Foreword from the Minister

As Minister for Building and Construction, I am proud to say that Tasmania continues to experience record highs in the level of construction activity across the state. This extraordinary momentum in the industry is not only good for the sector, but it is also helping to underpin our broader economic prosperity and provides confidence for Tasmanian families and communities.

These results have not happened by accident. The Hodgman Liberal Government has been working hard to ensure we have the right conditions in place to stimulate more construction, create jobs and boost the economy – not just in our major cities, but also in regional Tasmania.

While we don’t necessarily measure our success by the number of cranes on the skyline, up until recently there were six tower cranes established in Hobart’s CBD, with many more developments in the pipeline, particularly with the Hobart City Deal now signed.

Northern Tasmania is also seeing a construction surge, with developments such as the CH Smith redevelopment, the Silo Hotel and Hotel Verge, all revitalising the place to stimulate more construction, create jobs and boost the economy – not just in our major cities, but also in regional Tasmania.

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Elise Archer MP
Minister for Building and Construction

Introduction for Peter Graham

I’m delighted to take this opportunity to introduce Peter Graham, to readers of Connections. I took over the reins of Consumer, Building and Occupational Services (CBOS) in August this year and have been busy getting up to speed on the significant range of issues we cover in this Agency.

As a long time frequent visitor to this state I was pleased to have the opportunity to move here on a more permanent basis from my previous role in the Victorian School Building Authority.

I’m looking forward to meeting industry bodies and other stakeholders and getting a feel for the issues that are important to you. I also hope to have the opportunity to meet many of you – the people we license to work in the areas of building, plumbing, electrical and gas – and make sure the service we deliver meets your needs.

Finally, I’d like to pay tribute to my predecessors in this role, Dale Webster and Andrew Goldsworthy, who have left CBOS in good shape.

Peter Graham
Executive Director
Process for changing building surveyors

In July 2019 the Director’s Guideline – Processes for changing building surveyor was published.

The guideline provides guidance on the specific processes under the Building Act 2016 for changing building surveyors for an ongoing project, and the circumstances arising which may trigger the process. This process may become necessary in circumstances such as:

- a business closing or
- a building surveyor is no longer licensed or suitable to be the building surveyor for the project.

Only one building surveyor can be engaged for a project at any one time. Therefore before engaging a new building surveyor for a project, the existing building surveyor’s engagement must stop. No work can continue unless a building surveyor is engaged for a project.

There are three processes under which a building surveyor can be removed from a project:

- the work is referred to a new building surveyor
- the building surveyor resigns from the project
- the building surveyor is removed from the project at the owner’s request.

**Referral to a new building surveyor**

Work can be referred to a new building surveyor without the consent of the Director of Building Control. The engaged building surveyor and the person who engaged them can agree to refer the work to a new building surveyor. This referral option can be used in situations such as a business closure. Once a new building surveyor is engaged the owner must notify the relevant permit authority within 7 days. The current building surveyor must provide the new building surveyor with all the project records and project status.

**Resignation of building surveyor**

A building surveyor can resign from a project if it has been at least 3 years since their engagement. Consent from the Director of Building Control is not required for this resignation. However the building surveyor must notify the Director, and all documentation for the project must be sent to the relevant permit authority. All other resignations by a building surveyor require the consent of the Director of Building Control.

**Removal of a building surveyor at owner’s request**

A person can only remove a building surveyor they have engaged with the permission of the Director of Building Control. The Director can consent to the removal of a building surveyor if satisfied, on reasonable grounds, that the building surveyor:

- is incapable of performing the functions of building surveyor for which they were engaged
- is no longer the building surveyor, or no longer suitable to be the building surveyor
- is no longer qualified to perform the functions of building surveyor they were engaged to perform, or
- has engaged in professional misconduct.

For more information or to download the new Director’s guideline go to www.cbos.tas.gov.au

New licensing scheme for Building Services Providers

The new Occupational Licensing (Building Services Work) Determination 2019 started on 7 August 2019. It replaces five licensing documents, with all licensing requirements for building services providers now in one place. CBOS consulted with building industry stakeholders during the Determination’s development.

**Building services providers are:**

- designers
- builders and building surveyors who contract directly with an owner, and
- permit authority officers who work for a council.

The new Determination specifies minimum mandatory qualifications and experience of new licence applicants. It also provides the obligations of current licensees to:

- provide insurance cover
- perform professional development activities
- follow Codes of Practice.

There are special provisions in the Determination for:

- owner builder permits
- licensing of organisations that work as building services providers

**What are the changes?**

- A new type of licence for Domestic Builders is available for builders who want to specialise in that work. Effectively, this is a Builder Low Rise, further restricted to doing “domestic” work – meaning Class 1, 10, and Class 2 buildings up to two storeys. Builder associations asked for this change. Existing builders do not have to apply, as their current licence already allows for domestic work.

- Two existing licence types have been abolished:
  - In the Builder category, licensed Builder-Construction Managers has amalgamated with the existing class of Builder (General Construction).

**Work in hazardous areas – Tasmanian Planning Scheme**

The Building Act 2016 has provisions for building works in hazardous areas. When the Tasmanian Planning Scheme starts in each municipality, it will trigger these provisions.

**New Determinations**

There are new Director’s Determinations currently being finalised to use in each type of hazardous area. These Determinations will supersede any transitional hazardous Determination in place before the planning scheme starts in a municipality. Until the Tasmanian Planning Scheme starts in a municipality, the existing hazardous area Determinations continue to apply. The new Determinations for hazardous areas include:

- riverine and coastal inundation
- coastal erosion
- landslip and bushfire prone areas.

