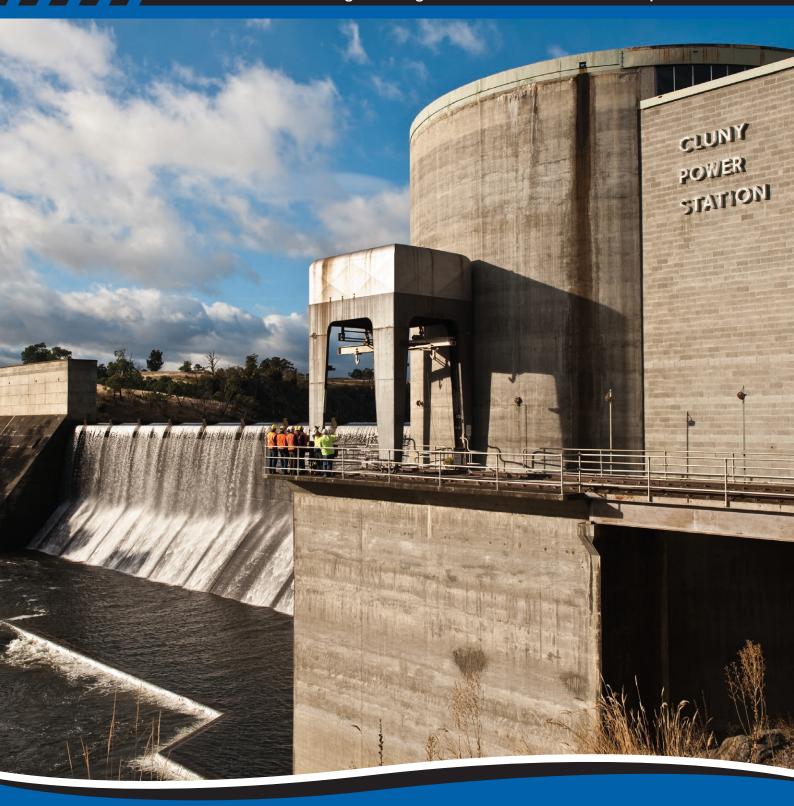
## CONNECTIONS

Electrical, Gas, Plumbing, Building

Issue 15 | October 2018





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#### Front cover

Hydro Tasmania workers at the Cluny Power Station, in the Central Highlands, after upgrades extending its life for another 50 years Image by Hydro Tasmania

## Minister's Foreword and inside cover

Mussleroe wind farm, Cape Portland, Tasmania Images by Woolnorth Wind Farm Holding

ISSN 1837-8005



## Foreword from the Minister

Our Tasmanian building and construction sector is booming, with nation leading growth in a number of key building areas including building approvals, dwelling commencements and new residential construction, as well as an all-time high of 23,200 people now working in the industry.

The Hodgman Liberal Government recognises that the construction industry is critical to our economy and we are committed to supporting the continued growth and the confident outlook in the sector.

To this end, it is fitting that this edition of Connections focuses on energy. Under our Tasmania First energy policy, the Hodgman Majority Liberal Government is committed to delivering low cost, reliable and clean energy for Tasmanian residents and businesses. We are delivering on our target of the lowest regulated electricity prices in the nation, and 100% self-sufficient renewable energy by 2022.

I am also pleased to announce that this year we are introducing a number of changes to Tasmania's gas legislation. The Gas Safety Bill 2018, one of two Bills introduced into Parliament in September 2018, is the result of a review into the gas supply industry framework to ensure contemporary regulation across gas infrastructure, gas installations and gas appliances. The legislation will replace the Gas Act 2000 and Gas Pipelines Act 2000, which

have regulated the Tasmanian gas industry for the past 15 years without substantial review.

Important changes in the Gas Safety Bill include:

- promoting regulatory consistency with regard to the LP Gas industry, the automotive gas-fitting industry and other emerging fuel gases
- reducing the regulatory burden on the Tasmanian gas-fitting industry, through changes to the gas installation application for acceptance criteria in line with evaluated contemporary public risk, and
- providing flexibility, whilst
  maintaining safety outcomes, to
  enable more effective monitoring of
  activities and new developments in
  areas of non-traditional gas supply
  and usage such as Biogas and
  stationary gas engines.

The Department of Justice has also conducted a series of roadshows across the state to educate the electrical trades community on changes to the Wiring Rules, which come into effect on

1 January 2019. The new rules will result in improved safety outcomes for people using electrical installations and reflect many advancements in technology with allowances for reliability of supply, electric vehicle charging facilities and additional requirements for protection.

It is great to see that these presentations have been well received by industry, with over 1000 practitioners attending sessions across the state to date. Further sessions will also be held on King and Flinders Islands later in the year.

The Department will continue to positively engage with the electrical trades to ensure that everyone is up to date with the new rules for the continued safety of the Tasmanian community.

The outlook for the building and construction sector is positive and together with the building and construction industry, we will continue to work hard to ensure that our building environment meets and exceeds the needs of the Tasmanian community now and into the future.

### Guy Barnett MP

Minister for Building and Construction



## Building in landslip areas

Land must be capable of accommodating a proposed development without posing a threat to its users, its surrounds and other infrastructure. Ground conditions must be understood and buildings designed and located accordingly. There are restrictions on building work in declared landslip areas to help ensure that this occurs.

### Declared landslip areas

The Minister for Resources has declared the following to be landslip areas as they are subject to earth movement due to inherent instability.

These locations may be either "A" or "B" landslip areas. The two are regulated differently, because A landslip areas have a greater risk of instability.

Further information and maps of declared A and B landslip areas is available on the Mineral Resources Tasmania website at www.mrt.tas.gov.au/portal/

declared-landslip-areas

Location	Local Council	
Boat Harbour Beach	Waratah- Wynyard Council	
Panorama Heights, East Devonport	Devonport City Council	
Beauty Point Beach Road, Legana Freshwater Point, Legana	West Tamar Council	
Windermere Road, Windermere	Launceston City Council	
Parnella, St Helens	Break O'Day Council	
Lowana Road, Strahan	West Coast Council	
Casuarina Crescent, Berriedale		
Officer Street, Rosetta	Glenorchy City Council	
Hone Road, Rosetta	Council	
Crosby Road, Rosetta		



## Building restrictions in landslip areas

Until the Tasmanian Planning Scheme commences, the old provisions on building in landslip areas still apply. These are in the *Building Act* 2000 (Part 10 Div 1) and the *Building Regulations* 2014 (Part 1 Div 1).

In all declared landslip areas, building work must not aggravate the existing landslip condition. Also, any work that involves excavation, depositing material, removing vegetation or using earthmoving or vibrating equipment is prohibited, unless it meets the requirements in the *Building Regulations* 2014 reg 13. Fines may apply if these restrictions are breached.

### B landslip areas

In B landslip areas, a person may only erect, alter or add to a building if the total floor area will not exceed 200m² when the work is complete (see the Building Act 2000 section 151).

A permit authority can grant a building permit for a building which will be over 200m² if a qualified geotechnical engineer issues a certificate, and a building surveyor grants a certificate of likely compliance, saying that they are satisfied that the stability of the landslip area won't be compromised.

Also, people in B landslip areas cannot:

- store more than 10,000 litres of water
- store any dangerous substance, or
- erect, alter or add to a building to carry out heavy industry.

### A landslip areas

In A landslip areas, people must not erect, alter or add to buildings unless the Minister for Building and Construction gives them permission to do so (see section 150 of the *Building Act* 2000).

The Minister can give permission for people to erect sheds and insubstantial buildings (one-storey high buildings with up to 25m² floor area) in A landslip areas, or for people to do building work other than erections.

#### How to get permission

To get the Minister's permission, the owner needs to:

- A. get planning permission from their local council
- B. ask the council General Manager to make a recommendation to the Minister that the building work be allowed
- C. get a geotechnical report prepared by a qualified and experienced geotechnical engineer or engineering geologist who has public liability insurance.

#### Impact on work category

To determine which category building work in landslip areas falls into:

- read the Director's Determination on Categories of Building and Demolition Work.
- look at the landslip provisions in the Building Act 2000 and Building Regulations 2014 to see whether they elevate the work's risk category.

#### Example

An owner wants a room added to their house. This may be notifiable work under clause 3.0.1 in the Determination. However, the property is in a B landslip area, and after the work is completed the house will be over 200m<sup>2</sup>. The owner needs to get a building permit from the permit authority for the work.

To view the requirements, go to www.legislation.tas.gov.au, search "Building Act 2000" or "Building Regulations 2014" and use the legislative history tab to view the versions that were current at 31 December 2016.

## Condensation regulatory update

Condensation is becoming a major problem in modern 'air tight' buildings. This is particularly the case in cool climates like Tasmania. This has led to proposed changes to the National Construction Code (NCC), and Tasmanian-specific research and guidelines on how to minimise condensation.

## National Construction Code

Currently, the NCC does not include any performance requirements to minimise condensation. However, emerging evidence of condensation prompted the Australian Building Codes Board to commission a study on the issue. The draft 2019 NCC now includes condensation management requirements.

The proposed new requirements are contained in Part F6 of Volume One, and Part 3.8.7 of Volume Two. They apply to class 1, 2 and 4 buildings. The deemed-to-satisfy provisions include new requirements on:

- the installation of water control membranes
- roof space ventilation and
- discharge of exhaust systems from kitchens, bathrooms, toilets and laundries.

Read the proposed provisions in the draft 2019 NCC at www.abcb.gov.au

#### Tasmanian research

Condensation is a particular problem in cool climates. CBOS funded research projects on condensation in 2014 and 2017. The initial research found that condensation is a major issue in Tasmanian buildings. This led to the development of a designers' guide called "Condensation in Buildings".

The most recent research project examined the risk of condensation in 'code-compliant' wall and roof systems. Simulation testing of typical designs showed that, in each of Tasmania's six climate subgroups, the outside temperature will establish a dew-point within external walls, subfloors and roof spaces.

The research also found that, to address this problem, all wall systems should have vapour permeable building membranes. In addition, ventilation should be installed in the subfloor, walls and roof spaces of buildings. Exhaust fans should also be installed in kitchens, bathrooms and laundries to remove excessive water vapour. These should be externally vented, rather than vented into roof spaces.

These recommendations exceed the requirements in the draft 2019 NCC. However, the research has found that these extra steps are needed to properly address condensation issues in cool climates like Tasmania.

