



# Electricity Industry Bulletin No: 58 June 2005

## FOR THE ATTENTION OF ALL ELECTRICAL WORKERS

### 1. THE SAFE USE OF POWER BOARDS

With the use of multi-outlet power boards proliferating in the home, Electrical Standards *and* Safety (ESS) warns about the danger of misusing them. Investigations involving power boards reveal that misusing power boards is prevalent. The following photos demonstrate what can happen.

The current Australian Standard requires that all power boards incorporate minimum safety requirements, including a circuit breaker to prevent overloading if fitted with three or more outlets. It should be noted that some older models might not incorporate a circuit breaker and it is strongly recommended that these units be replaced with more up to date models.



Despite their inherent overload protection, the use of multiple or cascaded power boards is no substitute for permanently installed power points. Due to their portability and upward facing sockets, power boards are more prone to damage, contamination, and wear and tear than fixed socket outlets.

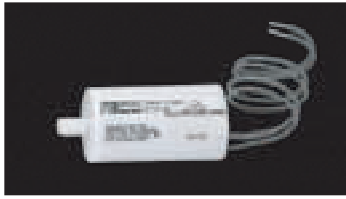


ESS recommends that owners and users of power boards:

- consider having fixed power points permanently installed by a licensed electrical contractor for a long-term solution
- do not cascade or piggy-back power boards
- do not use double adaptors in conjunction with a power board
- check from time to time to ensure that power boards show no obvious signs of damage and that socket contacts firmly grip the plug when inserted (ie there is no sloppiness when inserting the plug or when it is inserted)
- do not use power boards outdoors or in dusty or polluted environments, such as workshops and building sites
- do not use power boards in locations where infants, children or pets can access them
- do not use power boards in areas where there is likely to be water present (eg beneath aquariums, in a kitchen or bathroom)
- do not use a power board if it has been subjected to moisture or water, or has in any way been damaged.

ESS also strongly recommends the use of power boards on power circuits that are protected by a safety switch (also known as a residual current device).

## 2. ELECTRICAL SAFETY ALERT—ATCO LIGHTING CAPACITORS



Atco Controls issued a Trade Alert in March 1998 in relation to ATCO 'CP' type lighting capacitors (250V rated) bearing batch numbers 20/94 through to 32/96.

As a result of that Trade Alert and an inspection and replacement program carried out with assistance from the lighting industry, a large number of the potentially affected capacitors were identified, removed and replaced.

Atco Controls has since received reports of several incidents which may be associated with potentially affected capacitors. While Atco Controls expects there are only few of these capacitors still in use, the company seeks assistance from electrical contractors to identify and replace any of these capacitors they find still in service.

### Description of issue

A small number of potentially affected capacitors from these specific batch numbers (20/94 to 32/96) have failed in a manner which may cause damage within a light fitting, or in buildings where light fittings containing these capacitors have been installed. The damage which might be caused includes the potential risk of fire.

### Remedial action

It is highly recommended that any contractor aware of an installation containing Atco 'CP' type lighting capacitors (250V rated) from the batch numbers 20/94 to 32/96 replace the affected capacitor, which in any event, would be nearing the end of its effective life. For more information, contact Atco Control on 1300 657 100.

## 3. SUCCESSFUL TRADE NIGHTS

A number of trade nights for electrical contractors and electricians were held in Hobart, Launceston and Ulverstone during April, with presentations given by Energy Skills Australia, TAFE Tasmania, Aurora Energy and ESS.

Those speaking at the trade nights were pleased with the high number of contractors and electricians who attended, assuring that the nights were successful. In fact, organisers are hoping to hold similar events in the future.

ESS would like to thank all those supporting the trade night. In particular, we would like to thank National Electrical Contractors Association (NECA) for coordinating M M Electrical Merchandising, Clipsal Australia, Novaris Pty Ltd at all the three venues and Lawrence & Hansen Electrical Distributors and E W M Electrical Pty Ltd at the Hobart venue. Thanks also extend to J Boag & Son and Energy Skills Australia.

## 4. NEW ELECTRICAL SAFETY TIPS BROCHURE

Enclosed with this bulletin is a copy of ESS's new brochure titled *Electrical Safety Tips*, which was launched at Agfest in May this year. This practical guide provides basic safety tips on installing and using electrical appliances safely.



For additional copies please contact Workplace Standards Tasmania Helpline on 1300 366 322.

## 5. INSULATED PIN PLUGS

An article appeared in Bulletin Number 57 about the requirement for all 3-pin plugs on offer for sale after 3 April 2005 to have insulated pins. Following the publication of the bulletin, the Minister for Infrastructure, Energy and Resources Bryan Green MHA released a public announcement stating that '*despite a national standard applying from 3 April outlawing uninsulated electrical plugs, Tasmanian retailers will be given a further 12 months to clear their existing stock*'.

If you sell electrical articles, and have existing stock as of 3 April 2005 still fitted with non-insulated pin plug, then you need to clear this stock as soon as possible.

At this stage you should not be receiving from your supplier any electrical articles fitted with non-insulated pin plugs. **The extension of time is only to clear stock that was on hand prior to 3 April 2005.**

## 6. OCCUPATIONAL LICENSING ACT UPDATE

Version 33 is now the current draft. The Bill been introduced to Parliament. It may be perused at [www.parliament.tas.gov.au/bills/billsweb.htm](http://www.parliament.tas.gov.au/bills/billsweb.htm)

## 7. BE CAREFUL—OR PAY WITH YOUR LIFE

Mr Garry Michael Barwick, an unlicensed electrician, was installing lighting in a ceiling space when he died. The April 2005 Coroners inquest into Mr Barwick's death found that:

- Mr Barwick died by electrocution after coming into contact with a live terminal of a junction box situated in a ceiling space
- the junction box did not have the cover required by AS/NZS 3000:2000
- the death of the deceased was avoidable.

