ADU Building Plan Requirements & Worksheet

Would you like to get your accessory dwelling unit (ADU) building permit as quickly as possible? By submitting accurate, complete plans, you will avoid the need for a resubmittal and get your building permit issued more quickly. Homeowners are advised to hire a professional architect, designer, or draftperson to draw the plans — and these professionals are advised to create building plans that fully comply with the requirements outlined in this bulletin.

This worksheet is both a guide to creating plans that meet requirements and a communications tool that facilitates an efficient plan review process between the applicant and City plan reviewer.

BEFORE YOU CREATE BUILDING PLANS

Before investing in plans, it is important that proposed ADU complies with what the City's zoning code allows on the property and any special requirements should be identified — such as the possible need for a Planning Permit, Geologic Hazard Clearance, Fire Variance; or flood zone design requirements. The ADU Universal Checklist at www.sanjoseca.gov/ADUs is always the first step to an ADU project, as it will help you assess zoning compliance and any special permit requirements.

PUTTING TOGETHER PLANS

This bulletin outlines the content of building plans as required for a typical ADU.

Plans

Prepare 3 sets of Building Plans. Use the following required format:

- Minimum sheet size: 18X24 inches. Each sheet must include:
  - Page number (and then place sheets in chronological order)
  - Preparer's Name, Title, Registration Number (if applicable), Address, and Phone Number
  - Project Address
- Documents prepared by an architect must bear his/her stamp with renewal date written or date printed over the stamp.
- Documents prepared by an engineer must bear his/her stamp or seal and wet signature with date on at least the Cover Sheet, Title Sheet, or Signature Sheet

Calculations if Required

Prepare 2 sets of calculations and include:

- Preparer, Architect or Engineer is to sign and stamp all documents
- Required calculations may include: Structural Calculations showing vertical and lateral loads; Title 24 Energy CF-1R Form; and Title 24 Mandatory Measures of Performance Analysis Summary

For information on how to submit your plans, please visit the Permit & Plan Review webpage at www.sanjoseca.gov/ADUs for instructions on what to include in your Plan Submittal Package and how to secure an appointment for plan review.

WORKSHEET INSTRUCTIONS

In the following pages, use the Yes/No columns to indicate if the listed information is applicable to your project. Then, in the Page # column, indicate which page of your plans contains the relevant information. These steps help communicate your information to the City plan reviewer, and contribute to the speed of your plan review.

continued

CONTENT FOR TYPICAL ADU PLANS

A-1 COVER SHEET REQUIRED

1. Preparer's Name, Title and Registration (if applicable), Address, Phone Number
2. Project Name, Address, Assessor Parcel Number; Property Owner's Name, Address, Phone Number
3. Scope of Work identifying all work proposed under this permit
4. Occupancy Group Classification/s (e.g., R3 and U) and Type of Construction (e.g., Type VB)
5. Gross Area Per Floor and Building Height
6. Index of Drawings/Plans and show Scale used for drawings and details
7. Applicable Codes and Editions e.g., CBC, CRC, CEC, CMC, CPC & California Building Energy Efficiency Standards

A-2 SITE PLAN REQUIRED - DRAW TO SCALE AND INCLUDE:

8. Show full Parcel, Lot Dimensions, Property Lines, Interior Lot Lines if applicable, and Street Name/s.
9. Show footprint of Primary Dwelling and Roof Line with all projections and dimensions to property lines.
10. Show recorded Easements, if any, and Visible Utilities, such as meters for electric, gas, and water.

SYMBOLS ABBREVIATIONS

sf square feet

" inches

' feet

11. Show location of any existing and proposed Retaining Walls or Accessory Structures.
12. Show footprint of Proposed ADU and Roof Line with all projections and dimensions to property lines.
13. Show distance along a minimum 3' clear path from first story of ADU to front property line. Show that the minimum 3' clear path surrounds the ADU, as measured from farthest extending ADU projection, such as eaves, to the property line. CFC 503.1.1
14. Show a small Vicinity Map, with North Arrow and Scale. Mark one or more locations of fire hydrants closest to the project. Indicate distance from closest hydrant to the farthest ADU exterior wall using 3' clear path of travel. CFC 507.5.1, SJ ORDINANCE 29807 SECTION 17.12.440
15. Mark on the Primary Dwelling where the ADU address will be located. The Fire Department requires the address to be visible and legible from the street fronting the property.

