6 star house rating now required to get building permission for new residential buildings. The ventilation requirements for unflued gas space heaters, usually connected by a bayonet point, make it very difficult and expensive to comply with the requirements to receive a 6 star house rating.

## Ventilation direct to outside

EnergySafety has no intention of prohibiting ventilation via the wall cavity. This method of ventilation is compliant with AS/NZS 5601.1:2010 clause 6.4.4.4 (note to Table 6.1) as ventilation direct to outside provided that the ventilation path is unobstructed by building material or insulation.

## Acceptability of Siemens LGA and LGB burner management systems

EnergySafety has no intention of prohibiting the use of Siemens LGA and LGB burner management systems while they remain certified by a recognised certification body. It is the manufacturer's (Siemens) policy to no longer supply these control units for new gas appliances. Siemens has advised EnergySafety that at present it has no plans to remove the certified status of these components.

## Clarification of AS/NZS 5601.1:2010 clause 6.10.6.3 (e).

We have received a request to provide guidance on what is considered compliant with the requirements of clause 6.10.6.3 (e) of AS/NZS 5601.1:2010. The clause requires that where a flueless space heater is installed in a fireplace the chimney for that fireplace is shutoff. The clause is not specific as to where the chimney is to be closed off.

The EnergySafety interpretation of this clause is:

Where an unflued space heater is installed in a fireplace, the chimney must be closed off;

- a) for a shared chimney, so that the combustion products from the heater cannot be migrated to another room via the chimney; or
- b) for any other chimney anywhere over the length of the chimney.

This is deemed by EnergySafety as complying with the requirements of AS/NZS 5601.1:2010 clause 6.10.6.3 (e).

## High efficiency gas turbines installed in the West

Western Australia's newest and most efficient open cycle gas turbine power units, located at Verve Energy's Kwinana Power Station, started up in June 2012 with an official ceremony with Western Australia's energy minister Peter Collier.

The plant comprises two 100 MW open-cycle gas turbines (General Electric LMS100 with a gas rate of 960 GJ/h each). The two new high efficiency gas turbines are the first of their kind to become operational in Australia and represent the latest in gas turbine technology. The \$290 million turbines of which the state government funded \$263 million, replace older generators at Kwinana power station. The turbines were built on the site of two 35 year old gas-fired generating units which were demolished in 2010.

The machines, derivative of the engines on large passenger aircraft, combine excellent efficiency and extremely flexible operating capabilities. The turbines are up to 43% more efficient at full load than the plant they replace. This compares to other open-cycle gas turbines in WA which record efficiencies of 38% at full-load.

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The new turbines also generate fewer emissions and have a superior hot weather performance than the predecessors. The innovative high efficiency gas turbines are expected to reduce annual emissions of CO<sub>2</sub> by up to 45 000t compared with typical gas turbines.

Other features include a design suitable for stop-start operating conditions coupled with a fast start capability which enables the power station to reach full load in about 12 minutes.

The turbines with their 43% efficiency and an unmatched ability to respond quickly to a system load variation make a significant difference to Verve Energy's operations, especially when managing the intermittent output from wind farms and photovoltaic installations. This is a large part of their role in the market.

UGL provided engineering, procurement and construction on the project comprising the installation of the two turbines



along with the balance of plant including all mechanical, civil, electrical, control and other services required.

This article was in part extracted from that first published in the July 2012 issue of *Engineers Australia* magazine, published by Engineers Media ([www.engineersmedia.com.au](http://www.engineersmedia.com.au)). It appears here with permission.

## Gas appliances in garages

EnergySafety occasionally receives calls from gas fitters seeking advice when they come across a gas appliance installed in a garage with regard to whether the appliance location is permitted.

The majority of these appliances are found to be in the older suburbs. Originally installed and in a compliant position the outdoor balanced flued storage water heater becomes enclosed unwittingly by home renovators when building a garage or other structure around them. The main hazards in this instance are not only the products of combustion being trapped but pilot and burner flames being less than 450 mm from ground level providing a potential source of ignition of vapours should there be a flammable liquid spill.

A garage is also a popular venue for the families to gather to make home made sauces. Large pots are placed over a gas cooking appliance used for boiling the water, sterilising the jars, storage and cooking the sauces. The garage is ideal because of the space and with the doors opened it can help to dispel the cooking odours. Any mess generated can easily be washed down with the garden hose. These gatherings are less frequent now but the appliances are still out there.

Gas appliances are not prohibited in garages as long as they comply with their certification approval, manufacturers' installation instructions and relevant clauses of **AS/NZS 5601.1 : 2010** in particular clause 6.3.10 **Installation in a garage**. In addition to the above, consideration should be given to protection of the appliance from vehicles manoeuvring in and out of the garage **AS/NZS 5601.1 : 2010** clause 6.3.2 **Protection from physical damage**.

