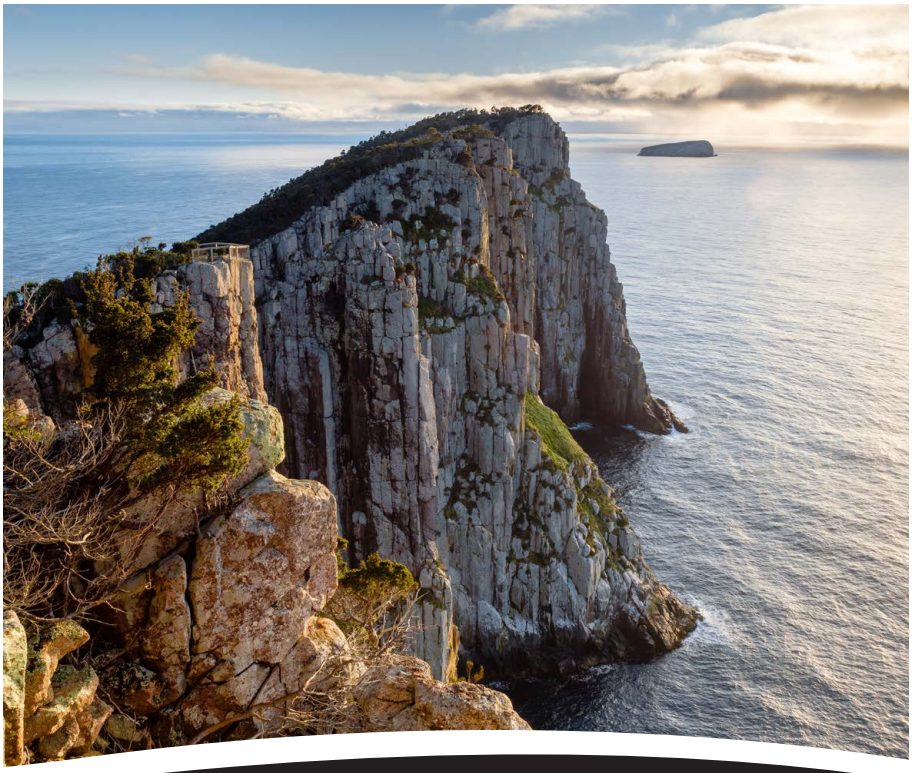
CONNECTIONS

Electrical, Gas, Plumbing, Building

Issue 18 | November 2020



Department of Justice
Consumer, Building and Occupational Services

Tasmanian Government

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Foreword from the Minister

As Minister for Building and Construction, I am proud that the Tasmanian Government is continuing to support the building and construction industry during these unprecedented times.

While there has been tremendous growth in the civil, commercial and residential sectors over recent years, COVID-19 has led to some longer term uncertainty for businesses, contractors and employees.

Our Government is aware of the impact the pandemic has had on the industry, including its effect on private sector projects that have been delayed or cancelled as a result of COVID-19.

Over the past six months, our Government has introduced a range of support measures to help Tasmanian businesses and industries to continue to operate and comply with the strict protection measures that were put in place due to COVID-19.

The Tasmanian Government has supported the building and construction industry by:

- extending the Local Government Loan program from $50 million to $200 million to encourage local councils to upgrade local infrastructure and employ Tasmanians in the process;
- extending the First Home Owners grant for new housing by two years to help residential housing growth;
- making various tax relief measures available, including payroll tax rebates and waivers for eligible businesses;
- providing one-off waivers on electricity, water and sewerage costs for small Tasmanian businesses;
- keeping all Consumer Business and Occupational Services (CBOS) trade licence fees, which are subject to the *Fee Units Act 1997*, at the 2019-2020 value for the 2020-2021 financial year; and
- extending key statutory timelines to support industry, owners and councils to meet their obligations within the current emergency period.

Measures to support employees and employers also included making $2.1 million available for one-off $5,000 grants for businesses that hire an apprentice or trainee, complementing the Federal Government's apprenticeship package.

We continue to work with the building and construction industry to provide longer term certainty of upcoming public sector projects across Government and Government owned businesses.

I would like to personally thank Tasmania's building and construction industry which responded quickly to issues and took a proactive approach which has resulted in the industry continuing to perform well through the pandemic.

The building and construction industry continues to be a high priority for our Government and we recognise the enormous amount of work the industry has done to stay safe and progress construction projects in response to the challenges presented by COVID-19.

For details on measures the Government is taking to support businesses at this time, you can refer to the Stimulus and Support page and any other updates on the Tasmanian Government's coronavirus website - **www.coronavirus.tas.gov.au**

Elise Archer MP

Minister for Building and Construction

Message from the Executive Director

2020 has been a year like no other resulting in challenges for Tasmanians both on a personal and business level. The COVID-19 pandemic has made us all rethink the way we operate and this has been particularly challenging for anyone working in the building industry. Implementing new workplace guidelines on managing worksites and staff safety while still meeting client expectations has meant a total change for many businesses. CBOS recognises how difficult the past six months has been and I would like to congratulate the Tasmanian building and construction industry for meeting these challenges and continuing to operate where possible.

A number of measures were implemented to help support industry during the pandemic. Certain permits for building, plumbing and demolition work were extended for six months. COVID-19 forced some CPD training to move from the more traditional in person/classroom location to online platforms. Requests to CBOS for support in meeting the CPD requirements were treated on a case-by-case basis. CBOS also helped facilitate sourcing personal protective equipment (PPE) to help plumbers continue to work while remaining safe on the job site.

Moving forward there are still many difficulties to overcome as a result of the pandemic. CBOS is here to work with industry and support the growth of all the building – related trades and other associated businesses. We will help the Tasmanian building industry to continue to meet all the compliance requirements and still operate safely during and beyond the pandemic.

Peter Graham

Executive Director

National Construction Code 2019 **Amendment 1**

The Australian Building Codes Board (ABCB) has undertaken an out-of-cycle amendment to the National Construction Code (NCC). This amendment is known as NCC 2019 Amendment 1.

NCC 2019 Amendment 1 was adopted by all states and territories on 1 July 2020.

Amendment 1 introduced enhanced fire safety measures for certain Early Childhood Centres and addressed recommendations contained within the Shergold and Weir *Building Confidence* Report.

The amendments are outlined below.

Early Childhood Centres
Amendment 1 provides for enhanced fire safety requirements for Early Childhood Centres not located on the ground level of buildings to better manage the risk to vulnerable occupants.

Process for Performance Solutions
The new provisions set out the process to be followed when a Performance Solution is proposed to satisfy a Performance Requirement. This change aims to improve the development and documentation of Performance Solutions. This amendment has a 12 month transition period to allow for the promotion, education and development of supporting material.

ACP labelling
Makes the labelling of Aluminium Composite Panels (ACPs) a requirement of the NCC and refers to a new technical Standard from Standards Australia: SA TS 5344.

Timber Cladding Concession
This is intended to clarify the use of the concessions for Class 2 and 3 buildings constructed with non-combustible materials, and that combustible cladding is not permitted under this concession.

Along with the above amendments there will be some typographical corrections and error corrections. You can find a complete list on the ABCB website at **www.abcb.gov.au**

Transition Periods

The transition period for Energy Efficiency in NCC Volumes 1 and 2 ended on 30 April 2020. **From 1 May 2020 the NCC 2019 must be used**. A reminder to all practitioners that Section 11 of the *Building Act 2016* (the Act) states that all work must comply with the Act and all applicable provisions of the NCC. This section also provides that a new provision of the NCC is not an applicable provision in certain circumstances if certification or design work has been completed or substantially progressed prior to the date of adoption. See section 11(5) of the Act for details.

1 May 2020 was also the adoption date for the new Fire Safety Verification Method (FSVM) included at Schedule 7 in NCC 2019. There is a webinar on the FSVM available on the ABCB website at **www.abcb.gov.au**

NCC National Seminars 2020 - cancelled

This year the ABCB's NCC Seminars were unable to occur, due to issues associated with COVID-19. The ABCB has now provided a series of 12 videos that cover the key topics of the Seminar. The videos can be accessed for free on the ABCB YouTube channel (go to **www.youtube.com** and search 'abcb'), or from the ABCB Resource Library at **www.abcb.gov.au**.

The ABCB's NCC Seminars are proposed to proceed in 2021, however this will depend on developments that may occur due to COVID-19. The situation will be monitored and more information released on future seminars when there is more certainty around COVID-19 restrictions.

HIA Building Women aims to lift female participation in industry

It won't be news to anyone that building and construction is a male-dominated industry. Out of all the practitioner licences issued in Tasmania only 1.92 per cent are for females. Despite this, it remains an industry in which women have achieved great success, at all levels, overcoming many challenges along the way and often without recognition or visibility.

