

BEST PRACTICES for Heat Pump Water Heater Installation

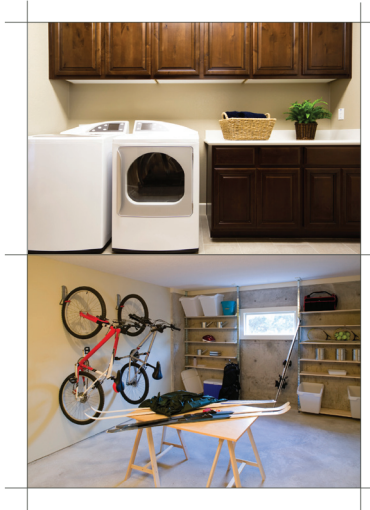
An Installer's Guide

- Properly installed heat pump water heaters save homeowners hundreds of dollars in water heating costs each year. By following best installation practices and providing homeowner education, you'll ensure satisfied customers.

Installation Location

Heat pump water heaters are suitable for installation in a variety of locations inside the home, depending on the unit's ducting capabilities.

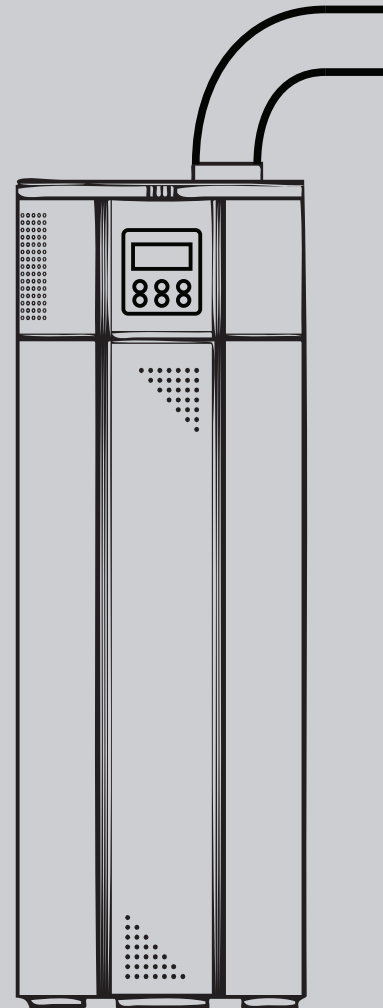
- Tier 1 units are best suited for unconditioned spaces, such as garages
- Tier 2 units are specially designed for colder climates and can be ducted to move cool air generated by the unit to the outside, allowing for installation in smaller spaces and inside the home.
- Ensure minimum clearance requirements are met on both the top and sides of the unit to ease installation, provide proper air flow and allow for maintenance



Please refer to the chart below for criteria used to determine appropriate installation location.

	Tier 1	Tier 2*
Unconditioned space installation	✓	✓
Conditioned space installation		✓
Minimum 40-45 degree installation location	✓	✓
Installation location > 1,000 cu ft (garage, etc.)	✓	✓
Installation location < 1,000 cu ft (utility room)		✓

*Note: A heat pump water heater that is ducted to exhaust cool air to the outside may create a negative pressure within the home, with the highest levels of negative pressure in the installation space. If the home has combustion appliances that use indoor air for combustion (a non-sealed combustion furnace, gas fireplace or a non-direct vented wood-burning stove or insert) a combustion safety test should be performed by a qualified professional prior to heat pump water heater installation. The qualified professional can assess the risk of back-drafting combustion gasses into the home during water heater operation. Visit www.neea.org/northernclimatespec/ for information on Tier 1 and Tier 2 specifications.



■ ■ Generate customer referrals and increase sales through quality installations

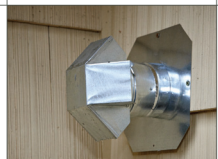
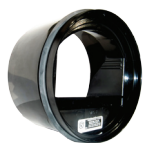
Installation Considerations

Verify all unit-size requirements are met for the home. Refer to the unit selection tool available on SmartWaterHeat.org for more information.



Ducted

- Prepare for ducted installations by carrying a wide variety of duct components and fittings to allow for installation flexibility around unforeseen constraints and site conditions.
- Install ducting per manufacturer's specifications
- Install a constant airflow regulator (CAR) inside the ducting, close to the unit, to limit airflow exiting the home to between 150 and 200 CFM
- Terminate the ducting fully outside the building
- Ensure that a functional carbon monoxide detector is installed near the primary sleeping area of the home



Non-ducted

- Protect unused duct attachment points to prevent obstruction or damage to mechanical component

Homeowner Education



- Review controls, operation mode, maintenance and clearance requirements with homeowner
- Discuss water temperature setting with homeowner to ensure comfort
- Refer to manufacturer's instructions for detailed operation information
- Instruct homeowner on who to contact for questions, service and repair of the unit
- Attach your contact information to the unit near the control panel

Installation Tips



- Install vibration-dampening mounts on units installed inside the home or against walls adjoining living spaces
- Condensate must be removed from the installation space via a properly sloped drainage system, condensate pump or connection to an existing plumbing drain; avoid creation of a slip hazard over sidewalks or driveways
- Install per local plumbing, electrical and building codes and always obtain necessary licenses and installation permits; verify requirements with your local jurisdiction

Maintenance



- Inspect and clean air filter in accordance with manufacturer's recommended schedule
- Inspect and clean condensate drain periodically
- Perform routine maintenance for water heaters

■ ■ For more information visit SmartWaterHeat.org

Disclaimer: This document is only to be used as a general guide for providing quality installations. For complete information regarding installation requirements, features, benefits, operation and maintenance, review the manufacturer's installation manual for the product being installed. Images of specific manufacturer product lines are not placed as endorsements nor does this guide guarantee their quality.

Smart Water Heat is an initiative of the Northwest Energy Efficiency Alliance, an alliance of Northwest utilities and energy efficiency partners.