

## ROUGH-IN INSPECTION CHECKLIST

All sub-trade rough-ins (plumbing, gas, mechanical and electrical) must be completed and inspected before insulation. (R109.1.2)



All rough framing and masonry shall be completed. The structure must be dried-in, doors and windows installed, masonry fireplaces and roof flashing and shingles completed. **DO NOT INSULATE EXCEPT CONCEALED WALLS, SUCH AS BEHIND SHOWERS AND CANTILEVERED FLOORS.** Do not stack sheet rock along walls. If a door or window is back ordered (other than required egress), please weather proof the opening with poly. (R109.1.4, R701.2)

Every structure must have a 3/0 by 6/8 side-hinge exit door. Every sleeping room must have an emergency egress window or exit door. The window sash must open clear at least 20 inches wide, 24 inches tall, be within 44 inches of the floor and have an overall opening size of 5.7 net clear feet (821"). A sleeping room is any room with a clothes closet including basements and bonus rooms. (R310)

Every stair must be a minimum of 3 foot wide and have a 3-foot by 3-foot landing at the top and bottom unless it meets one of the exceptions in the code. Stair headroom, measured from the slope of the stairs, must be a minimum of 6'-8". (R311.5)

Glazing in windows in hazardous locations must be tempered. (ie.: doors, next to doors, over tubs, large picture windows, in stairwells, etc.). (R308.4)

All structural members, their size, spans and method of attachment are to be in accordance with the code. Any alternative material not prescribed in the code must be approved by the Building Official. (R301.1.3)

Cuts, notches and holes bored in laminated veneer lumber, glue-laminated members or I-joist are not permitted beyond the manufacturer's installation guide. Truss members shall not be altered in any way without the approval of a design professional. Truss design drawings shall be provided at time of inspection. Use "hurricane clips" and room tie-downs as specified per manufacturer or as required per Table R802.11. (R502.8.2, R502.11, R802.10.1)

All load bearing members must be grade stamped. (R602.1)

Any framing member that has been cut or notched beyond allowances must be reinforced. (R602.6)

Wall bracing according to Design Category C. **NOTICE:** "let-ins" are not allowed on the bottom floor of a two story. (R602.10.3, R606.5)

Attic areas shall be ventilated. A 22 inch by 30 inch minimum access shall be provided. A larger opening may be required when equipment is located in the attic. (R807.1, M1305.1.3)

Fire blocking shall be in place. Use ASTM E136 caulk and other approved material to seal each vertical and horizontal penetrations not exceeding 10 feet. (Enclosed chases, floor/ceiling penetrations, soffits, stairs and tubs, etc.) (R502.12, R602.8)

Plywood, OSB and EIFS requires a weather resistant membrane (30# felt or house wrap) between masonry veneer and stucco. Do not install interior (conditioned side) vapor retarder, this will lead to moisture problems within the stud cavity. Foam plastic may be used if separated from the interior with 1/2" sheetrock. (R703.9.1, R314)

Flash porches, windows, doorsills and nailing flanges per manufacturer. Wall sheathing should be at least 6 inches from grade. (R703.8, R319.1)

A flight of stairs shall not have a vertical rise of more than 12 feet between floor levels or landings. (R311.5.4)

The following header chart may be used in lieu of the prescribed method. (CABO 1995)

MAXIMUM SPANS FOR HEADERS LOCATED OVER OPENINGS IN WALLS (feet)

SIZE OF HEADER	HEADER IN BEARNG WALLS			HEADERS IN WALLS NOT SUPPORTING FLOORS OR ROOFS
	Roof Only	1 Story (Floor)	2 Story	
2-2 x 4	4	-	-	-
2-2 x 6	6	4	-	-
2-2 x 8	8	6	-	10
2-2 x 10	10	8	6	12
2-2 x 12	12	10	8	16