CBOS will soon release an updated guide which reflects this new research on how to minimise condensation. Keep an eye out on our website at www.cbos.tas.gov.au and our Facebook page at www.facebook.com/
TasBuildingStandards





## Using the performance-based National Construction Code

Most people in the building and construction industry are aware that our national building and plumbing codes are performance-based.

Seminars and other training on the National Construction Code (NCC) have recited the following benefits of a performance-based code:

- facilitates the use of new and innovative products
- provides flexibility in design, and
- can improve constructability and lead to associated costs savings.

However, beyond these statements, do many people really understand what a 'performance-based' code means in practice and how to make the most of it? Or do they think that developing performance solutions is only for the big end of town or a work in the dark arts?

This article hopes to try to dispel some myths around the use of the performance-based NCC.

## The NCC has actually been performance-based for 22 years now

A performance-based code means that the focus of the NCC is on achieving overarching performance requirements, rather than on compliance with prescriptive technical specifications. The NCC still contains specific deemed-to-satisfy (DtS) provisions, but it also gives the option of achieving compliance by developing unique performance solutions.

Not to try and give a history lesson, but the performance-based NCC isn't new, we have actually have had it in place in Australia since 1996, yes 22 years.

Its introduction in Australia followed a number of other countries' codes also transitioning to the performancebased approach we now have. If you look at the other countries' codes, whilst they may use different terms to describe DtS provisions and performance solutions, they are essentially very similar.

Before 1996, most state and territory building authorities had a process in place for people to obtain a dispensation from complying with the prescriptive DtS provisions. Therefore, the introduction of performance solutions was not a completely new concept.

## Performance solutions are just another compliance path

The performance-based NCC is built around mandatory compliance levels and underneath that compliance solutions as depicted below.

PERFORMANCE REQUIREMENTS

Compliance Solutions

PERFORMANCE and/or SOLUTIONS

DEEMED-TO-SATISFY SOLUTION

Building

The NCC performance requirements are the mandatory standards that buildings must meet. Performance requirements state what the compliance solution must achieve but do not provide specific detail on the how. For example, the NCC performance requirement for room heights (P2.4.2 in NCC Volume Two) states:

"A room or space must be of a height that does not unduly interfere with its intended function".

To achieve compliance with this performance requirement, the NCC allows either compliance with the DtS provision prescribed in the code (i.e. ceiling height of 2.4m as per clause 3.8.2.2), developing a performance solution or using a combination of the two

A performance solution might be a useful alternative to the DtS provision if a room height of 2.4 metres is not possible in part of a house without major structural changes taking place. The performance solution could propose a lower ceiling height and describe how this meets the performance requirement. For example, it might state that a 2.35 metre-high ceiling will not unduly interfere with the intended function of a room, as the room will be used as a home theatre room where people will be sitting for most of the time.

The above example shows a situation where a performance solution was developed because the DtS provision was not suitable for the particular site. However, performance solutions can be used in a range of different situations as long as they are shown to comply with the applicable performance requirement. For instance, they can be used to implement unique design ideas, to develop more site-appropriate designs or to better meet a client's design brief. Performance solutions are just as valid as the DtS provisions as long as they are appropriately justified. Both are of equal standing in terms of compliance under the NCC.

In theory, a building designer could design a building which contains performance solutions only. However, in reality, most building designs comply predominantly with the DtS provisions and would have some performance solutions depending on the site, design brief and building materials used.

### Performance solutions can be simple, complex or very complex

Performance solutions come in all shapes and sizes.

You could have very simple ones such as using a different coating type for a steel beam than that prescribed in the NCC, to a very complex solution such as proposing alternative ways for complying with the fire brigade access and fire compartmentation performance requirements for a shopping centre or hospital.

For many simple performance solutions, anyone can develop them. They may just need to obtain relevant product data to indicate testing reports or certificates from the product manufacturer or supplier. More complex solutions will require specialist design consultants to be involved.

#### Assessment methods

Any performance solution needs to be shown to be compliant using one or more of the NCC assessment methods. These include:

- documentary evidence, as outlined in the NCC evidence of suitability provisions. This could be the use of a CodeMark Certificate of Conformity for a cladding product on a house that is not recognised by the DtS provisions
- using a verification method –
   either one listed in the NCC or
   one outside of the NCC that might
   be in an Australian Standard or
   in a comparable international
   building code such as one in the
   New Zealand building code

- using expert judgement, i.e. for a complex fire based performance solution using a fire engineer with relevant experience, and
- comparison to the DtS, i.e. a solution that provides an equivalent level to that which would be achieved by the DtS provisions.

While any of the above assessment methods can be used, a common approach involves a combination of expert judgement and using a comparative assessment to the DtS provisions. This is done because many of the NCC's performance requirements are not prescriptive in what exact benchmark needs to be achieved so the DtS provisions are often used to provide extra information to undertake the assessment of the performance solution.

#### Conclusion

In summary, don't be afraid of developing a performance solution for a building project. It can be a really useful alternative to the DtS provisions, and is not there to work around those provisions, rather it's just another equally relevant and acceptable compliance path.

Visit https://hia.com.au





Rick Sassin, Executive Director Tasmania, Housing Industry Association

## Building surveyors key to unlocking benefits of performance solutions

Performance solutions provide a huge benefit to a building project by allowing the design to be specific to the users' requirements rather than the users' requirements being made to fit into a prescriptive box.

With increased focus on security arrangements, performance solutions allow for a non-compromised solution for both the building occupier's personal safety and fire safety.

There are huge cost benefits in the construction cost by adopting performance solutions. In 2012 The Centre for International Economics (The CIE) identified that 50% of possible cost saving benefits from the use of performance solutions are still to be realised by the construction industry. Building surveyors are key to identifying these benefits.

"It's important when designing the project that the building surveyor is involved so that he/she can advise what performance requirements need to be achieved" said Roland Wierenga General Manager, pitt&sherry Building Surveying.

"A good building surveyor not only knows the requirements of the Building Code but also understands the basis of what the code is aiming to achieve. This understanding is important to allow for flexibility while ensuring the codes' requirements for the safety of building occupants aren't compromised."

"At pitt&sherry Building Surveying we understand the depth of knowledge required and ensure staff undertake relevant training continually. This includes post graduate qualifications in Performance Based Codes, disability access and energy,"

Recently pitt&sherry Building Surveying won the Australian Institute of Building Surveyors (AIBS) National Building Surveying Team of the Year award and Ash Beardwood was a joint winner as the National Emerging Building Surveyor of the Year.

"It is rewarding to win the AIBS top building survey team ranking against all the national entrants. It's the culmination of genuine teamwork in action, trusted long-term relationships and our wider community engagement. We pride ourselves on our two-way understanding of design and code parameters and this award is proof of that integrity." continued Wierenga.

#### **Experience counts**

With over 20 years' experience, pitt&sherry Building Surveying dedicated and specialist staff are amongst the most qualified and experienced in the industry and offer a range of building surveying services including certification of domestic and commercial buildings and essential service management.

"We are also experts in specialist reporting. The need for performance-based solutions has provided considerable scope for innovative approaches to planning and design, realising enhanced opportunities for cost savings and design freedom," Wierenga said.

Other specialist reporting includes the interpretation of technical and legislative matters, bush fire area assessments, strata and subdivision issues, access compliance, evacuation plans and temporary event certification.

## Performance-based solutions guide the building surveying complexities as Parliament Square project evolves

The Parliament Square project in Hobart is an excellent example of the broad complexity of compliance issues that require building surveying expertise. A site which required multiple staging, integration with heritage buildings, and a client - Citta Property Group whose long-term tenant - Tasmanian Government, had a demanding probity process. It's not just about the building but about the site ensuring that with continued occupation, occupants have access to the level of safety required at all stages.

This project has evolved since it started in 2013, growing in scope during construction, as new possibilities arose. Initially the redevelopment was for the construction of a standalone ninestorey office block, an open podium with bars and an underground carpark; which included the demolition of an existing thirteen storey office tower, other buildings and restoration of one of the oldest buildings in Hobart. It has now expanded to include two additional floors, incorporating conversion of plant areas to offices plus one additional structural level, as well as connection to the existing Parliament House and the Marriott Luxury Collection Hotel.

When a client sees new opportunities and the building evolves during the project it's important for the building surveyor to have a thorough knowledge of the current parameters so they can quickly provide the required advice on effects, Building Code implications, and altered approvals required. This provides for a seamless integration into the construction program ensuring the client's timelines are still achievable.

Staging of work also has its unique challenges where site safety requirements may preclude a designated exit/s being available; which may vary depending on the location of work, staged occupancy and the occupants shifting security arrangements. At these stages, it is necessary that the building surveyor is involved to ensure not only Building Code of Australia requirements are achieved but that the alternative fire solution does not lose its validity. It is also necessary to provide clear communications for the tenant to be satisfied its probity requirements are achieved.

The maintenance cycle of the building starts at day one and pitt&sherry Building Surveying are also providing the client with assistance in ensuring the client satisfies its legislative essential safety requirements so that the features and measures are maintained to perform their functions when required.

Shaun Wilson, Project Director of Parliament Square redevelopment, congratulated pitt&sherry Building Surveying saying "Citta Property Group have been extremely pleased to work with pitt&sherry on the Parliament Square project. This award is a well-deserved recognition of outstanding professionalism since 2012 when construction commenced. The longer we were involved in the project and the more we learned about the history, meant we developed some better ideas and pitt&sherry Building Surveying worked with us to achieve them."

#### Roland Wierenga General Manager pitt&sherry Building Surveying

Visit www.pittsh.com.au

(Roland is also the Tasmanian Chapter President of the Australian Institute of Building Surveyors)



## Old building permits due to expire in January 2019

Previously some building permits issued under the *Building Act 2000* and *Local Government (Building and Miscellaneous Provisions)*Act 1993 did not have an expiry date. Permits continued indefinitely until they were completed and if they were not completed, permits remained outstanding. This created an administrative burden.

In November 2012, the *Building Act* 2000 was amended making building permits valid for two years from when they were granted. This time limit only applied to permits issued from that date forward.

## Current building permit requirements

The *Building Act* 2016 commenced on 1 January 2017. Now all building permits expire:

- within two years of work starting or
- within one year of being issued if no work has started by then.

This is unless another expiry date is stated in the permit.

