



Office of **Energy**

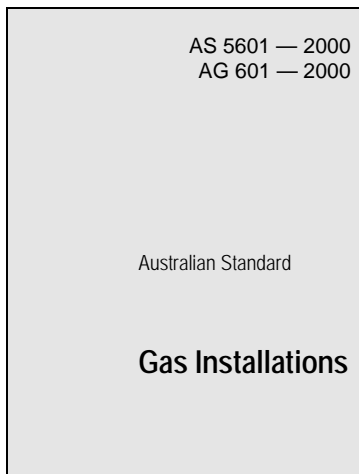
# Office of **ENERGY WA**

## **Gas FOCUS**

### **New Revisions of AG 501 and AG 601**

The Australian Gas Association codes AG 501 and AG 601 have recently been updated and released as new Australian Standards. The new Standards are known as AS 3814—2000 / AG 501—2000 “Code for Industrial and Commercial Gas-fired Appliances” and AS 5601—2000 / AG 601—2000 “Gas Installations”.

It is our intention to call up AS 3814—2000 and AS 5601—2000 in Schedule 7 of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* from 1 October 2000. Industry is therefore advised that, from 1 October 2000, gas installations and gas appliances will need to comply with the requirements of AS 3814—2000 and AS 5601—2000. In the meantime, industry should familiarise itself with these new Standards to enable compliance by 1 October 2000.



### **Exemption from AG 601-1998**

Rinnai Australia recently applied for an exemption from AG 601-1998, Fig 5.3 (h) regarding the clearance between flue outlets on their Infinity external water heaters.

Rinnai’s application for exemption is based on:

- testing carried out by Gas and Fuel Corporation of Victoria showing no evidence to suggest side by side installation of their Infinity external water heaters with flue clearances of 100 mm will affect normal operation;
- Australian Gas Association acceptance of the manufacturer’s revised installation instructions to reflect AGA approval for the side by side installation of the Rinnai Infinity water heaters with reference to the agreed change in dimension; and
- the fact that there have not been any reports of unsatisfactory operation with such installations of Infinity external water heaters in Victoria and NSW since Gas and Fuel Victoria (now GasSafe or Office of Gas Safety) issued a blanket exemption to AG 601-1998, Fig 5.3 (h) in August 1996.

The new Standard AS 5601—2000 includes amendments to Fig 5.3 to allow closer flue outlets clearances as long as the appliances are approved for such closer installation.

As an interim measure, the Director of Energy Safety has issued a variation to the technical requirements of AG 601, allowing the agreed change in clearance dimension for flue outlets of multiple installations of Rinnai Infinity external water heaters.

### **Variation to Requirements Under Regulation 32 of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999**

#### **Use of Olive Type Fittings in Consumers’ Gas Installations**

With the introduction of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999*, consumers’ gas installations must comply with specified industry standards/codes.

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Regulation 32(3) of the regulations allows the Director of Energy Safety to vary or impose additional requirements to those contained in the specified standards/codes.

Following a request from AlintaGas, the Director of Energy Safety issued the first variation to the technical requirements of AG601 Gas Installation Code, allowing gas fitters to use olive type fittings in consumers' gas installations, subject to the following conditions:

- olive type fittings (eg. Kinco fittings) used at the outlet connection to the gas meter manifold; and
- olive type fittings (eg. Philmac fittings) used to make underground connections immediately downstream of the gas meter manifold;

provided that in each case, the fitting line is thoroughly secured or held in place to prevent the connection being disturbed or dislodged, so that it remains gas tight.

This variation may be revoked if concerns arise from the use of these fittings.

In practical terms, this variation permits olive type fittings to be used only for connecting consumers' gas installations to gas undertakers' service apparatus.



*Olive type fitting on service apparatus*

## **Why Have Regulations?**

An AlintaGas designated Inspector recently notified an incident to the Office of Energy that highlights the need for regulations.

Damage occurred to a gas storage water heater because of its close proximity to a fence. The fence prevented the appliance from freely discharging products of combustion. This resulted in contamination of the air entering the appliance for combustion purposes, leading to high levels of carbon monoxide and carbon dioxide (CO/CO<sub>2</sub>) being produced.

This incident highlights the importance of ensuring sufficient clearances between appliances and neighbouring structures, as detailed in the Gas Installation Code AG 601-1998 and manufacturers' installation instructions.



*Water heater with damage around flue terminal*

## **Training for Authorization Holders**

Alcoa and representatives from the Office of Energy have been working together to develop an acceptable training package for Alcoa's authorization holders. Alcoa sourced the technical training expertise from within its own organisation and from external consultants, with the Office of Energy providing advice on legislation and compliance issues. The result is a five-day comprehensive course acceptable to the Office of Energy, which meets the basic needs of Alcoa's Authorization Holders (ie. Alcoa's supervising gas fitters).