A-3 ARCHITECTURAL AND STRUCTURAL PLANS REQUIRED

16. Foundation and Structural Floor Framing plans
17. Existing and New Architectural Floor plans including adjoining rooms
18. Demolition Plan if a structure or portion of a structure is to be removed
19. Exterior Elevations. For properties in flood zones A, AE, AH, or AO, please also include this information on the elevations:
    - Specify and delineate the height of the floodplain on the building elevations.
    - Show the lowest floor elevation above grade.
    - Show flood vent calculations on exterior elevation and foundation sheets.
    - Show location and height of all machinery and equipment.
20. Structural Material Specifications
21. Structural and Architectural Details
22. Typical Cross Sections in each direction
23. Shear Wall and Holdown Plan including table of wall type, nailing, anchor bolts, sill nailing, transfer connections, holdowns, and bolts

A-4 ROOF FRAMING AND TRUSS PLANS REQUIRED EXCEPT FOR ADU CONVERSIONS

24. Roof Framing Plan - Show truss layout. Specify collector load. Show support for girder trusses.
25. Truss Plan - Reviewed and stamped approved by responsible design professional. Show all truss calculations and details. Calculations and details not transferred to the plans must be stamped and signed by an engineer or architect licensed by the State of California.
26. Detail Sheet - Show all truss splices, connections, plate sizes and hangers. Specify the truss manufacturer and truss identification numbers. Provide truss framing key plan that matches the room framing plans with all types of trusses identified on the plan. (CRC R802.10)
    Note: No deferred submittal of truss calculations/drawings is allowed.
27. Show all trusses including gable bracing and bridging.

A-5 MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS REQUIRED

28. Location of HVAC equipment and size, noting BTU/HR output
29. Locations of plumbing fixtures, listing all required dimensions
30. Locations and sizes of outlets, fixtures, switches, smoke detectors, subpanels and main panels

A-6 GRADING PLAN AS APPLICABLE

31. Show and specify that the finish grade around the structure shall slope away from the foundation at a minimum of 5% for at least 10 feet from the structure. CBC 1804.3
32. On graded sites, the top of any exterior foundation shall extend a minimum of 12 inches plus 2% above the elevation of the street gutter at a point of discharge (or the inlet of an approved drainage device).

A-7 DETAIL SHEETS AS APPLICABLE. ALL DETAILS AND SECTIONS SHOULD CROSS REFERENCE.

33. Window Schedule detailing egress, safety glazing, and any skylight-approved listing numbers
34. Door Schedule listing sizes and types
35. Flashing: Vertical and Vertical-to-Horizontal Junctures of Materials
36. Footing, Piers and Grade Beams: Detail all post-to-beam, post-to-footing and beam-to-beam connections or call out approved metal connectors.
37. Post and Girder Connections
38. Roof: Eaves, Overhangs, Rakes and Gables
    - Dimension eave projections and their distance to property line. Verify that they conform to the limitations prescribed under CRC Section R302 and Tables R302.1(1) for non-sprinklered dwellings or Table R302.1(2) for sprinklered dwellings. See footnote in building codes for exceptions. Provide construction details for 1-hour fire protected eaves where they occur.
    - The projection of sills, eaves, belt courses, cornices, canopies and other architectural features can extend no further than 2 feet into the air space in any setback area. SJMC 20.30.400
39. Floor Changes such as wood-to-concrete flashing details
40. Handrails, Guardrails and Support Details
41. Structural Wall Sections with Details at Foundation, Floor and Roof Levels. Include a detailed exterior wall section showing a weather-resistant exterior wall envelope. Specify the construction including type of materials, thickness, sizes, spacings, etc. per CRC R703.
42. Stairway Rise and Run, Framing, Attachment and Dimensions of Members
43. Shear Transfer Details and Holdown Bolt Details

