

How Mixing Valves Work

Cold Water Is Mixed With Hot Water To Provide Safety And Comfort At The Faucet.

A Honeywell mixing valve allows you to set your water heater to a higher temperature to reduce the threat of bacteria growth, yet the mixing action helps prevent scalding. Plus, you'll increase your available hot water supply by mixing hot water with cold.



Meet The Code For Safety

New plumbing code changes adopted or soon to be adopted in most communities across the country require the control of hot water through the use of thermostatic mixing valves. All public sinks and non-shower bathtubs must use a thermostatic mixing valve that conforms to the new ASSE 1070 standard with a maximum temperature of 120° F at the tap.

A Honeywell mixing valve installed at your water heater ensures that you meet the code.

Sources

- 1 Legionella. Legionella 2003. An updated and statement by the Association of Water Technologies. June 2003. <http://www.awt.org/Legionella03.pdf>
- 2 Hot water burn and scalding graph. (2004) Retrieved June 20, 2005, from Hot Water Burn Prevention and Consumer Safety Web site: http://www.accuratebuilding.com/services/legal/charts/hot_water_burn_scalding_graph.html.
- 3 Christophersen, Ph.D., E.R. (2004). Burn safety: hot water temperature. Retrieved June 20, 2005, from Pediatric Advisor Health Library Web site: http://www.fairview.org/healthlibrary/content/pa_hotwatr_hhg.htm.
- 4 Scalds: a burning issue. (n.d.). Retrieved Aug. 10, 2005, from <http://www.ameriburn.org>.

Here To Help

If you have any questions about Honeywell mixing valves, call **1-800-468-1502** or visit **yourhome.honeywell.com**.

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Honeywell Mixing Valves



**Safety, Health And Comfort —
Mixing Valves Deliver Them All**

Honeywell

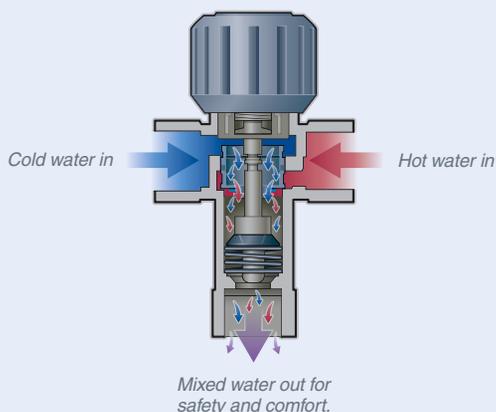
3 Ways

Honeywell Mixing Valves Increase Comfort And Safety

From more available hot water to improved safety for your family, Honeywell mixing valves are a perfect fit for your home.

1 More Available Hot Water

Honeywell valves can extend the capacity of your existing hot water tank. The mixing action gives you up to 60-gallon capacity from a 40-gallon tank by storing water at a higher temperature and then mixing it down to a safe 120° F or lower — giving you more hot water for your home. And when it's time to buy your next hot water tank, you can save money by purchasing a smaller tank without worrying about a cold shower.



The mixing action of a Honeywell mixing valve can produce up to 60-gallon performance from a 40-gallon tank — it's like adding a larger water heater without the added expense or space.

2 Help Prevent Bacteria Growth

Deadly Legionella bacteria can grow when a water heater's temperature is set to low, but studies show water heated to 140° F can kill up to 90% of the bacteria.¹ A Honeywell mixing valve allows you to set your water heater at a higher temperature to help kill bacteria while eliminating concerns about water being too hot at the tap.



95° F to 110° F
Legionella Growth



140° F to 180° F
Legionella Growth Controlled

Honeywell mixing valves are designed to prevent the growth of bacteria by allowing you to set your water heater at 140° F.

3 Help Prevent Scalding*

While your water heater is turned up to prevent bacteria growth, you'll still enjoy protection at the tap because mixing valves can help prevent burns due to scalding. Research has shown that burns from hot water can occur in just seconds — even less for small children. A mixing valve reduces the temperature at the faucet, so your family can use the sink, shower or tub with less fear of scalding.

Approximate time and temperatures causing a third-degree burn^{2, 3, 4}

TEMPERATURE	ADULTS Skin thickness of 2.5 mm	CHILDREN 0-5 YEARS Skin thickness of 0.56 mm
160° F	1 second	.05 seconds
155° F	1.5 seconds	1 second
150° F	2 seconds	1.5 seconds
145° F	3 seconds	2 seconds
140° F	5 seconds	3 seconds
135° F	15 seconds	4 seconds
130° F	35 seconds	10 seconds
125° F	3 minutes	2 minutes
120° F	10 minutes	5 minutes
100° F	Safest Water Temperature for Bathing	

Burns can occur quickly, but Honeywell mixing valves help prevent scalding. In fact, Honeywell mixing valves meet the most stringent safety standards in the industry.

* When used as directed