Each hazard area will have a separate Determination published. The Determinations will set out the:

- type of work they apply to
- types of buildings they apply to, and
- design and documentation requirements for the hazardous area.

The Tasmanian Planning Scheme will contain new planning hazard codes, as well as maps which define land subject to various natural hazards.

Read more about these changes at www.cbos.tas.gov.au
Building a better industry through training and professional development

The building and construction industry is dynamic. It is constantly subject to changes in regulation, methods of construction, new products and business systems. This commitment by HIA to the training and professional development of industry was evident earlier in the year with the holding of National Construction Code (NCC) seminars in Hobart and Launceston. These CPD sessions were attended by over 200 industry participants. Delivered by HIA technical staff, attendees were provided with valuable information about upcoming changes to the NCC while revisiting a range of building standards and requirements. The strong attendances at these seminars is a credit to the Tasmanian building industry and its commitment to keep up-to-date with technical changes.

Now that the NCC seminars are over HIA has turned its attention to its remaining events and education opportunities for 2019. This includes its annual economic outlook development breakfast and industry forums delivered in Burnie, Launceston and Hobart in August. HIA will also run a Silica Exposure Awareness workshop in November in Launceston and Hobart to provide information to industry on addressing this significant safety issue within the workplace.

In addition to this, HIA has developed a new business course that is supported by CBOS and the TBCITB. The Tasmanian Building Business Skills course:

- is fully funded
- offers 14 CPD points, and
- covers vital business topics such as risk management, legal requirements, building contracts and cash flow.

It is a must for small business operators seeking to run a business effectively and is a great refresher for existing operators. For industry to maintain its high standards in an environment where there is increasing regulation and change, training and professional development needs to be at the forefront. It is by attending HIA and other organisations’ CPD training and seminars that industry will be well positioned to successfully navigate the challenges that lie ahead.

Stuart Collins
Tasmanian Executive Director
Housing Industry Association

Professional indemnity insurance

Emerging issues around problems with professional indemnity (PI) insurance have come to the fore with several high-profile cases of building defects and combustible cladding receiving significant media attention. These follow a number of fires around the world, including the Grenfell fire in the UK, which have elevated risk ratings on cladding affected buildings. The result has been skyrocketing insurance premium and excess costs for businesses in the building and construction industry, instances of high-risk businesses not able to renew professional indemnity insurance policies or offering it with unacceptable exclusions which push the liability of claims onto the business owner. We are seeing insurance premiums in some instances increasing by as much as 300 per cent for building surveyors, building inspectors and design and construct builders.

It is worth noting that we have not seen the same issues in the built environment in Tasmania. A building audit was undertaken more than 12 months ago which identified one high risk building as a result of the installation of PE cladding. This cladding has since been removed. Despite this, we operate in a national insurance market and Tasmanian builders, designer and surveyors are subject to the same price changes. With many residential builders now involved in sourcing designs, and design and construct contracts becoming increasingly common in the commercial sector, it’s important to understand how this can expose a business to potential losses should the right insurance cover not be in place.

Construction industry professionals such as contractors and builders who provide design, product specification, or other professional services, in addition to or as part of their construction activities for clients, assume the additional responsibilities and liabilities of a design professional. Whether or not you provide these professional services in house or engage an external consultant, you assume liability to your clients or other parties for claims arising out of injury or loss incurred as a result of a breach of professional duty in the provision of these professional services.

Key exposures are:
- design failure
- inadequate or incorrect advice, design, or product specification
- incorrect certification, and
- poor work documentation.

PI claims can be made against a business by:
- clients
- regulatory authorities
- professional bodies, or
- other third parties to whom the business owes a duty of care.

If your business is involved in construction (not exclusively design) you should be insured through a Design & Construct (D&C) PI policy. Without being insured through a D&C policy, your PI policy will not cover you for jobs that you’ve constructed, even if your advice/product specification on the build was the direct cause of loss. D&C PI policies encompass a broad definition of the various professional services involved in designing and building.

Given the growing instance of claims on building construction projects it’s important that businesses ensure they are correctly insured to protect themselves and their clients.

Matthew Pollock
Master Builders Tasmania

The Housing Industry Association (HIA) plays an important role in ensuring industry is across any changes and businesses remain compliant. Critically, it also assists in providing ongoing training and professional development aimed at achieving industry ‘best practice’.

The Tasmanian Building Business (TBB) plays an important role in assisting new businesses to get set up and existing businesses to maintain their high standards. It is a must for small business operators seeking to run a business effectively and is a great refresher for existing operators.

It is by attending HIA and other organisations’ CPD training and seminars that industry will be well positioned to successfully navigate the challenges that lie ahead. It is a must for small business operators seeking to run a business effectively and is a great refresher for existing operators.

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Gas Safety Regulations - Continuation of gas regulatory framework review

Gas-fitters are important stakeholders in the Tasmanian gas industry. CBOS is hopeful that the trade seized the recent opportunity to comment on the review the draft Gas Safety Regulations.

Background
The Gas (Safety) Regulations have regulated the Tasmanian gas industry for over ten years. During this time there has been a series of minor amendments – the latest being in 2014. There has not been a substantial review of the legislation during this time.

Previous legislation has not kept pace with developments in areas such as:
- non-traditional gas supply utilisation (hydrogen and biogas), and
- stationary gas engines.
Safety legislation needed strengthening to enable more effective monitoring of these activities.

New legislation
The Gas Safety Act 2018 received Royal Assent on 9 April 2018. The aim of the draft regulations is to:
- continue establishment of an efficient and transparent regulatory framework
- maximise long-term growth of the gas industry in Tasmania, and
- provide sufficient regulatory certainty to attract investment.

