

BUILDING—RESIDENTIAL BUILDING PERMIT PLAN SUBMISSION REQUIREMENTS NEW HOMES & ADDITIONS ONLY

In order to perform a thorough Building Plan Review, and facilitate the Permit process, the following specifications, drawings and details must be submitted with your application for a building permit:

NOTES

- Not providing this information may result in your plans being returned for corrections, delaying the review of your application.
- Drainage Plans. See Site Plan Requirements.

Construction Plans

Construction plans (24"x36"—maximum) shall be drawn to scale with sufficient clarity and detail to indicate the nature and character of the work. In order to apply for a permit you must provide two complete sets of plans (all documents stapled together) which include the following information:

A. Cover Sheet with the following information:

1. Job address and legal description.
2. Contractor's name, address and contact person's phone number.
3. Proposed type of construction.
4. General notes. Cover sheet shall contain the following notes.
 - a. Only copper Type L or PEX a installed with PEX ring and fittings, ASTM F1960 shall be used for water distribution piping.
 - b. Water riser must be metal above ground; schedule 40 PVC may only be used for exterior piping that is underground.
 - c. Statement that the project was designed in accordance with the 2018 International codes and the 2017 NEC.
 - d. Structural engineer's certification that the project was designed in accordance with the Design Wind Loads of the 2018 International Codes. (136 mph Risk Category II exposure B per ASCE 7-16) Also submit signed and sealed statement in a separate letter.
 - e. Aluminum wiring is prohibited and 12/2 with ground is the smallest conductor size allowed.

- f. Compliance with IRC R312.2 for window fall protection.
- g. All walls with draw-waste-vent plumbing shall be 2x6 lumber.
- h. Fence Requirements: In addition to any fence requirements for tree protection, all building sites are required to be enclosed with a temporary fence a minimum height of 6 feet. This requirement applies to each side, rear, and 75% of the front yard during construction. Removal of this fence at any time during construction, for any reason, requires written authorization from the Building Official.

5. Framed area calculations:

Framed area is defined as the measurement from the outer exterior wall surfaces of all floor and ground areas under a solid, fixed roof. Floor and ground areas are measured on each level. (See zoning ordinance for those areas uncounted per the framed area definition)

NOTE: Maximum allowed framed area is 80% for Single Family District sites.

6. Open and Pervious Area Calculations.

B. Foundation plans, specifications, and engineering details to include:

1. Soils report by an A2LA certified laboratory indicating the required procedures and tests per the Technical Code provisions in Appendix C of The Code of Ordinances signed and sealed by a civil engineer.
2. Foundation design details signed and sealed by a registered Professional **Structural Engineer. (Original signature required.)**
3. Front, side, and rear building lines with dimensions on foundation layout plan.
4. Detail of allowable pipe penetrations through grade beams. **(Pipes shall be sleeved two (2) pipe sizes larger).**
5. Declaration on plans that the foundation was designed in accordance with the soils report. **(Indicate soil report number on plans)**

C. Architectural plans must include:

1. Designer's name, address, and phone number. If an architect, plans must be signed and sealed with an **original signature.**
2. Details showing draft stopping compliance methods per the International Codes. Trusses at 500 sq feet intervals.
3. Details of all headers—both size and support.
4. If trusses or truss joist systems are used, provide a layout plan and design plans signed and sealed by Registered Professional **Structural Engineer.**
5. Attic access, minimum opening 25.5"x54", shall support 350 lbs with 20 minutes fire resistance.
6. Fireplace and chimney details.
7. Typical wall section.
8. Fully dimensioned drawings to determine areas and building height. Maximum height is measured above standard base level elevation.

9. General notes: Architectural plans must contain the following notes:

- a. Door between garage and any habitable space must be 20 minute fire rated with closer.
- b. All residential structures (R-1, 2, 3, and 4) shall use 5/8" type X Sheetrock throughout entire structure.
- c. Safety glass specifications and locations.
- d. Breezeways shall be draft-stopped.
- e. Tub/showers enclosure wall (no green rock).

10. Site plan with dimensioned lot size, proposed construction, setbacks, easements, driveways, approach and sidewalk ramps.