For this fundamental reason, the Housing Industry Association (HIA) introduced a new program - **HIA Building Women**. The focus of the initiative is to support women in the residential building industry by:

- creating opportunities to enter the industry
- recognising the needs of women already working in the industry, and
- acknowledging the contribution of women to the industry.

Recently the program has been further refined to incorporate the following goals:

Visibility

There are women holding many and varied jobs in the industry. By increasing visibility of women's roles and highlighting the important work women do, **HIA Building Women** can assist in breaking down barriers to increased participation by women in the industry.

Education

Education is a vital part of developing a career in any industry. **HIA Building Women** aims to help women enter, develop and further their careers in building by providing information and support on trade training, business management and the requirements for home building across Australia.

Role models

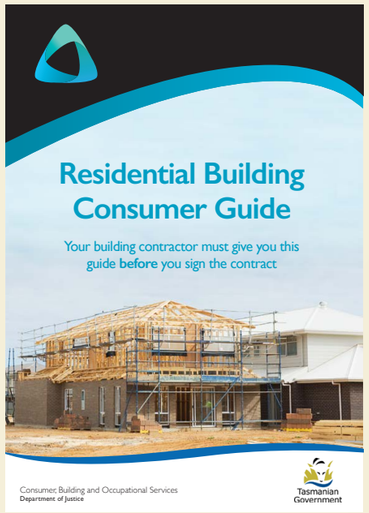
HIA Building Women provides a platform for showcasing women in the building industry, from multiple and diverse backgrounds. Role models and mentors sharing their experiences can play a significant role in drawing more women to the industry and in illustrating pathways for career development.

Networking

By getting together at **HIA Building Women** events female industry participants can support each other, share solutions to common problems and light the path to help with growth.

In keeping with these goals, late last year HIA held a Building Women's Luncheon in Launceston which was attended by over 100 guests. It was an overwhelming success with Ministers Elise Archer MP and Sarah Courtney MP as well as over 100 guests, coming together to acknowledge the positive contribution women make to the industry. Multi-skilled communicator Robyn Moore, and HIA National Board Director Debbie Johnson, entertained and enriched the audience with their presentations, advocating the need to learn from each other and to work together to raise the profile of women in the residential building industry.

In the wake of the success of this event, HIA will be scheduling more of these luncheons in the future. In the interim HIA will also continue to profile successful Building Women members in its publications while offering other networking and mentoring opportunities. However, the real challenge is still to lift the rate of female participation in the industry and it would be nice to think that initiatives such as **HIA's Building Women** play their part in achieving this vital outcome.



Residential Building Consumer Guide

For more copies of the Guide send an email to **cbos.info@justice.tas.gov.au** or ring 1300 65 44 99

New determinations for building in **hazardous areas**

Earlier this year the Director of Building Control authorised a set of Determinations containing specific building requirements relating to relevant hazards. The new Hazardous Area Determinations aim to improve building safety in Tasmania.

Hazardous areas are defined as land which is prone or subject to:

- bushfire, landslip or flooding
- slope instability
- erosion or coastal inundation (flooding)
- sea level rises or storm surges

The Determinations set out the:

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

When do the new Determinations apply?

The new Determinations:

- take effect on the commencement date listed on the first page of each document, and
- apply in municipal areas where the Local Council has adopted the Tasmanian Planning Scheme.

Tasmanian Planning Scheme

The Tasmanian Planning Scheme is a single state-wide scheme providing a set of consistent planning rules to ensure planning in Tasmania will be **simpler, fairer and more efficient**. The scheme contains planning hazard codes and maps defining land which is subject to various hazards.

If a Local Council has not adopted the new Tasmanian Planning Scheme, the requirements for hazardous areas as contained in the *Building Act 2000, Building Regulations 2014* and transitional Determinations continue to apply.

The Determinations have had stakeholder consultation. Feedback has been incorporated into the Determinations. The Determinations are now available on the CBOS website at **www.cbos.tas.gov.au** and search *'hazard determination'*.

Extending Building, Plumbing, Demolition and Substantial **Compliance Permits due to COVID-19**

The Minister for Building and Construction has listened to the concerns of both industry and consumers. As a result of this feedback and consultation, all Building, Plumbing, Demolition and Substantial Compliance permits valid and in force on 18 June 2020 have been extended for an additional 6 months.

This extension also applies to Building Permits issued under former legislation which, under the *Building Act 2016*, were due to expire on 1 July 2020. The new expiry date for permits issued under former legislation is **1 January 2021**.

For further information on the changes please see the CBOS website: **www.cbos.tas.gov.au**

Consumer, Building and Occupational Services **audit program**

As part of Consumer, Building and Occupational Services' (CBOS) ongoing audit program, audits are currently underway within the building and construction industry, including a focus on **building surveyors** as well as builders with **roof plumbing licence endorsements**.

Building Surveyor audit update

Consistent with the Building Confidence Report recommendations, the Director of Building Control commenced an audit into the performance of licensed building surveyors in Tasmania in 2019.

This audit is specifically focused on certain elements of building surveying including the:

- assessment of performance solutions, to ensure it meets the requirements of the National Construction Code
- inspection of building work during construction
- compliance elements of the role of the building surveyor, and
- administrative duties of the building surveyor.

Building surveyors have provided specific details for all building work certified in a three month period from 1 April to 30 July 2019.

From these projects, CBOS selected a representative sample for audit. Building surveyors have provided detailed information on the projects selected.

The audit will consist of an administrative review on the selected projects, with technical aspects to be reviewed by a third party consultant. CBOS has engaged an independent consultant for the purpose of the technical aspects.

Restrictive roof drainage **audit update**

As of June 2018, builders were able to apply to have an endorsement on their licence to undertake restricted roof drainage work. As part of this endorsement, an audit is being conducted to ensure:

- compliance with the legislation, and
- safety for property owners.

Main audit objectives

- Ensure public and property owner safety
- Promote compliance with the:
  - *Occupational Licensing Act 2005*
  - National Construction Code (Volume 3 - Plumbing Code of Australia 2019), and
  - Occupational Licensing (Restricted Roof Drainage Endorsement) Determination – June 2018
- Identify areas where training and education is required
- Identify where the legislative framework can be strengthened

CBOS engaged an external consultant with specialist expertise to undertake property inspections.

CBOS required all building services providers who hold a restricted roof drainage endorsement as of September 2019 to provide information regarding the properties where they have undertaken roof drainage work. A total of 64 builders were contacted and provided information.

From this information CBOS contacted owners to invite them to take part in the audit process. A total of 26 owners agreed to be part of the audit program.

CBOS has worked with Gandy and Roberts Consulting Engineers to form an inspection process that includes using an aerial drone to cause minimal risk or disturbance.

All inspections for the audit have now been completed and CBOS is finalising an audit report.

Door-to-door solar panel installers

CBOS has received reports of an increase in the number of solar panel installations being sold door-to-door around Tasmania.

For some installations the Electrical Safety Inspection Service, TechSafe Australia (TechSafe) has not received a Certificate of Electrical Compliance (CEC) as required.

Some of the people performing the electrical work for these installations may not hold a Tasmanian electrical contractor or practitioner licence.

CBOS is investigating these installations and the people involved. This investigation is ongoing and is a high priority for our Electricity Standards and Safety team.

As part of the investigations, TechSafe has inspected known installations. Many of the installations inspected have found to be defective.

Where possible, the responsible installers will be held accountable for any non-compliance under the *Occupational Licensing Act 2005* and the *Occupational Licensing (Electrical Work) Regulations 2018*.

What if a home owner contacts me to fix the work?

Some home owners have told CBOS that they would prefer to pay another electrical contractor to fix the defects with their solar installation, rather than wait until the investigation into the responsible installer is complete. This is the home owner's decision.

A home owner may contact you as a licensed electrician about their solar installation and ask you to check the installation and fix any defects.

If CBOS knows about and has inspected the installation, the home owner may:

- have a copy of the TechSafe inspection report listing identified defects, or
- be able to request a copy from CBOS.

Submitting a CEC form

If you rectify electrical work defects for a home owner, you need to submit a CEC to TechSafe. Your CEC should clearly state the work you have performed.

By signing the CEC, as an electrical practitioner you will need to be satisfied:

- the system fully complies with the *Occupational Licensing Act 2005* and applicable Australian Standards
- the test results are accurate, and
- the work is safe and fit for purpose.

A nominated manager who signs a CEC is accepting that the contractor is responsible for the work and accepts its obligations under the *Occupational Licensing Act 2005*.

> Read the CEC form carefully, and ensure you are satisfied that the system is compliant **before** you energise it and sign a CEC.

If the correct metering is not in place for the system, you will also need to submit an Electrical Works Request to TasNetworks.

Can the home owner get their money back?

