

# How do you stop shower scalding?

Last Updated: Monday, December 22nd, 2014, Created: Sunday, June 24th, 2001

It may surprise you, but more accidents happen in the shower when the shower suddenly goes cold, than when it suddenly goes hot. It seems that we just jump higher. But neither shock is agreeable, or safe.

That's why all new plumbing installations require something called a "Pressure Balancing valve" that prevents the water from changing temperature suddenly in a shower. You can also install these valves in existing showers. Click on the image above to see a 3-D animation of just what is a pressure balancing valve and how does it work.

The latest version of these shock control valves is called a Temperature Balancing valve".

The pressure balancing valve senses whenever either the hot or cold water supply has lost some pressure, probably because someone flushed a toilet or opened a faucet while you are in the shower, and it then reduces the pressure of the other line to match. The shower flow slows down but remains close to the same temperature. Click here for details on adjusting the pressure balancing valve.

The temperature balancing valve actually measures the temperature of the water and adjusts the hot/cold mix to maintain a constant temperature. One advantage of this system is you can set the temperature you like in the shower and it will always adjust to satisfy you, in fact you don't adjust the temperature, you simply turn it on and it is always right, summer and winter.

## PRO & CON

The pressure balancing valve reacts faster to a change in water temperature; the temperature balancing valve maintains the real temperature better. Many pressure balancing valves have no volume adjustment; it is simply on or off. The temperature balancing valves are all fully adjustable.

The temperature balancing valves are more expensive.

## SCALD PROTECTION

As an added protection against water scalding, the Ontario building code now requires a temperature control valve after the hot water tank that mixes hot water with cold water to avoid scalding water even being available at any tap in the house. The reason you cannot simply reduce the temperature of the hot water tank is that lower temperatures would promote bacteria growth inside the hot water tank. So the water is kept hot and sterile and then as you use it, it is tempered with cold water. When you take a shower with this arrangement you simply mix less cold water with the shower faucet controls. The rest of Canada has refused this code requirement for the moment but the child protection lobby keeps pushing hard to make it law throughout North America. Nothing prevents you from installing this safety device in your home even where it is not code.

## Keywords:

Faucets, Child, Shock, Balancing, Protection, Controls, Temperature, Accident, Adjustment, Water, Safety, Video - Included, Valves, Plumbing, Shower