



Electricity Industry Bulletin No: 63 December 2006

FOR THE ATTENTION OF ALL ELECTRICAL WORKERS

1. IMPORTANT INFORMATION FROM THE TASMANIA FIRE SERVICE

Photo-Electric Smoke Alarms are More Effective than Ionisation Smoke Alarms

For many years, the Tasmania Fire Service (TFS) has been promoting the benefits of smoke alarms in Tasmanian homes. They have saved many lives over the last 30 years. Two types of smoke alarms have generally been available; the ionisation alarms and slightly more expensive photo-electric alarms.

Until now, TFS has highlighted the relative merits of both types - ionisation alarms are better at detecting flaming fires, and photo-electric alarms are better at detecting smouldering fires. TFS and other Australian fire services have let consumers choose which type of alarm is better for their circumstances.

Recent research concludes that photo-electric alarms are superior to ionisation alarms, and should be promoted as the 'technology of choice' for home use.

The research, commissioned by the Australasian Fire Authorities Council (AFAC), strongly supports the view that only photo-electric alarms consistently detect typical fires in the home in time for occupants to safely escape. Photo-electric alarms typically detect smouldering fires significantly sooner than ionisation alarms and detect flaming fires only a few seconds slower than ionisation alarms.

The research indicates that ionisation alarms may not always detect smouldering fires in time to alert occupants to escape.

Until better technology is available, TFS now supports photo-electric smoke alarms for in-home use, rather than the less expensive and more common ionisation alarms. Where hard-wired smoke alarms are required to be installed in dwellings in accordance with building regulations, TFS recommends that these be photo-electric alarms.

However, householders shouldn't be encouraged to remove their ionisation alarms. Ionisation alarms have saved hundreds of lives in Australia over the last 30 years. Rather, TFS encourage householders to install photo-electric alarms as well. Photo-electric alarms will increase the likelihood of surviving a house-fire.

The comprehensive AFAC position on smoke alarms, which is supported by TFS, can be viewed at:

http://www.afac.com.au/awsv2/publications/documents/AFACsmokealarmposition-3April06_001.pdf



2. CARE USING SELF-DRILLING SCREWS

With the ever-increasing popularity of self-drilling screws being used in the electrical industry, Electricity Standards and Safety would like to remind electrical workers of the need for the correct selection of self-drilling screws for the application intended.

A number of electrical workers have been injured due to self-drilling screws protruding further than needed behind switchboard panels etc. Not only does this create a hazard for electrical workers but there is always the possibility of cable insulation being damaged.

3. OCCUPATIONAL LICENSING ACT 2005

Work is proceeding on the implementation of the *Occupational Licensing Act 2005*.

Workplace Standards Tasmania has considered comments received on the draft Occupational Licensing (Notification of Electrical Work) Regulations. Work is also proceeding on the licensing and general provisions, and the codes of practice.

In the meantime, it's business as usual and if your licence is due for renewal, a renewal form will be forwarded to you for you to complete and lodge in the normal way.

Your industry association will be consulted during the stakeholder consultation period. If you wish to be advised when comments are being sought on the regulations and codes of practice, please email marilyn.marshall@justice.tas.gov.au or telephone 03 6233 7699.

A copy of the *Occupational Licensing Act 2005* may be purchased from the Printing Authority of Tasmania, 2 Salamanca Place, Hobart. Alternatively, copies can be downloaded from the internet at:

www.dpac.tas.gov.au/divisions/opc.

4. NOW ON DVD! - SAFETY MESSAGES

The television campaign conducted during June and July this year, highlighting the benefits of having safety switches installed in homes and of the need to always use a licensed electrical contractor, has attracted positive feedback from both industry and the general public.

The 30 second television commercials have now been converted to DVD format and can be viewed on the Electricity Standards *and* Safety website: www.wst.tas.gov.au/electricity under "Hot Topics".

Additionally Electricity Standards *and* Safety have a limited supply of copies of the DVDs to provide to electrical contractors, free of charge. Contractors interested in receiving a copy of the DVD please contact Jenny Cashin on 03 6233 7851.



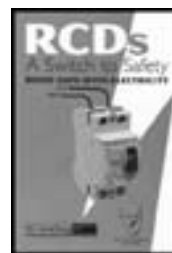
5. INFORMATIVE BROCHURES

Electricity Standards *and* Safety have lots of electrical safety brochures and stickers. Listed below are the more comprehensive publications produced by Electricity Standards *and* Safety and Workplace Safe. To order brochures and stickers (free of charge) please contact the Workplace Standards Helpline on 1300 366 322 (inside Tasmania) or 03 6233 7657 (outside Tasmania)

Items available include:

Electrical Safety - Guide to Best Practice

Detailing guidelines on testing, isolation and supervision.



RCDs— Residual current devices (or RCDs) are electrical safety devices designed to isolate the electrical circuits connected to them in the event of flow to earth of an electrical current.

Electrical Licensing in Tasmania — Detailing electrical licensing requirements in Tasmania.



