

# Anne Chambers and Ed McAlpine Green Home Features

March, 2024

## Our House before electrification

- Built in 1974
- 1999 sf, one floor, crawlspace, attic
- Gas furnace
- Gas cooktop
- Gas clothes dryer
- Gas water heater



## Tesla Solar Roof

- Completed 2021
- Installed by Tesla Energy
- Product combines a premium roof tile with solar collection
- 2/3 of the tiles on the south-facing side of the house are solar collectors, plus a few on the north-facing side.
- 25 yr warranty
- Cost: \$42,981 less \$8,840 Fed tax credit (26% of solar tile cost) = \$34,141
- Costs have increased substantially since 2021



## Tesla PowerWall Batteries and Inverter

- Completed 2021
- Installed by Tesla Energy
- Two 13 Kwh batteries power the house at night and when the solar roof can't – such as on a rainy or foggy day
- Inverter “directs traffic” between the solar power collected, the battery and the grid to meet energy needs.
- 10 yr warranty
- Cost: \$16,000 less \$4,160 Federal tax credit = \$11,840.



## HEATING AND COOLING

### Attic Insulation

- Completed 2023
- Contractor: Eco Performance Builders
- Installed stabilized cellulose insulation to an R-50 level
- This was done in conjunction with the heat pump installation to allow the house to retain heated or cooled air more efficiently
- Cost: \$3,960 less Federal tax credit of \$1,188 = \$2,772



### Ducted Inverter Heat Pump System

- Completed June 2023
- Contractor: Eco Performance Builders
- Heat pump system installed that worked with an airhandler and ducting installed in the attic.
- One outdoor unit Fujitsu ARU36RGLX, a 36,000BTU unit and one indoor airhandler Fujitsu AOU36RGLX
- 12 year warranty
- Cost: \$18,183 less Bay RE rebates (\$2,950) and Federal tax credit of \$2,000\*=\$13,233



\*note that we didn't qualify for the tax credit since we had so many credits from the heat pump water heater

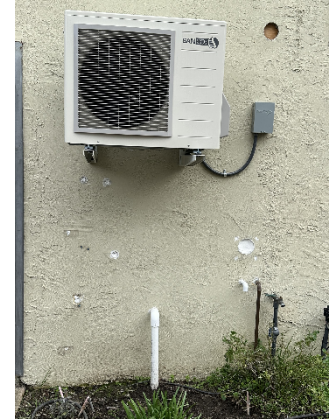
### Duct System

- Completed June 2023
- Contractor: Eco Performance Builders
- Customer designed duct system installed in the attic with new vents in each room of the house, to distribute the heating/cooling provided by the heat pump.
- Photo shows the air intake in the hallway of the house
- Cost: \$14,352



## Heat Pump Water Heater

- Completed June 2023
- Contractor: Eco Performance Builders
- SanCO2 Heat Pump Water Heater, 83 gallon
- One outside unit, plus one inside tank
- Cost: \$13,353 less \$1,000 MCE rebate less Federal tax credit of \$2,000 = \$10,353



## Induction Range

- Completed 2019
- Purchased and Installed by Friedman's Appliance
- Wolf 30" Induction Range
- Cost: ~\$6,000



## Heat Pump Clothes Dryer

- Completed 2022
- Purchased and installed by Best Buy
- LG 4.2cu ft stackable smart electric dryer with dual inverter heat pump
- No dryer vent needed, uses a water drain hose
- Cost: \$1,097