If the home owner has concerns about money paid to a solar retailer or installer for a non-compliant installation, they can contact CBOS for advice. CBOS cannot advocate on behalf of owners, so owners may also need to get legal advice.

There is information for consumers about their rights regarding door-to-door sales of solar panels on the CBOS website **www.cbos.tas.gov.au** Search using *"solar panels"*.

What if a solar company contacts me?

Some solar companies are contacting Tasmanian electrical contractors and asking them to sign CEC forms for solar installations which have been completed by others, sometimes by unlicensed installers.

Tasmanian electricians should be very careful in dealing with these companies. There have been reports of:

- licence details being used without a contractor's consent, and
- non-payment for work as agreed.

There have also been reports of some companies blaming electrical contractors for large numbers of solar installations, even if the contractor was only involved in one or two.

> **Be aware:** If you sign a CEC form for a solar installation, you are accepting personal responsibility for the electrical work, and liability for any future defects identified under the *Occupational Licensing Act 2005*. This is the case even if you did not do the work yourself.

Where can I send information?

Send information about non-compliant solar installations in Tasmania to **CBOS.Info@justice.tas.gov.au**, attention Electricity Standards and Safety.

The information you provide may help to hold people responsible for their work, and maintain a fair playing field for the electrical industry.

Electrical Equipment Safety System (EESS) **Latest News**

The Electrical Equipment Safety System provides a consistent set of national requirements which prescribe the minimum standards of safety for electrical equipment before sale. This article discusses what is included, what is not, and your responsibility when working in the electrical industry.

The system provides a distinct advantage to electricians, consumers and retailers by adopting a single nationally recognised set of equipment safety rules. All equipment must comply with the relevant Australian Standard.

What equipment does EESS cover?

Equipment covered by the EESS is called **in-scope electrical equipment**. The EESS aims to increase consumer safety through regulating household electrical equipment. The law defines the term in-scope 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.

It is immaterial whether the equipment is designed or marketed for commercial or industrial purposes as well as for household use.

The broad definition is intended to include all household electrical equipment, while excluding extra low voltage or battery operated equipment.

The EESS is fast becoming the national system that was originally planned. To date four states have signed the Intergovernmental agreement to adopt the system with Queensland and Victoria legislating the requirements, which are formally recognised by Tasmania. The draft Electricity Safety Bill was released for public consultation earlier this year. The Bill includes the Tasmanian legislative intentions.

EESS overview

The EESS has the following features in relation to **in-scope electrical equipment**:

- It is intended to create nationally consistent electrical equipment safety legislation throughout Australia that will increase consumer safety.
- Imposes a classification of household, personal and similar electrical equipment into three levels of risk (Level 3, Level 2 and Level 1) with different pre-sale requirements for each level.
- Requires registration of **Responsible Suppliers** who are local manufacturers or importers of in-scope electrical equipment. The Responsible Supplier:
  - must be a legal entity in Australia, and
  - is responsible for ensuring the safety of the electrical equipment sold onto the Australian market.
- Supports a publicly accessible database where Responsible Suppliers must register before equipment is sold. This allows higher risk equipment to be easily traced to its supplier and is intended to act as a gateway to the legal supply of electrical equipment in Australia.
- Uses the Regulatory Compliance Mark (RCM) as a single trademark for easy recognition of compliance with the EESS. Use of the RCM also reduces costs to industry.
- Outlines documented requirements for evidence of conformity.

The EESS is a self-funding, user-pays system where registration fees fund improved compliance, surveillance and post-market enforcement activities.

An important function behind the system is check testing of products, to ensure products for sale meet the required Standard. Check testing involves purchasing a product from a retailer, and sending it to an independent test laboratory to perform safety tests. Check testing has found a number of failures, which required follow up action.

Benefit to electricians

Electricians are responsible that equipment installed into an electrical installation is safe and does not pose a heightened risk of danger if installed and used correctly. Importantly where an article has the Regulatory Compliance Mark, the electrician is entitled to presume that the equipment:

- is compliant, and
- may be installed without further investigation.

When there isn't an RCM, the electrician needs to ensure the article complies with the relevant Australian Standard. This can be difficult to establish. Certificates provided may be to an international rather than an Australian Standard which can be confusing and time consuming. In the case of imported industrial equipment evidence of compliance to the Australian Standard should be requested to ensure that this equipment is safe.

Figure 1 Regulatory Compliance Mark (RCM)

Solar Panel Installations – electrical work notification requirements

CBOS is aware of an increasing number of solar panel installations around Tasmania where the Electrical Safety Inspection Service, TechSafe Australia (TechSafe) has not been notified of the electrical work, as is required.

Investigations into this have led to compliance action by CBOS against some installers, including significant infringement notices and licence implications.

Don't let this happen to you.

What are the requirements?

Tasmania has specific electrical work notification requirements that are detailed in Legislation.

Notifiable electrical work is listed in the *Occupational Licensing (Classification of Electrical Work) Code of Practice 2018*. This document is available on the CBOS website at **www.cbos.tas.gov.au** Search using *'classification electrical work'*.

Among other work, the Code of Practice includes:

- new generation systems
- relocation of existing generation systems, and
- additions or replacements of existing generation systems where this increases the system capacity.

Generation systems includes solar installations.

A person responsible for notifiable electrical work must give notification of the work within three days after the work has been energised. This is required under regulation 15 of the *Occupational Licensing (Electrical Work) Regulations 2018* (the Regulations).

To notify, submit a Certificate of Electrical Compliance (CEC) to TechSafe.

In some cases, electricians have submitted CEC forms to the Clean Energy Regulator in order to claim the associated monetary credits for solar installations, but have not submitted forms to TechSafe. **This does not satisfy the requirements of the Tasmanian Regulations**. It may also indicate that the electrician is deliberately not notifying electrical work.

Why is notification important?

Notification of electrical work enables TechSafe to inspect work to determine whether it complies with the mandatory minimum standards in the Code of Practice. This ensures that electrical work in Tasmania is safe and compliant. It protects the community, the electrical industry's reputation, and ensures a fair playing field for everyone.

Inspecting solar installations is particularly important, as the technical requirements are constantly evolving. You may not realise that an aspect of your work is non-compliant. When your work is inspected, any issues can be identified early, before you repeat them and before there is an incident which could be costly to your business.

If defects are identified with your work, you will receive a Notice of Defective Electrical Work (NDEW) from TechSafe. You must fix the defects in 21 days and pay a fee. If you comply with the first NDEW, the issue is resolved. You can then move forward being confident that there are no issues with the installation which may cause problems later on.

In addition, when you submit a CEC form, you are creating and lodging an official record of the electrical work you have performed at a property. If you don't do this, another electrician may perform defective electrical work at the property later, and this work may look like your responsibility. If there is an incident such as an electrocution, you could be held liable. **Do not take the risk.**

What may happen if I do not comply?

CBOS uses data matching and other investigation tools to identify failure to notify. Given the importance of notification to electrical safety in Tasmania, there are significant penalties for not complying.

Under regulation 15 of the Regulations, failure to submit a CEC for notifiable electrical work in the required timeframe can attract an infringement notice of 2.5 penalty units for a body corporate or 1.25 penalty units for a natural person. This equates to $420.00 and $210.00 in the 2019/2020 financial year, **per breach.**

Over recent months, CBOS has issued infringements to various electrical contractors for failure to notify breaches across Tasmania.

Widespread failure to notify may also impact your electrical contractors licence. Depending on the extent of the non-compliance, and your efforts to address this, CBOS may place conditions on your licence or refuse your application to renew your licence.

In determining appropriate compliance action, CBOS looks favourably upon efforts to voluntarily submit CECs to address past non-compliance.

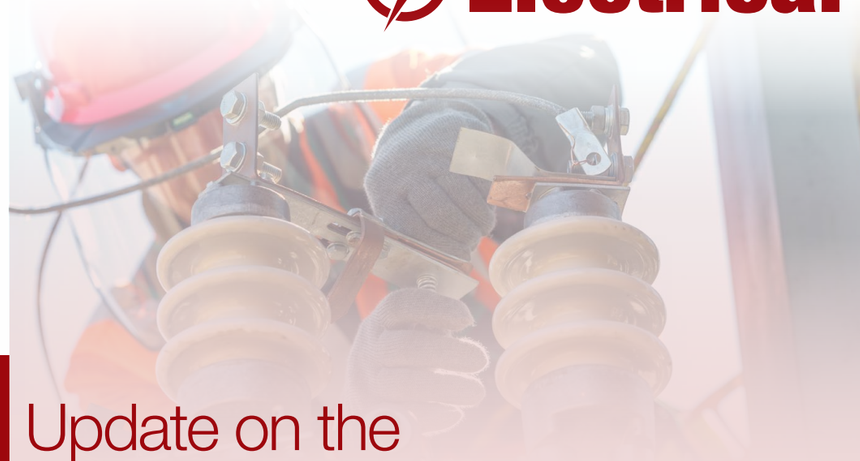
Where can I get CEC forms?