DESIGN CONSIDERATIONS AND SPECIFICATIONS

AS MAY BE APPLICABLE TO YOUR PROJECT

ATTACHED ADUS ONLY REQUIRED

1. Specify the 1-hour fire rated construction at wall and floors separating dwelling units. CRC R302.3
2. Specify how noise attenuation will be provided between dwelling units. CBC 1207, 1207.3, AND CRC APPENDIX K

BATHROOM REQUIRED

3. Show location of mechanical vent to control humidity. Window operation is not a permissible method of providing humidity control in a bathroom. CMC CHAPTER 4, CRC R303.3.1
4. Clear space around a toilet shall measure a minimum 15” from centerline of toilet to wall or barrier on each side, and a minimum 24” in front of the toilet. CPC 402.5
5. Shower pan dimensions must be a minimum area of 1024 sq. inches and a minimum finish dimension of 30” in any direction. CPC 408.6
6. Shower doors shall open with a minimum 22” unobstructed opening for egress. CPC 408.5

DOORS, STAIRWAYS, LANDINGS, AND GUARDRAILS AS APPLICABLE

7. To provide opening protection between the dwelling and an attached garage, show one of the following measures. Note that doors shall be self-closing and self-latching. CRC R302.5.1
   - Solid wood doors not less than 1-3/8” thick;
   - Solid or honeycombed core steel doors not less than 1-3/8” thick; or
   - A 20-minute fire rated door
8. A landing or floor is required on each side of each exterior door. The landing width shall be equal or greater than the door width and 36” minimum in depth. Landings at required egress doors shall be no more than 1-1/2” lower than the top of the threshold. Exception: A door may open at a landing that is not more than 7-3/4” lower than the floor level if the door does not swing over the landing. CRC R311.3.1 AND R311.3.2
9. Show and specify structural framing details for landings, stairs and their supports per CRC R311.7.
   - Specify rise (maximum 7-3/4”) and run (minimum 10”) from nosing to nosing. Where tread depth is less than 11”, a nosing of 3/4” minimum to 1-1/4” maximum is required.
   - Stairways shall have a minimum headroom clearance of 6’-8”.
   - Locate handrails 34” minimum and 38” maximum from plane parallel to line at face of treads; return handrails to the wall or terminate at newel post.
   - Landings top and bottom of each stairway shall have a width perpendicular to the direction of travel no less than the width of the flight served and a depth in the direction of travel not less than 36 inches.
   - For interior stairs, use 1/2” gypsum board to protect walls and soffits on the enclosed side (e.g. closet, pantry, powder room, etc.) CRC R302.7
10. Guard Rails. Provide 42” minimum high guard rails at balconies and porches greater than 30” above finished grade, which is measured as much as 3 feet out. Specify distance between balustrade so that a 4-inch sphere cannot pass through. Provide structural details and calculations per CRC R312.

FIRE PREVENTION SPECIFICATIONS REQUIRED

11. Show and specify smoke alarms in the following locations CRC R314:
    - In each sleeping room
    - Outside each separate sleeping area in the immediate vicinity of the bedrooms
    - On every occupiable level of the dwelling including basements and habitable attics
    - In the bedroom where a fuel-burning appliance is located within it or its attached bathroom

12. Show and specify carbon monoxide alarms in the following locations CRC R315:
    - Outside each separate sleeping area in the immediate vicinity of the bedrooms
    - On every level of the dwelling including basements

13. All structural elements supporting the floor/ceiling assemblies used as a fire-rated separation shall have 1/2" gypsum board protection. CRC TABLE R302.6

14. Provide fire-blocking to cut off all concealed draft openings (vertical and horizontal) to form an effective fire barrier between stories and between a top story and the roof space. CRC R302.11

15. All new and existing fireplaces shall comply with City of San Jose Fireplace Ordinance Policy on Wood Burning Appliances. Specify the make and model number on the plans. If specifying a prefabricated fireplace, show approved listing number.

16. For complete rebuilds OR additions ≥ 500 sf that result in a total building area ≥ 3,600 sf, provide an automatic fire sprinkler system to protect the entire house and ADU, designed per NFPA 13D with San Jose amendments.