D. Electrical Plans

- 1. Complete plans and specifications of all electrical work.
- 2. Load calculations for all structures. (Minimum 150 amp main required)
- 3. Floor plan showing all receptacles, outlets and GFCI locations for each story.
- 4. Panel board schedule: note location of meter and exterior disconnect at main.
- 5. Smoke and carbon monoxide detector locations.
- 6. Symbol schedule.
- 7. Designer's name, address, and phone number.
- 8. General note: arc fault protection will be provided per NEC 210.12
- 9. Tamperproof receptacles per NEC 406.12

E. Mechanical Plans

- 1. Designer's name, address; and phone number.
- 2. Floor plan showing all the following:
 - a. Method for providing combustion air for utility rooms (louver door or undercut door 2")
 - b. Locations of all return air. (City ordinance requires all return air be 24" AFF or media or electrostatic)
 - c. Location of all indoor equipment.
- 3. Site plan showing location of all outdoor equipment with setback to property line shown.
- 4. Attic ventilation with calculations. 1:150
- 5. General note that all mechanical equipment exhaust must terminate on the exterior of the structure.

F. Plumbing Plans

- 1. Designer's name, address, and phone number.
- 2. Floor plan showing all the following:
 - a. Utility room floor drains and outside termination points above first floor

- b. Access for tub and whirlpools
- c. Water heater location
- d. Location of all plumbing fixtures
- e. Plumbing fixtures table
- f. Water supply and distribution plan showing piping sizes, valves, water heater details and temperature-pressure relief valve with discharge pipe
- g. Riser diagram water, sewer and gas/material, size, BTU, longest length
- h. Location of proposed city water and sewer taps

G. Flood Plain

If the property is located in a Special Flood Hazard Area (Zone AE) a FEMA elevation certificate based on construction plans must be submitted. A final "as-built" certificate must be submitted before final occupancy.

Other Requirements

In addition, when applying for a building permit, the following additional information and documentation are required.

- 1. A completed tree disposition plan for the site shall be provided.
- 2. Letters to adjacent residents shall be provided, 8 for interior lots and 5 for corner lots. Letters must be in an addressed, stamped envelope, unsealed. Each letter must contain the contractor's return address. A site plan must be provided with each letter.

Additional Permits will be required for the following:

- 1. Fences
- 2. Swimming Pools
- 3. Decks
- 4. Sidewalks and Driveways
- 5. Area Drains
- 6. Lawn Irrigation
 - a. Location of all sprinkler heads
 - b. Gallons per minute required per zone and show calculations
 - c. Location of cross connection control device (backflow PVB)
 - d. Copy of PVB test report by state licensed tester
- 7. Any additional grade raising or work not approved or shown on the original plans and application.

BUILDING–DESIGN & CONSTRUCTION CODES AND ORDINANCES

Design and construction shall be in compliance with the following codes and ordinances:

NOTES

- All setbacks are measured from the wall surface, not the foundation. See “Formal Decision of the Administrative Official” dated June 9, 2009

I. Codes and Ordinances

- International **Building** Code
2018 edition with local amendments.
- International **Plumbing** Code
2018 edition with local amendments.
- International **Mechanical** Code
2018 edition with local amendments.
- International **Fuel Gas** Code
2018 edition with local amendments.
- International **Residential** Code
2018 edition with local amendments.
- International **Energy Conservation** Code
2018 edition.
- National **Electric** Code
2017 edition with local amendments.
- Zoning Regulations, Appendix A, Code of Ordinances.
- Technical Codes, Appendix C.
- Chapter **18**, Buildings and Development.
- Chapter **26**, Electrical and Alarm Systems.
- Chapter **62**, Plumbing, Gas and Solar Energy.
- Chapter **70**, Street Areas and Public Places.
- Chapter **82**, Urban Forest Preservation and Enhancement.

II. International Resident Code Sections

- Fireplaces—Chapter 10
- Glazing/Hazardous locations—Section 308.4
- Skylights—Section 308.6
- Stairs—Section 311.7

III. Miscellaneous Information

- Walls with drain-waste and vent shall be 2x6 lumber, boring and notching standards to be followed.
- No utility grade lumber for studs, joist and rafters.
- R312.2 Window Sills—In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610mm) above the finished floor of the room in which the window is located.
- Type “M” copper not allowed.
- PEX piping is allowed per local amendments.
PEX-a with PEX-a ring and F-1960 fittings only.
- Water lines looped under the slab shall be sleeved with one continuous sleeve 0.025 thick. Terminating 6 inches above slab.
- Schedule 40 PVC, ASTM 1785 may be used for water distribution outside, underground only.
- Building drains, building sewers and sewer lines must be Schedule 40 PVC, ASTM 2665.
- Fences require a separate permit.
- Pools required a separate permit.
- Sidewalks, driveways and approaches require a separate permit.
- Provide at least one qualified tree in the front yard.
- The removal, damage or death of any large tree, except as authorized by an approved tree disposition plan, is prohibited.
- Copper wiring only, No. 12 with ground is the smallest wiring allowed.
- A single exterior main disconnect is required as close as possible to the meter; 150 ampere minimum.