Books of CEC forms are available from:

- Service Tasmania shops - visit **www.service.tas.gov.au**
- TechSafe Australia offices - visit **www.techsafe.com.au**

There is **no cost** for CEC books, and **no fee** for submitting CEC forms. The forms are one page only, and take very little time to fill out.

You can submit CEC forms to TechSafe by email, post or in person. Details on how to submit are included in the CEC books.



Update on the Electricity Safety Bill

A new Electricity Safety Bill 2020 (the Bill) was introduced to Parliament in September.

The key objectives of the Bill are to:

- provide contemporary electricity safety legislation in a single Act
- update existing electricity safety requirements to meet current electricity industry practice and requirements
- provide for the ready adoption and control of electricity safety issues associated with new and emerging technologies
- mandate the national Electrical Equipment Safety System requirements in Tasmania.

The Bill combines into a single Act, the electricity safety requirements from:

- the *Electricity Supply Industry Act 1995,* and
- the *Electricity Industry Safety and Administration Act 1997*.

The Bill is in addition to and will not diminish, the legislative requirements of the *Occupational Licensing Act 2005* and the *Workplace Health and Safety Act 2012*.

CBOS thanks all stakeholders for their time and contributions to the process.

Guidance from TasNetworks

TasNetworks has consulted with electrical contractors and the building industry within Tasmania, and developed a series of brochures in response to feedback from these groups.

The brochures are designed to help builders and customers understand the connection process and provide a step-by-step guide on how to have your power connected without unnecessary delay.

Brochures are targeted toward each party involved in the process and include:

- **Electrical contractors** - How to get power connected
- **Builders** - How to get power connected
- **Consumers** - How to get power connected

To get a copy of any of the brochures visit **www.tasnetworks.com.au**.

TasNetworks asks that you let your builder and customer know these brochures are available. Direct them to the website or contact TasNetworks and get a copy.

Messages from industry

Supporting you through COVID-19

Is COVID-19 impacting your workplace? How do you manage building renovations and repairs while COVID-19 restrictions are in place? Are you experiencing challenges managing your business? HIA has produced a number of resources to help support industry through the COVID-19 pandemic. To access this information visit **hia.com.au/covid-19**

Master Builders Tasmania has brought forward the launch of their new website with a webpage focused on the coronavirus. Designed to help consolidate the myriad of information and to keep their members informed and to support them through the COVID–19 pandemic. Topics covered include keeping construction sites safe, contracts and project delays, stimulus packages, training and CPD. To access this one stop shop visit **www.mbatas.org.au**

Master Plumbers Tasmania (MPAT) and the National Electrical and Communications Association (NECA) are working hard to support our members and our industries at this time of change.

We have a range of information and tailored solutions to assist members with their business continuity through COVID-19 and beyond.

MPAT and NECA can help with your questions relating to WH&S, legal, IR and CPD. We can also help with your PPE, handwash and hand sanitiser needs.

If you are a plumber, electrician or gasfitter and need help with your business please call 6272 2199 or email **contact@mpatas.com.au**

Be COVID safe with a COVID Safety Plan

A COVID Safety Plan is a great way for your business to document your COVID control measures and show how you are keeping your customers, workers and the community safe.

WorkSafe Tasmania has developed templates to help you prepare your COVID Safety Plans. You can find them at **www.worksafe.tas.gov.au/coronavirus** under the framework link. Keep your completed plan at your workplace: you do not need to submit it to WorkSafe.

Your plan should be a 'living document' that you review whenever there are changes to Public Health advice or directions, or changes to your operating environment. And like any other policy, plan or procedure you have to manage safety in your workplace, set regular dates to make sure the control measures contained in your COVID Safety plan continue to do what they are supposed to do: keep you, your workers and your customers safe. For more information visit **www.worksafe.tas.gov.au**

Continuing Professional Development

All licensed practitioners in Tasmania are required to complete CPD in order to renew their practitioner licence. You must also keep records of your CPD.

Recently CBOS has received some enquiries from Restricted Electrical Work Licence (REWL) holders regarding CPD requirements. All REWL licence holders are required to undertake CPD. For those that hold the REWL in addition to another practitioner licence, this CPD counts toward your overall CPD requirements.

The following are categories of skills maintenance and development activities which can be used to accumulate CPD points:

- Technical courses
- Technical skills and knowledge
- Business management and control
- Health and safety issues and
- Personal Development.

For further information on CPD events and registration details go to the CPD calendar at **www.cbos.tas.gov.au** and search 'cpd events calendar', *'ongoing training resources'* or *'additional training resources'*.

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

Please contact **CBOS.info@justice.tas.gov.au** if you require any information or assistance with your CPD requirements.

COVID-19 and CPD Requirements

Advice on the impact on COVID-19 on the delivery of Continuing Professional Development (CPD) activities for the purposes of the *Occupational Licensing Act 2005* is in line with public health advice. A number of CPD providers have taken steps to cancel or postpone face-to-face CPD activities over the past few months.

Please ensure you check the CBOS CPD Calendar as CPD providers have transferred the majority of face-to-face training to online webinar events ensuring the ongoing delivery of relevant training is available to all licensed practitioners.

CBOS supports the decision by CPD providers to take appropriate steps to minimise risks to participants and the community by avoiding non-essential public gatherings. However due to some restrictions being eased, some face-to-face events are now becoming available. CBOS has taken steps to ensure that occupational licence holders are not disadvantaged by the lack of availability of relevant face-to-face industry-led training and events.

Occupational licence holders who have not been able to complete their CPD requirements due to COVID-19 restrictions will be able to renew their licence on the condition that any outstanding requirements are met within the next CPD period. These arrangements will be monitored to ensure they remain appropriate having regard to the extent of disruption from COVID-19.

If you would like further information regarding these changes, please contact

CBOS.info@justice.tas.gov.au

Courses available

- Using the NCC
- Building Approvals in Tasmania
- Safe Work Methods (SWMS)
- Asbestos Awareness
- Using the NCC 2019
- Dust Diseases
- Basic Contract Law
- Superannuation
- Employment Law
- NCC: A Performance-based Code 2019
- Mental Health in the Workplace
- Dial Before You Dig
- Insurance

Introducing **Samuel Spencer**

Gas Standards and Safety (GSS) is pleased to introduce Samuel Spencer who has recently joined Consumer, Building and Occupational Services as a statewide Inspector for Standard Gas Installations. Samuel is based at our Launceston office.

Samuel joined us from Degree C, where he worked as a Leading Hand in the Gas/HVAC industry. He brings with him 10 years of experience, ranging from large complex construction sites, break down repairs on type A appliances and standard domestic installations.

Samuel is passionate about his role and is intent on having a positive impact on the ever growing and evolving Tasmanian gas industry. He is looking forward to the new challenge and is eager to broaden his own knowledge of the industry, whilst working with gas-fitters to maintain the high standard of safety.

Gas appliance **recalls**

Coast RV Pty Ltd — Suburban Recreational Vehicle Water Heaters Model SW6DEA, SW6DA, SW4DEA, SW4DA, SW4DECA, SW6DECA and SW6PA

Suburban Recreational Vehicle Water Heaters fitted to Australian made caravans and motorhomes	• SW6DEA • SW6DA • SW4DEA • SW4DA • SW4DECA • SW6DECA • SW6PA	Serial numbers between 181315552 and 193002648 (some serial numbers may end with a 'D'), 8183311827 and 8199201139

If the unit is powered by gas and is operated in an enclosed area – such as a caravan or motorhome - carbon monoxide may spill into the vehicle and poisoning could occur resulting in serious illness, injury or death.

Tell consumers to immediately check if their appliance is affected and if so, stop using the appliance powered by gas.

Consumers may continue to use the appliance if powered by electricity only

Consumers with affected appliances should contact Coast RV's dedicated recall hotline on 02 9645 7685 to register their details. Arrangements will be made to have the appliance inspected and they will be advised of the remedial process.

When the gas appliance has been inspected and any required remediation undertaken, repaired units will be labelled. If gas-fitters see a label next to the model/serial number that says **CTC001** the inspection has already been completed and the appliance can continue to be used. If the label is not present, and the appliance falls under this recall, consumers must discontinue using the hot water service on gas and seek inspection and repair.

Jumbuck Stardom 4 burner BBQ – Certification number 8169

The BBQ has been fitted with a hose assembly containing a faulty Chat model 003 regulator. A manufacturing fault has resulted in the final section of the brass POL inlet thread to be not fully formed. This prevents the regulator from sealing with the LPG cylinder valve.

