
CASH ACME
TANK BOOSTER™ PRO
Water Heater Mixing Valve

IMPROVE CUSTOMER SATISFACTION

COMFORT

Easy add-on water heater accessory that increases usable hot water on existing water heaters and new NAECA compliant water heaters.

PROTECTION

Controls hot water to prevent injury from scalding when showering, bathing or washing by ensuring water is delivered at a safe temperature to all fixtures. Certified to ASSE 1017, ASSE 1070 and CSA B 125.

SAFETY

Reduces the risk of Legionella bacteria growth by enabling hot water to be stored at a germ killing 140°F (60°C), while ensuring that water is delivered at a safe temperature to outlets.

FOR THE HOMEOWNER

The Solution:

The Tank Booster Pro is a cost effective solution for increasing usable hot water capacity on an existing tank or a new high efficiency water heater. Adding a Tank Booster Pro mixing valve to a water heater allows water to be stored at a higher temperature, but safely delivered at 120°F (49°C) to all outlets. The valve mixes both hot and cold water, which increases the tank's water capacity. It also reduces the chances of legionella growth by allowing the thermostat to be set at 140°F.

New NAECA Water Heaters

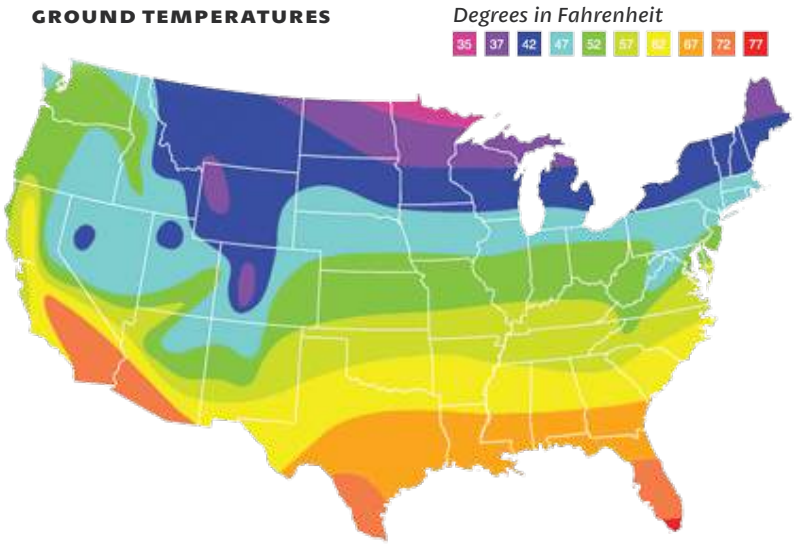
The diameter of a new water heater that has the same gallon capacity as an existing water heater may be two or more inches wider.

In addition, the height of a new water heater with the same gallon capacity as an existing water heater may be two or more inches taller.

GETTING MORE HOT WATER

Installing a Tank Booster Pro increases the amount of usable hot water by as high as 234% on gas water heaters and 125% on electric water heaters. The amount of hot water available may change based on the size and manufacturer of the water heater, flow rate and the cold water inlet temperature.

GROUND TEMPERATURES



PERCENTAGE INCREASE OF HOT WATER — ELECTRIC WATER HEATER

Hot Water Tank Storage Temperature		Cold Water Inlet Temperature			
		39°F (3.9°C)	55°F (13°C)	65°F (18°C)	80°F (26.7°C)
120°F	49°C				
140°F	60°C	41%	42%	57%	60%
160°F	71°C	82%	92%	96%	125%

Percentage increase compared to tank with water heater stored at 120°F (49°C) and water drawn at a steady rate of 3 gallons per minute until the outlet temperature dropped by 10°F. (Based on results at an independent test laboratory–CSA International on a 40 US gallon electric water heater.)

PERCENTAGE INCREASE OF HOT WATER — GAS WATER HEATER

Hot Water Tank Storage Temperature		Cold Water Inlet Temperature			
		39°F (3.9°C)	55°F (13°C)	65°F (18°C)	80°F (26.7°C)
120°F	49°C				
140°F	60°C	42%	51%	68%	174%
160°F	71°C	72%	104%	117%	234%

Percentage increase compared to tank with water heater stored at 120°F (49°C) and water drawn at a steady rate of 3 gallons per minute until the outlet temperature dropped by 10°F. (Based on results at an independent test laboratory–CSA International on a 40 US gallon gas water heater.)

HOW IT WORKS

The Tank Booster Pro is a mixing valve that combines hot and cold water to ensure that water is delivered at a constant safe temperature to outlet fixtures such as showers, baths and faucets.

This means that the temperature of the water heater can be increased to 140°F (60°C) without the risk of scalding. The hotter 140°F (60°C) water mixes with cold water until it can be released from the valve at a safe 120°F (49°C). Mixing the hot water with cold water means that less hot water is drawn from the water heater, therefore boosting the water heater's capacity and the amount of useable hot water for the home.

TIME/TEMPERATURE RELATIONSHIPS IN SCALDS

Temperature	Time for a mild First Degree Burn	Time For Permanent Second Degree Burn
120°F (49°C)	3 minutes	9 minutes
122°F (50°C)	1 minute	5 minutes
125°F (52°C)	30 Seconds	90 seconds
131°F (55°C)	5 seconds	25 seconds
140°F (60°C)	2 seconds	5 seconds
149°F (65°C)	1 second	2 seconds
154°F (68°C)	Instantaneous	1 second

It only takes seconds for hot water to burn or scald, and it can happen even quicker with young children. Include a Tank Booster Pro mixing valve with water heater installations to prevent scalding and ensure that water is delivered at a safe temperature to all outlet fixtures.

PEACE OF MIND

Legionella is a form of bacteria found naturally in water. It thrives in warm water environments, and storing water at 120°F (49°C) or less creates the ideal conditions for this bacteria to grow. When exposed to Legionella, it can lead to illnesses like Legionnaires' disease and Pontiac fever. The growth of this bacteria can be minimized, or eliminated, by increasing the hot water heater's temperature to 140°F (60°C) or higher.

Legionella Bacteria
STORE ABOVE 140°F

Disinfection: >160°F

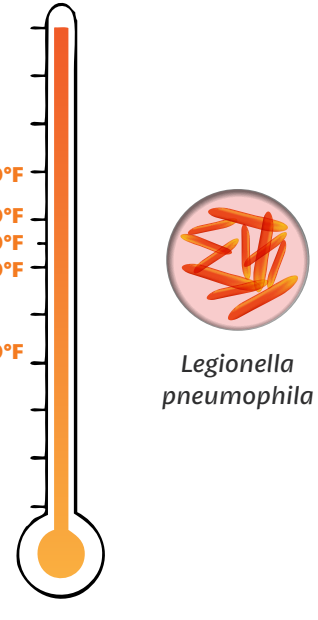
Legionella die in <2 minutes — 160°F

Legionella die in 32 minutes — 140°F
Legionella die in 5–6 hours — 130°F
120°F

Ideal growth range:
90°F – 108°F
Legionella growth range:
70°F – 120°F — 70°F

Legionella survive but dormant:
<70°F

**Results may vary based on usage conditions.*



Legionella pneumophila

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