These expiry periods apply to:

- new permits issued under the Building Act 2016 and
- any other permits without expiry dates which were valid when the Act commenced.

The older permits are now due to expire on 1 January 2019.

There is a bill before Parliament to extend the expiry date to 1 July 2020

#### Example

An owner was granted a building permit in 2010 for a project. The permit didn't have an expiry date. Work on the project started but was not completed. Under the *Building Act* 2016, the permit is now due to expire on 1 January 2019 unless it is extended.

## What to do before a permit expires?

Before a permit expires, the building work on a project needs to be finished. This includes the final inspection (by the building surveyor) to allow for any follow up work to be completed. A valid permit does not need to be in place for a Certificate of Final Inspection or Certificate of Completion to be issued, as these are administrative processes, not building work.

## How to apply for an extension

If the building work on a project (including conducting the final inspection) won't be finished before the permit expiry date, the owner needs to apply to have the permit extended. You can do this by submitting Approved Form 76A to the council permit authority, along with the relevant supporting information.

## What happens if a permit expires before work is complete?

If a permit expires and there is further building work to be done on the site, the owner needs to apply for a new permit to finish the project. It is illegal to continue work without a valid building permit in place. To apply for a new permit complete Approved Form 2 and comply with the *Building Act* 2016.

For more information, read our Fact Sheet on Expiry of Permits at www.cbos.tas.gov.au



## National Construction Code 2019

On 1 May 2019 all states and territories will adopt the National Construction Code (NCC) 2019.

#### You can read the draft

Go to the Australian Building Codes Board (ABCB) website at www.abcb.gov.au and download the draft version of the NCC 2019 – it's free!

The draft includes a number of proposed changes to all three volumes of the NCC. The period for public comment on the draft has closed, however the ABCB needs to approve the draft at their meeting later this year.

You can also download the current version of the NCC 2016.

## Summary of key changes to the NCC

#### **Volume One**

In Volume One (class 2-9 buildings) some of the proposed changes in relation to energy efficiency are:

 new verification methods JV1, JV2 and JV4 and changes to performance requirement JP1 and verification method JV3

- change to whole of façade assessment, including glazing in Part J1 and façade design in Part J2
- changes to efficiency requirements of mechanical equipment and
- changes to lighting requirements and lighting total energy use.

Also proposed for Volume One is:

- a new fire safety verification method
- a requirement for sprinklers to be installed in class 2-4 buildings with four stories or more up to 25 metres high, and
- new requirements around condensation minimisation (see our article on condensation for more information).

#### **Volume Two**

Volume Two (class 1 and 10 buildings) also has some proposed changes around energy efficiency. These include changes to the stringency of performance requirements and building sealing requirements. There are also new heating and cooling loads for the NatHERS software, however these don't apply in Tasmania due to our cold climate.

#### **Volume Three**

Some of the key draft changes to Volume Three (Plumbing Code of Australia) are:

- deletion of current Sections D (stormwater drainage systems), E (heating, ventilation and air conditioning systems) and F (on-site wastewater management systems), and moving these to the Tasmanian Additions and Variations section
- introduction of Section A6 on determining a building classification (bringing over terminology from Volumes One and Two of the NCC), and
- new sections on designing plumbing and drainage systems to avoid excessive noise and on disability access for facilities.

A key focus in the development of the NCC 2019 has been changes to make the NCC easier to read, understand and use. The ABCB will also be updating the guidance material on their website to help people navigate the NCC 2019.

## Building

# Building in accordance with approved plans

Builders must build to the approved plans for a project. This is required under the *Building Act* 2016 and under contract law. Failure to build to approved plans can cause legal disputes and attract significant fines.

If an approved plan exceeds the National Construction Code requirements, the work must still be done as per the approved plan, unless there is prior approval to do otherwise. The extra design features may have an important function, such as minimising condensation. Any deviation from approved plans should be done with extreme care.

### Responsibilities

A builder can only issue a Standard of Work Certificate (Form 71A) if work is "complete" in accordance with plans the builder was engaged to complete. This means that a builder cannot sign off on a project until they have completed the work as agreed. Further, it's implied in all building contracts that builders will comply with work plans and specifications.

When building surveyors inspect work, they should be checking the work is:

- code-compliant, and
- meets the approved plans.

A building surveyor can only issue a Certificate of Completion for notifiable work, or a Certificate of Final Inspection for permit work, if they are satisfied the work is complete as per the plans.

## Getting approval to change the plans

If an owner or builder wants to build differently to the plans, they need to get approval beforehand.

#### Notifiable work

If the work to be done is materially different from the original plans, the owner or builder needs to submit a new Notice of Work (Form 2) to the building surveyor. The building surveyor will assess the amended plans for compliance.

#### Permit work

Any departure from approved plans requires written consent from the building surveyor beforehand. The building surveyor can only give consent if they:

- have the amended plans
- have consent from the permit authority (if this is required), and
- are satisfied that the amended plans are compliant.

Even if a design change is minor, builders should always have prior approval from the owner and the building surveyor, to avoid disputes. Any variation to a building contract

must always be in writing and signed by the owner and builder.

## Changes made without prior approval

If a building surveyor inspects work and identifies the work does not comply with the approved plans, they can issue an Inspection Direction to the builder obliging them to make the work compliant. If the builder fails to rectify the work, the building surveyor can issue a Building Notice followed by a Building Order. The builder may also be fined.

If the owner and the builder are happy with the different work, and want it to stay the same, they must still get the building surveyor's written approval for the amended plans. They must also get the permit authority's consent where necessary. The building surveyor will only be able to sign off on the different work if it complies with the National Construction Code. All parties should agree to the different work in writing to avoid disputes later on.

For further information, you can view the *Building Act* 2016 (sections 97, 99, 101, 136, 148, 150) at

#### www.legislation.tas.gov.au

Read the Residential Building Consumer Guide at

www.cbos.tas.gov.au



## Condensation in Tasmanian homes - an update from UTAS

If a room is heated to 18°C and the outside temperature is below 12°C, condensation will need to form somewhere within the wall fabric.

As many readers would know, Architecture and Design (UTAS), has been working with CBOS since 2012 to provide guidance about construction practices to manage and minimise condensation risk in Tasmanian homes. Up to 2016, the recommendations had been based on similar experiences in Europe, the United Kingdom, Canada, Japan, the United States and New Zealand.

Research completed for CBOS, earlier in 2018, included several hundred condensation risk simulations. The UK developed JPA condensation risk software was used to complete the simulations. In the UK, wall systems must show regulatory compliance for water barrier, air barrier and vapour control at the design approval stage. The JPA software follows the ISO-13788 Glaser steady state calculation method, which is called up within the UK building regulation.

The results from the simulations showed that the most robust method of wall design and construction should include:

 a vapour permeable building/wall wrap  a slightly vented cavity between the cladding system and the building/ wall wrap.

Australian roof spaces are referred to as unconditioned or cold roof spaces. The rate of airflow through these types of zones makes it very difficult to simulate condensation risk. Several countries have relied on the results from test buildings and the limited capabilities of condensation risk software to provide guidance. To passively remove the high moisture content warm air from roof spaces the common recommendations include:

- the regular placement of eave supply air vents and
- the placement of ridge or high-level gable exhaust vents.

In Canada, where is it much colder than Tasmania, gable vents which are 600mm x 600mm or larger, are often visible and are installed to provide passive roof space exhaust ventilation.

The Glaser steady state method may provide an initial guidance to condensation risk, but it has been found that wall systems are still presenting significant problems 5 to 20 years after construction. In response to this issue, most condensation risk software owners are creating the next generation of transient or dynamic simulation tools.

These advanced tools can simulate a wall for 8760 hours per year and can simulate the wall for many years. Some market leaders in this field, like WUFI and Delphin, have had this type of software for some years now and are internationally recognised as best practice tools.

In that context, current research at UTAS includes the work of two PhD students, Shruti Nath and Toba Olaoye.

Shruti will be using the WUFI software to provide more accurate guidance to CBOS and the ABCB on wall system design to best manage the passive transport of water vapour.

Toba will be measuring the water vapour transport properties (vapour permeance or resistivity) properties of Australian construction materials.

It is planned that CBOS will provide update training on condensation risk in Tasmanian homes in the near future.

Mark Dewsbury (PhD) Senior Lecturer & Building Research Architecture & Design



## Introducing Matthew Pollock

Master Builders Tasmania (MBT) recently announced the appointment of its new Executive Director, Mr Matthew Pollock. Mr Pollock started in his role on 3 September 2018, and represents the peak building and construction industry body in Tasmania.

Matthew replaces Mr Michael Kerschbaum, who resigned in May 2018. Following a comprehensive recruitment process, MBT is delighted that it has attracted a young and dynamic person to the role.

Matthew was already a member of the Master Builders family, resigning his position as National Manager – Economics & Housing of Master Builders Australia to take up his new position.

Matthew's qualities, skills and previous experience will bring a new focus and direction to Master Builders Tasmania. The MBT Board is confident that Matthew will continue on with the good work of his predecessor and maintain MBT's vision to foster a healthy, productive, ethical and innovative housing and

construction industry which promotes excellence throughout the building environment.

Matthew has specific experience in providing industry advice to Master Builders Tasmania in his previous role as national manager for economic and industry policy for Master Builders Australia. He has been a keynote speaker at MBT industry events and has existing connections within the membership and the association nationally and statewide.

"To be selected to lead an organisation with such a proud history and prominent standing in the community is a humbling experience. It is not something to take on lightly.

"Master Builders Tasmania has been an important part of the Tasmanian community for more than 127 years. The association's longevity is a testament to its relevance and the important contribution it makes to the industry.

"As the peak construction industry association MBT represents more than 600 building and construction businesses. These businesses

provide rewarding jobs for thousands of Tasmanians, including new apprentices looking to enter the workforce.

"This important role, and our large membership base gives us the opportunity to shape policy and make Tasmania a better place to live for all, Matthew said.

"The next five years will be a period of opportunity unmatched in Tasmania's recent history, and in the 127-year history of Master Builders Tasmania.

"Harnessing these growth opportunities to take the organisation forward over the next five years will be the key measure of success.

"I am looking forward to working with the team, the Board and the broader membership to take on these challenges and opportunities in the years ahead."





## Construction ready program - A must for new workers

Master Builders Tasmania has introduced a must do training program for members who employ apprentices.