The regulator o-ring cannot contact the sealing face of the LPG cylinder valve which results in a very loose regulator connection. If the loose regulator is not observed by the consumer and the LPG cylinder valve is opened, a steady gas leak is the result.

The Jumbuck Stardom 4 BBQ was solely available through Bunnings stores. Tell consumers to stop using the appliance immediately and contact the store where it was purchased.

More information about product recalls can be found at **www.productsafety.gov.au**. Search using the term 'gas'

Australian upstream **gas infrastructure** committee

Having semi-isolated gas transmission and distribution infrastructure into and throughout Tasmania makes us quite unique, and while we have relatively new infrastructure in Tasmania, it's not getting any younger and we strive to continue learning from others, as well as share what Gas Standards and Safety do well in the state.

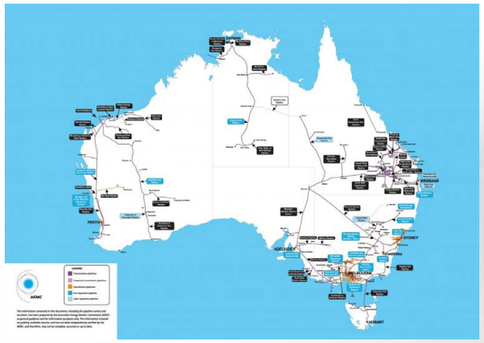
Gas Standards and Safety have been a long time believer that there is a need for an independent group in Australia for upstream gas industry regulatory bodies to meet. This group now looks as though it will come to fruition; with GSS fortunate enough to be included in the forum, which will begin to drive the implementation of an upstream technical regulators group in Australia. Unlike the Gas Technical Regulators Committee (GTRC), which some people may have heard about, this new group will discuss and review the activities associated with the upstream gas industry only.

In Tasmania, the upstream infrastructure and operations are legislated under the *Gas Act 2000, Gas Pipelines Act 2000* and fall within requirements of Australian Standards such as the AS2885 suite or AS4645 series.

Operating and maintaining gas assets to the highest standard is critical to ensuring public and asset safety, longevity, and essentially a reliable gas supply in Tasmania.

Gas Standard and Safety holds seats on both the AS2885 (ME-038) and AS4645 (ME-008) Standards committees. This alternative opportunity for Gas Standards and Safety to be included in a group with people who perform the very same tasks we do, will provide priceless opportunities to learn and evolve within our normal monitoring and regulation of the critical safety, integrity and reliability of transmission and distribution infrastructure operators and services in Tasmania.

This group will allow GSS to continue providing a high level of service to a vast number of Tasmanians who would tend to be affected by any considerable change or potential issues in the upstream gas industry. This group will also ensure we remain at the forefront of industry knowledge, technology and advancements. In particular, where we continue to witness significant investigation and interest in alternative fuels Australia wide.



Australian Transmission pipelines

Water bath heaters; preheat Natural Gas before it enters the distribution offtake system regulators.

Gas Pressure **Control** and Over Pressure **Protection**

Do I really understand Over-Pressure Protection?

Gas Standards and Safety (GSS) occasionally find gas-fitters who are unsure about applying Over-Pressure Protection (OPP) adequately to a gas installation.

Below are some common questions relating to OPP covering the correct application and fitment of various types of gas regulators including:

- consumer piping gas pressure regulators
- gas appliance regulators
- cylinder regulators and
- 1st/2nd stage LP Gas regulators.

What is Over-Pressure Protection (OPP)?

Over-Pressure Protection is defined as "A device or system for preventing the pressure in gas pipework or in gas appliances from exceeding a predetermined value." (AS/NZS 5601.1: 2013 *Gas Installations - General installations*).

Where is OPP required?

OPP shall be provided where the operating pressure at the inlet to a gas pressure regulator exceeds the Maximum Over-Pressure (MOP) of piping and components supplied by the regulator up to and including the next downstream regulator, 7kPa for Natural Gas (NG) and 14kPa for LP Gas. For more details see AS/NZS 5601.1: 2013, clause 5.11.2.

The over-pressure protection device shall ensure that piping and components supplied by the regulator up to and including the next downstream regulator will not be subjected to a pressure greater than the MOP for that piping and those components.

What is Maximum Over-Pressure (MOP)?

The Maximum Over-Pressure (MOP) is the maximum pressure at which the installation or any particular portion of the installation, or individual component, including appliances, remains safe.

For each individual component the MOP is the MOP of the component if known or 1.5 times the rated working pressure of the component.

The MOP for any portion of an installation is the lowest MOP of the components comprising that portion of the installation or the pressure to which that portion of the installation has been tested, if the pressures mentioned above are not known.

What must I consider when selecting a Gas Regulator?

The certifying gas-fitter will decide which OPP method will be most appropriate. Each method has advantages and disadvantages. You need to consider the customer's operational requirements and the cost of the system.

Before selecting a gas pressure regulator, the installer must establish the expected gas consumption and the most appropriate means of OPP.

What to consider when deciding what regulator is fit for your purposes

- Over Pressure Shut Off (OPSO) regulators need to be manually reset
- Production problems may occur if the gas supply is shut-off
- The process of resetting may incur costs (for example call-out fees)
- High temperatures affecting consumer piping can cause an OPSO to trip
- Gas emitted from a relief device may not be readily detected depending on the location of the vent termination point
- Venting a relief device may be impractical – consider the length and route
- An over-pressure situation may not be apparent to the customer if gas is being vented to atmosphere (this may also result in high gas consumption complaints)
- LPG is heavier than air and care must be taken to locate the vent termination point safely.

What are my options for Over-Pressure Protection using LP Gas?

Domestic and light commercial installations are typically catered for by an integral two-stage regulator with built-in overpressure protection, (internal relief) designed to limit downstream pressure to a maximum of 14kPa under fault conditions.

Large commercial and industrial installations may require a two-stage system to be selected. It is important to use compatible regulators.

- The optimum system is to select a first-stage regulator which has internal OPP. This regulator should be set to provide an outlet pressure of 70kPa.
- The second-stage regulator (with integral relief) will then provide an outlet pressure of 3kPa or higher if required. Under failure conditions of either regulator, the downstream pressure will not exceed 14kPa under fault conditions.

Have I adequately protected the Commercial Catering Gas Equipment from Over-pressure?

OPP is found in AS/NZS 5601.1:2013 however the mandatory fitment of a Gas Appliances Regulator to commercial catering equipment is not covered in the Standard.

There is some perception amongst gas-fitters that gas appliance regulators are only required to be fitted to appliances only connected to NG.

Australian Standard, AS4563: 2004 - *Commercial catering gas equipment* is the Standard that commercial catering gas equipment is certified to, and requires all appliances be fitted with a gas appliance regulator. Not fitting the gas appliance regulator to commercial cooking equipment when required takes the appliance outside its certified design.

- **2.2.1 – Provision of pressure regulators**

  A certified gas regulator shall be provided with each appliance intended for operation on natural gas or LPG.

  If the appliance has a control valve fitted that incorporates a gas pressure regulator as part of the appliance (i.e. deep fryer) a gas appliance regulator may not be required if all OPP requirements have been met upstream.

Gas

Caravans and Boats Standard - **New 2020 edition**

AS/NZS 5601.2:2020 Gas installations Part 2: LP Gas installations in caravans and boats for non-propulsive purposes

Gas Standards and Safety encourages all gas-fitters to familiarise themselves with the new version of a Standard relating to caravans and boats. The new edition of AS/NZS 5601.2:2020 – *LP Gas installations in caravans and boats for non-propulsive purposes* was published on **1 October 2020** and supersedes AS/NZS 5601.2:2013.

In Tasmania, the Director of Gas Safety requires compliance to prescribed Standards to begin from the publication date.

Changes to the new Standard include but are not limited to:

- New definition for a **domestic caravan**
- A definition for **controlled area** for LPG cylinders mounted on the drawbar of domestic caravans
- A new definition for an **ignition source**, which excludes electrical equipment that is **non-sparking by nature** or **encapsulated**
- New requirement for orientation of cylinders on caravan drawbars to allow for unobstructed relief of cylinder pressure relief
- New figure 3.1.8(A) demonstrating the **controlled area** on caravan drawbars for ignition sources. Allows for the installation of electrical equipment that is **non-sparking by nature** as defined in the Standard and will allow for electrical equipment required for vehicle operation safety, but will not allow any other electrical equipment.
- New figure 3.1.8(D) for clearances on caravan drawbars from cylinders to openings
- New figure 3.3.1(B) demonstrating venting through a drain outlet
- Prohibition on the use of press-fit end connectors
- New clearance from cookers to rangehoods to align with international standard for rangehoods
- New pipe sizing tables which allow for more flow capacity.

To get a copy of the new Standard visit **www.saiglobal.com** or ring 131 242.

