Attention Installer

Recommended clearances:

It is recommended to have a 7" (17.8 cm) clearance between any object and the rear and sides of the water heater in the event service is needed. A minimum 8" (20.3cm) clearance above the water heater to remove the filter for cleaning and for service access, and clear access to the front of the water heater, is recommended. Installations that require less than 7" (17.8 cm) clearance on the right side or rear of the water heater for earthquake straps are also acceptable (see *Minimum Required Clearances* section in the Installation and Operations Manual for more information) In these cases, additional clearance must be provided on the opposite side of the unit to allow for service access. The hot and cold water plumbing and electrical connections must not interfere with the removal of the filter.

If a separate ducting kit is purchased, additional space is required above and to the rear of the water heater for installation. Consult the ducting kit manual for specific instructions.



TYPICAL INSTALLATION Thermal Conduit to electrical expansion tank junction box (use only copper conductors) To cold water vlagus Hot water outlet to fixtures Shut-off valve Unior (suggested) 3/4" FNPT fitting to condensate drain pan Temperature & Condensate drain line Drain valve Relief valve discharge 6" (15.2 cm) minimum To open drain, line from the floor should be at least 3/4" ID and pitched for proper draining

Room size:

Because this unit draws in air from the room to heat the water, the room must be at least 10' x 10' x 7' (700ft³) [3.05m x 3.05m x 2.13m (19.82m³)] or larger. If the room is smaller there must be a louvered door or a ducting kit installed.

Protect Unit:

During installation cover and protect upper part of the unit from potential installation debris.

Installation Checklist:

1.	lank	loca	tion:
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- Does room size require louvered door, ducting, or similar ventilation? 10' x 10' x 7' (700 cu. ft.) or 240 square inches (0.15 m²) open air-flow area needed.
- Back of unit away from wall by 7 inches (17.5 cm), and sides have at least 7 inches (17.5 cm) clearance.

(Additional clearance for earthquake strap installations).

- Front of unit is free and clear.
- Is the water heater level? If no, add shims under the base of the unit to ensure proper function of sensors.
- 2. Verify Air Filter is installed. (Located in packaging).

3. Plumbing connections:

- Does not prevent air filter removal.
- No leaks after filling the tank with water, either when water is flowing or not.

4. Condensate lines are in place:

- Main flexible or rigid drain line installed and directed to a drain or condensate pump. Reducer fittings are not recommended.
- 5. Temperature and pressure-relief valve is working and drain line completed per local code.
- 6. Electrical: Verify 208/240 VAC to L1 and L2 at tank.
- 7. Electrical connection does not prevent air filter removal.
- 8. Verify control panel displays 120°F (49°C) Hybrid mode. Assist user in how to adjust temperature and modes (see "Temperature Adjustment" section of the Installation and Operation Manual).

Normal Startup Conditions:

Once the tank is full and power is energized, you may experience the following:

Elapsed Time	HEWH Actions	Comments	
0 to 2 minutes	Unit will go through self-check and display countdown.	This 2-minute off-time prevents compressor damage.	
2 to 22 minutes	Compressor and fan turn on.	This 20-minute period is used to ensure the tank is full of water (Dry-fire prevention algorithm).	
22 minutes and beyond	Compressor and fan turn off, heating elements turn on. After initial heat-up, elements turn off and compressor turns on.	The water heater is operating in Hybrid mode, quickly providing an initial amount of hot water before switching to the efficient heat pump for the majority of heating.	

NOTE: Heat Pump operating range is 35°F - 120°F (2°C-49°C).