FLOOD ZONE DESIGN REQUIREMENTS APPLIES ONLY TO FLOOD ZONES A, AE, AH, AND AO, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) MAPS. FIND YOUR FLOOD ZONE DESIGNATION AT WWW.SJPERMITS.ORG.

For help, please contact floodzoneinfo@sanjoseca.gov or 408-535-7803.

For ADUs proposed in the above flood zones, design requirements #17-23 apply to:

- ADU as detached new residential structure.
- ADU as part of "substantial improvement/substantial damage" to an existing residential structure.

* Any improvements or any damage repairs, such as reconstruction or rehabilitation, to a structure occuring within a five-year period with a cumulative cost equal to or exceeding 50% of the structure's market value — as assessed before the damage or initial improvement is started — is considered to have "substantial improvement/substantial damage" status, and must comply with the flood zone design requirements. Municipal Code Chapter 17.08 and 2016 CRC Section R322

For an attached ADU that is an "improvement" and the cumulative costs are less than 50% of the structure's market value, the requirements apply**:**

- Existing structure built or relocated before 1982 - no floodplain requirements.
- Existing structure built or relocated after 1982 - comply to floodplain requirements in effect at time of original construction.

Cost estimates - Acceptable methods for estimating the cost of improvements:

- Itemized estimate from a licensed contractor or other professional estimator in the construction industry.

Market value estimates - Acceptable methods for estimating the market value of the structure:

- Detailed estimate of the structure's Actual Cash Value, as determined by City staff;
- Appraisal by an independent professional appraiser; or
- Santa Clara County Tax Assessor's improvement value estimate from RealQuest, excluding land value (only as a screening tool).

17. Elevate the lowest floor of the entire structure, including basement, above the flood elevation shown on the FEMA flood map, plus 1 additional foot. CRC R322.2

18. Elevate all building support utility systems, i.e.furnace, water heaters, washer/dryer, air conditioning condensers, ect. above the flood elevation shown on the FEMA flood map, plus 1 additional foot, OR protect from flood damage. CRC R322.1.6

19. Submit an Elevation Certificate (FEMA Form 086-0-33) to Public Works for each structure based on construction drawings. Certificate form: https://www.fema.gov/media-library/assets/documents/160

20. Provide vent openings at approved locations for all enclosures below the flood elevation, such as attached garages or crawlspaces, certified by a registered engineer, OR meet both of the following requirements: CRC R322.2.2

    , Minimum of 2 vents with total area of not less than one square inch per one square foot of enclosed area, on at least 2 exterior walls;

    , Vent openings must be installed with the top of vents within the floodplain and the bottom of vents no higher than 1 foot above adjacent grade.

21. Fill in any existing basement to the level of the existing crawlspace or the lowest adjacent grade (full basements).

22. Construction materials used below the flood elevation must be resistant to flood damage. CRC R322.1.7

23. Additional requirements apply to properties in the following areas:

Alviso - Areas designated Flood Zone AE, Elevation 12.00 feet NAVD88

- Ground floor may only have parking, storage, and access uses. Living space on next higher floor, equal to or above elecation 13.00 feet NAVD 88.
- Electrical switches and receptacles on the ground floor designed per Building Division requirements.

FEMA-designated regulatory floodway

- Submit to Public Works a certification, from a qualified registered professional engineer, that the project will not affect flood heights with supporting hydrologic and hydraulic analyses.

Near or within a Santa Clara Valley Water District waterbody, facility, or easement

- Comply with the “user manyal: Guidelines and Standards for Land Use Near Streams” located at www.valleywater.org.