What’s new
Principally the Gas Safety Regulations contain combined and consolidated provisions of the existing Gas (Safety) Regulations 2014 and Gas Pipelines Regulations 2014. There are opportunities to:
- rectify current anomalies
- reduce red tape where risk was not proportionate to regulatory burden, and
- reflect current regulatory and industry best practice.

Examples of this include:
- Removal of certain obligations on industry and government that are not conducive to efficient decision making, and can place barriers to investment in projects including:
  » class 1a buildings from the interpretation of Standard gas Installation of a Prescribed Class
  » Increase the MJ required for installations in certain classes of buildings before being interpreted as Complex Gas Installations
- Provide safety regimes for emerging gases e.g. compressed natural gas (CNG), liquefied natural gas (LNG), biogas and hydrogen.
- Allow for enforceable Codes of Practice to cover emerging technology not already covered in legislation or standards
- Allow for infringement notice provisions to better regulate safety outcomes
- Flexibility to regulate the safety of reticulated and non-reticulated natural gas, LP gas, compressed natural gas, liquefied natural gas, biogas, hydrogen gas and any other gas that may emerge in the future
- Clarification of interpretations
- Clarification of expectation when working in ground next to buried gas infrastructure.

The final Regulations including the Gas Safety Act 2018 are expected to be proclaimed in 2019 or early 2020.

For more information, please contact Consumer, Building and Occupational Services on 1300 654 499 or email cbos.info@justice.tas.gov.au.
Gas-fitting work reminders

A reminder of gas-fitters’ obligations when issuing a Certificate of Compliance

Section 66 - Gas Act 2000

66. Certain gas-fitting work

A person who carries out work on a gas installation or proposed gas installation must make sure that:

a. The work is carried out as required under the regulations; and
b. Examinations and tests are carried out as required under the regulations; and
c. Compliance with the regulations is met for notification and certificates of compliance.

Regulation 50 - Gas (Safety) Regulations 2014

50. Certificate of compliance for gas-fitting work

1. A certificate of compliance for gas-fitting work on standard gas installations or gas storage systems must be:
   a. in a form approved by the Director of Gas Safety; and
   b. signed by the gas-fitter who did the gas-fitting work.

Complying with the 48 hour notification requirement

To comply with the requirement of advising the Director of Gas Safety within 48 hours of commissioning, a copy of the Gas Fitting Notice can be emailed to cbos.info@justice.tas.gov.au. The original (white) copy can follow either by Australia Post or be delivered to one of our regional offices.

Compliance plates

Must be fixed to all gas installations, whether they are:

• new installations
• alterations/modifications to an existing installation
• re-certification of systems and appliances for compliance, or
• servicing of existing appliances.

Plates must contain the current information relating to the work you have completed on the installation.

56. Commissioning gas-fitting work

1. At the completion of any gas-fitting work installing a standard gas installation, complex gas installation, standard gas installation of a prescribed class or gas storage system, a gas-fitter must make sure:
   a. the installation or storage system has been commissioned in accordance with applicable standards; and
   b. as far as reasonably practicable, that all existing gas-fitting work carried out on the installation or storage system complies with the applicable standards; and
   c. the installation or storage system a gas-fitting work has attached a compliance plate that states the:
      i. reference number of the gas-fitter who carried out the gas-fitting work; and
      ii. identification number of the gas-fitting form that is approved by the Director of Gas Safety about the gas-fitting work; and
      iii. date the installation or storage system was commissioned by the gas-fitter who carried out the gas-fitting work.

2. At the completion of alteration change to an existing standard gas installation, complex gas installation, standard gas installation of a prescribed class or gas storage system, a gas-fitter must make sure:
   a. the installation or storage system has been commissioned in accordance with applicable standards; and
   b. as far as reasonably practicable, that all existing gas-fitting work carried out on the installation or storage system complies with the applicable standards; and
   c. the installation or storage system a gas-fitting work has attached a compliance plate that states the:
      i. reference number of the gas-fitter who carried out the gas-fitting work; and
      ii. identification number of the gas-fitting form that is approved by the Director of Gas Safety about the gas-fitting work; and
      iii. date the installation or storage system was commissioned by the gas-fitter who carried out the gas-fitting work.

What is classed as “permanent form”?

We have been communicating the definition of “permanent” (as highlighted in S.51(7)) as being “fasting or intended to last or remain unchanged indefinitely”. Engraving/stamping is the recommended method for completing the required information on compliance plates. Permanent markers/biro are not considered as being a permanent form, as they do not last in the weather with the information fading and eventually disappearing.

All legislation can be downloaded from the “Resources and tools” section on our website at www.cbos.tas.gov.au.

Service works on gas appliances

Consumer Building and Occupational Services will be adding a new field under the “Gas Installation” section on the Gas Fitting Notice for “Appliance Service Work” due to increasing demands from consumers and manufacturers requiring/requesting service work of their appliances. In the meantime, until new Gas Fitting Notice books are available, indicate completing service work on appliances in the “Description of Gas Fitting Work” section.

Gas Standards and Safety (GSS) is pleased to introduce Duncan Lamond who has recently joined Consumer, Building and Occupational Services as a regional Inspector for Gas Infrastructure located in the Rosny office.

Duncan joined us from Professional Plumbing, where he worked as the manager for gas installations. With 11 years working in the gas and allied industries, Duncan brings with him a breadth of experience covering large complex installations and Type A appliance work.

