

Exhibit A - Mandatory and Optional Design Elements

Guiding Design Principles

- A. The ADUs will be electrified. There will be no fireplaces or supply hook-up/ventilation systems for natural gas. No appliances/equipment will be powered by natural gas, propane or any other form of direct combustion.
- B. Affordability in terms of both construction and operation of the ADU. Designs should avoid complicated geometries and focus on rectangular or square footprints. Where construction costs increase due to design features (e.g., renewable energy systems), there should be a corresponding decrease in the operating costs of the home.
- C. Limit total site energy use based on size of units. Where feasible, energy use should have an energy design rating (EDR) of zero or lower.
- D. Develop ADU designs that outperform future Title 24 updates and allow occupants to live comfortably with the impacts of climate change.
- E. Develop ADU designs that are accessible for future occupants.

Highly Desirable Design Elements

- I. Indoor Air Quality and Emissions
 1. Size ducts and return grilles of any HVAC system to accommodate MERV 13 air filters. Grilles should be at least 2 inches deep.
 2. No insulation containing formaldehyde.
 3. Low-VOC paints, glues and other finishing products.
- II. Energy Conservation
 4. "Smart" thermostat.
 5. ENERGY STAR Dishwasher: Compact 18 inch for 1 bedroom/studio ADU; Standard 24 inch for 2 bedroom ADU.
 6. ENERGY STAR Refrigerator: 30-inch maximum width.
 7. ENERGY STAR Clothes Washer and Dryers: Electric, stacked.
 8. Electric Induction Cooktop: 30-inch.
 9. Elevated electric convection oven with self-cleaning feature.
 10. Integrated indoor clothes drying rack (include design) or dedicated storage space for stand-alone drying rack.
 11. Hybrid heat-pump water heater with Uniform Energy Factor (UEF) ≥ 3 . Storage tanks should be ≤ 60 gallons and located inside the unit with approximately 1,000 cubic feet of air space around the water heater. A split-system with the heat-pump unit on the outside of the unit would be preferred.
 12. Insulation for walls: R-value to maximize energy efficiency.
 13. Insulation for roof: R-value to maximize energy efficiency.
 14. Insulated floors: R-value to maximize energy efficiency.
 15. Doors with R-value to maximize energy efficiency.
 16. High-performance, triple glazed/double low-e windows ($U=0.12/R-8$).
 17. Design option that specifies the installation of shading devices on south-facing windows (e.g., overhangs).
 18. Design for airtightness of maximum 0.6 air changes per hour (ACH) at 50 Pascal. Provide drawings of each junction at a scale of approximately 1:5 to 1:10 to

demonstrate how airtightness will be achieved. Limit envelope penetrations to no more than 15 penetrations.

19. HVAC options: Ground or Air Source Heat Pump ducted system or split ductless system. Exterior air source heat pump units should have flexibility to allow for placement on different sides depending upon setback requirements and aesthetic considerations. Size any ducts and dedicate space for a heat pump-type HVAC system. Integrate Heat Recovery Ventilation system of at least 80% efficiency.
20. Space for exterior metering for electricity and water.

III. Water Conservation/Quality

21. Purple pipe ready/graywater system integrated.
22. Rainwater catchment system for use as irrigation.
23. Low-flow shower head (2.0 GPM or better) and aerators on sink faucets.
24. Permeable paving for walkways around and leading to ADU.

IV. Waste Management

25. Integrate bins under sink for recycling, green waste and trash.

V. Renewable Energy

26. Solar PV panels already integrated with roof design and that can be oriented to maximize southern exposure.
27. Dedicated battery back-up system connected to solar system.

VI. Livability & Accessibility

28. Kitchen space: optimize counter space, storage and flow.
29. Lever handles for faucets and door handles.
30. Kitchen cabinets and drawers with D-style handles.
31. Pull-out work surface in kitchen that can be used while sitting.
32. Thermostatic shower valve that allows preset temperature to save energy and water.
33. No-step entry to shower with hand-held/adjustable shower head.
34. Slip-resistant floor in bathroom with coefficient of friction (COF) equal to or greater than 0.60 (wet).
35. Bathroom walls reinforced with blocking for later installation of grab bars or seats in shower as well as near toilet.
36. Low-flush, comfort height (17 to 19 inches high) round-bowl toilet.
37. Step-free main entrance and/or compressible rubber thresholds.
38. Rocker-style "push" switches.
39. Bench or table outside the front entrance.
40. Wifi/cable box that is easily accessible and connected to other rooms in ADU.
41. Space for plants (particularly native plants) inside and out with greenwall, window planters, bay window.

VII. Building Materials

42. Low-carbon concrete slab-on-grade foundation that is accompanied by a reduction in cement use by at least 25 percent.
43. Flooring made from low-VOC, renewable sources (e.g., bamboo, cork).

44. FSC-certified wood for framing.

VIII. Transportation

45. Secure bicycle storage on exterior. This may be a locker-style that encompasses the entire bike or a secure metal rack/bar that allows the owner to secure the bike frame.

IX. Safety and Security

46. Space for fire extinguisher near stove/oven – ideally under sink.

47. Dedicated wiring for connected smoke detectors (avoid batteries).

48. Motion-activated exterior lighting at entrances.

49. Wiring available for security camera at doors.

Lower Priority Design Elements

50. Low-voltage wiring that includes in-wall speakers, CAT 7 ethernet cables and phone cables.

51. Connect rainwater catchment system to indoor, nonpotable water uses (i.e., toilet).

52. Radiant heating floor.

53. Dedicated space for vermicomposter either inside the kitchen or outside on porch.

54. Use of recycled or reusable materials whenever feasible provided these materials are easily sourced in the Bay Area and would be approved by planning/building departments.

55. Wind-turbine possible add-on and connected to battery back-up system.

56. Fire sprinkler system (where not required by building code).