A Regional Perspective - 3 ADU Case Studies

- Concord
- Berkeley
- San Jose
Concord Detached ADU
~24x15 = 375 sq ft
Concord - Shoehorned in

Site Plan

New Accessory Dwelling Unit: 374 sq ft

Existing house and garage: 1,735 sq ft

Lot area: 6,028 sf

SCALE: 1/16" = 1'-0"
Concord - Shoehorned in
Concord: “Engineered Framing”
Concord: Ouch - Thermal Bridging

Contractor: “Need insulation outside the envelope. The structurals were so intense that you have a stud every 6”. They are 4"x6" very often too.”

“Used closed cell spray foam open cell on outside as part of stucco. 108 degrees outside and really nice and cool on the inside.”
Concord: Permitting Improved the Efficiency!

- Electric mini split heat pump = no gas
- R-47 roof, spray foam walls + exterior insulation on walls
Concord ADU: Permitting Improved the Efficiency!
Berkeley Garage To ADU Conversion
Berkeley Garage To ADU Conversion
Berkeley Garage To ADU Conversion

~18' x ~20' = 375 square foot “garage remodel”

Spend Per Month
18 months design & 9 months building
Permits required we preserve “shell” (including thermal bridging and dry-rot)
Remove too much framing and the job gets shut down! Causing $10,000+ in time and fees, a 6 month delay, unhappy client and a terrible Yelp review.
How to help: Give the contractor something in writing saying they can remove old wood
Berkeley Garage To ADU Conversion
Berkeley Garage To ADU Conversion Lessons

- Batt insulation “calcs” close to The Bay. Rockwool/mineral wool for 1 hour plus added R value.
- Heat pumps eliminate gas line and furnaces. It is a struggle to compete with the furnace salespeople.
- We can run hot and cold water from the main home too then put in a more efficient water heater in the main home. Win-win!
- “A lot of guys are not sealing sill plates and electrical outlets.”
San Jose Net Zero ADU- Owner Concept
San Jose Net Zero ADU: Reality with Setbacks

- <600 sq ft is a comfortable one bedroom
“I feel very connected to my solar panels.”

“I think I love them the most of anything else in my house. I don't want their effort to be wasted.

It wasn't until I got solar that I really started to care about efficiency. It made me feel like the electricity I was generating was MINE and I didn't want to waste it”
San Jose Net Zero ADU:
Solar Fits On The Main Home

We are branching off 4KW for the ADU from the 11KW system on the main house roof.
San Jose Private Sub-Metering

- “The main house sits perfectly for solar, and with the ADU extra power needs, sunsetting of the direct tax credits, it was now or never.
- PRIVATE sub meter which will measure ADU usage, which is broken down out of the total on a per KWh basis, for cost splitting.”
- Flat rate .23/KWh in lease. I can generate at about .10/KWh so the tenants get a fixed tier, pays me back in about 4.5 years or so. If you count depreciation expenses, maybe 3.5 years....
Just Out: Little House in the City Features ADUs.