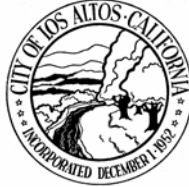


CITY OF LOS ALTOS
Community Development
Building Division

Telephone No. (650) 947-2752 / Inspection Line (650) 947-2754



SUBJECT: RESIDENTIAL FINAL INSPECTION

REVISED: May 1, 2007

TO CONTRACTORS & HOMEOWNERS:

This handout for final inspection is predicated on 2001 California Building, Plumbing, Mechanical, Electrical Codes and Title 24 requirements applicable to the majority of Final Inspections. Not all code requirements listed will apply to your particular project, nor is this intended to be a complete list. It is the owner and contractor's responsibility to comply with all codes that apply to the project as well as all State and local laws and ordinances.

Have available at FINAL inspection:

Building permit and inspection card, job copy of plans, Title 24 CF-6R, Statement of Compliance to CF-1R requirements, insulation certificate, any revisions thereto and all Correction Notices (UBC 108.1, 2 & 4. 108.5.6.). Failure to provide said documents will result in a terminated inspection.

1. Exterior address numbers, 3" high minimum size, in contrasting color, to be posted on the house and be visible from the primary street location. (CBC 502)
2. On the underside of cantilevered bay windows or floors, there shall be no exposed framing. The soffit in such installations shall be sheathed with pressure treated plywood if closer than 6" to earth. If any other wood is placed closer than 6" to earth it shall be treated wood or wood of natural resistance to decay. Stucco may be applied over plywood. (CBC 2306.8)
3. All exterior wall coverings including wood trim shall be protected from weathering by paint or other approved protective coating and all door and window edge joints caulked. (UHC 1001 (h))
4. All exterior doors including patio sliders shall have a landing 36" x the width of the operable door in open position. *Exception: Exit door from the house to the attached garage may be considered an interior location such as access to a internal basement and may not require a landing if the door swing is inward.* Maximum rise between landing and floor shall be 8". If doors swing outward over landing, said landing depth shall be a minimum of 36" x the width of the door opening and maximum rise shall be 1". Maximum rise for steps is 8", and 9" minimum for tread width. Minimum rise of steps and stairs shall not be less than 4". (CBC 1003.3.1.6, exception 1.2 & 1003.3.3.3, exception 1.1)

5. **Finish grade shall be a minimum of 6" below top of foundation and slope 2% for first 5' away from foundation. Provisions shall also be made for the control of surface water from around buildings and finish grade completed. (CBC 1806.1 & according to grading and drainage plan)**
6. **Stucco screed shall be a minimum of 4" above earth and 2" above paved areas. (CBC 2506.5)**
Note: Concrete steps, patios and landings cannot be constructed against stucco surfaces.
7. **Final grade shall not be higher than original grade unless otherwise approved by Planning Department.**
8. **Roof Inspection:**
 1. **All new roofing shall be Class C or greater. (CBC 1503.3)**
 2. **Roofing shall be installed per manufacturer's specifications. (CBC 1507.3-14)**
 3. **Areas around skylights, chimneys and walls projecting above roof surfaces shall be flashed and counter-flashed as required. Roof jacks for vents and flues shall be installed, sealed and painted. (CBC 1509)**
9. **Gutters and downspouts shall be installed as per plans and as required to reduce additional run off onto neighboring properties and reduce under floor infiltration. (CBC 1506)**
10. **New fencing shall comply with current zoning requirements. Contact the Planning Department for information on fencing restrictions.**
11. **Swimming pools and spas shall be protected from ingress with a minimum 5' high fence and self-closing and latching gate. (Los Altos Municipal Code Section 10-2-2607) Required pool alarms – covers – gates per plans (CBC 3151 B)**
12. **Listed backflow preventers shall be installed on all hose bibbs with the setscrew tightened and broken off. (CPC 603.4.7)**
13. **All ABS roof vents to be painted and cut to not less than 6" and no more than 1' above adjacent roofing materials. Note that the flag poling of vents is prohibited. (CPC 906.3) Joints around roof vents shall be watertight. (CPC 906.5)**
14. **Chimneys on existing solid fuel fireplaces shall have an approved spark arrestor installed. Spark arrestor shall have openings not larger than 1/2" and no smaller than 3/8" and shall be heat and corrosion resistant, with a net free area 4 times the outlet area of the chimney. (CBC 3102.3.8) Acceptable shrouds shall be listed and approved by the manufacturer for specific fireplace models.**
15. **All sanitary sewer cleanouts outside of buildings shall have yard boxes installed for accessibility. (CPC 719.5)**
Extendable backwater valves shall be installed upstream of building clean out on all new and repaired sewer installations.
16. **Driveways, sidewalks and required approaches shall be completed as per plans. Engineering Department approval required before extending driveway beyond property lines.**

