

MINISTER RE-ITERATES WARNINGS ON DOWNLIGHT SAFETY

Warnings of the dangers of halogen downlights being placed too close to structural timber and insulation material were re-iterated by the Minister for Energy and Resources, Peter Batchelor, when replying to a parliamentary question recently.

The question had referred to fire statistics indicating that some 57 homes in Melbourne had been lost in the 18 months up until July – with the likely cause being downlights which had not been installed properly.

The Minister said: "This is clearly a very important issue, and it is one Energy Safe Victoria will be tackling in its new safety advertising campaign, which is due to begin on 14 October. It is important to understand that downlights in themselves are not unsafe. It is only when improperly installed that they are transformed into safety risks."

"For example, if they are placed too close to structural timber or become covered by insulation or ceiling debris they can pose a substantial fire risk and consequently a risk to the lives of people living in or visiting those homes."

He said that although the new Wiring Rules are not due for implementation until next year, he urged registered electrical contractors and

licensed electrical workers to take up the new standards relating to downlight installation straight away.

"It is important that they are known, and there is no reason why they should not be implemented," he said.

"The new rules set a minimum distance of 200 millimetres between halogen lamps and flammable materials. Halogen lamps can operate at up to 500 degrees Celsius, so it is not hard to see how they can ignite roof insulation or even timber roof trusses if they get too close to the lamp – a source of heat – or to the transformer that forms part of the lighting unit.

"This is especially worrying where there is loose-fill, paper-based insulation. This type of insulation is particularly prone to being blown around by the wind or disturbed in the roof cavity by birds or animals. But there are products available on the market now to combat the dangers posed by the uncontrollable movement of insulation," said the Minister.

He said that if people are unsure as to whether their downlights are installed safely, they can contact their local registered electrical contractor or contact Energy Safe Victoria to arrange a value-for-money inspection of the home safety of these insulations.

"Finally, homeowners should always ensure that a registered electrical contractor is engaged for any electrical work around the home and insist on a certificate of electrical safety when the work is complete. If the tradesman is not prepared to provide a certificate of electrical safety, the owner should refuse to engage them for the job.

"What is important at the end of the day for both consumers and electricians is that they remain vigilant to ensure that lights are installed and maintained properly and that the appropriate consideration is given to the types of lighting that is going to be used both from a safety perspective and from an energy efficiency perspective.

"For those who already have halogen lights installed in their homes – and I guess there are a lot of people in that category – I urge them to check they are installed properly or, if they cannot do that, to engage a suitably qualified electrician to check for them.

"The other message that needs to go to the electrical industry is that there is no need for electricians and contractors to wait until these new regulations become enforced in law: they should start using these revised wiring rules right now."

DOWNLIGHTS – WHAT ARE THE SAFE DISTANCES BETWEEN THE INSTALLATION AND INSULATION?

ESV has received a number of questions since the issuing of the media release on the dangers associated with the use of ELV halogen downlights. It has always been ESV's intention to remind the electrical industry that these light fittings need to be installed in the correct manner and the information from the new Wiring Rules, AS/NZS 3000:2007, was provided to help electricians.

There are a number of barriers and surrounds available on the market to protect downlights from encroaching roof insulation and roof supports. There are others about to hit the shelves with manufacturers awaiting laboratory testing of their products.

ESV wishes to make it clear that the distances between the downlights and roof timbers or insulation prescribed in the new edition of the Rules are the minimum distances which must be maintained.

The only acceptable alternative to this rule will be where the manufacturers' instructions provided with the barrier or guard stipulate that a lesser distance is required between the light and guard and the combustible material.

As can be seen in the clause detailed below, if there is no such information contained with the product then the distances cannot be decreased and must comply with the Standard.

In AS/NZS 3000:2007, Clause 4.5.2.3 states:

"4.5.2.3 Recessed luminaires

Recessed luminaires and their auxiliary equipment shall be installed in a manner designed to minimize temperature rise and prevent the risk of fire.

The temperature rise at the rear of a recessed luminaire shall be limited to prevent damage to adjacent materials.

This requirement shall be satisfied by one of the following methods:

(a) The use of a luminaire specifically designed and certified by the manufacturer to permit—

(i) contact with combustible materials; or

(ii) enclosure or covering by thermal insulation material, as appropriate to the location of the luminaire.

(b) Installation of the luminaire within a suitable fire-resistant enclosure.

(c) Provision of required clearances from combustible and thermal insulating material as specified by the manufacturer of the luminaire.

(d) Provision of the default clearances from combustible and thermal insulating material as specified in Figure 4.7.

Where manufacturer's installation instructions that specify required clearances are not

available, the luminaire shall be installed in accordance with (b) or (d).

NOTE: In the case of a suitably designed luminaire, the installation instructions may specify that no clearance is required.

Recessed luminaires and their auxiliary equipment shall be installed in such a manner that necessary cooling air movement through or around the luminaire is not impaired by thermal insulation or other material.

Where thermal insulation is of a type that is not fixed in position, e.g. loose fill, a barrier or guard constructed of fire-resistant material shall be provided and secured in position to maintain the necessary clearance (see Figure 4.7)."

Insulation too close to a downlight.

