Testing of consumers’ gas installations


Standards Australia has published a new edition of AS 5601, AS 5601–2004 “Gas installations”.

Energy Safety will ‘call up’ AS 5601–2004 by way of an amendment to Schedule 7 of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999. This is expected to occur during the second half of 2005.

However, when AS 5601–2004 is called up, the testing of consumers’ gas installations will still require to be carried out in accordance with Variation No. V/E 04/11 (notified to industry in Gas Focus No. 31, April 2004).

Variation No. V/E 04/11 requires:
- For a consumer’s gas installation with a nominal gas meter outlet pressure of 2.75 kPa or an LP Gas installation with a nominal appliance inlet pressure of 2.75 kPa, test the consumer piping to a pressure of 4 kPa.
- For a consumer’s gas installation with a nominal gas meter outlet pressure of 1.25 kPa, test the consumer piping to a pressure of 2 kPa.
- For all other situations, test the consumer piping to the operating pressure (lockup pressure).

All other testing requirements in the Regulations and relevant standards or codes will continue to apply.

Gas installations not being tested correctly

Energy Safety is being advised by gas suppliers that gas fitters are not testing gas installations correctly.

Gas fitters are reminded of their obligation to correctly test gas installations and to ensure the system is gas tight [Regulation 26 of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 and Appendix E of AS 5601–2002].

The correct method to test a gas installation operating at a pressure of less than 200 kPa was described in Gas Focus No. 31 (April 2004).

An article on testing requirements for installations operating above 200 kPa was published in Gas Focus No. 33 (November 2004) and has since been published as a Guideline (available from Energy Safety’s website).

Turning the gas supply on and then off again in not an approved method of testing. In the case of LP Gas installations, this method of testing will not indicate a small leak. The pressure in (Continued over page)
the pigtail will normally be in excess of 700 kPa and, if there is a leak, gas will continue to pass through the regulator until pressures upstream and downstream of the regulator are exhausted.

The gas supply must be isolated from the installation and the system tested in accordance with the required procedure. For a typical domestic LP Gas installation, this means subjecting the installation to a test pressure of 4 kPa for five minutes.

Leaving gas leaks in a gas installation is a serious breach of the Regulations. Incorrect testing of an installation is no excuse for leaving a gas leak.

Do you still have a Certificate of Competency?

Gas licensing was first introduced in 1983 and, until 1989, Certificates of Competency were issued without an expiry date.

Classification of gasfitting was identified as A, B, C, D, E and F. Certificates of Competency were issued with one or more classifications. The descriptions for the classifications were very broad in nature, which fitted the type of work being undertaken and types of gas available at the time. The gas suppliers and regulatory authority closely controlled gasfitting work.

Since then, and particularly over the last decade, there have been significant changes in technology, the supply of gas and the inspection regime. The introduction of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 heralded an update both in regulatory compliance requirements and the introduction and ‘calling up’ of industry codes and standards to better address an ever-expanding gas industry. There has also been a shift to less inspection by the regulator and gas supply inspectors – with more emphasis on the gas fitter “getting it right the first time every time”.

One of the more significant changes for the gas fitter in 1999 was the introduction of different classification types of gasfitting to those previously used in Certificates of Competency. These new classifications better identify the sector in which a gas fitter is authorised to work. Permits issued from 1999 with the updated gasfitting classifications therefore reflect the type of work that can be undertaken by the holder much more accurately than the Certificates of Competency.

Technology in the supply and use of gas has also changed. Industry is now experiencing an expansion and variation in gas supply that previously was limited or not available between 1983-89. Compressed Natural Gas, Liquefied Natural Gas and Hydrogen (for fuel cell buses being trialed in Perth) are now a part of the gas industry.

Energy Safety continues to recognise the classifications endorsed on Certificates of Competency for the type of gasfitting that was generally being carried out at the time they were issued. However, a Certificate of Competency is not recognised as covering any work associated with:

- Class P, automotive refuelling facilities, from the gas supply to the refuelling apparatus; or
- Class E, mobile engines operating on Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG) or Hydrogen.

Gas fitters must therefore not undertake this type of work unless specifically trained and authorised by a Permit.

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Exchange your Certificate of Competency for a Permit

Permits and the classes of gasfitting endorsed on them are now the industry standard.

Gas fitters who hold a Certificate of Competency and who are still active, particularly in the domestic, commercial, industrial or automotive sectors, should consider updating to a Permit.

Upon application, Energy Safety will exchange a person’s Certificate of Competency for a new Permit at no cost for the first 12 months. After that, normal reapplication (renewal) fees will apply.

An application to change from a Certificate of Competency to a Permit must be supported by relevant evidence so that the relevant permit can be issued. Evidence may take the form of a letter from the applicant declaring the reason for requesting a particular class of gasfitting. Other evidence may also be requested before a Permit can be issued.

Gas fitters who require further clarification of the scope of work that can be carried out under their Certificate of Competency or who would like to exchange their Certificate of Competency for a Permit, should contact Energy Safety’s Gas Regulatory Officer by telephoning (08) 9422 5292.
Gas industry forums

Energy Safety plans to conduct a series of Gas Industry Forums to outline proposed changes to the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999. Details of these information evenings will be announced in a future Gas Focus.