Please read the instructions...

Everyone knows they should do it. Everyone knows they are available somewhere. And we are quite confident that everyone knows there will be complications or consequences if instructions are not read and followed.

No, we are not talking about your flat pack furniture or your online special deal toys.

We are talking about the unique instructions provided by each infrastructure asset owner and operator in Tasmania when we engage with the free Dial Before You Dig (DBYD) services for ANY excavation activities. These instructions are made available to us, free of charge to all involved, to ensure safety and to help maintain the integrity of all buried assets in Tasmania.

Unfortunately, people continue to brush these instructions aside. In some cases, people might think:

- they know best on the day
- the task is simple
- they are in a hurry to get the job done so rush in without consideration
- they do not need to read or follow specific instructions, as they have worked in the area before or have performed the task before
- they are on private property and they will not affect other utilities.

Wrong!

In spite of infringement, penalties or prosecutions, it is becoming clearer with every case GSS investigates, that people who perform excavation work near live gas infrastructure without **reading and following instructions**, have simply not considered:

- the safety of their work mates, their employees, their employer or their families
- the safety of the public
- the safety of emergency services or personnel who may have to make safe, repair or clean up after them.

Work in the vicinity may also have an indirect or long-term effects on other company assets.

These are all things to consider when using:

- explosives
- compaction equipment
- deep trenching
- drainage redirection or modifications
- maintenance and repairs to other utilities in the area.

The list goes on.

Not following instructions may also have implications when making an insurance claim if something goes wrong. Can you afford to pay for repairs to damaged infrastructure?

When you think how simple it is to read the instructions and make a phone call, what excuse do you have really?

We, as in everyone, need to read and make sure the instructions of the DBYD documentation are understood **BEFORE** starting any excavation work. If you are unsure, make the call to the infrastructure owner to find out what can or needs to be done to continue safely. Ideally do this as part of any PLANNING stage.

Asset owners and operators are all different, with different assets, plans, drawings and subsequently different requirements when working near their assets. In fact some provide their own specialised services. For instance, natural gas infrastructure operators in Tasmania will, in most cases, provide a free location and supervision service if needed to help ensure businesses work safely near gas infrastructure. All this takes is a phone call to the right company after requesting your DBYD plans for each location.

To find out more about what you can do, contact your local authorities or infrastructure operator. Contact details for the asset owners and operators can be found in your DBYD documentation.

PLEASE NOTE: DBYD can prepare training and awareness packages for those who wish to better use their service. Please contact directly for further information.

Hydrogen Update

In early March 2020, the Tasmanian Government released the Tasmanian Renewable Hydrogen Action Plan showing it is committed to developing a Tasmanian renewable hydrogen industry. The Plan establishes a comprehensive $50 million over 10 years package of measures to support the development of a Tasmanian hydrogen industry.

There are four key pillars which will underpin the Tasmanian hydrogen vision:

- **exploring** the opportunities for using locally produced renewable hydrogen in Tasmania and for export
- **providing** financial support for renewable hydrogen projects for export and domestic use, and continue investment attraction activities including with international trade partners
- **ensuring** a robust and supportive regulatory framework and assessing supporting infrastructure
- **building** community and industry awareness, developing skills, and supporting research and education.

Read the full report at **www.stategrowth.tas.gov.au**

Standards Australia has also been busy adopting the ISO Standards for using hydrogen. Some of the Standards that have been adopted and have been released are:

- AS 16110:2020 *Hydrogen generators using fuel processing technology*
- AS 19880.3:2020 *Gaseous hydrogen – Fueling stations – Part 3 Valves*
- AS 22734:2020 *Hydrogen generators using water electrolysis – Industrial, commercial and residential applications*
- AS ISO 14687:2020 *Hydrogen fuel quality – Product specification*
- AS ISO 16111:2020 *Transport gas storage devices – Hydrogen absorbed in reversible metal hydride*
- AS ISO 19881:2020 *Gaseous hydrogen — Land vehicle fuel containers*

There are over 100 Standards requiring review or amendment to support introducing hydrogen as an alternative fuel source. This work includes the mammoth task of amending current Standards to include safety provisions for hydrogen; AS 5601 *Gas installations* and AS 3814 *Industrial and commercial gas-fired appliances* to name just a couple.

Testing is still on-going in Australia in the area of injecting hydrogen within existing gas infrastructure and as a fuel for conventional gas appliance. Research has commenced using an injection of 10% hydrogen into natural gas networks, making sure there are no safety issues that would arise from adding hydrogen. Public reports are yet to be released.

Open Flued Gas Heater Inspection Program - Carbon monoxide in buildings is a risk

Installing a gas heater? Do you know what you need to do?

Following tragic deaths in Victoria as a result of faulty heater installations, there has been a national safety focus on open flued gas heaters. The Victorian Government is developing a Regulatory Impact Statement (RIS) which will consider options for addressing risks from open flued gas heaters in Victoria. Victorian residents have been encouraged to have their heaters checked by qualified gas-fitters.

In Tasmania, CBOS has rolled out a statewide program involving inspecting and testing these types of heaters, looking at a variety of brands, models and ages. We have also verified the work of as many Tasmanian gas-fitters as reasonably possible.

Inspections and testing included testing for negative pressure and flue performance in accordance with AS/NZS 5601.1 – *Gas installations for new installations* and *AS 4575 – Gas Appliances – Servicing of Type A appliances for existing installations*.

The adoption of the AS 4575 was reported to gas-fitters in October 2019 so by now all gas-fitters who undertake gas appliances servicing should have a copy of this Standard. If you don't, please visit **infostore.saiglobal.com**

The outcome of these inspections, along with the recommendations from Victoria, will aid Tasmania to develop evidence based policy aimed at protecting the public from risks posed by open flued gas heaters.

To ensure you know what is required, CBOS, along with the Master Plumbers Association Tasmania, will continue to provide gas-fitters with opportunities to undertake training on open flued gas heater inspection and testing.

Please watch your email inboxes for further details of the upcoming open flued heater training webinar

Gas Installations – High Rise Buildings

Independent Design Certification - IDC

An increase in high rise buildings means a change in structural design methodology including alternative designs to provide designers, architects and engineers a competitive edge.

Gas installations in high-rise buildings require special consideration by the installing gas-fitter to ensure the design and installed installation complies with Section 5.7, AS/NZS 5601.1:2013 - *Gas installations General installations*.

The complex nature of multi-storey piping systems and associated equipment maintain an inherent greater risk. This could be to do with such things as:

- increased loading
- pipe lengths
- riser shafts
- pipe locations
- expansion and contraction of different building materials, pipe support or even multiple dwellings within.

Due to these public risks, Gas Standards and Safety (GSS) require "Independent Design Certification" (IDC) of all gas installations in every high-rise building - a building with five or more storeys.

Sharing the assessment and certification process with others who have the appropriate engineering capabilities to assess and monitor will provide greater clarity and determination of any specialised system requirements within a high-rise building.

Extract from AS/NZS 5601.1:2013 Gas installations General installations

5.7 CONSUMER PIPING FOR A HIGH-RISE BUILDING

5.7.1 General

The design of consumer piping for high-rise buildings is a specialized area and shall be carried out by appropriately qualified and experienced persons.

NOTES

1. Guidance is contained in Appendix K
2. The Technical Regulator may require to be specifically advised prior to the commencement of the installation of consumer piping in a high-rise building.
3. The Technical Regulator may require the design be verified by an independent competent third party and design records be kept for a minimum of 10 years.
4. This requirement also applies to consumer piping passing through unventilated spaces in buildings.
5. Reference should be made to the applicable building regulations, which give requirements for the construction of fire-rated pipe ducts, and the construction of plant rooms and enclosures for appliances in high-rise buildings.
6. Special consideration should be given to pressure reducing systems (at higher floors) and seismic valves where appropriate.

This will remain part of the Director of Gas Safety's acceptance of any high-rise gas installation work. The installation will remain unaccepted until an appropriate person has been accepted and performed IDC for the gas installation.

How to Get IDC?

Steps to achieving IDC of Gas Installations in High-rise Buildings - Tasmania

1. Confirm building height. If the building is five or more storeys, IDC is required.
2. Notify GSS preferably before or during the complex gas installation application process.
3. Notify the building provider of the requirement, and that GSS requires IDC.
4. Contact the primary installation designer/engineer, or make contact with another engineering firm. Request that they either:
   - apply to the Director of Gas Safety (the Director), to become an Independent Design Certifier (if not already). Forms and approval criteria are available through your local regional gas inspector or from the CBOS website at **www.cbos.tas.gov.au** or
   - liaise with GSS to complete the application process and receive acceptance from the Director.

