

# Residential Plans Designer Checklist

Each plan sheet shall include the authorized seal or stamp with license expiration date and signature of a professional engineer or architect licensed in the State of Hawai`i, and include this statement. "This work was prepared by me or under my supervision and construction of this project will be under my observation".

**Title or First sheet**

Provide the project information including the legal property owner, lessee/tenant, tax map key (TMK), site address and site location map.

- Design criteria

Floor Live Load \_\_\_\_\_ psf     Roof Live Load \_\_\_\_\_ psf

Basic wind speed \_\_\_\_\_ mph     Effective Wind Speed \_\_\_\_\_ mph

Wind Exposure Category \_\_\_\_\_ mph     Seismic Design Category \_\_\_\_\_

Insulation (Floor, Wall, Ceiling R-Value if air conditioned or heated)

- 8 1/2" x 24" blank space on the right side of sheet for approval stamps.

**Plot/Site plan**

- Drawn to scale w/ scale indicated
- Enlarge Site plan if applicable
- Show the entire TMK parcel, property line measurements, CPR lines w/CPR unit numbers, easements, setbacks, abutting street(s) and north arrow.
- Location of existing and proposed buildings, swimming pools, rock/masonry walls (include height info), potable/non potable water tanks, fences, ancillary structures, driveway access, septic systems or cesspool, eaves, overhangs, etc.
- Distance between building(s) and property lines, on-site wastewater disposal (i.e. septic systems, leach field, cesspool), etc.
- Grades where applicable
- Location of driveway
- Location of available underground public or private utilities at the property line: water, gas, sewer and cable/electric.

**Floor plan and sections** for each floor level must clearly call out existing, proposed, as-built, and/or work started prior to permit, as each may apply to your project. Show the following where applicable:

- Room Identification  
All rooms must be dimensioned (square footage tabulation and total floor area) and labeled as to their use (living, kitchen, master bedroom, bedroom, bathroom, family room, storage, den, patio, lanai, deck, carport, garage, etc.). Indicate if room is new or existing
- Shear/Braced Walls

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Location and widths, type/thickness of sheathing, nailing/bolting requirement, strut/cord details. Braced wall analysis required for residential prescriptive design, per IRC, otherwise provide structural calculations for engineered design.

- Doors/windows schedule and sizes (note bedroom egress window and safety glazing where required), required light and ventilation calculations.
- Plumbing fixtures (water heater, water closet, lavatory, shower, bath, sink, hose bib, washer/dryer, pressure tanks, pumps), ventilation fans, other fixtures with clearances to electrical fixtures where applicable.
- Plumbing wall dimensions
- Occupancy use of each room or space identified including square footage tabulation (living, kitchen, master bedroom, bedroom, bathroom, family room, storage, den, patio, lanai, deck, carport, garage, etc.) and total floor area.
- Dimensions of counters, cabinets, partitions, built-ins, etc.
- Doors/windows schedule and sizes (note bedroom egress window and safety glazing where required), required light and ventilation calculations.
- Guardrails & stairways/step details including tread & riser dimensions, nosing, handrails, railing/guard height
- Ceiling heights
- Floor/wall/ceiling dimensions and materials. Indicate if this is new or existing.
- Floor/wall ceiling insulation R-Value if air conditioned or heated
- Kitchen stove top w/ clearances from combustible, water-main, oven refrigerator, and other fixtures
- Plumbing fixtures (water heater, water closet, lavatory, shower, bath, sink, hose bib, washer/dryer, pressure tanks, pumps), ventilation fans, other fixtures with clearances to electrical fixtures where applicable
- Brace wall sheet

**Foundation plan** (including layout, dimensions, details)

Where applicable:

Include details of the concrete slab, footing, concrete strengths, steel reinforcement placement, anchor bolts, hold-downs and reinforcing pads, connection details, post, pier, sill, joist, vent size (perimeter foundation) and location, etc.

