



New Construction Inspection Checklist

Inspections General Requirements

- The address must be clearly posted on the jobsite.
 - All issued permits must be posted on site.
 - City approved plans are to be kept on site in a weatherproof location.
 - The jobsite must be clean with any trash or debris contained properly.
 - Temporary restroom facilities must be available for workers.
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1) Temporary Construction Power

- A. Meter base and panel set per NEC regarding under-ground or over-head electrical connection. T-pole braced on at least two (2) sides.
 - B. Ground-fault circuit protection on all 110/ 220-volt receptacles and proper grounding means must be in place.
 - C. Job-site address must be visible from the street.
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2) Plumbing Rough-In and Layout Inspection

- A. To be made after the soil, drain and waste piping is installed within the confines of a slab form and prior to any backfill or placement of concrete.
 - B. A water test with a 10-foot head pressure shall be performed on the entire system to verify tightness of the system.
 - C. The building drain must be sleeved where passing through exterior beam. Sleeve shall be sealed tight around the building drain to prevent insect intrusion.
 - D. All drain and waste piping installed with slope required for pipe size.
 - E. Finished floor elevation allowing proper drainage around structure.
 - F. Proper bedding must be placed under all pipes and compacted as necessary to support the pipes.
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3) In-Slab Water Distribution Piping (Plumbing Copper)

- A. A pre-pour inspection is required by the design engineer or architect. Forms erected and floated, reinforcement steel and/or post-tension cables in place, grade beams cleaned and have been properly cut, vapor barrier installed and intact. Plans must be on-site.
- B. All in-slab water distribution piping is installed within the confines of slab form and prior to any backfill or placement of concrete.
- C. Copper water lines shall be sleeved and protected from dissimilar metals.
- D. In-slab water distribution piping is insulated within 12-inches from slab exterior and pressure tested to a minimum 50 PSI.
- E. "UFER" ground wire bonded to reinforcing steel or alternate means of ground protection installed.
- F. All rough-in plumbing, in-slab electrical or other conduit in place.

4) **Frame Inspection**

The structure must be dried-in with the roofing complete, all doors and windows installed, sheathing and moisture barrier installed to prevent water damage to the interior of the home. Temporary guard rails must be in place at all stairs and balconies to ensure all areas of the home are safe for contractors and inspectors.

- A. Plate anchor (1/2") or mud clips placed within 12' of each end of a sill plate and every 6 feet.
- B. Top plate end joists offset 24"
- C. Top plates at tee's overlap
- D. The wall studs shall be a minimum of No. 3, standard or stud grade lumber. The size, height, and spacing of studs shall be in accordance with table R602.3
- E. Ceiling joist bearing on top plate a minimum of 1 1/2" and spanned per code.
- F. Joist taper is cut a maximum of 1 1/4" for 2x6, 1 3/4" for 2x8 etc.
- G. When metal connectors are used or required, they must be installed per the manufacturer's recommendation with all rounds or obround holes filled with nails.
- H. Where joists, trusses, or rafters are spaced more than 16" on center and the bearing studs are spaced 24" on center, such members shall bear within 5" of the studs beneath
- I. The notching of any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25% of the width of the stud. Nonbearing studs may be notched no greater than 40% of the width.
- J. When any stud is drilled or bored the diameter of the resulting hole shall not be more than 60% of the stud's width, the edge of the hole is no more than 5/8 inch to the edge of the stud, and the hole is not located in the same section as a cut or notch.
- K. Studs located in exterior walls or bearing partitions drilled over 40% and up to 60% shall be double with no more than 2 successive double studs bored.
- L. Top plates shall not be less than 2" nominal thickness and have a width at least equal to the width of the stud. The same rule applies to the bottom (sole) plate and studs shall have full bearing on a nominal 2x or larger plate or sill having a width at least equal to the width of the studs.
- M. Cutting of the top plate by more than 50% of its width shall require a galvanized metal tie to be fastened across the cut with eight 16D nails on each side.
- N. Fire blocking shall be provided to cut off all concealed draft openings (both horizontal and vertical) and to form a barrier between stories and between the top floor and the attic space.
- O. Headers over windows must be sized properly. Where the opening of an operable window is located more than 72" above finish grade, the lowest part of the clear opening of the window shall be a minimum of 24" above the floor of the room it's located in unless provisions are made for fall protection.
- P. Stairs, handrails, guardrails, and landings must be properly framed and built to code. Windows must be properly installed, meet the energy code, and have safety glass where required by code.
- Q. Rafters must be properly spaced and properly aligned at ridge board.
- R. Roof trusses must be properly spaced and braced per the approved engineered design and approved details.