The direct method Mr Barwick used to prevent electrocution was to station his workmate at the stairwell light switch to prevent the switch being switched on, and therefore preventing the light circuit that he was using being energised or made 'live'.

The Coroner was advised that this was not a safe practice, and that this circuit should have been isolated at the main switchboard. This would not have isolated the circuit relevant to the exposed junction box, but it is the accepted safe practice. If Mr Barwick had done this, the switchboard would not have been locked as it was, and the time taken to switch off the power (from the time Mr Barwick called out to his workmate) would have been reduced significantly. To have not performed this task is tantamount to undertaking a hazardous task with disregard for both their own safety and the safety of other occupants of the building.

The Coroner also said he was satisfied that "the deceased did not employ adequate safety precautions" at work, and that "this was a significant causative factor in his death".

The Coroner thought "it appropriate and timely to once again remind the community that only appropriately licensed electricians, authorised under the *Electrical Industry Safety and Administration Act 1997*, carry out electrical installation and or repair work and that the fullest safety procedures and protocols be identified and followed at all times".

To read the full Coroner's verdict of this case, go to [www.courts.tas.gov.au/magistrate/decisions/coroner\\_s/gmb.htm](http://www.courts.tas.gov.au/magistrate/decisions/coroner_s/gmb.htm)

It is unfortunate that these warnings could just as easily apply to a similar fatality in Western Australian. For more information about that case, read the April 2005 (No. 35) issue of *Electrical Focus*. Go to [www.energysafety.wa.gov.au/energysafety/media\\_include/electrical\\_focus\\_35.pdf](http://www.energysafety.wa.gov.au/energysafety/media_include/electrical_focus_35.pdf)

## 8. AGFEST 2005

Once again we took the opportunity to be involved in an electrical safety display as part of the Workplace Standards Tasmania promotion display at Agfest.

Our key message this year was "Electricity kills instantly: Don't do it yourself". On display were numerous defective electrical products that drew a lot of attention helping us to reinforce our safety message.

Our new *Electrical Safety Tips* brochure was launched (see previous story), and a new safety sticker was also available.

This sticker is part of one of ESS's "Use a Licensed Electrical Contractor" education campaign.



The number of people visiting the ESS display area was very encouraging, with many people asking for further information about electrical safety.

## 9. EQUIPMENT INVESTIGATION RESULTS IN CHANGE TO STANDARDS

ESS is involved in a number of national electrical safety committees. The Electrical Regulatory Authorities Council (ERAC) working group and the Australian Standards committee for household electrical equipment EL/2 are both concerned with the safety of electrical appliances.

A short time ago ESS investigated two reports in Tasmania of damage to supply cords that had come into contact with the hot surface of a sandwich toaster. The incidents were reported back to the relevant ERAC committee, where it was found that the South Australian electrical regulator also had concerns with similar incidents.

Electrical regulators took their concerns to the Australian Standards committee EL/2, where the committee agreed to publish an amendment to the relevant electrical safety standard. This amendment requires a different type of supply cord - one that would be more resistant to heat damage to be fitted to sandwich toasters.

Not all investigations into electrical equipment failures result in changes to the relevant electrical safety standards. There are a lot of factors that need to be considered by a large group of people before this occurs; however with this case, it was clearly identified that there was an important safety issue that needed to be addressed.

## 10. LICENSING FEES

Licensing fees will increase on 1 July 2005 due to indexation and in accordance with the *Fee Units Act 1997*. Below is a guide to the new fees. Please note alphabetical renewal periods remain the same.

TYPE	APPLICATION FEE (\$)		LICENCE FEE (\$)		TOTAL FEE (\$)	
	OLD	NEW	OLD	NEW	OLD	NEW
Electrical Technician (3 yr Licence)	34.20	35.10	102.60	105.30	136.80	140.40
Electrical Contractor (1 yr Licence)	34.20	35.10	228.00	234.00	262.20	269.10
Provisional (1 yr Licence)	34.20	35.10	34.20	35.10	64.80	70.20

For further information contact Licensing on (03) 6233 7831.

## 11. NEW STANDARDS FOR HAZARDOUS AREAS

Twelve new revised Hazardous Areas Standards have been published in April/May 2005; most as adoptions of recent International Electrotechnical Commission (IEC) editions to keep Australia aligned with the latest IEC Standards.



Some of these new/revised standards refer to the Dust Series AS/NZS 61241 and others refer to the Gases Series AS/NZS 60079.

Amendments are available by contacting Standards Australia offices on 1300 654 646 or by visiting their website at [www.standards.com.au](http://www.standards.com.au)

## 12. HAZARDOUS AREAS AWARENESS SEMINARS

In order to introduce the industry to the above new standards (as well as other upcoming changes and trends) Standards Australia, in association with SAI Global Professional Services, will be conducting two half-day awareness seminars in Hobart on 27 July 2005.



Each seminar will focus on changes in Australian Standards and the installation and certification of Ex equipment. The seminar would suit electrical engineers, instrumentation and control engineers, electrical contractors, electrical designers, electricians, consultants, plant managers, occupational health and safety managers, buyers and suppliers of electrical equipment for hazardous areas (Ex equipment), regulators and inspectors, mine electrical engineers, mine managers, Ex equipment manufacturers and personnel involved in dealing with hazardous areas.

For further information, contact SAI Global Professional Services on 1300 727 444 or visit [www.sai-global.com/training](http://www.sai-global.com/training)



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