



Electricity Industry Bulletin No: 61 June 2006

FOR THE ATTENTION OF ALL ELECTRICAL WORKERS

1. IMPORTANT ELECTRICAL SAFETY ISSUE

Undersize 1mm² ARLEC CABLE

In October 2005 an electrical contractor was performing electrical work at a domestic residence, when he noticed that an existing electrical cable installed for a light circuit appeared to have undersize active and neutral copper conductors.

The three core flat cable was marked V570 ARLEC POWER 8010 ELECTRIC CABLE 450/750V V-90 2005 (see photo below).

The electrical contractor compared another brand of 3-core flat cable with 1.0mm² conductors, which clearly demonstrated that the active and neutral copper conductors of the Arlec cable marked as "Cat No 8010" had smaller conductors.

Electricity Standards and Safety identified 30 rolls of the non-compliant Arlec Australia Limited 8010 cable that was a part of a delivery of 129 rolls to Upton Salvage Hobart in July 2005.

It has been established that 55 rolls of the 129 have been sold to the public with the rest being removed from sale.

In April 2006 Arlec Australia published a recall notice in three Tasmanian regional newspapers advising consumers who may have purchased the Arlec Australia cable between June 2005 and January 2006 from K&D, Dover hardware stores or Uptons Salvage Hobart, to contact Arlec Australia on 1300 360 650.

Electricity Standards and Safety advises electrical contractors that if they know of or come across the cable installed, it must be removed.



Change of Department Name

From April 2006 WST and its associated units of Electricity, Gas and Building changed from Department of Infrastructure Energy and Resources to the Department of Justice.

2. AIR CONDITIONER STARTING CURRENTS

Electrical contractors are required to install equipment so that it is electrically safe and technically compliant, including considering likely starting current issues.

Service rules require customers to limit interference at the point of common coupling with others and/or limit starting currents, specifically Aurora Energy service and installation guide clause 2.3.2 which states 'that equipment should not be operated in such a manner as will cause interference to the supply of other customers'. Clause 2.3.3 provides a rule of thumb guide for determining the motor starting requirements.

Electrical contractors have an obligation to take starting currents into consideration when quoting or undertaking this work.

New Minimum Energy Performance Standards (MEPS) required of residential air conditioning systems, will mean suppliers will largely be restricted to offering inverter type systems for which the starting current does not exceed maximum run current.

3. HAZARDS FROM MODIFYING ELECTRICAL EQUIPMENT

Energy Safe Victoria recently investigated an incident where a commercial deep fryer caught fire. The investigation revealed that the temperature control thermostat had failed and that the over-temperature protection device had been bypassed.

Electrical technicians are reminded that when repairing electrical equipment, safety devices are not to be bypassed or rendered inoperable. In most cases these devices are installed in electrical equipment as a requirement of their relevant electrical safety standard.

Even undertaking this action temporarily it is still defective electrical work and is a breach of the *Electricity Industry Safety and Administration Act 1997*.



4. TAFE TASMANIA TRADE CELEBRATION EVENING

Matthew Miller employed by Kone Elevators Pty Ltd was the proud winner of the Best Student - Regulatory Compliance Award at the recent TAFE Tasmania Trade Celebration evening held at Wrest Point on 1 June 2006. The regional celebrations recognise the achievements of apprentices who have completed their trade apprenticeship with prizes and certificates being awarded to acknowledge excellence among the trades.

Electricity Standards *and* Safety (ESS) invest significant time and resources into supporting the development of apprentices for the Institute of TAFE Tasmania Electrotechnology program.

With the current focus on skills shortages and the low number of apprenticeships available, ESS are proud to assist industry training

as well as being a sponsor of the 2006 TAFE Tasmania Awards. ESS congratulate Matthew on his outstanding achievement and look forward to continued involvement in the apprenticeship program.



Chief Electrical Inspector John Hammersley with Matthew Miller

5. UPDATE—STANDARDS AUSTRALIA

Wiring Rules

Standards Australia committee EL-001 revision of AS/NZS 3000:2000 Electrical installations (known as the Australian/New Zealand Wiring Rules) is nearing completion. The draft revision of the Wiring Rules DR 06001 was made available for public comment on the 31 March 2006 and closes on 30 June 2006.

The draft revision has a new format. It will now be one Standard in two parts bound together and sold as AS/NZS 3000. Part one will provide the essential regulatory platform and high level safety performance outcomes/conditions without prescriptive work methods that demonstrate means of compliance – for minority applications. Part two will provide the installation practices (deemed to comply - compliance with the work methods and installation practices that comply with Part 1) for all normal applications.

Persons wishing to comment are reminded to do so as soon as possible. The preferred method is to download the MS word document form at <http://www.standards.com.au/Catalogue/misc/Public%20Form.doc>.

Follow the web site instructions or contact Standards Australia customer service centre on 1300 654 646 for assistance.

For information on The Wiring Rules Complete List of Frequently Asked Questions go to:

<http://www.wiringrules.com.au>

6. BUSINESS NAME CHANGES — THINGS TO CONSIDER

Electricity Standards *and* Safety ('ESS') regularly see a young electrician applying for a contractor's licence. They are granted a licence if they can show:

- They are 'fit and proper'
- They have qualified as a nominated manager; and
- They have a minimum of \$5 million public liability insurance cover.

A few years later they may marry and/or want to reorganise their business affairs. This may involve holding their electrical contractor's licence in a different way. Problems can arise because of issues not previously considered, so let's go back to basics and explain how it is done and why.