   Once approved as an Independent Design Certifier, perform an assessment of gas installation design, installation and/or commissioning aspects at appropriate intervals. Subject to the outcome of a final assessment, submit a copy of the signed IDC form to the Director, and the installing gas-fitter. Send this to your local inspector where possible and send a copy to **CBOS.info@justice.tas.gov.au**

   Note. The person or company who applies and performs the IDC, does not need to be employed by the business that has provided the original plans for the installation that the gas-fitter is working to. It can be the engineer who meets the criteria for IDC and has been reviewed and accepted by the Director.
5. The gas-fitter should liaise with the building designer/engineer and regional gas inspector to ensure steps are taken to satisfy any specific requirements during the construction phase and before commissioning the installation.
6. Upon commissioning, the gas-fitter must provide the Director with a signed statement of compliance (white Gas Fitting Notice) along with any other particulars requested which formed part of the acceptance by the Director.

If there are any questions or concerns regarding the process, Gas Standards and Safety are available to discuss and help wherever appropriate. Contact us at **www.cbos.tas.gov.au** or ring 1300 65 44 99.

Gas

Gas Standard and Safety inspection findings: **what we found**

As part of a recent inspections GSS made a number of findings that are highlighted below, including references to the relevant Standard clauses that apply.

Gas-fitters need to take special note and rectify habits in respect to these re-occurring non compliances.

Gas Fitting Notices

Gas Fitting Notices (GFN) must be filled completely and correctly. Information from these notices is used to:

- establish what works were done on the day
- create a timeline of works carried out on the property
- capture a database of appliances and their location

Once the GFN is signed and submitted, the Certificate of Compliance certifies the installation compliant as of that date. The gas installation therefore should be complete with no works to be done by others. This is the sign off on the work and the responsibility lies with you - the certified gas-fitter - to ensure it is complete and compliant.

LPG exchange cylinder location – Entry into a building

When determining where to locate LPG exchange cylinders on a building, the Standard states LPG exchange cylinders must be located:

- at a minimum of 150mm below a window, and
- at least 1000mm from any opening into a building, air vent, drain or door.

Refer Standard: Clause 4.4.5 and figure 4.2 of AS/NZS 1596:2014 *The storage and handling of LP Gas*

Location of consumer piping above ground

When installing consumer piping above ground, you must ensure it:

- is not installed at ground level, and
- is at least 50mm clear of finished ground level.

Refer Standard: Clause 5.3.7 of AS/NZS5601.1:2013 *Gas Installations*

Location of consumer piping below ground

Consumer piping buried in the ground shall have:

- depth of cover no less than 300mm, and
- a minimum of 450mm for roadways (including trafficable areas in private property).

Refer Standard: Clause 5.4.3, Table 5.4 of AS/NZS5601.1:2013 *Gas Installations*

Outlet provided for future connection to be sealed

Where an outlet has been provided for connecting a gas appliance, but:

- will not be used immediately, and
- the outlet is not fitted with a quick connect device,

the outlet shall be sealed using a plug, cap, blank flange or a capped or plugged manual shut-off valve.

It is essential that all open ends and provisions for future connections on a live gas system are plugged or capped on completion of works. The closing of a shut-off valve is not sufficient unless the outlet of the valve is sealed.

Refer Standard: Clause 3.4.3 of AS/NZS5601.1:2013 *Gas Installations*

Signing off other people's gas-fitting work – **what are your responsibilities?**

When submitting a Certificate of Compliance Gas Fitting Notice it is important to know your responsibilities, including what you can sign off on.

Gas Standards and Safety (GSS) have noticed an increase in Certificates of Compliance, Gas Fitting Notices (GFN) that are being signed and submitted by office administrative staff. While administrative staff can fill out the notices, the certifying gas-fitter is responsible for the notice and must ensure its accuracy, including that the information is correct and sufficiently describes the work. When it comes to describing the work, more words are better than less!

The information that GSS gets from a GFN is invaluable. It helps us ensure public safety by judiciously targeting responses to gas appliance recalls. It also provides a legal record for "work performed". As a result it protects the gas-fitter from potential non-compliant or unsafe work being done by others at a later time.

Gas (Safety) Regulations 2014 make it mandatory for a GFN to be filled out and signed by the gas-fitter who performed the work. Signing off other people's work leaves you open to prosecution if the work is found to be non-compliant or an unsafe gas installation.

Checking and signing off the work extends to gas-fitters who sign off gas-fitting work undertaken by unlicensed staff. In such instances the certifying gas-fitter must be confident that they have complied with the Occupational Licensing (Supervision of Prescribed Work) Code of Practice 2019. You can read this Code of Practice on our website at **www.cbos.tas.gov.au** and search 'supervision prescribed work'.

Whilst the Code of Practice provides detailed advice, generally supervision provided by the certifying gas-fitter to an unlicensed person should include:

- being physically present, and
- observing the unlicensed person doing the gas-fitting work.

This ensures that you are both doing the right thing!

When is a Gas Fitting Notice required?

GFN's are required for all types of gas-fitting work including service work and "Like for Like" change outs.

Electrical safety for plumbers

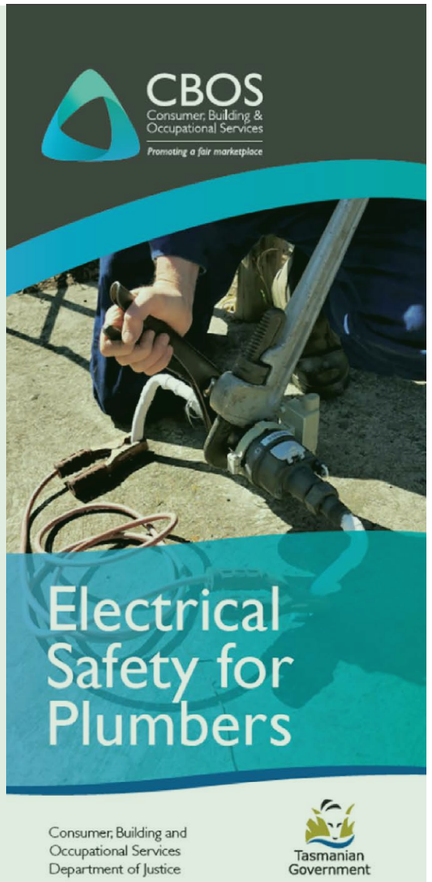
CBOS has recently released an updated version of the Electrical Safety for Plumbers guide.
The updated version provides contemporary advice for plumbers on the correct **safety first approach** to disconnecting water services to effect alterations and or repairs. It was developed in consultation with Master Plumbers of Tasmania.

Fatalities with the disconnection of water services due to stray electrical current and earthing faults have occurred. The guide is a timely reminder to the risks associated with this aspect of the trade.

Download a copy from our website at **www.cbos.tas.gov.au**. You can make this information available at your next toolbox meeting or as general safety advice material.

Please take the time to read it and be aware of the simple requirements to perform water services disconnections in an electrically safe manner.

Note: Some contemporary water services may be fully or partly constructed with non-metallic pipework and or fittings. It may also be of unknown material for the full extent of the service. Applying the safety recommendations contained within the guide is still recommended good practice.



Automatic fire sprinkler systems design and installation - FPAA101D and FPAA101H

The National Construction Code (NCC) 2019 has referenced new Deemed-to-Satisfy provisions for fire sprinkler systems. These new provisions may be used for new Class 2 and 3 residential accommodation buildings exceeding three storeys but less than 25 metres high.

The Building Code Specification E.1.5a regulated FPAA101D and FPAA101H as **builder's work**.

The FPAA101D sprinkler systems is a fire sprinkler system that is supplied from the building's drinking water supply for buildings which are less than 25m in effective height and contain Class 2 and 3 parts.

The FPAA101D sprinkler system extends from the building's drinking water supply system on each floor. This configuration eliminates the need for a dedicated sprinkler system such as dedicated water supply, tapping, pump set, control valve assembly, or riser.

Each floor has a branch from the building's drinking water supply riser to feed both the sprinkler system and drinking water supply system for that floor level. The branch includes an isolation valve to allow the simultaneous isolation of both the drinking water supply system and sprinkler system to that floor level. Downstream of this isolation valve, the sprinkler system separates from the drinking water supply system at a tee to serve the sprinklers and toilets. The sprinkler system incorporates a backflow prevention device downstream of the tee and then reticulates throughout the floor level.

The FPAA101D sprinkler system has the added benefit of having a regularly monitored water supply. Because the sprinkler is supplied by the building's drinking water supply system, any interruption or reduction in drinking water supply to the domestic appliances (for example taps or showers) indicates an interruption or reduction in the water supply to the FPAA101D sprinkler system.

See figure 1 for an illustration of this system configuration.

NOTES:

A building with an FFAA101D Sprinkler system would have two pipes entering each Class 2 or 3 Sole Occupancy Unit (SOU):

- The drinking water supply pipe (as present), and
- The FPAA101D sprinkler pipe.