The two-day program is primarily targeted at new apprentices before they enter the workplace. It covers a variety of topics which are important for new industry participants to gain knowledge about before they start on a work site.

The course is designed to raise the awareness of potential dangers and help keep new workers safer while at work.

### **Program topics**

- · Working at height
- Manual handling
- Asbestos awareness
- Hazard identification and risk management
- Working in confined spaces

The comprehensive coverage of construction safe work practices, which act as a precursor to and

provide underpinning knowledge of, the Work Safely in the Construction Industry [White Card] qualification, is of particular note. It also aims to provide an understanding of the technical language used on a work site before workers start on site.

### Working safely at heights

Another important part of the course is on working safely at heights, covering:

- safety harnesses
- · the importance of fitting them well
- how to wear them

The course has participants hanging in a harness off a frame to show them how a properly-fitted harness could save them from a fall. While understanding that a harness could arrest a fall and save their life, getting those involved to actually experience hanging in a harness is where the true learning lies. Participants gain a realistic work-life understanding of the risks involved and gain a new commitment

to avoiding them. Attitudes change after the harness element of the training.

Sending new employees to a work site with an understanding of some of the issues they may face is extremely important. For example, an understanding that when they hear the word "asbestos" there is a potential risk and there are precautions to put into place.

### Completing the course

After successfully completing the course participants gain:

- their Work Safely at Heights qualification and
- a statement of attainment for Asbestos Awareness and Hazardous Manual Tasks.

This training is free to MBT members. To register or find out more please contact Wendy or Amy at MBT Hobart on 6210 2000.

Visit www.mbatas.org.au

## Firewall penetrations: How to stay compliant

#### What is it all about?

Firewalls are used to assist with the emergency evacuation in buildings, by increasing the available time to safely evacuate people when a fire occurs. When a fire ignites in a room, you can have as little as 80 seconds before gases reach flashpoint and the room is not survivable. Consider how long it would take to evacuate a multi-story building - most take much longer than a couple of minutes to evacuate. It is even worse when a large proportion of occupants are not easily moved, such as in a hospital.

## Recent audit results - what has been found?

A recent audit by the Building Safety Unit of Tasmanian Fire Service, found 72% of fire safety deficiencies related to non-compliant firewall penetrations. During a follow up rectification program, the client found 200 separate non-compliant firewall penetrations on just two levels of the building.

The problems identified as a result of the audit came from a wide range of areas. In some cases, the firewall was not completed during construction. Other non-compliant penetrations were found from:

- mechanical services and duct work
- fire service installations including hydrant mains, sprinkler and hose reel connections
- general water supply and drainage/ sewerage
- refrigeration and air-conditioning work, and
- electrical and data services, including cabling for fire detection.

In short, the audit identified examples of non-compliance from almost all building trades.

## National Construction Code (NCC) requirements

The National Construction Code (NCC) details the compartmentation requirements. These requirements vary depending on the class of building and exist to give occupants

enough time to evacuate safely if there is a fire. This compartmentation is only effective if it is intact when a fire occurs.

The NCC is available to all as a free download. Go to the Australian Building Codes Board (ABCB) website at www.abcb.gov.au Register with the ABCB to download the NCC 2016 Complete Series (including Amendment 1).

Firewalls come with different ratings. A smoke wall is a firewall rated at 60 minutes, instead of 120 minutes. The time required to withstand fire is covered in Section C of volume 1 of the NCC, and can be as high as 240 minutes. Section C3.15 deals particularly with penetrations of firewalls by services.

## How do you know it is a firewall?

A wall marked 'fire or smoke wall' is easy to identify. However not all firewalls are marked. Look for other evidence, as the following are likely to be firewalls:

- wall is of masonry or concrete construction.
- walls with two layers of plasterboard are likely to be smoke walls.
   Especially if it is pink fire rated plasterboard.
- walls that continue above ceiling to the underside of the slab for the floor above, or the roofline.

If in doubt, treat the wall as a firewall.

## What is a compliant fire seal?

Penetration sealing must use a system that has been tested to AS1530.4:2014 Methods for fire tests on building materials, components and structures Part 4: Fire-resistance test of elements of construction (as amended).

There is no international equivalent to this standard. Products used in Australian installations must be:

- tested in accordance with this standard, and
- marked on the product or its datasheet.



Non-compliant penetration seal

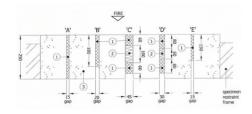
While the seal in this image looks very tidy, when the product data sheet is checked we find that it is non-compliant.

The fill foam product has only been tested to a maximum gap of 45mm. It must have a mineral or ceramic fibre friction fit in the centre of the void. The test certificate was not tested with any services penetrating the seal.

#### Important

- Review the test certificate for the product or system being used
- Fully understand the limitations or restrictions on use
- Follow the manufacturer's instructions

For example some larger sites like the Launceston General Hospital, have banned the use of foam fill PU- foam on their site.



Example of test certificate for fire rating - note that no services are shown as being tested.

## IECTRIC

#### Fit fire collars correctly



Incorrect installation of a fire collar

Take care to only use suitable fasteners. Nylon plugs are not suitable - metal only types need to be used for fire applications.

#### What is likely to be needed in future?

It is prudent to give consideration to future needs. In areas requiring a number of services, one penetration with a suitable intumescent seal may be a better option, rather than a number of separate penetrations. This is important if other services are likely to be added.



Example of a multiservice intumescent fire damper

Be aware that the time rating for a seal may be different if the cable tray passes through the opening. To prevent heat transfer, the tray may need to end a distance such as 100mm before entering the damper. Make sure it is suitable for the time rating required.

#### Conclusion

- Keep penetrations fire sealed
- Use only sealing systems tested to AS1530.4:2014 (or later)

Follow the installation instructions, and do not exceed product or system.

## 2018 Wiring Rules – Make sure you're up to date

An update to the Wiring Rules (AS/NZS 3000:2018 Electrical Installations (Wiring Rules)) was released in June this year.

The new Standard still comprises two parts but is bound as one document.

#### Part One

- Uniform essential elements that constitute the minimum regulatory requirements for a safe electrical installation
- Alternative regulatory vehicle for Australian and New Zealand regulators seeking to move from the present prescription of AS/ NZS 3000 in electrical safety and licensing legislation

#### **Part Two**

- Installation practices that achieve certainty of compliance with the essential safety requirements of Part One
- Complete revision of the 2007 edition to provide updated work methods and installation practices that are 'deemed to comply' with the associated performance outcomes/safety conditions

The new Wiring Rules have been significantly updated. It is important

that you make yourself familiar with the changes. NECA, at the invitation of the Department of Justice, has just completed a series of Wiring Rules roadshows across Tasmania.

If you missed them you can find more information on our website at www.neca.asn.au (just search for Wiring Rules).

### Where can you get a copy?

You will of course need your own copy of the new Standard. It is available in hard copy and in pdf format. As one of their membership benefits, NECA members receive:

- · a significant discount on any hard copies they purchase through their local chapter and
- access to the pdf copy through NECA's Technical Knowledge Database (TKB).

For more information visit https://neca.asn.au







## The ongoing nature of Continuing Professional Development

Licensed practitioners - it is important to maintain and update your knowledge and skills. You can do this by regularly undertaking relevant Continuing Professional Development (CPD). Do not underestimate the importance of CPD. It is an ongoing process which should continue throughout your career.

#### Why continuous learning?

Put simply, all industries today are constantly evolving. With advances in technology, changes in regulation, and increasing specialisation, CPD is becoming the norm for many tradespeople looking to get ahead in their careers and many employers hoping to meet their business objectives.

The CPD process helps you manage your own development on an ongoing basis after you have qualified. The same is true if you have many years' experience in the workplace, as it ensures you will continue to be competent in your profession.

CPD can help you:

- recognise new advances and methodologies which can provide you with improved ways to undertake tasks and
- improve your time management.

This means life-long learning has become a crucial part of career development. Without continued learning, you not only risk falling behind but also impacting the success of your career.

#### How does CPD work?

CPD requirements are very flexible. There are a range of approved learning activities which count towards the minimum CPD you must do each year.

To meet the CPD requirements of a practitioner's licence you must achieve the required points within each licensing period. For most practitioners it is easier to spread this learning out over the licensing period. For example try averaging 12 points per year rather than trying to achieve the total points for the 3 year licensing period in a short space of time. You will be in control of what, how and when you learn.

Planning your CPD is important because it needs to be interesting and relevant to you. You should consider:

- what are the learning outcomes of this activity/course?
- is this relevant to your current role?
- will I benefit from this activity/ course?
- will my employer benefit from this activity/course?
- will other people benefit for example your customers and/or colleagues?

#### Plan and prioritise

Try to make best use of time so you can meet your CPD requirements. Always consider the effectiveness, relevance and convenience of the learning, activity or training.

To plan your CPD it is helpful to:

- Identify where you are at in your career and where you want to be
- Plan how you can get to where you want to be, with clear outcomes and achievable objectives to track progress
- Act on your plan and consider new learning experiences, methods and events. This may mean researching available training/events. You can check the CBOS CPD calendar for upcoming training opportunities, online courses, TAFE training and industry association events.
- Reflect review your training and learning and consider if it is achieving what you want it to
- Apply put your theory and learning to use in your work and track your progress
- Impact/Result measure the impact the learning has had on the work you do. How has it improved your output and the way you carry out your work? Did the training meet your needs and those of your employer?

There are many learning and training opportunities throughout the year for you to take advantage of. These, along with your CPD eligible industry association memberships and Connections magazine subscription, can easily help you meet your CPD requirements.

Through ongoing learning CPD will help you:

- continue to expand your knowledge and skills
- meet professional standards
- meet public expectations increase consumer confidence
- meet regulatory requirements
- lower defects and risk.

## CPD – an investment in your career

It is useful to think of CPD as an investment by you in your career and an investment in your development as a professional by your employer. Both you and your employer can contribute to the investment. You might contribute the time and effort. Your employer might support you by providing CPD/study leave or covering/sharing any costs.

At the individual level, continuous learning is about expanding your ability to learn, by regularly:

- upgrading your skills and
- increasing your knowledge.

The outcome of well-planned CPD is that it safeguards:

- the public
- employers
- licensed practitioners and
- a licensed practitioner's career.

