

## TECHNICAL SERVICE BULLETIN

## **Tankless Electric Water Heaters and Water Quality**

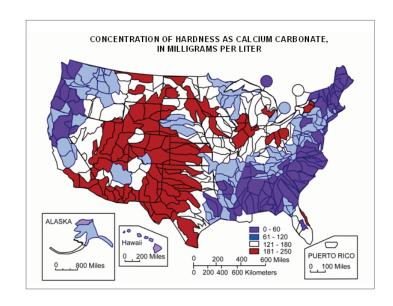
This bulletin guides the user how to maintain and protect a Stiebel Eltron tankless electric water heater against damage caused by minerals found in hard water.

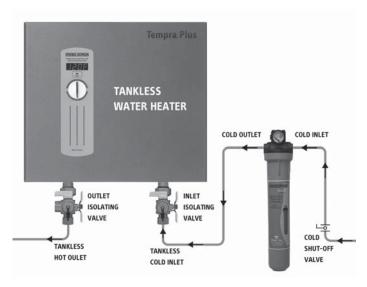
Stiebel Eltron tankless electric water heaters are designed for a very long service life, but actual life expectancy will be directly affected by water quality and use. If you do not already know the quality of your water, we advise testing (your water department may be able to assist). Installing a non-salt based softener or polyphosphate inline filter may prolong the life of your unit. Stiebel Eltron recommends the HousePure® water filter (our Part No. 581331) for this purpose. To ensure consistent water flow, we recommend periodically checking for and removing any scale and dirt in the faucet aerators and showerheads, and in the filter screen in the unit. Depending on water hardness, scale build-up may need to be flushed from the unit every six months to a year.

Stiebel Eltron recommends locating suitable valving and/ or the use of braided stainless steel flex connections on both inlet and outlet pipes for the last 1-2 feet of bridge between your household water piping and the tankless water heater. This will allow you to quickly disconnect and isolate the unit (see diagram, right). You can then periodically pump a descaling solution from a bucket in front into the inlet and back out the outlet to the bucket, much the same as you would descale a coffee maker.

This twofold approach of treating the incoming water properly and periodic flushing should help to maintain the efficiency of the heating elements and extend the life of your Stiebel Eltron tankless electric water heater.

Additionally, if you operate the tankless water heater at an output temperature of 110° Fahrenheit or below, this will help to minimize scaling.





Recommended installation of a tankless water heater with a HousePure® water filter [Part No. 581331]



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## » Descaling procedure, step-by-step using Flow-aide descaling kit:

- 1. Disconnect power to water heater.
- 2. Close hot and cold isolation and service valves and remove service caps.
- 3. Pour 1.5 gallons of water into bucket and place under water heater.
- 4. Add contents of 1 quart bottle of Flow-aide into bucket (bucket should be filled approximately ½ full).
- 5. Connect one hose pump, and other end of same hose to cold service valve. Place pump in bucket.
- 6. Connect second hose to hot service valve. Place other end in bucket.
- 7. Open both hot and cold service valves.
- 8. Plug pump into grounded receptacle.
- 9. Allow pump to circulate Flow-aide solution through heater for 30-45 minutes. Unplug pump.
- 10. Close cold service valve. Remove hose from cold service valve, and replace service cap.
- 11. Disconnect the hose from the pump and remove pump from bucket. Discard Flow-aide solution.
- 12. Flush tankless water heater for 3-5 minutes or until water flows clear by opening the cold isolation valve and allowing water to exit through the hot service valve into a drain or bucket. If using a bucket, empty periodically.
- 13. Close hot service valve. Remove hose from service valve and replace service cap.
- 14. Open hot isolation valve.
- 15. Connect power to water heater and return appliance to service.



We recommend our Flow-aide Descaling Kit [Part No. 540000] for this purpose. Alternatively white vinegar or CLR® Calcium, Lime & Rust Remover may be used.