Duncan is looking forward to expanding his knowledge of the Tasmanian gas industry as a whole and is enjoying working with the GSS team so far. He will be working as an inspector responsible for Southern region complex installations, transmission and distribution networks.
Dial Before You Dig and third party activity

Preventing gas pipeline encroachments

I’m sure there have been plenty of studies done about people who are thought of as risk takers. It turns out that there are a lot of risk takers, and they’re not who you might think they are. We aren’t talking about thrill seekers, bungee jumping or skydiving either. The big question is, why? Unfortunately we don’t have the answers. But we do need to do something about it before something major happens.

There seem to be ongoing issues where field based constructions and maintenance workers, businesses, developers, weekend warriors and other risk takers have done boring, opening of the ground or excavation work in or near natural gas infrastructure. This infrastructure is live and high pressure. In some cases the pipelines have been struck and either damaged or caused an uncontrolled gas release. This places their own lives and others in danger and also risks damage to property. These incidents can have severe impacts; both physically and financially. The increasing number of incidents and investigations have confirmed and proven that people actively choose not to follow the requirements contained in instructions and do the wrong thing. Regardless of what’s within the Dial Before You Dig (DBYD) document or what plain common sense looks like, in most cases they assumed they knew what was underground, knew what they were doing (“I’ve done this a million times before”) or they did not consider the need to contact DBYD. Most likely in every case, they didn’t consider the consequences which affect others.

You don’t get a second chance with gas when it goes wrong.

Under the Gas Act 2000 and the Gas Pipelines Act 2000, any person who does boring, excavation or activities to uncover in any way in or near buried gas infrastructure or within a pipeline corridor MUST do so only with the authorisation of the asset operator. Failure to do so can carry penalties of up to $333,000. That’s not including court costs.

What are you going to do about it?

These activities and needs are not just about a person’s ability to dig a good hole, not hit another service or get the job done quickly, it’s the law. It is also about giving assurance to yourself, your employer, other employees, the public and the asset owners that these assets can be protected adequately, effectively and the quality of the infrastructure maintained for its lifetime.

Preventing incidents from occurring.

Everyone knows about the FREE Dial Before You Dig service. It’s been around for some time and we see it everywhere in training courses, TV, newspapers, the internet and in most cases it’s even in company policy to use these services.

Make sure that you read the report supplied by the asset owner. This report has all the information you need, including pipelines types, sizes, pressures, consumer service tails, clearance and distance needs for work sites, and contact details for each gas entity where required.

The natural gas entities spend increasingly large amounts of time and money each year on maintaining and operating their infrastructure. This includes providing free asset protection services to those who need it, gas awareness programs which provide invaluable information that will give you a better understanding of your obligations and processes around the natural gas industry. DBYD also spend large amounts of time and money on researching on how to better prevent incidents and encroachments.

It is important to know and discuss the fact that both natural gas transmission and distribution organisations provide FREE asset locations and permits to work services. All it takes is for you to read the DBYD documentation, call the numbers required and organise the service. This not only allows the gas entity to assist in confirming pipe locations, but provides them with important information and statistics to maintain pipeline integrity and accurate records of easement activity. This can also be used in the event of a potential pipeline failure years later. They have records of approved work that has been completed.

Regardless of how big or small the task is the gas entities need to know about it and you are obliged to use their service.

What we suggest every person does is create a DBYD account. The account is free and is there for you whenever you need it. Discuss the topic of DBYD at the next tool box meeting with your contractors, with the boss, with your mates, the family. If you really want to get the point out there, discuss it with your dog before it digs up your yard!

On a serious note, ask yourself, are you covered by insurance if you don’t follow DBYD procedures? You can start the process now by visiting the webpage at www.1100.com.au or download the App today:


Gas

Tasmania’s Construction Industry Snapshot 2018

Construction is our state’s third largest employing industry with an estimated annual gross value of over $1.7 billion. This industry is separated into eight groups.

- There were 710 injuries in the Construction industry in 2018.
- Injury numbers for this industry have decreased 30% in the last ten years.
- Bricklayers, carpenters and joiners reported the most injuries.
- Bricks had the highest serious injury frequency rate, with 39 serious injuries per million hours worked.
- Top Three Injury Causes
  - Body stressing
  - Falls slips and trips
  - Being hit by moving objects

Top Three Injury Causes

9% of the total Tasmanian Workforce
84% of workers are employed full time
Half the industry is under 35 years old

To find more Industry Snapshots like these, go to WorkSafe Tasmania’s website at www.worksafe.tas.gov.au and search for Industry Snapshots.
AS 4575 – Gas appliances – servicing Type A appliances

Why do we need another Standard?

With a recent coronial enquiry looking at a number of tragic deaths, there has been a lot of focus on the importance of quality servicing and testing gas appliances for flue gas products and carbon monoxide (CO) spillage. Gas appliance operation by nature will continue to degrade with time and can be affected by changes to their operating environment. With the increase in building efficiency standards, any addition of building exhaust fans can affect the operation of burners, combustion and dilution air paths. This can cause the production of CO and adverse flue flows that endanger consumers.

Appendix R – Spillage tests for flued appliances in AS/NZS 5601.1 Gas appliances – Servicing of Type A appliances was gazetted on the 11 September 2019 as an applicable Standard for the purposes of the Gas Act 2000. This was done because the Director of Gas Safety believes it is important that gas appliances are serviced and maintained in good working order, and the installation environment confirmed, to make sure consumers are safe from the risks posed by CO.

When must I comply with AS 4575?