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

## Continuing Professional Development Record Example of how to record CPD activities

NAME: John Smith

Start Date: 17/05/2016 End Date: 16/05/2019 No. of Points Required: 36

Date	Name of Training/Course/Online Learning	Training/Journal/Internet Source	Certificate Y/N (not mandatory)	No. of CPD points
15/9/2016	Low Voltage Rescue	St Johns Ambulance	Yes	3
31/12/2016	Association Membership			1
12/12/2017	Working at Heights	RIS Safety	Yes	6
31/12/2017	Association Membership			1
19/2/2018	Connections Magazine	CBOS	Yes	6
02/3/2018	Online research: Power distribution specialists offers advise https://www.electricaltrademagazine.co.uk/article/power-distribution-specialist-offers-advice-fitting-event-power	SXS20	Yes	1
09/05/2018	Online research: Wiring Regulations: Circuit Protection http://professional-electrician.com/18th-edition/circuit-training/	Professional Electrician & Installer	No	1
10/5/2018	Journal Article: The Wiring Rules are Changing Are you ready? P32-38	Electrical Trade Magazine	No	1
24/6/2018	Journal Article: Contacta launches V14 loop driver to offer increased power p10-15	Electrical Trade Magazine	No	1
7/8/2018	CPD One Day Event – Launceston	CBOS	Yes	10
5/9/2018	New Wiring Rules – Updates Hobart	CBOS	Yes	6
31/12/2018	Association Membership		No	1
Total CPD Points:				38

Want to hear about CPD events coming up? Make sure your contact details are up to date. Go to My Licence at https://occupationallicensing.justice.tas.gov.au/mylicence and update your details directly online

### **CPD** events calendar

CBOS has provided a CPD events calendar to assist in your professional development opportunities. The activities in the Calendar have been assessed and approved by CBOS to ensure that they are both reliable and provide quality learning.

Use the training calendar to browse upcoming courses by licence holder category, date or region.

Architect	ts	Builders	<ul> <li>Building Designers</li> </ul>	<ul> <li>Building Services Designers</li> </ul>	
Building	Service Providers	<ul> <li>Building Surveyors</li> </ul>	<b>○ Electricians</b>	<b>○</b> Engineers	
Gas-Fitte	ers	OPermit Authorities	O Plumbers	Restricted Electrical	
Month All	•	Region All \$			
Sep 18 - 19	First Aid (HLTAIDO  O 04:30pm - 08:00  O Ulverstone Surf L  CPD Points: 6  Region North Wo	opm ife Saving Club, Beach Road, Ulv est			СРД



## Updates and reminders

#### Advice for solar installers

Solar installers are reminded that solar systems are to be left off until the new meter has been installed. Aurora Energy will contact the electrical contractor once the meter has been installed to advise that the customer's solar installation is ready to be switched on.

#### Asbestos in meter panels

Any meter panel containing asbestos needs to be replaced in order for an advanced meter to be attached by Metering Dynamics. Metering Dynamics now have asbestos trained crews and, where possible, will replace single-dwelling asbestos meter boards at the time of the meter exchange.

Meter panels containing asbestos can delay the meter exchange process. This may occur if the time taken to replace the meter board means other replacements cannot be completed and a second visit is required.

#### Thank you

The introduction of new metering rules in Tasmania has had a significant impact on all parties involved in the metering process. The transition has been challenging on a number of fronts and Aurora Energy would like to thank all parties for their ongoing patience and valuable feedback throughout this process.

### **Key contacts**

#### **Metering Dynamics**

Metering Dynamics CT sale enquires – 1300 792 611, Option 2/2/3 (MeterShop+) (8am-5pm Monday to Friday AEST) or metershop@meteringdynamics.com.au

Metering Dynamics large business customer enquiries – 1300 792 611, Option 2/1/1 (8am-5pm Monday to Friday AEST) or worksadmin@ meteringdynamics.com.au

#### **Aurora Energy**

Electrical Contractor Helpline (to check EWR status)
1300 085 055 (8am-6pm Monday to Friday AEST) or EChelpline@
auroraenergy.com.au

General metering enquiries 1300 132 003 (8am-6pm Monday to Friday AEST)

#### **TasNetworks**

To report a network fault or power outage 13 2004 (24 hours)

All customer enquiries outside of the above should be directed to customer's retailer directly.

## Implementation of AS/NZS 3000: 2018 Wiring Rules

From 1 January 2019 the Wiring Rules become the mandatory Standard for electrical work. The new 2018 edition has more than 200 changes. Many of these are editorials or additional explanations to help with unclear requirements in previous editions.

Although there are a large number of changes along with extra or new requirements – don't panic. You should be able to put in place the changes without disruption.

Changes to existing work practices include the introduction of RCD protection to:

- all domestic sub circuits, and
- the majority of circuits rated at 32A or less on non-domestic.

The increase to switchboard clearances and openings to switch rooms need consideration during the design phase. But as with other requirements, the electrician assumes responsibility for compliance when signing the Certificate of Electrical Compliance.

## Explaining the changes – we're here to help

CBOS, in partnership with NECA and Master Electricians, has hosted nine information nights around the state with two more events planned for King Island and Flinders Island. For future events, contact your industry organisation who may run more events depending on demand.

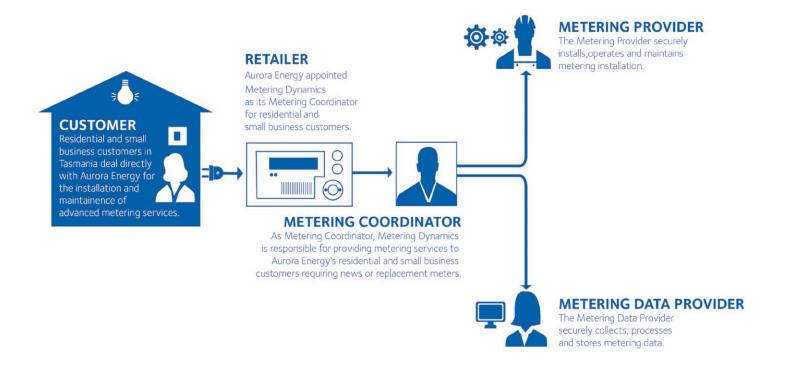
### Did you know...

Studying the Wiring Rules can also count towards your CPD achievement. You can earn a maximum of 4 points.

To get a copy call 131 242 or visit www.saiglobal.com



## Electrica



## Managing new metering services

The introduction of the national Power of Choice metering reforms in Tasmania has changed the way metering services are managed in Tasmania.

Aurora Energy is now responsible for the installation and maintenance of advanced meters in Tasmania.

Over the past few months a number of organisations and individuals have provided Aurora Energy with feedback on its metering processes, including ways to improve the visibility of Electrical Work Requests (EWR) once they have been issued to Aurora Energy from TasNetworks.

The following information has been developed by Aurora Energy to provide an update on some recent improvements and tips to avoid delays.

## Electrical contractor helpline

During processing, an electrical contractor may need to check the status of an EWR.

If an EWR has been submitted to TasNetworks, a contractor can log

on to TasNetworks' EWR portal and check its status.

To provide a central point of contact to follow up on EWR jobs Aurora Energy recently created the Electrical Contractor Helpline:

#### 1300 085 055 EChelpline@auroraenergy.com.au

To ensure Aurora Energy can assist with progressing EWR queries in the most efficient way, electrical contractors are asked to provide the current status of the EWR when they contact the helpline.

Aurora Energy has access to the Metering Dynamics portal and can see once a job has been issued and at what point it is in the process. Aurora Energy does not have access to the TasNetworks EWR portal, however, Aurora Energy can liaise directly with TasNetworks to confirm the status of an EWR.

## To help avoid any delays For new builds

 Ensure a Connection Application is completed with TasNetworks

- as soon as practical, before the connection is required
- Ensure the Connection Application process is complete before submitting the EWR to TasNetworks
- Once the EWR has been accepted by TasNetworks, check its status in the EWR portal. Remember - this can be done on a mobile device
- Make sure you have checked the status of your EWR before calling the Electrical Contractor Helpline.

## For meter alterations and replacements

- Check-in with your customer to ensure they have provided prompt, explicit consent to Aurora Energy (or their retailer)
- Be aware that if issues are found on-site this can impact meter installation timeframes - contact the EC Helpline for advice.



## AS/NZS 3000:2018 Understanding the changes

### Interpretation

The new 2018 edition of the Wiring Rules has been published. A 6-month implementation period has been provided to the industry before mandatory adoption on 1 January 2019.

During this period, you can use the previous 2007 edition if you are unsure of how to apply a changed requirement, or if a design under the previous version was done prior to the publication of the new 2018 edition.

Each state's electrical regulator are advising their electrical licence holders about the new standard. However, it should be noted that they have no legal requirement to ensure contractors are aware of the new requirements. It's the licence holder's responsibility - both electrical contractor and electrical worker.

#### Worker responsibilities

Licensed electrical practitioner must make sure they:

- are aware of the changes and
- can correctly apply the new requirements to the work being performed.

An electrical contractor employing electrical workers needs to make sure staff can meet this essential requirement.

It is ultimately the electrical contractor who will be responsible for any non-compliant work performed by an electrical worker on the contractor's behalf.

While it will be difficult for an electrical contractor to monitor work performed by their electrical workers and to manage the implementation of a new standard, it is important to do this as the consequences of failure to meet the new standard could be serious.

Firstly, returning to a job to fix a non-compliance issue can be costly to the business, with the extra work and possible new equipment likely to be non-chargeable. It also means a loss of revenue from other work that would have been scheduled.

A secondary consequence is the resultant loss of customer confidence and any potential future work.

#### Contractor responsibilities

Electrical contractors need to find a way to ensure their employees have the opportunity to understand the new requirements and demonstrate that ability.

Every electrical worker must have their own copy of the new standard. It must be available at all times they are practising their trade. This is as important as their test instruments and tools.

Depending on employment arrangements, it may be up to the contractor to provide the new edition of the Wiring Rules. The electrical contractor has an obligation in deeming an employee proficient in the new requirements.

How you do this will vary based on the size and location of your business. A small contractor with a handful of staff could manage this with toolbox discussions, extra time spent on the job with each employee and auditing uncompleted work prior to energisation.

Larger companies may look at inhouse training, internet-based Q & A tests or giving extra responsibilities to selected workers as mentors or auditors.

There are a range of solutions to meeting this requirement.