A gas fitter working on part of a gas installation notices a portion of the gas installation that may not be compliant, has an obligation to inform the consumer and advise the network operator/gas supplier of their findings in Section 8 of the Notice of Completion.

Installations considered unsafe require the gas fitter to make it safe by isolation, and advise the network operator/gas supplier. If the gas supplier is unknown notify EnergySafety reference Gas Standards (Gasfitting and consumers Gas Installations) Regulations 1999 **Regulation 42A Unsafe gas installations, gas fitters to report**.





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## Notice of Intent and amendment of NOC

EnergySafety intends incorporating a Notice of Intent (NOI) with each amended Notice of Completion (NOC) in the Notice of Completion books following consultation with the gas industry. The NOI will also be made available for downloading from the EnergySafety website ([www.energysafety.wa.gov.au](http://www.energysafety.wa.gov.au)). The proposed NOI is shown below.

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.

There have been some adverse instances arising in Western Australia where:

- The installed gas load has exceeded the capacity of the supply system.
- The gas supplier was unaware of the installation of Type B gas appliances until commissioning gas was requested.
- The gas supplier was unaware of modifications affecting multi-residential installations.
- There has been a reduced level of monitoring or no monitoring at all of complex installations during their implementation.

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. After the regulations have been amended, the submission of the NOI will be mandatory where the criterion for a complex installation applies.

An NOI will only need to be submitted for a gas installation to the gas supplier when any one or more of the following 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 will be further explained in the inside front cover of the future Notice of Completion booklet. An NOI will only need to be submitted for a gas installation to the gas supplier when any complex gas installation criterion is applicable. Where none of the installation types shown are applicable, the NOI may either be left in place in the book or removed and disposed.

An NOI will be required to be submitted to the gas supplier at the

project planning and design stage and well before the construction or commencement of installation by the gas installation designer, be they a registered gas fitter, builder, plumbing contractor, architect, strata company or any other body or person planning to undertake a complex gas installation. The submission to the gas supplier of an NOI for any or all of the gasfitting work carried out on a project by a registered gas fitter is mandatory under the regulations.

In the interim period until the NOI is incorporated in the Notice of Completion books, the existing Notice of Completion books are phased out and the regulations amended, 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.

Government of Western Australia Department of Commerce EnergySafety		NOTICE OF INTENT		No.																																					
<p>This Notice must be duly completed and sent to the relevant gas supplier at the required timeframe, as prescribed in the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999, if any complex installation type listed applies.</p>																																									
<p>1 <b>COMPLEX INSTALLATION TYPE</b> (Please tick appropriate boxes. Only if a box is ticked, send completed Notice to gas supplier)</p> <p> <input type="checkbox"/> Multi-residential (16+)            <input type="checkbox"/> Multi-storey (3+)            <input type="checkbox"/> Consumer piping nominal size greater than 32mm            <input type="checkbox"/> Class I            <input type="checkbox"/> Gas rate greater than 1,000 MJ/h         </p>																																									
<p>2 <b>DETAILS OF INSTALLATION AND GAS SUPPLIER</b></p> <table border="1"> <tr> <td colspan="3">Owner/Occupier name:</td> <td colspan="3">Builder's Name:</td> </tr> <tr> <td colspan="3">Phone/Fax:</td> <td colspan="3">Phone/Fax:</td> </tr> <tr> <td colspan="3">Email:</td> <td colspan="3">Email:</td> </tr> <tr> <td>Lot No.</td> <td>Unit No.</td> <td>Street No.</td> <td>Street name</td> <td>Suburb/Town</td> <td>Postcode</td> </tr> <tr> <td colspan="6">Directions (please provide sufficient information)</td> </tr> <tr> <td colspan="2">Gas supplier (name)</td> <td>Meter No. (if existing)</td> <td colspan="2">Proposed commencement date</td> <td>Proposed completion date</td> </tr> </table>						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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<p>8 <b>GENERAL INFORMATION</b> (Please tick appropriate boxes. If "yes" ticked provide details.)</p> <table border="1"> <tr> <td>Any comments or details (include likely or used variation/exemption or dispensation)</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Does any part of the existing gas installation not comply with the regulations?</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> </table>						Any comments or details (include likely or used variation/exemption or dispensation)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Does any part of the existing gas installation not comply with the regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No																																
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<p>9 <b>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 nominal 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>10 <b>DECLARATION 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 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 .....</p> <p>DATE .....</p>																																						