17. (a) Permanent power installed and metered by P G & E.
 - (b) All circuit breakers at service entrance and sub panels are to be clearly and permanently identified in durable ink as to what they serve. Be specific, not just outlets, but outlets (where) and lights (where). (CEC 110-22)
 - (c) Outdoor receptacles (outdoor) shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted (CEC 406.8)
 - (d) Circuit breakers at sub or service panels shall be listed for use in that panel.
18. Provide continuous cold-water bond to main electric panel and bond between gas and cold water. Connection must be readily visible and accessible. (CEC 250 90 & 92)
19. Provide a caulked seal around all exterior lights. Fixtures in covered porches and similar locations shall be listed for damp locations. (CEC 410.4(a))
20. Joints at exterior door frames, windows and other openings in the building envelope that are potential areas of air leakage and water and moisture invasion shall be caulked, gasketed, weather-stripped or otherwise sealed. Thresholds shall be installed at all exit doorways. (Title 24 2.4.1)
21. A minimum 10 lb final gas test is required at final inspection. (CPC 1204.3.2)
22. (a) AC compressors shall not be closer than 25 feet to property lines unless sound engineering verifies noise less than 50 decibels. (LAMC 10-5.07 (b) (12))
 - (b) Fixed in place standby generators shall have planning department approval.
23. AC coils installed over garages or habitable spaces shall have both primary and secondary condensate drains. Secondary drains shall discharge over a readily visible location. (CMC 310.2)
24. Return and supply ducts in garages that penetrate walls or ceiling between garage and dwelling shall be 26 ga. Steel minimum or shall have listed fire and smoke dampers and shall be either internally or externally insulated with a minimum of R-4.2 insulation. (CBC 302.4, exception 3)
25. A furnace or hot water heater "B" vent flue passing through walls or ceilings shall not be closer than 1" to combustibles including sheetrock and shall be installed with a metal collar around the flue at the point of passage through wall or ceiling. (CBC 710,2)
26. Cord and plug electrical service to furnaces and instantaneous water heaters is not allowed. (NEC 400-7 and 422-16) Electrical supply shall be hard wired in rigid conduit or flexible conduit from an electrical box with a snap switch, branch-circuit over current device or branch circuit switch or circuit breaker located within sight of the appliance. (NEC 422.30, 31 & 32)
27. Flexible gas connector shall not be less than the size of the inlet to a furnace or range and shall not extend through appliance housing. An approved shut off valve shall precede connection to the gas supply. (CMC 1312.0, Appendix B, Chapter 13) Alternative: Comply with manufacturer's size specifications attached to flex connector.