AS 4575 Gas appliances – Servicing of Type A appliances was gazetted on the 11 September 2019 as an applicable Standard for the purposes of the Gas Act 2000. This was done because the Director of Gas Safety believes it is important that gas appliances are serviced and maintained in good working order, and the installation environment confirmed, to make sure consumers are safe from the risks posed by CO.

What must I do after completing an appliance service?

• The gas-fitter must attach to the appliance, in an obvious position, a notice which can be read and clearly displays in permanent form, the date of the service and the reference number of the gas-fitter who carried out the gas-fitting work, in accordance with Regulation 51(7).
• Submit a Gas Fitting Notice to the Director of Gas Safety in accordance with Regulation 47(1) and 50(1).

What will I find in AS 4575?

• Minimum requirements for Type A appliance servicing, repair and conversion from one gas type to another, related aspects of gas installations and their associated quality management systems, risk assessment and the competency of personnel.
• Comprehensive combustion products spillage testing procedure and flowchart for open flued appliances.
• Guidance on quality management systems for organisations that deliver servicing, repair, or conversion of Type A appliances.
• Details to consider when inspecting an appliance before servicing, the tools and equipment required, and the steps to be taken with dangerous appliances and installations.
• Appliance repair requirements (including the repair or replacement of components).
• Electrical safety requirements (including an informative appendix on electrical safety).
• Sample template for recording details for dangerous gas installation notification.

Have you considered working with private power poles?

It is estimated that there are in the region of 65,000 private power poles in Tasmania and more beyond the metering point that are not recorded. All these poles and associated conductors and fittings require periodic inspection, maintenance and repair including replacement. Vegetation management surrounding these assets is also an ongoing requirement.

How to become a licensed contractor

If you have the appropriate licences and competencies to do this work you can apply to become a private pole/vegetation contactor. Email your details to CBOS.finfo@justice.tas.gov.au to be considered. CBOS has a list of licensed contractors at www.cbos.tas.gov.au/poles

Hydrogen - an emerging energy industry

Hydrogen gas is a considerable natural resource, but the challenge is removing it from the environment. Technological advances and hydrogen’s adaptability has provided an increased focus on hydrogen as a clean source of energy.

Whilst essentially the aim is in the production of clean energy, there are currently hydrogen production alternatives available that allow this new industry to establish itself domestically and within the global market. These include:

• Green hydrogen is produced by splitting the water molecule (H2O) through an electrolysis process driven by excess renewable energy from solar and wind power. Seen as the ‘holy grail’ of hydrogen production, there are no carbon dioxide (CO2) emissions involved in the process.
• Blue hydrogen is produced by cracking natural gas (methane) using a steam methane reforming process where CO2 is also produced and captured using carbon capture and storage (CCS) technology.
• Brown hydrogen is produced via coal gasification where CO2 is also produced, but again is captured using CCS technology.

Gas Standards and Safety is excited about the possibilities that hydrogen will bring to Tasmania. Tasmania has the resources needed to be at the forefront of future development but is conscious this must not be at the detriment of the public’s or workers’ safety. As a result, and to ensure contemporary safety standards are developed to cater for this new industry, Consumer, Building and Occupational Services (CBOS) is represented on the Australian Standards Committee, ME-093 Hydrogen technologies. The committee has been busy reviewing international standards and research/technical reports, with a view to either directly adopt or amend to meet the Australian needs.
Working within the electrical industry requires high levels of engagement to meet work pressures and keep current with emerging technologies and changing regulatory requirements. Sometimes it’s helpful to step back and ask a few questions to get perspective.

Your future – Have you considered where you’d like to be with work in 12 months, 2 years and 5 years? Do you want to expand, specialise or relocate? What type of work interests you and what type of work would you prefer to avoid? How is the market likely to change and where are the emerging opportunities? What training or technology interests you? What steps can you take now to back yourself in the future in regards to training and competency?

Advertising – Does your current advertising strategy support the direction of your business? Word-of-mouth, sponsoring a local club/association, radio, telephone directory, TV or internet? If you’re knocking back work, you may be over-advertising. If you’re not getting the type of work you’re after, reconsider your advertising approach. Don’t be afraid to ask customers for testimonials. Consider asking for feedback as part of your job finalisation process.

Quotations and contracts – Do your quotes describe inclusions, exclusions, timeframes and terms of payment? Have you considered the requirements to meet expectations of the customer and importantly those of the Australian Consumer Law? Do they include photos, diagrams and brochures? Brands and styles? How do you record variations and consent to these variations? Do you crosscheck quotes with completed work to ensure you are invoicing correctly?

Business systems – Do you have a system to record and link contracts, quotations, invoices, metering or other network requests? Have you submitted documentation required under relevant electrical safety legislation? Have you given the customer the required testing results, manuals and warranty information? You need to keep electrical work records for 10 years in Tasmania. Would you be able to provide yours if requested by the electrical safety regulator?

Remember - complying with the relevant electrical safety legislation can be an effective tool to defend yourself when challenged.

Quality of Work – What type of training would improve the quality of your work? Are your testing procedures compliant, consistent and documented?

Without a commitment to continuous improvement, you can easily fall into bad practices or forget specific technical requirements that are not often used. Are you still competent and up-to-date with the requirements of Section 8 of the Wiring Rules?

In Tasmania, electrical licence holders need to accumulate an average of 12 Continuing Professional Development (CPD) points per year. If you have been completing CPD approved activities, are you recorded?

Are you satisfying your WHS and any apprentice supervision requirements? Are there any reasons your insurer may refuse to honour a claim?

All good food for thought, and many good questions that we all need to ask ourselves from time to time!