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The new regulations provide a flexible approach to authorizations which cover maintenance work on industrial plant and equipment, allowing more than one authorization per site/operation. They also specify the requirements that need to be satisfied to obtain an authorization. A person applying for an authorization needs, in addition to a letter of nomination and possession of an engineering or associated trade background, to have:

- adequate knowledge of the *Gas Standards Act 1972* and the *Gas Standards (Gasfitting and Consumer Gas Installation) Regulations 1999*; and
- adequate theoretical and practical knowledge and adequate skills to do or supervise the gasfitting work.

These requirements can be satisfied by providing certificates of training, recognised by the Office of Energy, for:

- WA Gasfitting Legislation;
- Gas Safety; and
- Industrial Gas.

A condition placed on the holder of the authorization is that the work carried out under the authorization is undertaken by trained and skilled people and complies with the regulations. Most authorizations are issued for maintenance activities, like-for-like exchange of components, maintenance and repairs as the scope of work varies between companies.

The gasfitting training requirements will be different for each company and need to be identified by the company. However, the minimum training requirements identified for new authorization holders are a knowledge of the WA Gasfitting Legislation, Gas Safety and Industrial Gas.

All Alcoa refineries have a Gas Team that identifies its own training needs, with a centralised Gas Lead Team to look at their overall WA training and policy requirements. It was through the Gas Lead Team that Alcoa submitted its training courses to the Office of Energy for acceptance. Alcoa is to be congratulated for its efforts in providing the relevant training for employees.



*Kim Wong, Acting Principal Engineer Gas Installations & Appliances presents an Authorization certificate to Domenic Boni, Electrical Instrument Maintenance Supervisor of Alcoa*

### **Gas Fitter Alert — Spa Heaters**

Serious concerns have been brought to the attention of the Office of Energy in regard to the use of domestic instantaneous gas water heaters being used as spa heaters.

The advice given indicates that one particular brand of instantaneous water heater is being modified and installed for use as a spa heater even though it states clearly on the manufacturer's packaging that it is unsuitable for use as a spa pool heater. This is contrary to the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999*. Two breaches of the regulations are evident:

1. The instantaneous water heater has been modified without the approval of an inspector [regulation 20(4) of the regulations].
2. The instantaneous water heater has been installed for a purpose other than that for which it was approved [item 501(1)(b) of the regulations].

The Gas Inspection Branch of the Office of Energy is currently investigating these serious alleged breaches of the regulations. The Office and gas supplier's inspectors will take all appropriate measures to ensure that any identified existing and new spa heater installations meet the requirements of the regulations.

Gas fitters are reminded that if they are involved in spa heater installations, only gas appliances approved as spa heaters (AGA approved) may be installed for use.

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Any person who becomes aware of any spa heater installation that may not comply as indicated above should contact the gas supplier inspector or, alternatively, the Office of Energy's Gas Inspection Branch on 9422 5297.

A list of currently approved spa heaters is also available from the Gas Inspection Branch.

**As an employer, do I need to keep records in relation to each gas fitter?**

The answer is yes!

An employer must keep records in relation to each gas fitter employed to do gasfitting work, as required by Regulation 34 of the *Gas*

*Standards (Gasfitting and Consumer Gas Installations) Regulations 1999.*

The records must include:

- the name and address of the gas fitter; and
- the identifying number and grade of the gas fitter's certificate of competency, permit or authorization and any restrictions, limitations, conditions or restrictions on the certificate, permit or authorization.

The employer must keep the records for at least two years after the gas fitter ceases being an employee.

The employer must make records available for inspection by an inspector during normal office hours.

A sample register is shown below.

<b>Right Gas &amp; Co Ltd GAS FITTERS REGISTER</b>						
<b>Date Started</b>	<b>Name</b>	<b>Residential Address</b>	<b>Licence Number</b>	<b>Class/es</b>	<b>Type of Authorization</b>	<b>Date Finished</b>
29 Feb 1992	Kelvin Ross	113 Plane Cir Balga	GF 000560	ABCDE	Certificate	1 Apr 1998
29 Feb 1992	Ken Dodd	2 Spy Glass Midvale	GF 000401	ABCDEF	Certificate	
5 Nov 1998	Guy Spark	6 Earl Crt Leederville	GF 004792	G	Permit	
14 Feb 1999	John Valentine	1 Rose Gdn Innaloo	GF 006348	G I E	Permit	

**PROSECUTIONS FOR BREACHES OF THE  
GAS STANDARDS (GASFITTING AND CONSUMER GAS INSTALLATIONS) REGULATIONS  
1999**

**1 November 1999 to 29 February 2000**

<b>Breach</b>	<b>Name (and Suburb/Town of Residence at Time of Offence)</b>	<b>Licence No.</b>	<b>Fine \$</b>	<b>Costs \$</b>
<i>Failed to ensure work was done in a safe manner Regulation 18</i>	<i>D Beament (North Beach)</i>	<i>GF 007940</i>	<i>600.00</i>	<i>187.50</i>
<i>Failed to install an appliance in accordance with manufacturer's instructions Four counts Regulation 20(1) GSA</i>	<i>D Beament (North Beach)</i>	<i>GF 007940</i>	<i>200.00</i>	<i>62.50</i>