5) Mechanical Rough-In Inspection

- A. Components must be R-8(except in structures insulated with spray foam, or using the
 - B. performance compliance path)
 - C. No gas appliances can be installed in bedrooms, bathrooms, or closets.
 - D. Furnace equipment installed in a garage must be 18" above finished floor.
 - E. Duct connections and plenums must be sealed.
 - F. Return air cannot be taken from bathrooms or kitchens.
 - G. Flex ducts must be supported properly per the manufacturer's requirements.
 - H. A minimum working space of 30"x 30" is required to be provided on the service side
 - I. of mechanical equipment.
 - J. Access openings to equipment must be a minimum of 22"x 30."
 - K. A walkway with a minimum width of 24" and maximum length of 20' is to be provided
 - L. for all mechanical equipment.
 - M. A light fixture and a service outlet is to be provided on the service side of mechanical
 - N. equipment.
 - O. Drain pans are required under evaporator coils that are 1 ½" deep and extend 3"
 - P. beyond the equipment.
 - Q. Drain pans are to be equipped with overflow detection devices and must be plumbed
 - R. to the exterior or to an indirect waste.
 - S. The primary evaporator drain must be insulated.
 - T. Bathroom exhausts are to be ducted to the exterior of the home.
 - U. Dryer vents must be a minimum of 4" diameter and smooth on the inside.
 - V. The dryer vent maximum length shall not exceed 35 feet with 5' deduction for 90's
 - W. and 2.5' deduction for 45's.
 - X. Combustion air must be provided for fuel burning appliances.
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6) Gas Rough-in Inspection

- A. All gas piping must be sized per code with approved connectors properly installed and
- B. no gas valves in concealed spaces.
- C. A main shut off valve is required downstream of the meter.
- D. Shut-off valves are required for all appliances in the same room and within 6 feet of
- E. the appliance.
- F. Gas lines must be pressure tested at 5 psi for 15 minutes with no leakage.
- G. Sediment traps must be installed downstream of the appliance shut-off and as close to the
- H. appliance inlet as possible.
- H. Gas piping shall not penetrate any building foundation walls below grade.
- I. Gas piping shall not be installed in or through a ducted supply, return or exhaust, or a clothes
- chute, chimney or gas vent, dumbwaiter, or elevator shaft.