FOUNDATION, BEARING AND STEM WALLS, SLAB FLOORS, AND SOILS REPORT
REQUIRED

24. Dimension continuous exterior and all interior bearing wall foundations.
    - Specify minimum depth of footing in undisturbed natural soil. CRC R403.1.4
    - Specify minimum height above finished grade. CRC R317.1 & R404.1.6
    - Specify bearing width. CRC Table 403.1
    - Specify minimum stem wall width and footing thickness. CRC R404.1.4.2
25. Provide capillary break for slab-on-grade floors inconformance with CRC 506.2.3 and CALGreen 4.505: A 4-inch thick base of 1/2" or larger clean aggregate shall be provided with a 6 mil polyethylene or approved vapor retarder (lapped 6 inches minimum at edges), in direct contact with the concrete.
26. Specify the report number (e.g., ICC or IAPMO), name of manufacturer, size and minimum embedment of expansion anchors, epoxy anchors, or powder-driven pins. Show and specify the required edge and end distances, and spacing between fasteners. CRC R403.1.6 & R403.1.6.1.
    - Provide calculation for epoxy holdown per ACI appendix D and dimension the side distance on the detail/s to accurately reflect the distance used in the calculation.
27. Provide a site specific soils report or specify how the project's foundation is designed using presumptive load-bearing values. Specify minimum soil compaction requirements on the plans.
28. Where a soils report is required, provide two copies of the letter from the soils engineer in accordance with the soils report if review of foundation plans for general conformance with report is requested.

RETAINING WALLS AS APPLICABLE

29. Provide engineering design calculations and complete details for all retaining walls:
    - Indicate drainage
    - Specify location and size of horizontal and vertical reinforcing
    - Specify maximum height of retained soil, surcharges, and slope of fill behind wall

ROOMS, WINDOWS, AND EGRESS REQUIRED

30. Specify a minimum ceiling height of 7' for all habitable rooms. CRC R305.1 INCLUDES EXCEPTIONS.
31. No habitable room other than a kitchen shall be less than 7' in any dimension and less than 70 sf in area. CRC R304.2 AND R304.3
32. Exterior glazed opening area (window) must be at least 8% of the floor area of all habitable rooms. CRC R303.1 INCLUDES EXCEPTIONS.
33. Openable exterior opening area must be 4% of the floor area. CRC R303.1 See also Information on Plans for ASHRAE 62.2 for applicable Energy Compliance requirements.
34. Basements and sleeping rooms must have a window or exterior door for emergency exit or rescue that opens onto a yard, alley, or public way. The window shall have the bottom of the clear opening not greater than 44" above finished floor, 5.7 sf of openable area, 24" net clear opening height, and 20" net clear opening width. CRC R310 Exception: Grade floor openings may have a minimum net clear opening of 5 sf.
35. Habitable levels or basements located more than one story above or below an egress door are limited to a maximum travel distance of 50" from any occupied point to a stairway or ramp that provides egress from such habitable level or basement. CRC R311.4
36. Required egress doorways shall have a minimum 32" clear width (measured with door open 90º and not less than 6'-6" clear in height. CRC R311.2

37. SAFETY GLAZING. CRC R308.4 Specify locations where safety glazing is required, including:

, Glazing in all fixed and operable panels of swinging, sliding and bifold doors.

, Glazing in an individual fixed or operable panel adjacent to a door, where the bottom exposed edge of the glazing is less than 60 inches above the floor or walking surface and it meets either of the following conditions:
1. Where the glazing is within 24 inches of either side of the door in the plane of door in a closed position.
2. Where the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches of the hinge side of an inswing door. See R308.4.2 for exceptions.

, Glazing in an individual fixed or operable panel that meets ALL of the following conditions:
- The exposed area of an individual pane is larger than 9 sf;
- The bottom edge of the glazing is less than 18" above the floor;
- The top edge of the glazing is more than 36" above the floor; and
- One or more walking surfaces are within 36" of the glazing as measured horizontally.

, All glazing in guards or railings regardless of area or height above a walking surface. Included are structural baluster panels and nonstructural infill panels.

, Glazing enclosing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor swimming pools where the bottom exposed edge of the glazing is less than 60" measured vertically above any standing or walking surface.

, Glazing adjacent to stairways, landings and ramps within 60" horizontally of a walking surface when the exposed surface of the glazing is less than 36" above the plane of the adjacent walking surface.

, Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60" horizontal arc less than 180 degrees from the bottom tread nosing.