28. Attic furnaces and hot water heaters shall have the following:
 1. 30" work platform in front of burners
 2. 24" wide unobstructed walkway from attic access to appliances
 3. An electric outlet and lighting fixture at or near appliances with a switch located near access to attic.
 4. Provide 26 ga. metal over combustibles in front of burners per manufacturer's specifications. (CMC 908.0)
29. In garages a vehicle barrier shall be provided in front of gas burning appliances when located within the path of travel. (3" steel pipe filled with concrete, embedded 12" into floor and 36" high). (CPC 510.3)
30. Water Heaters shall be:
 1. Strapped or anchored at both top and bottom 1/3 of tank to resist seismic displacement. (CPC 510.5)
 2. Shall have a pressure relief line terminating outside the building when installed in an attic or building interior. (CPC 608.5)
Flexible gas connector size shall not be less than the inlet to the water heater. (CPC 1212.0 and Table 12-10) *Alternative:* Comply with manufacturer's specifications on flex connector.
31. Water heaters to have a minimum R-12 exterior insulation if the energy factor is less than .58. (Title 24 2.6.2)
32. On new construction and additions, insulate the first five feet of hot and cold water piping from water heater except within 6" of the gas flue. (Title 242.6.3)
33. 1" pipe insulation is required on the entire length of hot water recirculating piping on a recirculating system. (Title 24 2.6.2 & Title 24 6-1C) Note: recirculating system must be included in approved job Title 24 CF-1R specifications.
34. Pull-down steps to garage attics are not permitted if the area has not been engineered for storage and/or the garage ceiling is a fire rated separation. (CBC 710.2) Per exception in (CBC 710.2 (6)), access doors may be installed in such ceilings provided they are fire rated and listed for such purpose.
35. Storage areas above garages or ceilings must be engineered for uniform loads as per (CBC Table 16-A, No. 12). Without such engineering, attic floors will not be allowed. (Note: Attic storage loads are calculated at 40 lbs. per square foot).
36. Seal all penetrations in walls between garage and dwelling with non-combustible fire rated material. (CBC 709.6)
37. Openings around all pipes, electrical wiring, framing, vacuum fittings and/or heat ducts passing through a garage firewall separation shall be 1-hour fire protected and non-combustible. (CBC 709.6, Exception 1 & 2)
38. Door from house into garage shall be a minimum 1-3/8" solid core 20-minute rated, self-closing, weather-stripped and shall latch closed from any open position. (CBC 302.4, Exception 3) Note: A minimum of 2 spring-loaded hinges are required. (CBC 713.6.2) Panel type doors shall be or stamped with a 20-minute fire rating. Do not remove fire rating label or paint over rating stamp.

39. Receptacle outlets at kitchen counters are required to be within a 2-foot reach of any point measured along the wall. Island counters shall have at least 1 outlet. Counter space greater than 12 inches require outlets. Qualifying outlets cannot be concealed behind cabinet doors or in toe kick space. (CEC 210-52 (b) & (c)).
40. GFCI's required (CEC 210-8(a)):
 1. All garage and carport electrical outlets to be GFCI protected excepting single dedicated receptacles and those over 6'6" above the floor.
 2. All counter top outlets shall be GFI.
 3. All bathroom outlets shall be GFI.
 4. All unfinished basement outlets shall be GFI.
 5. All exterior outlets under 6'6" from grade shall be GFI.
 6. All outlets in crawl spaces and below grade shall be GFI protected.
 7. New bedroom circuits, as well as existing bedroom circuits located in electrical panels that are being replaced or upgraded are required to be protected by an arc fault circuit interrupter. (CEC 210-12)
41. Multi-wire branch circuits, serving the disposal and dishwasher, that are connected to one outlet shall be fitted with a listed breaker handle tie between the required adjacent breakers at the panel. (CEC 210.4)
42. Seal all wall penetrations under sinks, joints and countertops. (Title 24 2.4.1)
43. Non fluorescent light fixtures in bathrooms, utility rooms, laundry rooms and garages shall be controlled by a manual on occupant sensor. In all other rooms except the kitchen and closets smaller than 70 square feet they shall be controlled by a dimmer. Exterior non fluorescent fixtures shall be controlled by both a photocell and a motion sensor.
44. In new construction exceeding \$1,000.00, or when one or more sleeping rooms are added in dwellings, AC/DC smoke detectors shall be installed in all rooms which are used or intended for sleeping; installed centrally in corridors or areas accessing them; at all floor levels and shall sound an alarm audible in all sleeping rooms. Smoke detectors may be solely battery-operated when installed in existing buildings or in buildings, which undergo alterations, repairs or additions of \$1,000.00 or more. (CBC 310.9.1, .2, .3 & .4)
45. All glazing within doors and panels in shower and tub enclosures and windows less than 60" above a standing surface or drain inlet shall display a safety or tempered label. (CBC 2406.2 & 4.5)
46. (a) Light fixtures and trim above shower stalls, bath tubs and whirlpools shall be listed as suitable for wet locations. (CEC 410.4 (a))

(b) Fully enclosed lens covers are required on all incandescent lights in clothes closets. (CBC 410.8.(b)1)
47. Seal around all shower and tub fixtures, floor and wall fixtures, and other bathroom accessories where there is an incidence of moisture egress into walls or floors. (CBC 807.1.2.2)
48. Hand held tub-spraying devices with integral backflow preventers or air gaps manufactured as a unit shall be installed per manufacturer's instructions. (CPC 603.3.7)
49. Seal around gas pipe into fireplaces using refractory cement or high temperature caulk. (CBC 3102.5)