7) Electrical rough-in inspection

- A. Service meters shall not be installed below 4.5' or above 6.5' measured from the center of the meter.
 - B. Breaker panels located in thermal envelope must allow for R-13 insulation behind them.
 - C. A means of disconnect must be located on the exterior and within 50 feet of the main structure.
 - D. Nail guards must be in place for wires less than 1 ¼" from the face of the stud. Kitchen countertops of 2 feet or more require an electrical outlet and must be spaced a minimum of 4 feet apart.
 - E. Kitchen counter outlets can be no more than 20" above the countertop.
 - F. Islands and peninsulas must have an outlet no more than 12" below the countertop and the countertop cannot exceed 6" over the electrical outlet.
 - G. Bathroom outlets must be within 3 feet of the outer edge of the lavatory.
 - H. An exhaust fan is required in all bathrooms unless it has an operable window.
 - I. Pendant lights and ceiling fans must be a minimum of 3 feet horizontally and 8 feet vertically from the top of a tub.
 - J. Light fixtures above a shower or tub must be rated for wet locations.
 - K. Hydro tubs must be bonded and have an access panel for the motor and GFCI outlet.
 - L. At least one electrical outlet is required for outlets exceeding 10 feet in length.
 - M. Wall spaces exceeding 2 feet require an outlet and outlet spacing cannot exceed 12 feet along a continuous wall space (doors break the space but windows do not).
 - N. Foyers exceeding 60 sq ft. require an outlet if each wall measures more than 3 feet.
 - O. Garages require one general circuit with a minimum of one outlet per car.
 - P. GFCI outlets are required at the front and rear of the dwelling exterior.
 - Q. A service outlet is required at the A/C condensing unit and must be within 20 feet of the appliance.
 - R. Lights are required in all habitable rooms, entry ways, stairs, and hallways. Three-way switches are required at the top and bottom of stairs and at hallways.
 - S. Smoke detectors are required in all bedrooms and immediately outside of bedrooms. A detector must be a minimum of 3 feet from any HVAC supply/return air duct, ceiling fan and/or bathroom door opening that has a bathtub or shower.
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8) Plumbing Top Out Inspections

- A. Drain, waste, and vent system must be filled with water and an inspection stack installed a minimum of 42 inches in height.
- B. Water lines must be under City pressure or a minimum of 50 psi.
- C. The minimum size of water supply line is ¾ inches.
- D. A main cut-off valve must be where the main water line enters the building.
- E. Toilets must be a minimum of 15" from the center of toilet to the side wall.
- F. Hose bibs with backflow protection must be installed at the front and rear of the home.
- G. Holes in slabs under tubs or showers must be filled with concrete.
- H. Shower pans must be tested, and custom shower and bathtub walls must be waterproof.
- I. Hot water lines must be insulated to meet the energy code.
- J. All exposed water supply lines in the attic must be insulated. Individual shower valves and tub/shower valves shall be equipped with control valves of the pressure-balance, thermostatic-mixing or combination pressure- balance/thermostatic-mixing valve types with a high limit stop.

9) Insulation (Energy 1) Inspection

- A. Correction of items from previous Frame and MEP rough-in inspection(s) are complete.
 - B. To be made after all insulation is in place and all exterior and plate penetrations have been sealed.
 - C. Requirements of the International Energy Conservation Code will be inspected.
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10) Final Gas and/ or Electrical Service Inspection (If Required)

- A. Gas piping is complete with all gas stop valves installed and all gas flex piping connected to appliance(s). Gas stop valves are readily accessible.
 - B. A minimum 10-PSI air test is performed on gas piping to verify tightness of system.
 - C. Electrical service wiring and main disconnect is installed and ready to be energized.
 - D. Have no exposed electrical wiring. All junction boxes such as receptacle boxes, switch boxes, lighting boxes, etc. must have the electrical device installed or blanked off.
 - E. The address is posted and visible from the street for all inspections.
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11) Final Inspections- Building Final/Certificate of Occupancy

Inspections to be done after the building is complete and ready for occupancy. All prior inspections have passed, and reinspection fees paid.

- A. Energy code certification must be on display.
- B. There must be an address visible to the street.
- C. The door from garage to house must be self-closing.
- D. Weep holes must be open at the bottom of brick walls and over all lintels with a maximum spacing of 33.”
- E. Handrails and guardrails on stairs and balconies must meet code Finish grade should be a minimum of 6-inch drop in 10 feet from slab.
- F. The yard must be properly graded to drain.
- G. Chimney terminations must be 2’ above any roof structure within 10 feet and not less than 3’ above the point of roof penetration.
- H. Chimney must be properly capped.
- I. Safety glass must be installed in all required areas.
- J. Bedroom emergency escape windows must not exceed 44” in height and must have 20” minimum width and 24” minimum height.
- K. All doors into attic spaces must be self-closing.
- L. All penetrations on the exterior of the structure must be properly sealed.