

# plugged in

THE EXPERT TRADESMENS' NEWSLETTER

## Welcome to the fifth edition of *Plugged In!*

WINTER IS HERE! So pull out those winter woollies, rug up, wrap up and warm up!

Shorter days and colder nights make many of us grateful to American physician Sidney I Russell for inventing the electric blanket over 100 years ago!

Did you know home accidents increase in winter, especially burns and electrical fires?

To help you stay WARM and SAFE this chilly season, get comfy, pour a hot chocolate or glass of good red and check out our articles on safety switches, smoke alarms and tempering valves.

Thank you trusting us with your electrical and plumbing safety needs. Have a cosy, safe winter.

All the teams at Everest Electrical and Jedi Plumbing. ■

## 1kw

An electric oven uses one kilowatt-hour of electricity in about 20 minutes, but one kilowatt-hour will power a TV for 3 hours, run a 100-watt bulb for 12 hours, and keep an electric clock ticking for 3 months.

### DID YOU KNOW?

Rather than heat your bedroom, you could add another blanket to your bed or **use an electric blanket, wheat bag or hot water bottle.**



WHAT DOES "WARM AND SAFE" really mean?

Over 100 years ago, houses were lit with kerosene lamps and warmed by wood or coal burning stoves. Now with the simple flick of a switch we heat and illuminate our homes.

We take electricity for granted and sometimes forget how dangerous it is.

The colder months are the most common for house fires to occur and over 350 house fires are started by electrical faults in NSW every year! In winter we place extra burden on our home electrical systems using heaters, electric blankets, heated towel racks and other appliances. Now is the time to check you have properly installed and working smoke alarms and safety switches

because they save lives and the next one they save could be yours!

#### Smoke Alarms:

- Smoke alarms are the law and the absolute minimum is one per level in your home.
- Never take out the batteries unless you are replacing them.
- Always have spare batteries handy.
- Regularly test your smoke alarm.

#### Safety Switches:

- Check safety every 30 milliseconds
- Monitor electricity loss
- Prevent electric shock and death

For more details go to our website:

[www.everestelectrical.com.au](http://www.everestelectrical.com.au).

For extra protection call us for your free safety inspection. We are committed to looking after your home and keeping you and your family safe all year round. ■

**WINTER SPECIAL** Install one smoke alarm and get the second smoke alarm half price.



**Remember...**  
to mention your membership  
when you book in your  
next job with us.

# plugged in



**Some facts on how quickly a child can suffer a scald:**

Liquid type	Temp C	Time
Boiling water from a kettle	100 °C	Under 1 second
Cup of hot tea/coffee	70–95 °C	Under 1 second
Hot water from the tap	60 °C	1 second
Hot water from a kettle 5–10 minutes after boiling	55 °C	10 seconds
Hot water from a tap with a tempering valve	50 °C	5 minutes

SCALDING IS ONE OF THE MOST serious, painful and long-term injuries for young children. Scalding can happen very quickly, depending on the temperature of the water and with lever style mixer taps becoming common place, it has become easier for young children to turn on hot taps.

At 60°C a serious burn can occur in 1 second. However, at 50°C a serious burn wouldn't typically happen until after 5 minutes, so you can see the benefit of controlling the temperature of the hot water at the tap.

The Plumbing Code of Australia (PCA) has two conflicting requirements. To protect against the growth of Legionella bacteria, the cause of Legionnaires' disease, it is a legal requirement that any stored hot water be kept at a minimum temperature of 60°C. This applies to all hot water systems with tanks.

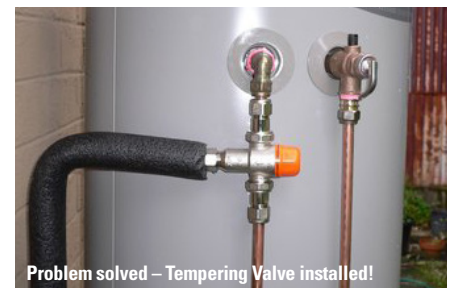
On the other hand, the Code requires that the delivery temperature of hot water for personal hygiene purposes (primarily bathroom taps) is not to exceed 50°C.

**A tempering valve mixes your hot and cold water to deliver hot tap water at a constantly safe temperature.**

So, how are both of these requirements met?

#### Tempering Valves Explained

A tempering valve mixes your hot and cold water to deliver hot tap water at a constantly safe temperature. Tempering valves have a temperature sensitive element which adjusts the mix depending on the temperature of the incoming water flowing through the valve. The valve is designed to maintain a constant outlet



temperature, reducing the risk of accidental scalding. Your plumber adjusts the valve to the required temperature.

It is now law that tempering valves be installed on all new homes or renovations. Also when replacing an old hot water system you must now install a tempering valve to reduce the temperature to 50°C in bathrooms. However your kitchen and laundry lines are permitted to bypass the tempering valve and use the hot water directly from a standard electric or gas hot water tank (normally set at 60°C). So be extra vigilant with your kids at the kitchen and laundry sinks.

While there is no finite life span for tempering valves, some manufacturers suggest that they be replaced every 5 years. If you have an older hot water system, you may not have a tempering valve. However, they can be added to older systems, too.

So, if you are making changes to your hot water system or are unsure if you have a tempering valve on your existing system, get in touch with the team at Jedi Plumbing today and let us guide you through your hot water system requirements. ■

## 34,000lt

In a typical home, more than 34,000 litres of water are wasted while running the tap waiting for hot water. As much as 15% of your annual water heating costs can be attributed to the wasted heating of the extra 34,000 litres.

### DID YOU KNOW?

There are actually **two common types of plungers** – a toilet plunger and a sink/shower plunger. Toilet plungers narrow at the bottom to fit into the toilet drain, while sink and shower plungers have a flat rim.

Printed on 100% recycled paper.

**EVEREST**  
ELECTRICAL



0410 229 139  
everestelectrical.com.au

**JEDI**  
PLUMBING

0411 774 381  
jediplumbing.com.au