ROOFS, SKYLIGHTS, RAFTERS, BEAMS AND OTHER STRUCTURAL ITEMS

AS APPLICABLE

38. Show and specify a minimum roof slope of 1/4" in 12" for flat roofs. CRC R905.9.1, R905.11.1, R905.12.1, R905.13.1, R905.14.1, and R905.15.1. For metal roof panels, see CRC R905.10 for slope requirements.

39. Where the pitch is less than 3:12, design the ridge beams, hips and valleys as a vertical load carrying members. CRC R802.3

40. Specify minimum class 'C' roofing on the plans. CRC R902.1.3. Specify on the plans that the fasteners for the roofing shall be corrosion resistant per CRC R905.2.5.

41. Delineate the roof drainage system and its discharge to 5 feet minimum from foundation to an approved drainage system.

42. Specify the make, model number, and approved listing number (e.g. ICC, IAPMO, etc.) of each skylight on the plans. Show and specify framing members around skylight openings. CRC R802.9 Show and specify skylight installed on 4" minimum high curb when the roof slope is less than 3:12. CRC R308.6.8

43. Show and specify the size of the ridge, hip and valley beams to be not less in depth than the cut end of the rafters. Show adequate support for hips, valley beams, and ridge beams. CRC R802.3

44. Show and specify rafter ties or collar ties and their connectors for roof framing in accordance with the CRC Section R802.3.1 and Table R802.5.1(9).

45. Note on the plans: "Submit Certificate of Conformance indicating that the glue-laminated members conform to the requirements of ANSI/AITC A190-1 upon request of the City field inspector prior to installation." Provide glue-laminated specifications on the plans.

46. Provide metal tie straps centered on ridge and connected to rafters supported by a load-bearing ridge beam or collar ties located within upper third of the attic space. Maximum spacing is 4 feet. CRC R802.3.1

47. Where the uplift force is 200 lb.s or more, provide a tie-down clip (e.g., Simpson H2) between rafter to top plate. CRC R802.11

48. Specify how double-framing members are interconnected. CRC Table R602.3.1

49. Provide typical nailing schedule on the plans. CRC Table R602.3(1)

50. Bearing wall studs shall not exceed a height of 10 feet, unless they are in compliance with exception 2 of R602.3(1) or are justified by engineering analysis. CRC Table R602.3(5).

51. Specify on the plans the material properties or approved listing number for each type of structural framing element identified on the plans.

52. Provide structural design calculations for rafters, joists, beams, girders, headers, posts, columns, and their connections, for engineered structural framing systems, or use 2016 CRC tables for Conventional Light Frame Construction.

53. Show details of stone or masonry veneer walls. Indicate anchorage, maximum height, and required footings, as applicable. CRC R703

54. LATERAL BRACING. Show and specify Conventional Light-Frame Construction lateral bracing provisions per CRC R602.10 and SJMC 24.09.330: CRC R106.1.1

, Braced wall panel lengths and locations

, Type and thickness of panel sheathing, and connections to studs, sole plates and top plates

Where portions of the building do not satisfy the lateral bracing provisions:

, Provide structural calculations tracing the load path from roof to foundation. Design and detail all elements of the lateral force resisting system. Demonstrate continuous load path of each tie-down location to the foundation.

, Where beams support discontinuous load path from shear walls above, demonstrate adequate structural capacity of the elements and connections within the load path, through analysis and detailing. See ASCE 7-10 section 12.3.3.3.

, Specify the minimum length of each shear wall, or shear wall segment.

, Provide in-plane shear capacity check for walls with height to width ratios exceeding 2:1. AWC SDPWS-2015 Section 4.3.4

, Specify size, type and spacing of plywood nailing and sills connections

, Show and specify adequate footings under all shear walls and at ends of panels with holdowns.

, Specify size, embedment and distance from center of holdown anchors to edge and sides of foundations on the foundation plan. Note on the plan: “Holdown anchors to be tied in place prior to calling for foundation inspection.

, Show and specify all lateral force transfer details.

