

electrical focus

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Amendment No. 02 to the WA ELECTRICAL REQUIREMENTS

Electrical Equipment in Zone 2 & 3 Areas in Locations Containing Baths and Showers

The Issue

Amendment No. 1 of AS/NZS 3000:2000 (the Wiring Rules), which was issued in September 2001, amended the minimum height of Zone 2 and Zone 3 areas in locations containing baths and showers from 2.25m to 2.5m.

As a result of concerns expressed by industry regarding the installation of electrical equipment in these Zones, the Office of Energy issued Guideline 01/2002 that approved the installation of flush mounted fan/heater/light and heater/light units in Zone 2 ceiling areas. Also issued was an article in Energy Bulletin 23 that permitted Zone 2 to remain at 2.25m until 01 August 2002, allowing incandescent or fluorescent batten holders to be installed above the Zone 2 height limitation of 2.25m until this date.

Standards Australia Wiring Rules Committee EL-001 has recently agreed in principle to reverse some of the requirements of Amendment No. 1, by proceeding with the development of a future Amendment No. 3. That will propose the adoption of the IEC height standard (2.25m) for Zone 2 and Zone 3 areas in bathrooms. (Note: Zone 1 height limitations are planned to remain as specified in Amendment No. 1 - Height of either 2.5m or the room ceiling, whichever is the lower).

WA Electrical Requirements Amendment

Immediate implementation in WA of the standard heights for IEC Zones is therefore considered appropriate and is achieved by amending the WA ELECTRICAL REQUIREMENTS document, which overrides the Wiring Rules requirements, allowing the installation of batten holders in locations above the Zone 2 and Zone 3 height of 2.25 m.

Section 12 of the WA ELECTRICAL REQUIREMENTS is amended by deleting the existing (now obsolete) Clause 12.7 at page 48 and replacing it with the following Clause:

12.7 CLASSIFICATION OF ZONE 2 AND 3 AREAS IN LOCATIONS CONTAINING BATHS AND SHOWERS AS DEFINED IN SECTION 7 OF THE AS/NZS 3000:2000 AUSTRALIAN/NEW ZEALAND WIRING RULES

Zone 2 (refer to Wiring Rules Clause 7.1.2.1 (c) (ii)): The height of Zone 2 is the lower of either:

- 2.25 m above the floor; or
- the room ceiling.

Zone 3 (refer to Wiring Rules Clause 7.1.2.1 (d) (ii)): The height of Zone 3 is the lower of either:

- 2.25 m above the floor; or
- the room ceiling.

The updated WA ELECTRICAL REQUIREMENTS document, which incorporates this amendment and became effective from 31 July 2002, is available on the Energy Safety Website - www.energysafety.wa.gov.au

Energy Safety





Energy Safety sponsored the “Energy Safety WA and Electrical Contractors Association WA Electrical Safety Awards 2002”. Pictured at the presentation of the Electrical Safety Awards are (from left to right) Michael Waymark, Executive General Manager Siemens Power Transmission & Distribution (co-sponsor of the Awards), Bob Hatherley of Downer RML P/L (winner of Category 2 Safety Award), Arie Hordyk of Always Electrical (winner of Category 1 Safety Award) and Albert Koenig, Director of Energy Safety.

Coroners Hand Down Findings into Two Fatalities

Coroners recently concluded investigations and handed down findings relating to the tragic deaths of two young men.

The first incident, reported in Energy Bulletin 17 (May 2000), occurred on 19 January 2000 when two employees entered a Western Power transformer substation at the Ladyloch water pumping station in Coolgardie. Whilst there, Daren Tan (a young electrical engineer) received a high voltage shock from a live arcing horn mounted on an open aerial transformer bushing. He died in Perth later the same day.

The Coroner found that the deceased died accidentally as a result of thermal injury in association with electrocution.

The accident was avoidable and is unlikely to have occurred, had the substation’s safety clearances to live parts complied with Australian Standard AS 2067. The incident resulted in a survey and Western Power found 95 other substations with the same problem. Remedial work on these has been completed. Regulations introduced in late 2001 now require this compliance.

The second incident, reported in Electrical Focus No. 21 (September 2001), occurred on 14 April 2001 when the mast of a yacht made contact with a live Western Power 22kV overhead power line that crossed the Serpentine River at Nairns (Coodanup). Guy Chesterfield-Evans was standing on the bow of the yacht holding the main forestay when the contact occurred. He suffered burns and a high voltage electric shock from which he

subsequently died.

The State Coroner found that death arose by way of accident. He noted that a previous incident had occurred in 1999, in which a barge-mounted derrick had hit the line at the same location but no one had been injured. The State Coroner issued a number of recommendations designed to avoid a repeat of such unfortunate incidents.

As a result, Energy Safety carried out a consultative process and developed a draft code for electricity supply network operators that specify safety requirements for power line crossings of navigable waterways. Comments to the draft have been received and the new code of practice will be published in the near future. A copy of the new code should be available from Energy Safety’s website towards the end of 2002.