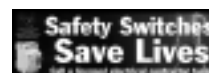
Electrical Licensing in Tasmania — Information covering all types of electric cabling in older homes.

Electrical Safety for Plumbers—Includes information on earthing, the electricity distribution system, working on water pipes and more.



Safe Electrical Goods—A Tasmanian legislative guide for retailers and importers of electrical equipment.

Stickers also available:



6. DEFECTIVE ELECTRICAL WORK

This roof and the metallic building structure posed a risk of serious electric shock

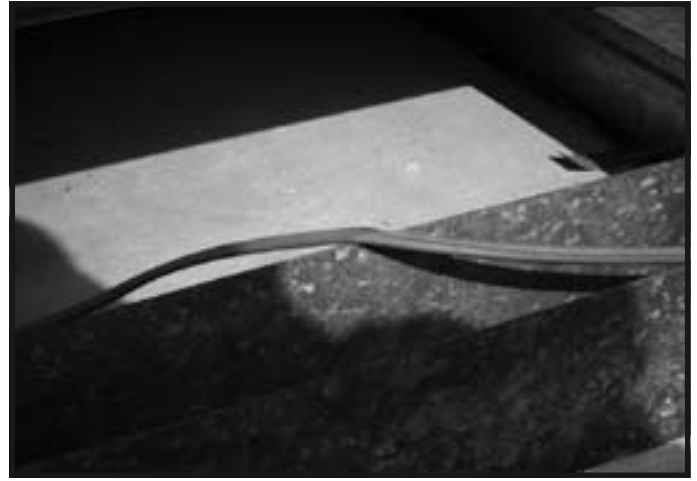


The electricity supply to a major complex was cut off and employees and visitors at the site were required to leave after the discovery of damaged cables in the roof of the building.



Seriously defective electrical work was the cause. Cables had been installed crossing steel roof members directly under the sheets of roofing iron. Some cables were severely scorched and others were damaged by sharp edges exposing bare live conductors.

Further inspection revealed that the damage to cables was extensive. Cables over a large area of the roof were damaged in one way or another. The repairs required hundreds of metres of cable to be replaced.



A number of sub switchboards were discovered with escutcheon panels missing, exposing live parts to anyone operating equipment, which included RCDs that were requiring resetting in bad weather.

To make matters worse people at the complex had been aware for some time that there were issues with the power supply and various electricians had worked on the site.

This was a case of poor electrical work, not “it’s the builders fault”. While it’s true that some builders take little care with electrical cables, the electrician is responsible to ensure that cables are installed so that all requirements are met when the building is completed.

The other issue highlighted here is that of the responsibility of the building owner to ensure there is an asset maintenance program. Not only was there a loss in production as well as a huge cost to repair but also the very high potential for serious injury and death.



Electrical contractors and electricians have a responsibility to ensure unsafe conditions are made safe and reported to the appropriate people.

7. KEEP UP TO DATE WITH FIRST-AID

For many years first-aid training has been incorporated in the trade courses for electricians. Although many employers have excellent safety records and continue to maintain staff training in this area, many electrical workers are not currently competent or up to date with techniques.

For example, in the last 12-24 months there have been significant changes in CPR. This is not to say that past methods won't work, only that new, "more efficient", methods have been agreed nationally and internationally to the benefit of patient and first-aider.

Workplace Standards Tasmania (WST) views the electrical industry as having significant high-risk areas when assessed against the *Workplace Health and Safety Act 1995*. It therefore follows that one method of reducing the risk is to ensure all staff continue to maintain their competence in

first-aid. Electricity Standards *and* Safety has included the WST booklet, *A Guide to First Aid in the Workplace*, with previous editions of this bulletin. If in need of additional copies call the WST Helpline on 1300 366 322 or check their website for an online download, www.wst.tas.gov.au, select "Publications," booklet GB119.

If you are in need of training or a refresher, we recommend you contact Red Cross or St John Ambulance in your area.

Note:

- There is no substitute for safe work practices
- Never work live unless absolutely necessary, shut it down

Refer to AS/NZS 4836 *Safe Working on Low-Voltage Electrical Installations*



Seasons Greetings

John Hammersley and staff at Electricity Standards *and* Safety would like to wish you all a safe and happy holiday.

Electricity Standards *and* Safety office hours over the holiday period:

Closing Friday 22 December 2006 at 3.00 pm,
re-opening Tuesday 2 January 2007.

* Please note that it is still possible to renew electrician licences online during this period.



- SONY BATTERIES SUPPLIED WITH LENOVO AND IBM THINKPAD NOTEBOOK PERSONAL COMPUTERS
- CONVECTION HEATERS – VARIOUS BRANDS INCLUDING: SUNAIR, HELLER, RADI-I AND MODERN LIVING
- MOULDED CASE CIRCUIT BREAKER
- ACME NIGHT LIGHT

For further recalls and precise product information, defect details and consumer action, visit the Product Recalls Australia website at www.recalls.gov.au



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