



Planning & Community
Development

17500 Midvale Avenue North
Shoreline, WA 98133-4905
206-801-2500 [phone]
206-801-2788 [fax]
pcd@shorelinewa.gov
www.shorelinewa.gov

Solar Water Heating

Solar water heating works - even in western Washington. If your property gets a lot of sun, especially on a south-facing roof, you can save energy and money by installing a solar hot water system at your home. There may be state & federal tax incentives available to offset cost.



If your house has a south facing roof or wall and not much shade from trees or neighboring buildings, you may be able to get between 50 and 70 percent of your hot water needs met by solar water heating. This can make a big impact on your energy bill, especially if you add up the savings over the life of the system. If you don't have shading issues, you can even make solar work on an east or west facing roof.

There are two types of solar collectors that work well for domestic hot water in our climate – flat plate glazed collectors and evacuated tube collectors.

Roof Mounted Collectors



Glazed Flat Plate Collectors



Evacuated Tube Collectors

Hours of Operation:

Monday 8:00 am-5:00 pm
Tuesday 8:00 am-5:00 pm
Wednesday 1:00 pm-5:00 pm
Thursday 8:00 am-5:00 pm
Friday 8:00 am-5:00 pm

Permit Processing Ends at 4:00 pm Daily

If you just want to heat a swimming pool, use unglazed collectors. You can heat a pool all summer using solar power alone.



Unglazed Collectors for Swimming Pool Heating

Collectors are normally installed on the roof, but they can be ground mounted if you have enough space that is not shaded. Your roof must be in good shape before you install a system on it. If you need a new roof, replace it prior to installing a solar hot water system. A building permit for roof replacement may be required (see handout on Re-Roofing). You may also want to consider installation of a more durable roof.



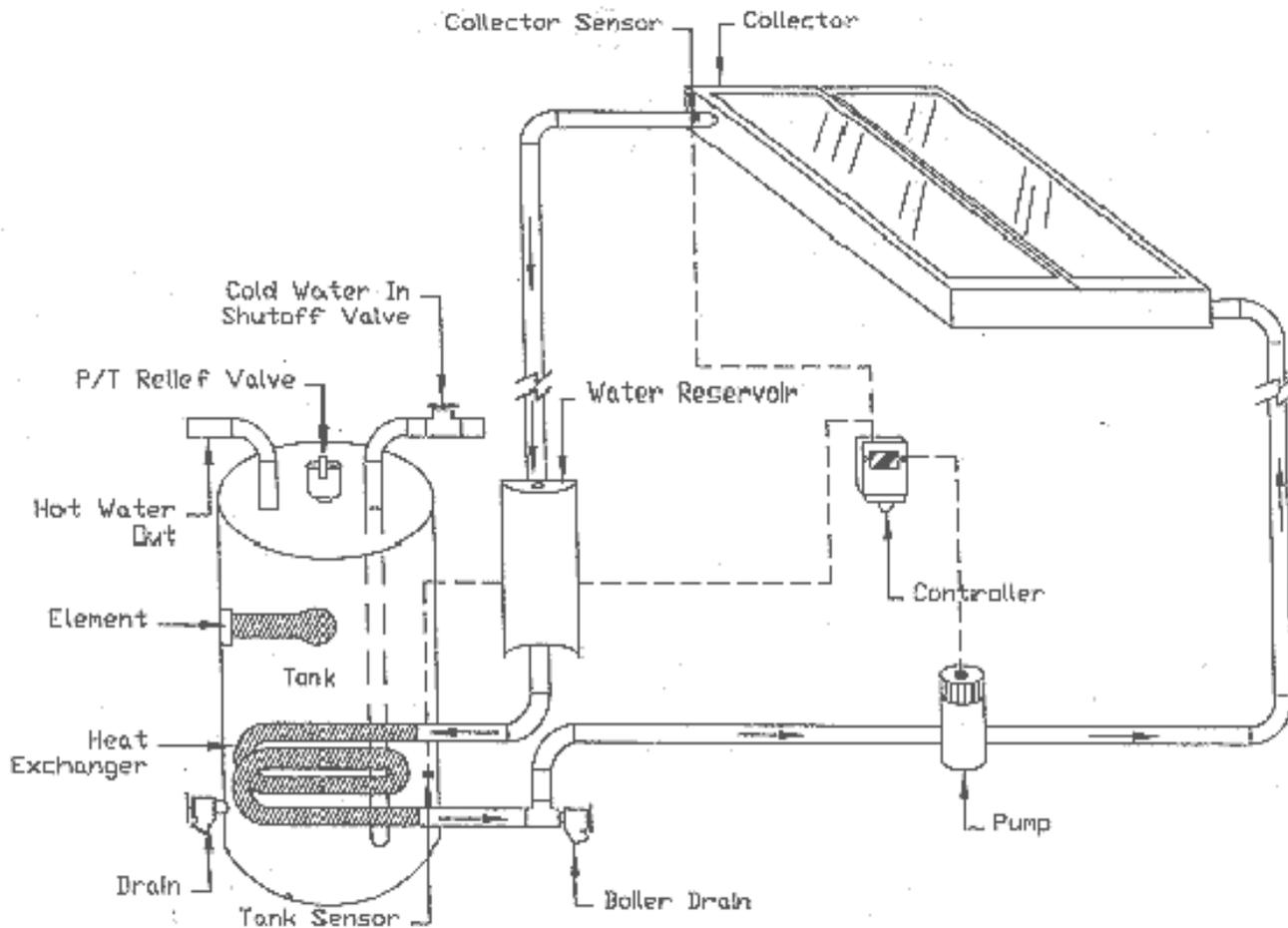
Ground Mounted Flat Plat Glazed Collectors

Photovoltaic panels are used to convert solar power to electricity. They can also work well in our region, but are not used for heating water.



Photovoltaic Panel

The City of Shoreline requires that you obtain a plumbing permit for the installation of a solar water heating system. Some system configurations also will require cross-connection protection of the public water supply - check with your water purveyor (Shoreline Water District or Seattle Public Utilities).



Typical Plumbing System