Who can hold a contractor's licence?

The simple answer is - anyone who can satisfy the triple tests set out above including: a company, a trust, sole trader or partnership to cite only the common examples.

Registered companies will have an Australian Company Number (ACN). Some contractors will register their business only and in doing so will be issued an Australian Business Number (ABN).

Those thinking of making the transition from being the holder of an electrical contractor's licence in their own name as a sole trader, to being a company (as one example) need to be aware of the following criteria.

Firstly, it is a new entity applying for an electrical contractor's licence - it's not the same person or entity applying for their licence to be renewed. It follows that the new entity needs to fulfil the triple test set out above.

When applying for a new electrical contractor's licence, the new entity will have a new ACN or ABN depending on what they are. The contractor will need to show they have an insurance policy in the new entities name, a nominated manager and that they are fit and proper.

Assuming they are granted their licence they will be issued with a brand new electrical contractor's licence number and will need to do the following:

- change to new letterhead with the new electrical contractor number displayed
- change all advertising, business documents including quotes, bills and receipts for payments made by customers
- new signage on vehicles

Contact Robert Steedman at ESS on 6233 7831 if you require further information or clarification on any of the above.



7. SUITABLE SLEEVING FOR UV PROTECTION OF MAINS CABLES

For a number of years it has been normal practice for electrical contractors to use coloured sleeving to identify and provide UV protection of mains cable at the POA.

It has now been identified that some of the sleeving used in the past was not suitable in providing UV protection and has deteriorated to the extent that the sleeving is brittle and breaking down, exposing the conductor insulation.

Electrical contractors need to be aware that not all brands of sleeving available are UV stabilised. Please ensure when purchasing sleeving for the purpose of providing UV protection that the sleeving is suitably rated for the task.

8. NOTICE OF ELECTRICAL WORK COMPLIANCE AUDIT

206 letters were sent out to Electrical Contractors (EC) in relation to an Audit conducted by Aurora Energy on behalf of ESS. The audit checked to see if all appropriate EINs had been lodged where EWRs indicated a regulatory notice was required.

Responses were varied. Fifty did not respond, some were inadequate and some were valid in their reasons or have made changes to improve their system. In some cases ECs believed the error wasn't theirs and felt in many instances Aurora Energy was at fault with the EWR and EIN processes. As the EIN is the regulatory requirement, this article only deals with that process.

Key things identified by this audit:

- Numerous ECs are either not lodging EINs or are not lodging within the appropriate time frame (3 days)
- Some ECs save up their EINs and lodge them in batches (one lodged 77 in one go!)
- There are inefficiencies with the current process of lodging EINs
- Many businesses acknowledged that their processes needed improvement
- Many businesses identified that Aurora Energy's processes needed improvement

What next?

All 206 ECs will receive further written advice in the coming weeks. Discussions will also be held with Aurora Energy in relation to the EIN process and the effect the EWR process has on the lodgement of EINs. It is on our desire to have a simplified system that is efficient and effective for all to work with.

9. NEW CAMPAIGN HIGHLIGHTS ELECTRICAL SAFETY MESSAGE

A television campaign highlighting important electrical safety messages will be running during June and July. The 30-second advertisements are a graphic reminder of the benefits of safety switches in homes and of the need to always use a licensed electrical contractor.

Attorney General and Minister for Justice and Workplace Relations Steve Kons said 'although safety switches have been mandatory since 1992 in new residences and where major electrical changes are undertaken, there are still thousands of Tasmanian homes that don't have them. Safety switches work by switching power off immediately when electricity is detected leaking to earth at a level that could be dangerous and can prevent electrocution which might result from such things as faulty appliances, damaged electricity cables, and dangerous practices such as trying to remove toast with a knife from a toaster that is still switched on'.

'We'd like all Tasmanians to consider installing one – for as little as \$200 they may well save a life.'

The advertisements are an initiative of the Electricity Standards *and* Safety Branch of Workplace Standards.



10. LICENSING FEES

Licensing fees will increase on 1 July 2006 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)	35.10	36.30	105.30	108.90	140.40	145.20
Electrical Contractor (1 yr Licence)	35.10	36.30	234.00	242.00	269.10	278.30
Provisional (1 yr Licence)	35.10	36.30	35.10	36.30	70.20	72.60

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

11. OFFICE MOVE

Electricity Standards *and* Safety have moved but not far! We have relocated to the other end of Workplace Standards Rosny building. To access the new ESS office, turn into CR Barnard Drive and enter through the main reception door - directly opposite the car park. **Refer to red arrow on map opposite for new location.**



12. INSULATED PIN PLUGS — TESTING AND TAGGING

Electricity Standards *and* Safety has received a number of enquiries regarding what to do when test and tagging electrical equipment fitted with the old style non insulated 3 pin plug.

Should the plug be replaced with a newer insulated pin type? The simple answer is there is no requirement to replace the 3 pin plug unless there is evidence that the plug is damaged and unsafe to use. Any new plugs fitted must meet the new requirements.



15/2/2006	HPM 'Instant Heat'
29/3/2006	Arlec 1.00mm Core Flat Electrical Cable—Code 8010
20/4/2006	Hewlett-Packard (HP) And Compaq Notebook Computer Battery Packs
4/5/2006	Turbo Ion Hair Straightener, Model DH-001

For further electrical 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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