### **Tendering**

When pricing an electrical plan drafted by a third party, make sure the plan is compliant. You cannot blindly assume that an engineered design will be compliant. An electrical contractor is responsible for:

- the work they perform and
- referring possible non-compliant designs back to the designer.

## Application and interpretation

Many of the changes to the new 2018 edition are not straightforward requirements.

For example, the new RCD requirements for non-domestic and non-residential installations involve undertaking a risk assessment and



documented consultation with the owner. This is a complex task as in many instances where fixed wired equipment requires RCD protection, and the use of exceptions has very serious implications.

New requirements for equipment isolation and the problems finding acceptable methods to meet the requirement may differ on an inside location as opposed to a rooftop location. New definitions for the term "adjacent" and not restricting a roof surface by wiring systems, require knowledge of multiple changes to existing clauses applying to this work.

The regulator cannot always be asked for guidance and in many instances, may not want to be a source of compliance at a specific installation.

The electrical contractor has all design, product selection and installation responsibility.

#### The solution

To assist with this time-consuming yet essential learning requirement, a Master Electricians (MEA) membership may be your solution. MEA understands the problems associated with upskilling business owners and employees on the changes.

Guidance documents outlining the changes are provided to members at no cost. An online version of AS/NZS 3000:2018 is also provided to members at no cost, as well as information sessions, regular email updates and training refresher courses.

The Master Electricians AS/NZS3000 Roadshow was undertaken in all states and there are some sessions still available open to contractors and their employees. Places are limited, so registration is essential at www.masterelectriciains.com.au/events

MEA believes all electrical licence holders should attend these sessions in order to meet the competencies expected by regulators. Ignorance is no excuse for non-compliance.



## Electrica

## Electrical practitioners and contractors - administration requirements for electrical work

Record keeping and notification of electrical work provides:

- assurance to customers
- satisfies legal requirements and
- allows for testing and rectification process to occur.

#### Records of electrical work

If you are responsible for electrical work you must keep electrical work records for at least 10 years. You must also provide the customer with a copy of these records. This applies to all electrical work, including "like for like" replacements and new installations. Invoices which clearly detail the works completed are a common method used for recording electrical work.

## Notification of electrical work

Licensed electrical practitioners and contractors must provide notification within three days of energisation for certain classifications of electrical work. This means completing a Certificate of Electrical Compliance (CEC) form and providing it to TechSafe within three days. By completing CEC forms, electrical practitioners and contractors certify the quality of their work as:

- · being safe
- fit for purpose and
- meeting applicable standards.

Notification is not generally required for "like for like" replacement and

repairs to an existing electrical installations.

Find out more about the recording and notification requirements by reading the Occupational Licensing (Classification of Electrical Work) Determination 2016 available at www.cbos.tas.gov.au

### Testing and rectification

TechSafe undertakes testing to ensure that electrical work is satisfactory. For defective work use information from CEC forms to assign rectification notices to the persons responsible for their defective work. Practitioners and contractors can use their CECs to show which works they are and are not responsible for.



## DC isolators - what has changed?

Electrical regulators around Australia investigate fires where electricity is suspected to be a cause. A significant amount of fires are being directly attributed to have started from DC isolators.

As a result of investigations and concerns, several products are being recalled. A search of the Product Safety Australia website (www.recalls.gov.au) currently shows ten different recalls for DC isolators.

To prevent future recalls, and achieve a higher level of compliance, a higher level of certification standards is now required.



Remains of a failed DC Isolator

### Changes in risk level

On 30 June 2018 DC isolators were re-classified. They moved from "In-Scope" electrical equipment risk Level 1 to risk Level 3 under the Electrical Equipment Safety System (EESS) in participating jurisdictions who apply defining standard AS/NZS 4417.2:2018 Regulatory compliance mark for electrical and electronic equipment - Specific requirements for particular regulatory requirements

In Tasmania, under the *Electricity Industry Safety and Administration Act*1997, declared electrical articles must:

- be approved
- be marked to indicate the approval
- comply with the relevant standard

AS/NZS 4417.2 Amendment 4 was published on 2 July 2018. It lists DC isolators as Level 3 and defines which standard is the relevant manufacturing standard.

## Change in the manufacturing standard

The new standard AS 60947.3:2018 Low voltage switchgear and control gear - Switches, disconnectors, switch-disconnectors and fuse-combination units, is an adoption of the IEC 60947-3 edition 3.2 with additional Australian deviations. The new standard can be applied immediately and will supersede AS/NZS IEC 60947-3:2015 on 29 June 2019. Products certified to the 2015 standard have approval for sale which expires on 29 June 2019.



The new standard includes requirements specifically for DC isolators used with PV solar installation. The main changes, including Australian deviations, incorporated in AS 60947-3:2018 are:

- for devices for use outdoors, a rating of IP56NW (means no water in enclosure after IPX6 water jet test is applied), and
- the solar effects test on switchgear in its enclosure at rated current (this is in the latest IEC 60947-3 edition 3.2 published in 2015).

There are also a number of classifications that must be applied, and clarity on instructions to be supplied.

DC isolators for outdoor use are tested and certified to a minimum of IP56NW. The NW indicates 'No Water' is permitted to enter the enclosure. As part certification, the isolator is certified together with the enclosure to ensure the NW requirement is met.



Recent example of an isolator fire

## What is the Regulatory Compliance Mark (RCM)?

The Regulatory Compliance Mark (RCM) shows equipment sold by a responsible supplier complies with regulations in Australia and New Zealand. DC isolators have changed from a Level 1 product to a Level 3 product.



Regulatory Compliance Mark (RCM)

## Is your product nationally certified?

You can verify your product has nationally recognised certification by searching the database at https://equipment.erac.gov.au/ Public/



## Standard gas installation inspections – What is being found

Over the past 12 months, Gas
Standards and Safety (GSS) have
been conducting inspection audits on
standard gas installations within the
State

GSS assess installations for compliance against the prescribed Australian Standards. It is very important that gas-fitters have the right tools for their job. This includes access to the relevant Standards. To make sure an installation is compliant a gas-fitter must:

- read and understand the relevant Standards
- follow the manufacturer's instructions.

GSS inspectors have identified the most frequent non-compliance issues occurring with installations which have been signed off as compliant by gasfitters: See Figure 1.

### **Gas-fitting endorsements**

All gas-fitters must ensure they have the correct endorsement on their gas-fitting practitioner licence. There are separate endorsements required for boats and caravans. To check your licence details, visit <a href="https://occupationallicensing.justice.tas.gov.au/mylicence">https://occupationallicensing.justice.tas.gov.au/mylicence</a> and follow the prompts.

## Caravan – Issuing a Certificate of Compliance

Please ensure all fields on the Gas Fitting Notice (GFN) are fully completed. You must provide a Registration Number as well as a Chassis/VIN Number. If you are certifying for a retailer/seller make sure you get the new owner's contact information (name and contact number) and include this information on the GFN when submitting the completed form to the Director of Gas Safety.

Issue	Australian/New Zealand Standard
Gas appliance connection – means of isolation	AS/NZS 5601.1:2013, Clause 6.6.3
Cylinder clearances and locations	AS/NZS 5601.1:2013, Appendix J
Cylinder and appliance restraint	AS/NZS 1596:2014, Clause 4.4.11
Cooker clearances	AS/NZS 5601.1:2013, Clause 6.10
Regulator positioning (height)	AS/NZS 5601.1:2013, Appendix J
Fitting of compliance plate	Gas (Safety) Regulations 2014, Reg 52

Figure 1

## Filling out and submitting Gas Fitting Notices

Gas-fitters must submit completed Certificates of Compliance after any gas-fitting work is undertaken. This is provided in the form of a Gas Fitting Notice (GFN). This is a legal requirement under the *Gas Act* 2000.

Within 48 hours after commissioning an installation, you (the gas-fitter) must provide a copy of the GFN to:

- the owner, and
- · the supplier, and
- the Director of Gas Safety.

The responsibility is on you to provide GFNs within the prescribed time

#### Large installations

Gas-fitters who are doing a large installation requiring commissioning in stages, should:

- sign off each stage, and
- notify the Director and the gas supplier when each stage is completed.

Gas suppliers must supply safe and compliant gas installations. GFNs are used to determine safety and compliance. If a gas supplier does not receive a GFN, they are obliged to turn off the gas until you provide a completed GFN.

## Alterations to existing gas installations

If you are completing an alteration to an existing gas installation, you must still send a GFN to the Director as well as the gas supplier. You must also submit a completed GFN if you are adding an appliance to an existing gas installation. This helps Gas Standards and Safety if there is a recall or safety concerns with an appliance. It also helps gas suppliers make sure supply capacity is sufficient to ensure installation safety.

## Lodging a Gas Fitting Notice

You can lodge the gas supplier's copy of the completed GFN by:

- Emailing a photo or scanned image to connections@tasgas.com.au
- More information is available at www.tasgas.com.au/tas-gasnetworks

You must send the original GFN to the Director of Gas Safety by:

- Post: PO Box 56, Rosny Park TAS 7018 or
- You can email a copy of the GFN to cbos.info@justice.tas.gov.au to meet the 48 hour notification requirement
- Important: you must still post the original GFN to the Director
- More information is available at www.cbos.tas.gov.au

## Flame safeguards on domestic cookers

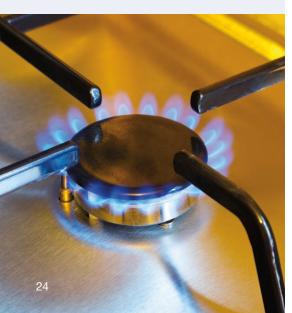
Gas-fitters may remember a previous Connections article mentioned that flame safeguards were mandatory for cookers manufactured after 1 July 2017. This safety initiative has caused some confusion in industry. Gas Standards and Safety has received calls from gas-fitters whose customers have asked them to install cookers without flame safeguards on all burners.

## Which cookers are affected?

The flame safeguards requirement applies to domestic gas cookers only.

- If the gas cooker doesn't have flame safeguards and has a manufacture date before 1 July 2017, you can install it without restriction
- If the gas cooker has a manufacture date after 1 July 2017, it must have flame safeguards

Gas-fitters need to establish the manufacture date of appliances to determine if the appliances comply with this new requirement. AS/ NZS 5263.1.1:2016 Gas appliances Domestic gas cooking appliances requires the year and month of manufacture to be clearly and permanently marked on the appliance in a legible location when the appliance is installed.