The connection of the toilet/s only to the sprinkler system pipework effectively provides a point or multiple points of end-of-line monitoring for that SOU.

In order to clarify any demarcation issues between drinking water supply plumbing work and fire sprinkler fitter work in accordance with the *Building Act 2016* and the *Occupational Licensing Act 2005,* the following applies:

- installation of the drinking water supply is **licensed plumbing work** to AS/NZS 3500.1.2018 *Plumbing and drainage Water services*
- installation of the fire sprinkler system downstream of the backflow protection device excluding the water service pipework branch to the toilet cisterns control valve is **sprinkler (Building) work**.

The FPAA101H sprinkler system consists of a fire hydrant installation commonly required where coverage cannot be achieved by external fire hydrants. The FPAA101H system includes branches from the fire hydrant system at each floor level to sprinkler system to that level.

Copies of the FPAA101D and FPAA101H specifications and other information is available from the FPAA website at **www.fpaa.com.au**

Operational sizing of pipework, flow rates and pressures for both systems should be completed by Building Services Designers who have competences in the drinking water and sprinkler systems design.
(**NOTE:** Maximum Static Pressure at an outlet 500kPa.)

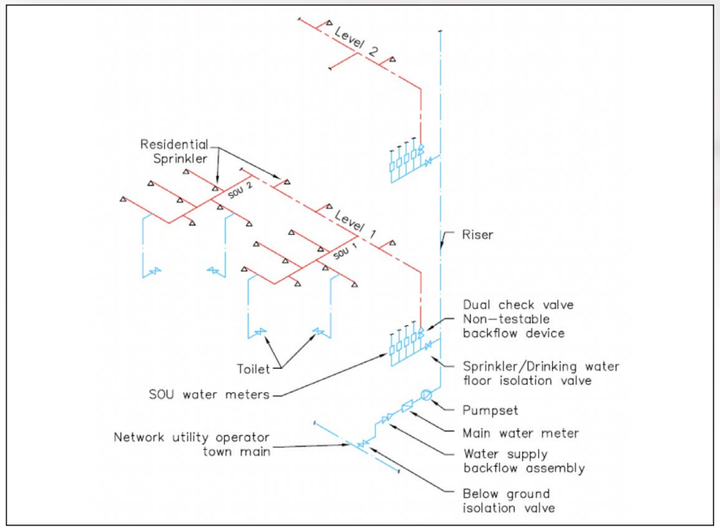


Figure 1 Sample system diagram of a FPAA101D Sprinkler System

Separation of common services

The Director of Building Control has become aware of non-compliance with separation distances, specifically that these distances (both horizontal and vertical), are not being complied with for services installed in the same trench, duct, wall chases or roof spaces.

Builders and tradespeople should be checking with services installers that they are:

- aware of the specific requirements regarding the proximity of services, and
- checking the completed installation to ensure minimum separation distances are being maintained.

Any service trench containing more than one individual service is generally referred to as a **common** or **shared** trench.

The minimum separation requirements for the various services are set out in several Australian Standards.

- Plumbing systems refer to AS/NZS 3500:2018 *Plumbing and Drainage* series for water, sanitary drainage, stormwater drainage within the boundary and upstream of the point of connection to the points of discharge.
- Gas systems (consumer gas pipe) refer to AS/NZS 5601:2013 *Gas installations* series.
- Electrical systems refer to AS/NZS 3000: 2018 *Wiring Rules* series and AS/CA S009 for low and high voltage Telecommunications cables.

Above and below-ground plumbing systems shall be installed so that:

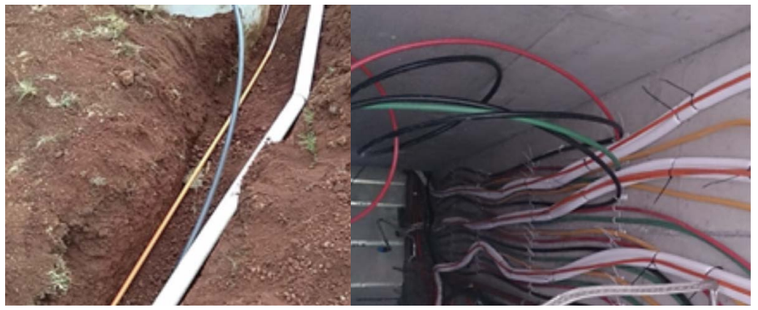
(a) potential branch insertions are not impaired by other services;

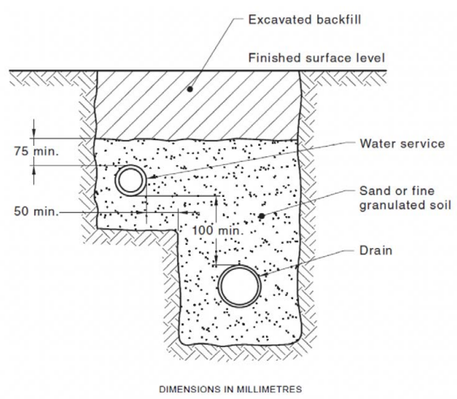
(b) potential safety hazards are not created by other services;

(c) access for maintenance is not impaired by other services.

NOTE: The Network Utility operators may require other additional Standards for their services.

The contents of pipes, conduits, ducts and sheathing used to contain fluids or for the distribution of electrical or communications services must be identified by the use of colours, words and symbols, in accordance with AS 1345:1995 *Identification of the contents of pipes, conduits and ducts.*





AS3500.1 Figure 5.2.6
AS3500.2 Figure 3.6.6

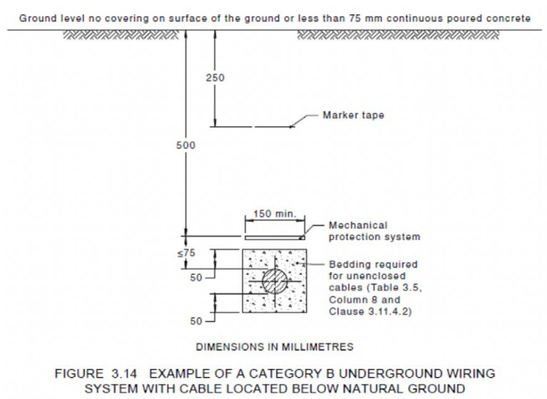


FIGURE 3.14 EXAMPLE OF A CATEGORY B UNDERGROUND WIRING SYSTEM WITH CABLE LOCATED BELOW NATURAL GROUND

AS3000- 2018 of Category B underground wiring Example. One figure arrangement of several Categories (A,B & C)

Table 1: *Indicative summary of separation distance (in mm) between different services below ground.*

Below Ground services (General Advice only based on the AS3500 series)		Water Service supply (Connected to Drinking Water Supply)			Drainage			
		Cold Water AS3500.1:2018 Clause 5.2 (Drinking water)		Heated Water	Under-ground sanitary drainage	Under-ground Storm-water drainage	Consumer gas pipe	Low Voltage Electrical Supply Cable
		Not greater than DN65	Not greater than DN65	AS3500.4 :2018 Clause 4.2.	AS3500.2 :2018_V3 Clause 3.6	AS3500.3 :2018 Clause 6.2.6	AS5601.1 Clauses 5.4	AS3000 Clause 3.11.5
Non-Drinking water AS3500.1 Clause 9.3.2.2	Identified by a purple marker tape laid 150mm above the installed pipe to AS/ NZS26248.1	300	300	300	100	300	100 for </= DN65 or 300 for >DN65	100 for </= DN65 or 300 for >DN65
Consumer gas pipe AS5601.1 Clauses 5.4	Identified by an orange marker tape laid 150mm above the installed pipe to AS/NZS26248.1 and mechanically protected	100	300	100	100	100	N/A	100
	Neither indicated nor mechanically protected	600	600	600	600	600	N/A	300
Low Voltage Electrical supply cable AS3000 Clause 3.11.5	Identified by an orange marker tape laid 150mm above the installed pipe to AS/NZS26248.1 and mechanically protected	100	300	100	100	100	N/A	100
	Neither indicated nor mechanically protected	600	600	600	600	600	N/A	300
Underground sanitary drain AS3500.1 Clause 5.2.6 See Figure 5.2.6		100	100	100	100	300	N/A	N/A
Communication cable AS3500.1 Clause 5.2.5		100	100	100	100	100	N/A	N/A

NOTES:

1. Minimum separation of conductive enclosures to low voltage earthing electrode 500mm for water, sanitary drainage and gas and 600mm for stormwater drainage.
2. Low voltage is voltage that exceeds extra-low voltage (not exceeding 50 V a.c. or 120 V ripple-free d.c.) but not exceeding 1000V a.c. or 150 V d.c.

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