**Reflected ceiling plan**

Show the following where applicable:

Light fixtures, skylights, smoke detectors, ceiling/ventilations fans, supply/exhaust registers, attic access, etc.

**Roof and/or roof framing plan** (solar water heater panels on roof, if any, should be shown either on the roof or exterior elevation plan)

Show the following where applicable:

- Member sizing, spacing and bearing locations
- Attic ventilation
- Roofing insulation
- Connection details

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- Hips, ridges, and valleys with roofing material, slope, overhangs, gutters, downspouts, ventilation, etc.

## Framing plan for each floor

- Floors and Walls layout and dimensions for structural members (joists, beams, rafter, header sizes, spacing, bearing, **connection details**, insulation).
- Diaphragms: type and thickness of sheathing, span rating, and nailing requirements;

## Pre-Engineered Roof Trusses (options):

- Truss shop drawings and calculation prepared by the professional architect or engineer shall be sealed or stamped and signed with authentication stating, "This work was prepared by me or under my supervision and construction will be under my observation." Observation of pre-engineered truss fabrication may be satisfied through a pre-approved testing or inspecting agency.
- Framing plans prepared by project architect or structural engineer of record shall identify on plans the pre-engineered roof truss document identification, designer and fabricator, sealed or stamped and signed with authentication stating, "This work was prepared by me or under my supervision and construction will be under my observation."
- Truss shop drawings and calculation submitted separately from building permit application, the project architect or engineer of record shall submit a letter identifying the legal property owner, TMK, building application or permit number, pre-engineered roof truss document identification, designer fabricator, and include a statement accepting the pre-engineered roof truss design/fabrication and its incorporation into the design/construction, with a letter sealed or stamped and signed with authentication stating, "This work was prepared by me or under my supervision and construction will be under my observation."

## Interior elevations w/dimensions & details

- Dimension and detail of counters, cabinet and built-in, window heights from the floor, etc.
- Kitchen stove top w/ clearances from combustible, water-main, oven, refrigerator, and other fixtures

## Exterior elevations

- Full elevation showing walls, roof, doors, windows, stair, guard, railing, items affixed to exterior structure, dimensions from finished floor and overall height from grade, etc.
- Exterior elevation plans show the finished floor height dimensions from the finished grade.
- Cripple wall where applicable
- Framing member vertical dimension to earth.
- Guardrails & stairways/step details including tread & riser dimensions, nosing, handrails, railing/guard, height.
- Solar water heater panels if applicable.

## Building sections with details

- A complete load path: type, placement and amount of connectors, roof strapping, and fasteners.

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- Ceiling heights.

**Wall sections with details**

- Framing-member size and spacing. Vertical dimension to earth
- Headers, joists, sub-floor, wall and roof constructions

**Details**

- Ceiling height, siding material, handrail, stairs and step section, typical eave footing, connections and connectors, fire barrier blocking material details, etc.

## Additional documents that may be required

- Engineer stamped wastewater system plans and State Department of Health approved Individual Wastewater System (IWS) plan (if applicable). **Required for dwellings without a county sewer.** (<http://health.hawaii.gov/wastewater/home/forms/>)

- AS BUILT letter from Architect (if applicable)

- Contractor declaration form (includes designations for plumber and electrician).

- Architect Truss letter

- Architect/Engineer stamped water tank detail sheet/catchment plans (if applicable)

- Electrical drawing (if applicable)

- 2015 Residential Energy Code Certificate Form, (if applicable)

- Pool/Spa details, including required code compliant safety barrier and alarm (if applicable)

- FUDS Notice (if applicable)

- Approved Solar water heater variance (if applicable)

- Fire blocking material details (see County preapproved fire blocking list)

- Special inspection form (if applicable)

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### PV Installations

- Location of PV modules
- Rail mounting details including attachments, spacing and manufacturer specifications
- Battery installations, provide manufacturer's manual and/or bracket mounting detail
- Residential PV Structural Evaluation Worksheet (if applicable)
- Residential Roof-Mounted Panel System Installation Acknowledgement (if applicable)

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