# Changes to the caravan licensing endorsement - refresher training is now required

Important information to anyone holding a caravan licensing endorsement

If you are renewing your gas-fitter certifier caravan endorsement you must complete a refresher course.

- The refresher course has been allocated 6 CPD points
- You are required to complete the course every 3 years

This renewal condition has been in place since 2010 when the original Determination came into effect. However it has not been enforced previously because a suitable course was unavailable. This has now changed.

CBOS, in conjunction with TasTAFE, has prepared a course which has been accepted by the Administrator of Occupational Licensing.

### Course availability

TasTAFE is planning the first course later in 2018 for anyone required to renew a licence between 1 Jan – 31 Mar 2019. If your licence renewal falls

within this time period, you will receive a letter. You will be required to contact TasTAFE to arrange completing the course. Further courses are planned for future licence renewal cycles (Apr/Jun, Jul/Sep etc).

From 1 January 2019 CBOS will be enforcing the caravan licensing endorsement

## What happens if the refresher course isn't completed before renewing a licence?

The caravan endorsement will be suspended until you provide evidence you have completed the course through your My Licence account.

#### **Determination**

For more information read the Occupational Licensing (Gas-fitting Work Licence Classes – Gas Installation) Determination 2016 available at www.cbos.tas.gov.au

Gas

## Combustion products and spillage testing flued appliances

Carbon monoxide (CO) and carbon dioxide (CO2) are often confused.

- The names sound the same
- They both are colourless and odourless gases
- At high concentrations, both can be deadly

In fact, carbon monoxide is one of the most fatal types of poisoning in the world. It is produced in several ways:

- Naturally (in trace amounts) by the partial oxidation of methane in the atmosphere for example volcanoes and bush fires
- At dangerous levels by oxygen starved combustion in gas appliances which are insufficiently:
  - » fuelled
  - » ventilated
  - » maintained

## Carbon monoxide poisoning

The average level of carbon monoxide in the air we breathe is around 0.1 parts per million (ppm). Carbon dioxide is around 400 ppm.

Mild symptoms of carbon monoxide poisoning can include:

- headaches
- dizziness
- nausea

These symptoms can occur when you are exposed to concentrations around 100 ppm. Similar symptoms can occur when exposed to carbon dioxide (CO2) concentrations of 30,000 ppm.

This, and the likelihood of flue spillage from open flued appliances (with draft diverters) when subjected to negative room pressures, proves the importance when considering:

- the design and installation of gas appliances, and
- appropriate testing for flue spillage during the commissioning and operation process.

These procedures saves lives

#### Spillage testing

AS/NZ 5601.1:2013 Gas installations General installations Appendix R contains specific guidelines for spillage testing flued appliances.

Except for room sealed appliances, these tests and test conditions are a national minimum requirement when installing any flued appliance. You should use them in conjunction with all standard commissioning procedures. These tests help determine if there are adverse effects from any mechanical ventilation/extraction and if there are any further fixed ventilation requirements.

#### **Testing**

- Before you start testing, check that the appliance is installed correctly and the flue isn't blocked
- Conduct the initial flue test (R2) without the appliance operating
- Close all external doors and windows
- Open internal doors between the extraction fan and flued appliance and turn on any mechanical ventilation (kitchen and bathroom). It is essential to manipulate the internal doors to mimic maximum suction effect or "worst case scenario"
- Light a suitable smoke producing device (for example a smoke match or incense stick) and position it next to the appliance combustion air intake or draft diverter if installed
- Observe the smoke carefully which should be drawn into the appliance.
   If the smoke is drawn towards the source of suction (mechanical ventilation) then further action is required

## Calculating ventilation size requirements

- Open a window in the room containing the mechanical vent and make a note of the sized opening when the spillage is fixed
- For the next test, run the appliance for a minimum of 10 minutes.
   Consider the flue size and length
- Perform this test with all doors and windows left in the same position as the initial test, and all extraction

fans operating. Following the same smoke test steps previously used should produce a satisfactory result where no flue spillage products are drawn back into the room. If spillage continues, adjust window openings again

Once you have reached a satisfactory result, refer to AS5601.1:2013
Appendix R4 for specific requirements for fixed vent locations. Locate vents in the space where appliances are installed and position to prevent any discomfort to the occupant.

## Servicing older flued appliances

It is essential that gas-fitters follow these procedures, not only on new installations but especially when servicing older flued appliances.

You should also consider checking appliances when performing alterations on an installation where flued appliances are installed.

Gas Standards and Safety inspectors may conduct similar testing:

- to determine correct installation, or
- confirm correct appliance servicing procedures.

### Managing change

Gas-fitters need to adapt in line with changes in technology and appliances. It is now common for gas-fitters to carry and use flue gas analysers. GSS recommend you use these tools as part of your standard practice. This type of equipment can:

- help check flue spillages
- locate leaks on flue shafts, appliance panels and recessed appliances
- · accurately read exposure levels
- confirm that repair work needs to be done immediately.





## Open flued appliances - Responsibilities for maintaining consumer safety

Recently a Victorian woman died from exposure to carbon monoxide produced by an open flued gas appliance. This highlights the fact that adequate ventilation and proper flueing are essential to operate gas appliances safely and efficiently. This risk requires gas-fitters to always be:

- vigilant when installing and servicing these types of appliances, and
- **observant** of correct appliance flue performance testing.

#### Types of gas space heaters

Gas space heaters are classified as:

- flueless heaters
- · room sealed heaters, and
- open flued heaters.

Open flued heaters draw air from the room to support combustion. Combustion products, which are hotter and lighter than the ambient air, are directed to the atmosphere through the flue. This design means there is a risk that inadequate ventilation and exhaust fans can draw these combustion products (including high levels of carbon monoxide) back into living areas through the draft diverter.

### **Draught diverters**

The draught diverter is an opening in the flue designed to allow combustion products to spill into the living area if the flue is blocked. When the flue is operating correctly, the hot combustion products travelling up the flue will suck combustion products past the draught diverter opening. However, when there is a fault, the draught diverter is designed to automatically redirect combustion products into the living area without:

- interrupting airflow to the burner or
- producing excessive carbon monoxide.

A room which has a heater installed requires ventilation to:

- replace air being consumed by the heater, and
- prevent negative pressures from exhaust fans which can affect the normal operation of the heater.

## Negative pressure environments

Negative pressure environments significantly increase the risk of a fatality or serious injury from carbon monoxide poisoning. Gas Standards and Safety recommends that gasfitters service all open flued heaters at least every two years to ensure appliances are operating safely. As well as other routine service tasks, gas-fitters working on open flued appliances must visually inspect the flue system and conduct a combustion spillage test (CO test).

Ensuring a gas installation is safe is a fundamental responsibility for all gas-fitters

## Gas appliance installation and servicing

When installing or servicing any open flued gas appliance, gas-fitters must always start with inspecting

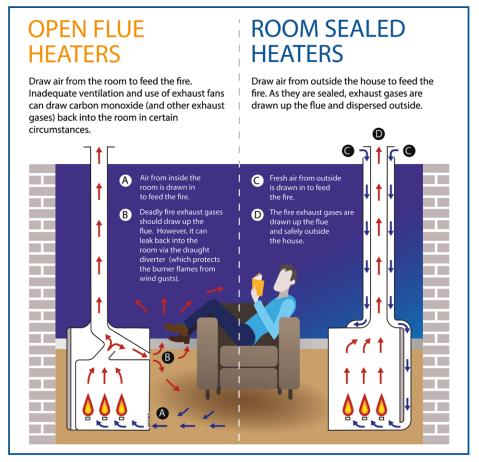


Image used with the permission of Energy Safety Victoria (ESV)



the installation and checking the air supply quality and adequacy. This includes performing a negative pressure smoke test and spillage test as per Appendix R, AS/NZS 5601.1:2013 Gas installations General installations. This can be broken down further into three points to consider:

- Air supply quality (AS/NZS 5601.1:2013, clause 6.4.2),
- Air supply adequacy (AS/NZS 5601.1:2013, clause 6.4.1),
- The adverse effect of air movement systems (AS/NZS 5601.1:2013, clause 6.3.1).

There are risks associated with open flued gas space heaters and open flued Type 2 decorative effect gas appliances with draught diverters. Nationally, serious concerns have been raised about a lack of ventilation, particularly when a negative pressure environment is caused by kitchen range hoods or bathroom exhaust fans (or both). Gas-fitters and gas appliance suppliers need to be aware that subsequent national actions have resulted in a substantial number of open flued heater certification suspensions.

Appliances without current certification cannot be legally sold or installed

### **Appliance certification**

To keep up to date on these appliance certifications go to the Gas Technical Regulators Committee (GTRC) National Certification Database at http://equipment.gtrc.gov.au/

## Master Plumbers Association Tasmania -Flue spillage testing training

CBOS welcomes the Master Plumbers Association Tasmania (MPAT) initiative to deliver flue spillage training. This has come as a result of substantial dangers posed by incorrectly operating open flued gas appliances.

The Director of Gas Safety and MPAT are encouraging every gasfitter to attend the sessions which will earn attendees CPD points. MPAT will release details on training session dates, times and locations soon.

For more details go to www.mpatas.com.au or follow the CBOS Facebook page at www.facebook.com/
TasBuildingStandards



## Dial Before You Dig (DBYD)







## Lead in drinking water

In 2016 lead was discovered in the water supply at the Perth WA children's hospital. The levels exceeded the Australian Drinking Water Guideline (ADWG) levels. Since then, Queensland and Victoria have also had instances where water supplies and/or fixture testing has indicated lead levels above ADWG recommended safe levels.

In Tasmania, the Department of Health and Human Services routinely tests drinking water. Recent testing found some Tasmanian drinking fountains returned moderate levels exceeding the ADWG limits for heavy metals in drinking water. In all cases, the testing fountains were:

- complying with AS/NZS 4020:2018
   Testing of products in contact with drinking water, and
- all WaterMark certified.

The source water of these drinking fountains was also tested. The results showed the water did not contain heavy metals in concentrations which would cause these elevated levels.

## So what is causing this increase in lead in the drinking water?

According to DHHS, if you rule out contamination of the source water, the evidence points towards the drinking fountains leaching metals into the drinking water. Although these drinking fountains are all AS/NZS 4020 and WaterMark compliant, independent tests are finding increasing evidence of compliant fixtures leaching heavy metals, particularly lead, into water.