Completing Preliminary Notices / Notices of Completion (Including Minor Work Notices)

Energy Safety and electricity supply authorities are continually receiving Notices which are not "duly completed" in that they do not provide sufficient information. The type of information that is not being provided includes:

- the name of the owner/ occupier of the installation
- the address of the installation
- directions on how to find the installation.

This information is critical to a Notice being processed.

Electrical contractors must ensure that all the information required on the Notice is provided, briefly but accurately, especially the information listed above.

It is an offence under the *Electricity (Licensing) Regulations 1991* to submit a Notice that is not duly completed. It is also an offence if the Notice is not sent to the relevant electricity supply authority within the allocated time frame.

Disciplinary Action Taken by the Electrical Licensing Board

From 1 June 2002 to 31 August 2002

The Electrical Licensing Board dealt with 8 operatives from 1 June 2002 to 31 August 2002

COMPETENCY ASSESSMENTS

Two operatives were required to complete a competency assessment:

- B Blake
- G Scheltema

Mr Blake satisfactorily completed the assessment.

Mr Scheltema failed the competency assessment and his licence has been suspended until he can prove his competence.

FORMAL PROCEEDINGS

Stephen Bettles - Bettles Electrical (EW 115693) (EC 006512)

Grounds for Proceedings:

During testing of an electrical installation, an apprentice received an electrical shock from an unterminated cable.

The Board's Order:

Mr Bettles is prohibited from supervising apprentices and from signing Notices of Completion. These conditions will remain in place until Mr Bettles satisfactorily completes a recognised checking and testing course and provides evidence to the Board that he has a comprehensive checking and testing procedure in place.

Mr Brian Russ (EW 103198)

Grounds for Proceedings:

Mr Russ carried out electrical work at an address in Geraldton. Once he had completed the work, he became aware of a defect in the electrical installation that rendered it unsafe but did not report it to the relevant supply authority or to the Director of Energy Safety.

The Board's Order:

Mr Russ's electrical workers licence is suspended for three months until 31 October 2002. He must demonstrate his competence as an electrical worker before this suspension will be lifted.

Andrew Wareing - Warelec trading as Advance West Pty Ltd (EW 116346) (EC 004138)

Grounds for the proceedings:

Mr Wareing carried out sub standard electrical installing work whereby an earth conductor had not been included in the submains to two socket outlets at a future house site. An MEN connection had not been made and the two socket outlets were earthed ineffectively by connection only to a driven earth electrode.

The Board's Order:

Mr Wareing's electrical contractor licence was cancelled. Mr Wareing must undertake and satisfactorily complete the Electrical Contractor's Training Programme before the licence will be reinstated.

**PROSECUTIONS FOR BREACHES OF THE
ELECTRICITY (LICENSING) REGULATIONS 1991
1 June 2002 to 31 August 2002**

Breach	Name (and suburb of residence at time of offence)	Licence No.	Fine & Court Cost (\$)
<i>Unlicensed electrical work Regulation 19 E(L)R</i>	<i>Jacob Paternostro (Noranda) 5 offences</i>	<i>EW 129760</i>	<i>1,212.70</i>
<i>Carried on business as an electrical contractor without a licence Regulation 33 E(L)R</i>	<i>Roger Stanton (Marangaroo)</i>	<i>EC 002696 EW 109636</i>	<i>* 1,212.70</i>
<i>Failed to ensure electrical contractor's number appeared in advertising Regulation 45 E(L)R</i>	<i>BFT Electrical (Sorrento)</i>	<i>EC 003820</i>	<i>552.70</i>
<i>Carried out substandard electrical work Regulation 49(1) E(L)R</i>	<i>Garry Bowden (Dudley Park)</i>	<i>EW 127957</i>	<i>700.20</i>
	<i>Roger Stanton (Marangaroo)</i>	<i>EW 109636</i>	<i>*</i>
	<i>Paul Watts (Karratha)</i>	<i>EW 124657</i>	<i>747.70</i>
	<i>Leong Wood (Lynwood)</i>	<i>EW 109429</i>	<i>942.50</i>
	<i>Christopher Zoutman (Halls Head)</i>	<i>EW 127379</i>	<i>700.20</i>
	<i>Dale Carthew (Willetton)</i>	<i>EW 128866</i>	<i>492.50</i>
	<i>Timothy Fletcher (Boulder)</i>	<i>EW 121046</i>	<i>557.70</i>
	<i>Daniel Robinson (Carlisle) 2 offences</i>	<i>EW 102606</i>	<i>1,377.50</i>
<i>Did not effectively supervise an apprentice Regulation 50 E(L)R</i>	<i>John Bech (Riverton)</i>	<i>EC 002258 EW 111373</i>	<i>1,692.50</i>

Legend: * Global fine (more than one offence)

E(L)R Electricity (Licensing) Regulations 1991

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