TITLE 24 BUILDING ENERGY EFFICIENCY STANDARDS AND CALGREEN

55. Certificate of Compliance. For all buildings, the Certificate of Compliance Form (CF1R) shall be signed by the person who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design. The forms shall be incorporated into the plans.

56. For performance Compliance Method, all pages ofthe CF1R form must have the same “Report Generated” date and time. If HERS verification is required, the form must be registered with a HERS provider.

57. Provide the CALGreen checklist on the plans indicating all the ‘green’ features proposed; see: www.hcd.ca.gov/building-standards/calgreen/docs/HCDSHL605_2016.pdf. Where the addition or alteration increased the building’s conditioned area, volume, or size, the requirements of CALGreen chapter 4 shall apply only to and within the specific area of the addition or alteration. CALGreen 301.1.1

58. Buildings finaled prior to January 1st, 1994 are subject to Civil Code Section 1101.3 for installation of water-conserving plumbing fixtures. CALGreen 301.1.1. For information and self-certification form, see: The Non-Compliant Plumbing Fixture Replacement Requirement Form.

VENTILATION AND ACCESS FOR ATTIC AND UNDER-FLOOR

59. Show and specify attic access. Specify minimum dimensions: 22” x 30”. CRC R807

60. Provide a cross section through the attic demonstrating how the air handling unit meets the requirements for access; passageway height, length and width; work platform; lighting and convenience outlet for furnace installation and maintenance. CMC 904.10

61. Show and specify under floor access. Specify minimum dimensions: 18” X 24”. CRC R408.4

62. Provide the calculations for the minimum required under-floor ventilation and specify how cross ventilation will be accomplished. Typically, the net free area of ventilation openings shall not be less than 1/150 of the underfloor area. See CRC R408 for exceptions.

63. Provide calculations for the minimum required roof or attic ventilation and specify how it will be accomplished. Typically, the net free ventilating area shall not be less than 1/150 of the area of the space ventilation; see CRC R806.2 for exceptions. Verify that the ventilation calculations accurately reflect the ventilation shown on the plans.

- Where roof areas are isolated from adjacent roof areas, provide the required ventilation for each isolated area.
- Show how the California framed portion of the roof is cross ventilated.
- For additions, specify the size and location of all vents (new and existing to remain).

64. For new residences or additions greater than 1000 sf, show the method of house ventilation as required by Energy Compliance Standards Title 24, Part 6 #150(o) mandatory measures and the ASHRAE 62.2 standards.

WATER HEATERS, FURNACES, AND CLOTHES DRYERS

65. Show location of water heater and forced air unit on the plans.

66. Show and specify how the water heater will be seismically braced per CPC 507.2. Water heaters in garages or adjacent spaces that open to the garage and are not part of the living space of a dwelling unit shall be installed so that the burners and burner-ignition devices are located not less than 18” above the floor, unless listed as flammable vapor ignition resistant. CPC 507.13

67. Water heater installations in bedrooms and bathrooms shall comply with CPC 504 options:

- Option #1 - Fuel-burning water heaters may be installed in a closet located in the bedroom or bathroom provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device that does not have a hold-open feature. The assembly shall be installed with a threshold and bottom door seal. All combustion air for such installations shall be obtained from the outdoors. The closet shall be for the exclusive use of the water heater.
- Option #2: The water heater shall be of the direct vent type.

68. Central heating furnace installations or low-pressure boiler installations in bedrooms or bathrooms shall comply with CMC 904.1 options:

- Option #1: The furnace or low-pressure boiler may be Installed in a closet located in a bedroom or bathroom, provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device that does not have a hold-open feature. The assembly shall be installed with a threshold and bottom door seal. All combustion air for such installations shall be obtained from the outdoors. The closet shall be for the exclusive use of the furnace or low-pressure boiler.
- Option #2: The central heating furnace or low-pressure boiler shall be of the direct-vent type.

69. Show and specify a laundry tray or automatic washer standpipe for each dwelling unit. CPC Table 422.1.

70. Ventilation for mechanical clothes dryers shall be vented to the outside and comply with San Jose Building Division Directive M-001. See: Domestic Dryer Vent Length Limitations for more information.