Currently the Australian Building Codes Board is reviewing both AS/NZS 4020 and the WaterMark Certification Scheme to try and identify if the requirements contained in both are adequate.

## Is there any cause for concern?

DHHS has advised that the considered safe levels of lead in drinking water are set out in the

ADWG (Less than 10ug/L). Levels are based on the life-time exposure for an adult of average body weight consuming 2L of water a day. Reducing or eliminating lead or other heavy metals from drinking water is obviously an ideal solution. However this emerging issue is complex. Industry, state and territory regulators, the ABCB and enHealth are all working on identifying suitable strategies for dealing with this issue as further research reveals more accurate data

### What can you do?

Analytical Services Tasmania (AST) can test water samples if you have concerns about lead or heavy metals in your drinking water. Contact AST on (03) 6165 3300 or send an email to enquires@ast.tas.gov.au

AST notifies the Department of Health of any non-compliance samples outside the health-related limit of the ADWG.

# Accreditation fees for plumbing products and systems

Accreditation fees apply to certain plumbing products and systems in Tasmania. These fees started in March this year and apply to manufacturers seeking to have plumbing products or systems accredited for use in Tasmania by the Director of Building Control.

#### Accreditation

All on-site wastewater management systems installed in Tasmania must have accreditation. This includes:

- Aerated wastewater treatment systems
- Composting toilets
- Greywater treatment systems.

Accreditation is not required if the council permit authority has authorised the system to be installed as a unique plumbing installation. Accreditation is also required for other plumbing products which require certification under the Plumbing Code of Australia and are not certified under the WaterMark Certification Scheme.

For more information on the accreditation process for plumbing products and systems, go to **www.cbos.tas.gov.au** and read the following documents:

- Director's Determination Accreditation and Maintenance of Plumbing Installations
- Manual of Authorisation and Accreditation Procedures for Plumbing Products and Systems

You can read information on certified products and services including Certificates of Accreditation.

### Fees and categories

These fees are CPI indexed and increase on 1 July each year. View the current fee list at

www.cbos.tas.gov.au

Accreditation category	Accreditation fee
Accreditation for a plumbing product or plumbing system, other than an onsite wastewater management system	\$763.14
Accreditation for an on-site wastewater management system	\$1523.12

## Short and medium term visitor accomodation audits

There has been significant growth in the accommodation sharing economy. CBOS has started auditing short and medium term visitor accommodation throughout Tasmania.

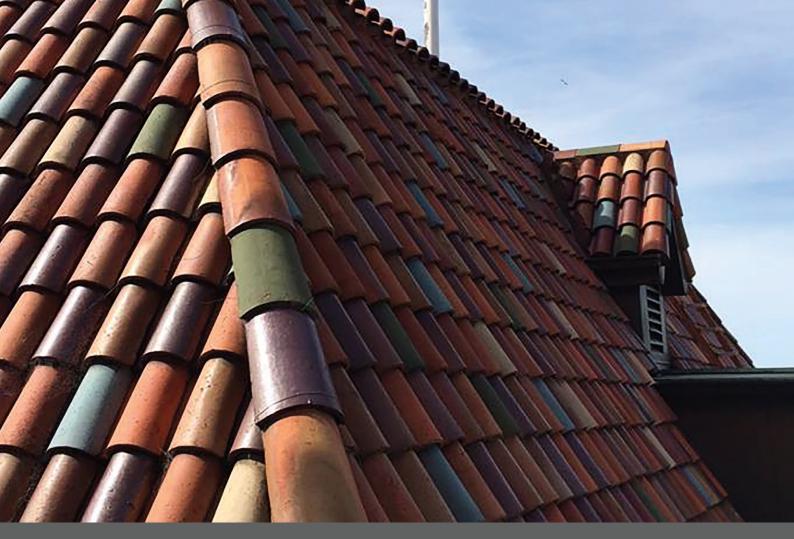
Short and medium term visitor accommodation providers must lodge a self-assessment checklist with Council, if they meet the requirements of the Determination. The audit aims to ensure safety and compliance by focusing on the self-assessment checklist.

### The audit findings will:

- help CBOS educate owners about the requirements
- help owners ensure the safety of their properties, and
- strengthen the existing legislative building framework.

The Director's Determination – Short or Medium Term Visitor Accommodation has now been in place for 12 months and is available at www.cbos.tas.gov.au





## Open house event picks up steam -10 -11 November 2018

Tasmanians have another chance to look behind the scenes of our most intriguing buildings and discover what makes them work.

The state's most popular architecture and design event, Open House Hobart (OHH) is on again this year, over the weekend of 10 – 11 November. Organised and run by the Tasmanian Chapter of the Australian Institute of Architects, OHH is the local version of a global event first held in London in 1992 and now staged in more than 30 cities around the world. It gives visitors the chance to see how others live, work and play; look up, look inside, have a sticky-beak, and see the city from a different angle.

'For five years now, people have had the opportunity to see behind the scenes of Hobart's unique built environment and enjoy a combination of heritage and contemporary architecture,' says Open House producer, Jennifer Nichols.

'This year, we are continuing to build on this, with the focus on different housing models, particularly those that provide innovative solutions to local challenges. We love opening up some of the hidden gems our city has to offer and seeing the results that come from taking a different design approach.

'Whether it's dealing with Hobart's hilly topography or designing a house for maximum energy efficiency, our buildings reflect the diversity of our geography and population and we are proud to be able to show them off to locals and visitors alike.

'We will also have many of our muchloved inclusions from previous years, including some of Tasmania's bestknown heritage buildings, which have been repurposed as must-see tourist destinations through sensitive and well-considered adaptive reuse.'

Don't forget your camera. Some buildings require registration to

visit. In true Tassie style, it's first in, best dressed! So be sure to reserve your place for each building. Bookings can be made at https://openhousehobart.org

As you make your way around the city, share your snaps with the world by using the hashtag **#oh\_hobart** There's some great Tasmanian loot to be won.

Open House is generously supported by our major partners, the Tasmanian Government and the City of Hobart, our design partner, Futago, and our supporting partners, Federal Group, the Tasmanian Heritage Council and Austral Bricks.





Australian Institute of

## Into the future with WorkSafe Month 2018

Our working lives are rapidly transforming, through the increase of digital technologies and robotics, changing employment patterns, people staying at work longer, rising levels of work related stress and chronic disease and sedentary behaviours. These and other significant changes are likely to have disruptive impacts on the Tasmanian working environment.

Anticipating these impacts and preparing for a range of plausible futures is an important step in ensuring the long-term effectiveness of our work health and safety systems.

WorkSafe Month 2018 adopts these future possibilities as the theme for its events, to help employers and workers prepare for the challenges and changes ahead.

## Risk management workshops

New technologies present new opportunities — and new risks. Our workshops will present ways of transforming your thinking from safety-based to risk-based; and help you achieve productivity and quality work outcomes.

Presented by Tania Van der Stap from ALIGN Risk Management and supported by WorkSafe's Advisory Service, the workshops will address risk challenges and opportunities that affect Tasmanian businesses every day.

## Two day WorkSafe conference

The theme of this year's conference, at the Hotel Grand Chancellor in Hobart on **23 and 24 October**, is 'Future Work, Future Challenges'.

Featuring keynote speakers and workshops with leading experts across industries, sectors and educational institutions, the conference will examine key trends (known as 'megatrends') and innovations, and their impact on health, safety and wellbeing. It will also help employers prepare for these changes and achieve better health, safety and wellbeing outcomes.

Area	Location	Date and Time
Hobart	Tattersalls Park Function Centre, 6 Goodwood Road, Glenorchy	8 October 2018 9am – 12noon
Strahan	Risby Cove, Esplanade. Strahan	10 October 2018 10am – 1pm
Smithton	Tall Timbers, 5/15 Scotchtown Road, Smithton	12 October 2018 2pm – 5pm
Ulverstone	Ulverstone Sports and Leisure Centre, Flora Street, West Ulverstone	16 October 2018 9am – 12noon
St Helens	Bayside Inn, 2 Cecilia Street, St Helens	17 October 2018 5.30pm – 8.30pm
Launceston Tramsheds Function Centre, 4 Invermay Road, Launceston		18 October 20189am – 12noon

The conference will culminate in the 2018 WorkSafe Awards cocktail evening.

Held every two years, the WorkSafe Awards celebrate the outstanding achievements of Tasmanian workplaces and individuals who lead the way in raising the standards of work health and safety, health and wellbeing, and return to work.

The Awards promote and encourage innovation and excellence in these areas and can help drive positive change in the Tasmanian community and better work, health and safety outcomes. The Awards also reinforce the message that safe business is good business, with less injury and illness helping improve overall performance and productivity.

The 2018 conference is an opportunity to connect with peers, gain invaluable insights into future work, future challenges and establish new professional connections.

#### Flinders Island events

We understand it's difficult to attend a WorkSafe Month event if you're in a regional area. So our Health, Safety and Wellbeing Advisors will be on Flinders Island to discuss the best way to implement new safety and wellbeing practices in your business. Whether you're starting out or want to change your existing policies and procedures, our Advisors will give you the tools and information you need.

On Wednesday, 17 October, WorkSafe and beyondblue will host a forum on the Island with Lindsay Morgan, who will talk about his struggle with depression.

## Strahan Beach to Bay Fun Run

WorkSafe Month will conclude on **Saturday, 3 November,** with this fun community event. Active Strahan and WorkSafe are hosting another chance to enjoy exercising with your family and friends in our great outdoors.

#### Virtual seminar series

Safe Work Australia will broadcast free online seminars showcasing the latest thinking, research, developments and best practice in work health and safety. Watch these at

www.safeworkaustralia.gov.au

#### Register to attend now

It's not too late! For details of all 2018 WorkSafe Month events and to register to attend, go to www.worksafe.tas.gov.au and follow the links for WorkSafe Month 2018.



## CONNECTIONS

### **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

### **CONNECTIONS** mailing list details

If you would like to be added to the mailing list, please email the following details:

Name:

Position/Title: Organisation:

Postal address: (if you would like a printed copy)

Phone:

If you would like to be removed from the mailing list or change details for the current subscription, please provide the new details or request by emailing CBOS.info@justice.tas.gov.au or ring 1300 654 499



### **Building in Tasmania**





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

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.