Wiring Rules - repair or alteration

Recent changes to AS/NZS 3000 (the Wiring Rules) have revived the debate on when work is considered a repair and when it is considered an alteration and importantly the ramifications of which Standard applies to each category.

Observe readers of the 2018 edition of the Wiring Rules would have picked up that the previous term “Addition” is no longer used as additional wiring is new work and therefore the current Standard would apply.

The terms “repair” and “alteration” are now defined in the Wiring Rules to assist readers when they need to consider the relevant clauses. (see clause 1.4.8 and 1.4.101)

Repair is work required to rectify damage irrespective of its cause. This may be due to deterioration or equipment or component failure.

When conducting repairs we may use methods and apply the specific requirements within Standards that were acceptable at the time of the original installation.

When a modification or change to an existing installation is necessary then the current Standard is applied to the portion of the installation that is altered.

Frequently asked questions - practical and common examples

All referenced clauses relate to AS/NZS 3000:2018 Electrical Installations (Wiring Rules)

Do I need to install an RCD when replacing a damaged or non-functioning socket outlet, or when replacing a single outlet with a double?

Although the installation of RCDs are always recommended, it is not obligatory and you may simply replace the socket outlet in the same location without installing an RCD. Clause 2.6.3.2.6.

I need to move an existing socket outlet to a new location only a few centimetres away.

This is an alteration and therefore the wiring from where you have commenced the work must be in accordance with the current Standard.

Adding in a new outlet onto an existing circuit is new work and therefore the provisions of the current Standard apply. The RCD must, as a minimum, be installed at the commencement of the altered or new wiring, but again more preferably at the switchboard. Clause 2.6.3.2.5

I am replacing all the circuit protection on an existing switchboard. Do I need to install RCD protection on the sub circuits?

Yes, clause 2.6.3.2.5 requires RCDs to be installed in accordance with 2.6.3.2.2, 2.6.3.2.3 and 2.6.3.2.4

I am installing new lights on an existing circuit. Do I need to install RCD protection?

No, an exception in clause 2.6.3.2.5 allows for replacement light fittings and new lighting points on existing circuits, not to require RCD protection.
Tasmania formally joins the Electrical Equipment Safety System

The previous Minister for Building and Construction, the Hon Sarah Courtney MP, signed an intergovernmental agreement with Queensland, Victoria and Western Australia that formalises our adoption of the Electrical Equipment Safety System (EESS). This agreement makes us the fourth state to adopt the EESS and reinforce the move to a nationally consistent approach to equipment safety.

The adoption of the EESS requires all in-scope electrical equipment to bear the Regulatory Compliance Mark (RCM) indicating compliance with the EESS. This mark is well recognised within the industry and well supported by suppliers and is the only mark that is now accepted.

Main features of the EESS
• Products to which the EESS applies are “In-Scope Electrical Equipment”. The term “in-scope” is defined in law and means electrical equipment that is:
  » rated at a voltage greater than 50 V AC RMS or 120V ripple-free DC; and
  » rated at a voltage less than 1000V AC RMS or 1500V ripple-free DC; and
  » designed or marketed as suitable for household, personal or similar use.
• National Equipment Safety Rules apply.
• In-scope equipment - equipment designed or marketed for commercial or industrial purposes as well as suitable for household use.
• Out of scope equipment - equipment that is not suitable for household or personal use.
• All equipment must comply with the relevant Standard/s that applied at the time of manufacture.
• Responsible supplier, the manufacturer or importer must register on the National Supplier Registration Database. Resellers or electrical contractors only need be registered if they are the importer or manufacturer.
• The Responsible supplier must be an Australian or New Zealand entity.
• Classifying equipment by risk level as per AS/NZS 4417.2:2018 Regulatory compliance mark for electrical and electronic equipment Specific requirements for particular regulatory requirements.
  » Level 1 includes in-scope equipment not classified as level 2 or 3
  » Level 2
  » Level 3
• Where a responsible supplier sells level 2 or level 3 products, these specific products must be registered on the National Equipment Registration Database. Registration for level 1 products is recommended but not mandatory.

Electrical Equipment Safety System (EESS) is now accepted.

It is an offence for a product to be marked when not approved to use the mark.

www.cbos.tas.gov.au

Eliminating electrical energy and proving de-energised
In Section 4 of the Code of Practice, the general principles are described with Section 5 providing guidance and examples of how this can be achieved.

Testing to prove de-energised is live work and therefore a Safe Work Method Statement (SWMS) must be developed for the work with a site risk assessment also completed before the work commences.

Section 8.4 of the Code describes the requirement for the test equipment to be “in test” and is suitable for the voltage to be tested. The risk assessed environment and the task procedure detailed in the Safe Work Method Statement will also ensure the correct level of personal protective equipment is used and a safety observer is included where the risks are deemed necessary. This requirement is addressed in Section 8.5. In section 5.1, the use of out of service tags is required while de-energised works are in progress. All are essential methods to provide for a risk free workplace.

The Code of Practice is an essential tool for all electrical workers. It is free and can be taken to every job. Get a copy.

For further guidance and information on Isolation (Lock Out Tag Out), contact your State regulator.

Master Electricians members can also access a Safety & Technical hotline on 1300 889 198.

Training sessions
Master Electricians Australia is delivering training sessions in the last quarter of 2019 to Tasmanian Technicians. The interactive sessions are designed to help you complete your CBOS Continuous Professional Development (CPD) requirements and to keep up-to-date with your training.