50. Install glass doors on all new fireplaces. (Title 24 150 E 1 A)
51. Masonry fireplace hearths shall be 16" wide minimum by 8" longer at each end than the fireplace opening. If opening is more than 6 sq. feet, the hearth shall be 20" wide by 12" beyond each side of the fireplace opening. (CBC 3102.7.12)
52. Factory-built fireplace hearths, mantle and clearances shall conform with manufacturer's installation instructions and conditions of listing. (CBC 3102.1, 3102.5.1 & 2)
53. For clearance to combustible facings from fireplace opening, apply 6/12 rule: No combustibles within 6" of opening and no combustibles within 12" shall project more than 1/8" for each 1" away from such opening. (CBC 3102.7.8 (b) 1 & 2)
54. When gas log lighters or decorative gas logs are installed in solid fuel burning fireplaces, the damper shall be permanently fixed in the open position. (CMC 912.1.1)
55. A decorative gas appliance (fireplace) may be installed in bedrooms and shall be direct vent, with variable heat output and flame control and permanently affixed artificial logs. Excluded are existing wood burning fireplaces and shall be fitted with an outside supply of combustion air if the room's volume is less than 50 cubic feet per 1000 BTU or, if the building is of unusually tight construction. (LAC Ordinance 01-404 CMC 911.0, 912.1.2 & 703.4 1 & 2)
56. A closet designed for a clothes dryer shall have a minimum 100 sq. in. make-up air opening through the door or by other means. (CMC 504.3)
57. All residential exterior doors shall be operable from the inside without the use of a key. (CBC 1003.1.8 & .2)
58. Stairway handrail height shall be 34" to 38" measured from the stair nosing; rail ends shall terminate at posts or safety terminals. (CBC 1003.3.3.6)
59. Residential guardrail 36" high shall be installed at any deck, porch or other elevated area higher than 30". (CBC 509.2.1)
60. Openings between intermediate rails on all handrails and guardrails shall be so spaced that a 4" sphere cannot pass through. The triangular stair section shall not allow a 6" sphere to pass through. (CBC 509.3 & 3.2)
61. Handrail gripping surface to be a cross section dimension of 1-1/2" to 2", shall be no closer than 1-1/2" to the wall and ends shall return into the wall at top and bottom ends. (CBC 1003.3.3.6)
62. Recessed light fixtures in closets shall be 6" from the lights edge to the vertical line of the shelf. Incandescent surface lights require 12" from the vertical line of shelving. (CEC 410.8(a) & 410.8)
63. All light fixtures shall be installed with bulbs for testing.
64. All switch and outlet covers shall be installed prior to any meter release to connect power to service panel.
65. Required landscaping irrigation and site requirements per site plan shall be completed at time of final inspection.
66. Non Point Source Pollution Control prior to and at final inspection.

As owner or contractor you may be responsible for any environmental damage caused by your subcontractors or employees. See Bay Area URPPP storm drains; threatened discharges, Los Altos Municipal Code. Failure to comply may result in a citation and fine of \$1,000.00 or more.

- 1. Pool and spa water cannot be discharged to a street or storm drain. Must discharge to sanitary sewer or gradually to landscaped area.**
- 2. Never hose down "dirty" pavement or surfaces where materials have spilled. Use dry cleanup methods. Use water only to keep dust down. Do not allow water to go into gutter. Contaminated water must be contained and discharged into sanitary sewer. If contamination is hazardous waste, it must be disposed at a hazardous waste facility.**
- 3. Never bury waste materials on site or leave them in the street or near a creek or streambed.**
- 4. Prior to final inspection, all construction debris to be properly removed and jobsite construction residue cleaned up. During cleanup, check street gutters for residue or debris. Look around the corner or downstream for material that may have already traveled away from the job site.**
- 5. Wash down exposed aggregate concrete only when wash water can flow onto a dirt area or be collected, contained and disposed of properly. Wash water must not flow into street gutters.**
- 6. Small amounts of excess concrete, grout, and mortar must also be collected and disposed of in the trash.**
- 7. Construction sites shall be replanted as soon as possible with annual grass to prevent erosion of soil into street or off site areas.**