The information sessions will cover:
- Gasfitting disciplinary matters being dealt with by the State Administrative Tribunal
- Changes to AS 5601 and the “calling up” of the 2004 edition
- A demerit points system for gas fitters, based on defects.

The forums will be conducted later in the year in the metropolitan area and the following regional towns:
- Kalgoorlie
- Esperance
- Albany
- Bunbury
- Geraldton

Demerit system for gas fitters

Energy Safety, in association with gas suppliers, is developing a Demerit System for gas fitters.

The system can be used as a basis for taking disciplinary action against a gas fitter following a number of Notices of Defect being issued to that operative. The Notices of Defect would normally be a consequence of an inspection of a gas installation by a gas supplier inspector, in accordance with the supplier’s approved Inspection Plan and Policy Statement.

Under the System, demerit points will be issued for defects in a consumer installation and/or breaches of the regulations. The number of demerit points will depend upon the seriousness of the breach/defect.

Further details on this system, including the implementing plan, will be advised in a future Energy Bulletin. Details will also be available on Energy Safety’s website.

Supervision by gas fitters

Energy Safety is aware that some apprentices are not applying for a restricted permit to work under supervision until late in their apprenticeship. This means they are working without the appropriate licence – and it is an offence to carry out any gasfitting work without the appropriate licence.

Gas fitters may supervise persons carrying out gasfitting work only if those persons have a permit to work under supervision. This includes apprentices/trainees and specialists such as pipe fitters or welders. The only exception to this is when a gasfitting Authorisation is issued for specified work and these are normally restricted to industrial installations.

Information on the supervision of apprentices/trainees and how to obtain a restricted permit for pipe fitters or welders is available from Energy Safety’s website or the Licensing Office.

New requirements for approval of commercial gas appliances

From 1 January 2005, all new LP Gas commercial appliances certified by the Australian Gas Association (AGA) or locally certified LP Gas appliances will require a regulator to be fitted.

The relevant standard for commercial catering gas equipment is AS 4563 – 2004 “Commercial catering gas equipment”. The following Clauses in this Standard refer to requirements for a gas regulator:
- Clause 2.2.1 requires “A certified gas regulator shall be provided with each appliance intended for operation on natural gas, town gas, tempered LP Gas or LP Gas”.
- Clause 3.5.1 Pressure Regulator Performance – the footnote to Table 3.1 contained in brackets, states “implementation date, pressure regulator, 1 January 2005”.

Schedule 7 of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 refers to the AS 5601/AG 601 – 2002 “Gas installations” requirements that must be met, in particular, compliance with Clause 5.7.1 “Fitting of an appliance gas pressure regulator” which has an explanatory/advisory note stating “This requirement does not apply to an LP Gas appliance where the appliance is certified without a regulator”.

Energy Safety would expect commercial catering gas equipment to be certified by the AGA or any gas, tempered LP Gas or LP Gas”.

This new process will identify errant gas fitters who continually leave defects or breach the Regulations. The objectives of the system are to improve installation safety, maintain adequate gas fitter performance and competence and reduce the number of gasfitting defects.

Energy Safety will generally initiate disciplinary action:
- when there are two repeats of the same breach that constitutes an immediate safety issue (that is, having three or more demerit points) accrued in a quarterly or reporting period; or
- when 12 demerit points are accrued.

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other recognised certifying body, in accordance with AS 4563 and the implementation date for LP Gas regulators of 1 January 2005. Where an LP Gas appliance was certified by the AGA before 1 January 2005 without a regulator provided, then the appliance can be installed without an appliance regulator.

### Prosecutions for breaches of Legislation 1 January 2005 to 31 March 2005

<table>
<thead>
<tr>
<th>Breach</th>
<th>Name (and suburb of residence at time of offence)</th>
<th>Licence No.</th>
<th>Fine ($)</th>
<th>Court Costs ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failed to attach a compliance badge</td>
<td>Alan Dalby (Trigg)</td>
<td>GF 007196</td>
<td>700.00</td>
<td>340.00</td>
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<tr>
<td>Failed to submit a Notice of Completion to the Gas Supplier</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulation 28(3A)(B) GSR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carried out gasfitting work while not holding a Certificate of Competency, Permit or Authorisation</td>
<td>Raymond Noon (Parmelia)</td>
<td>NA</td>
<td>500.00</td>
<td>288.45</td>
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<tr>
<td>Regulation 27(2) GSR</td>
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<tr>
<td>Failed to give a copy of the Notice of Completion to the customer</td>
<td>Martin John Power (Joondalup)</td>
<td>GF 006824</td>
<td>600.00</td>
<td>233.45</td>
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<tr>
<td>Regulation 28(3A)(c) GSR</td>
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<td></td>
<td></td>
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<tr>
<td>Carried out gasfitting work while not holding a Certificate of Competency, Permit or Authorisation</td>
<td>Grant Raymond Otto (Gooseberry Hill)</td>
<td>NA</td>
<td>250.00</td>
<td>233.45</td>
</tr>
</tbody>
</table>

Legend:
- GSA  Gas Standards Act 1972
- GSR  Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999
- NA  Not applicable (no licence held)

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