Training modules covered include:
• Asbestos Awareness for Electrical Workers
• Isolation (Lock Out Tag Out)
• Working at Heights
• PPE aligned with Tasmanian COP and AS/NZS4836 Section 9
• Testing and Verification

To find out more contact Master Electricians Australia on 1300 889 198 or visit our website at www.masterelectricians.com.au
Plumbing compliance in the field

Examples of non-complaint plumbing work

CBOS recognises that some installations are tampered with after installation and that some are installed by unlicensed persons. We are working on that through our compliance team. The message here is - as a licensed plumber:

- make sure your installation is completed properly to the Standard
- when you sign your completion certificate be clear what work you have done by accurately describing it on the form
- make sure your As Constructed drawings also accurately reflect the installation.

This way, when you as the licensed person say it has been done in accordance with the Standard, you are covered.

CBOS believes that there are exemplars of this approach both as companies and individuals. With the work CBOS is doing with the whole of industry we are building further on this and our aim is to have you on board.

Fixture traps

- AS/NZS 3500.2:2018 Plumbing and drainage Sanitary plumbing and drainage - Section 6.5 Trapping of Fixtures and Appliances
- 6.5.1 General

Each sanitary fixture and appliance shall have a trap or self-sealing device. The trap or self-sealing device shall be in the same position as the fixture and/or appliance that it serves and be accessible. Bathrooms installed on slabs on ground that have traps installed under the bath must have access. The alternative is to drain to a floor gully within the room.

Overflow relief gullies

Top of the gully is accessible and positioned where any discharge will be noticeable and with clear access for more than 2m above the gully grate. It is much easier at the time of installation to provide for access to pipework, valves, and fittings as required than having to do this after the fact. Or being required to go back on-site and rectify non-accessible items to make them comply at your cost. It should be in the installer’s mind as a licensed plumber, how will someone get at this to service it in the future? Do I say it has been done by an unlicensed plumber, need to champion this aspect with the builder or the owner to ensure access is provided......yes you do!

Accessable plumbing work

Legislative requirements

The National Construction Code Volume 3 – Plumbing Code of Australia (PCA), sets out the requirements for the design, construction, replacement, repair, alteration and maintenance of following sections:

- Part B Water Services
- Part C Sanitary Plumbing and drainage
- Tas Section F Stormwater drainage systems
- Tas Section G Heating, Ventilation and Air-conditioning systems
- Tas Section H Onsite waste water systems

AS/NZS 3500.2 Plumbing and drainage Set glossary of terms defines accessible as “capable of being reached for the purposes of inspection, cleaning or maintenance, repair, or replacement but first may require removal of an access panel, cover, door or similar obstruction. AS3500 Series refers to accessible and readily accessible.

Redeably accessible means: without the need to access from ladders or scaffolding. AS/NZS 5601.1 Gas installations General installations defines readily accessible as access can be gained without hazard, undue difficulty, or use of a tool.

An inspection opening is “an opening in the pipe or fitting, arranged to facilitate inspection testing or the clearing of obstructions, and fitted with a threaded cap or plug or an access cover.

No access to inspection opening in the following areas:

The following issues have been found on several projects:

Sanitary plumbing

- Inspection/testing openings are required to be installed at:
  - the base of a stack and
  - either at the branch connection to the stack or in the upstream section of the common discharge pipe in the ceiling space below. Upstream inspection opening should be raised to the surface level and fitted with an articulated bolted trap screw where access cannot be provide in the ceiling below.
  - Other areas where in-ground drainage inspection openings should be bought to surface level where concrete driveways or paths when excavated may cause a risk to the public.

Occupational health and safety

The process of safety in the design of the installation, operation and maintenance should take into consideration the relevant occupational health and safety requirements.

Examples of Defective Electrical Work (NDEW)

Notice of Defective Electrical Work (NDEW)

Licensed electricians must ensure that the electrical work they are responsible for complies with the Occupational Licensing (Standards of Electrical Work) Code of Practice 2017 which includes:

- AS/NZS 3000:2018 Electrical Installations (Wiring Rules)
- AS 2067:2016 Substations and high voltage installations exceeding 1kV a.c.
- AS/NZS 7000:2016 Overhead line design
- any additional obligations imposed by those Australian Standards.

What work does not comply with the Code of Practice is defective

Defective electrical work is a safety risk to people and property. Defects may also expose involved parties to liability that may affect warranty and insurance claims. For example not following the manufacturer’s instructions when installing electrical equipment may compromise a warranty claim. There are serious consequences for licensed electricians carrying out defective electrical work, particularly if they fail to rectify it afterwards.

If an authorised electrical inspector identifies defective work through an inspection, they will issue a Notice of Defective Electrical Work (NDEW) to the responsible electrical contractor. The NDEW requires the contractor to rectify the work in a specified timeframe and pay a fee. Fees increase and rectification timeframes decrease with each NDEW issued.

<table>
<thead>
<tr>
<th>Notice of Defective Electrical Work (NDEW) fees 2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial inspection</td>
</tr>
<tr>
<td>First NDEW - 21 days to rectify</td>
</tr>
<tr>
<td>Second NDEW - 14 days to rectify</td>
</tr>
<tr>
<td>Third NDEW - 7 days to rectify</td>
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<tr>
<td>Progressive total</td>
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Notice of Defective Electrical Work (NDEW) fees 2019-20

In every case is considered on its merits, CBOS always investigates the cases when defects are not rectified and may:

- issue an Order to Rectify defects against the contractor
- issue an Order to Rectify defects against the property owner
- refer the matter for investigation under the Australian Consumer Law and consider whether the conduct of the licensed persons responsible for the work displays a disregard for the proper performance of prescribed work. CBOS can apply conditions to licences where appropriate. These conditions may include taking further electrical work until the defects are rectified and/or complete training to demonstrate sufficient competency.

Licensed electricians must ensure that the electrical work they are responsible for is compliant. If they make a mistake they must fix it as quickly as possible. This is in the best interests of the electricity and the Tasmanian public.

What happens if a fourth NDEW is issued?

As all cases are considered on its merits, CBOS always investigates the cases when defects are not rectified and may:

- issue an Order to Rectify defects against the contractor
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Licensed electricians must ensure that the electrical work they are responsible for is compliant. If they make a mistake they must fix it as quickly as possible. This is in the best interests of the electricity and the Tasmanian public.

Example of non-compliant plumbing work

Our Tasmanian Plumbing Surveyors (or to use the old term Plumbing Inspectors) are out in the field day after day ensuring that plumbing standards are being met. These surveyors are Council employees and are responsible, on behalf of the community, for citizens having access to safe drinking water and clean sanitation drainage systems.

At the end of the day this is what plumbing standards are all about - the protection of the health of the Nation. While this sounds a high and lofty goal, and would be more like a reference from a health related enterprise, it is absolutely applicable to plumbing. In Australia we have had practical and robust plumbing systems since the late 1890s in the form of structured training and apprenticeships. Our systems have been engineered and work within a framework of design principles that as long as the pipework configuration remains within, the completed system will function correctly. This can be taken as the Deemed to Satisfy approach. There is a performance approach also available to engineers.

CBOS is in regular contact with plumbing surveyors through local councils monitoring the installation standards and compliance of plumbing installations. We do this to help and provide assistance. If non-compliance is the result of:

- poor training
- poor practices
- poor attitudes or
- unlicensed work.

CBOS determines which approach to take in relation to improving these standards on behalf of the community.

Example of non-compliant plumbing work

What is provided…...yes you do!

By law, all plumbing installations must be accessible to the public. By this means: without poor practices, poor attitudes and without unlicensed work.

How do you define accessible:

Accessible as access can be gained without hazard, undue difficulty, or use of a tool.

An inspection opening is “an opening in the pipe or fitting, arranged to facilitate inspection testing or the clearing of obstructions, and fitted with a threaded cap or plug or an access cover. Each sanitary fixture and appliance shall have a trap or self-sealing device. The trap or self-sealing device shall be in the same position as the fixture and/or appliance that it serves and be accessible. Bathrooms installed on slabs on ground that have traps installed under the bath must have access. The alternative is to drain to a floor gully within the room.

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Why is Continuing Professional Development important?

As a professional, it’s important to maintain your knowledge and skills by pursuing Continuing Professional Development opportunities. This will enable you, as a licensed practitioner, to:

- review your current knowledge and skill level,
- continue to be competent within your profession.

CPD also helps you to keep up-to-date with:

- new products, systems and technologies, and
- legal responsibilities benefiting both you and your consumers.

CPD is not just about earning points. CPD has always been about helping you to stay informed, up-to-date, skilled and more knowledgeable. CPD also has across-the-board benefits for the industry in general. It helps to:

- lower defects and risk
- increase consumer confidence
- ensure currency of practitioner qualifications.

Ultimately, CPD helps to keep the industry moving in the right direction, as well as adapt to a rapidly changing workplace.

CPD provides licensed practitioners with opportunities to maintain competencies and develop capability. As a competent practitioner you have the ability to transfer and apply knowledge and skills to new situations and environments and consistently apply that knowledge and those skills to an acceptable industry standard. Capability is about confidence and adaptability as well as the development and effective use of industry specific knowledge and skills in complex and changing circumstances, including those that may not have been previously experienced.

Capable people have knowledge, skills, self-esteem and values making them confident in their ability as individuals and in association with others in a diverse and changing workplace.

CPD events calendar

Test and tagging
Launceston 7 October 2019
Devonport 8 October 2019

Changes to the MBT domestic Building / Contract & Changes to the National Construction Code
Finders Island RSL & Sport Club 16 October 2019

Waterproofing Internal and External
Launceston 22 October 2019
Devonport 28 October 2019

Waterproofing Wet Areas
Ulverstone 24 October 2019

Managing Legal Risks and Reducing Risk for Contractors
Launceston 9 October 2019
Bume 30 October 2019

Silica Awareness
Hobart 7 November 2019
Launceston 8 November 2019

On-site Waste Water Training
Devonport 12-14 November 2019

The CPD events calendar is a great way to keep up-to-date with training opportunities. Go to www.cbos.tas.gov.au and search “cpd events calendar”

The calendar is continually updated with CPD opportunities and you can also contact your industry association for any further opportunities.

If you require any CPD advice or information please send your enquiry to cbos.info@justice.tas.gov.au
Feedback

Your feedback is important to us.

If you would like to comment on Connections, please contact us at:

CBOS.info@justice.tas.gov.au OR

PO Box 56, Rosny Park TAS 7018
Ph: 1300 654 499
Fax: 03 6173 0205
Web: www.cbos.tas.gov.au

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Building in Tasmania

CBOS is a member of 26TEN and we are working to make our website easier to read for busy people.

26TEN is Tasmania’s campaign for adult literacy and numeracy. For more information visit www.26ten.tas.gov.au

Personal information we collect from you will be used by the Department of Justice for that purpose and may be used for other purposes permitted by legislation and policies administered by the Department of Justice. Your personal information may be disclosed to contractors and agents of the Department of Justice, law enforcement agencies, courts and other public sector bodies or organisations authorised to collect it. This information will be managed in accordance with the Personal Information Protection Act 2004 and may be accessed by you on request to this Department.