## MECHANICAL ROUGH-IN INSPECTION CHECKLIST

Gas pipe shall be run to all locations and pressure tested. Test must be gauged from the location of the meter through the foundation to the approximate location of all appliances. A minimum test of 10 psi and the gauge must be calibrated to discern any leak. Mechanical gauges used to measure test pressure shall have a range such that the highest end of the scale is not more than five times the test pressure. A tag allowing connection to utility will be placed on the system once the rough-in inspection has passed. (G2417.4, G2417.1).
Use only appropriate piping materials (copper, CSST, black steel and wrought iron). Properly size and support gas piping. No unions, couplings, bushings and flared fittings shall be in concealed locations. Protect copper or CSST piping through wood members with shield plates. Protect piping against corrosion when passing through foundation walls and exposed to exterior locations. (G2411-G2417, M1308.2)
Fireplaces, vented or un-vented, must be installed. If gas is to be used in such fireplaces, the gas lines must be run and tested. (G2417.1)
The vent termination for a mechanical draft system shall not be mounted directly above or within 3 feet horizontally from an oil tank vent or a gas meter and shall not be closer than 3 feet of an interior corner formed by two walls perpendicular to each other. (M1804.2.6.3-M1804.2.6.5).
Fueled fired appliances are restricted in sleeping rooms, bathrooms and storage closets. See manufacturer's guidelines for exceptions. (G2406.2).
Air returns must be installed. Prohibited in kitchens, bathrooms, garages and within 10 feet of a fueled fired appliance. (M1602.2)
Supply boots must be installed and insulated in non-conditioned spaces conducive to condensation. (M1602.2).
Condensate and HVAC line sets should be installed and fire-stopped. (M1411, M1412).
All chimneys and vents shall be inspected for proper size and clearances. A mechanical draft venting system shall terminate at least 2 feet higher than any air inlet with 10 feet. (G2427.6.5)
Clothes dryer exhaust shall be roughed-in. Maximum length shall not exceed 25 feet. (G2439.5.1)
Bathroom exhaust fans must be installed in every bathroom and water closet and duct run to outside air. (R303.3)
The <i>International Mechanical Code</i> and the <i>International Fuel Gas Code</i> are referenced standards and may be used in conjunction with the IRC.

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## ELECTRICAL ROUGH-IN INSPECTION CHECKLIST

The panel box needs to have the grounds and neutrals made up. No breakers are required. Service entrance must be run.
Wiring must be run to all locations. (R109.1.2)
Service loads shall be computed in accordance with the code. Services over 400 amps require a design professional. (E3502)
Unless the meter base and the service panel are located back-to-back or next to adjacent stud cavity, a four wire system with an exterior service disconnect is required. The sub-panel must isolate neutrals from the grounds. (NEC 230.70a and 230.91a)
A grounding electrode system is required at each structure served. Each electrode specified in section E3508 shall be bonded together to form the grounding electrode system. (E3508)
A four wire service is required for stoves and dryers. (NEC 400.5 or 250.59b)
Panel box locations must meet clearance (30 inches wide and 36 inches deep by 6'-6" high) and cannot be located in a bathroom or clothes closet. (E3305)
Receptacle spacing on walls shall not be more than 12 feet apart, within 6 feet of a door and on any wall over 2 feet in length. (E3801.2.1)
A minimum two 20-amp circuits are required in the kitchen, one in the laundry and one for the bathrooms. All must be wired with 12-gauge wire size. (E3603)
Kitchen countertop receptacle spacing is basically every 2 feet on center, with one receptacle required in any island or peninsula countertop over a certain size. (E3801.4)
Wiring shall be protected from abrasion and from physical damage. (E3805.1.2, Table E3701.4)
Holes closer than 1 ¼" from edge of member shall be protected with nail guards. (E3702.3.2)
Bond all metal water pipes. (E3509.6)
Bond each portion of a gas piping system that is likely to become energized. (G2411.1)
Use UL listed fixtures as designed or tested. (ceiling fans, wet and damp locations, recessed can lights, etc.) (E3903)
Luminaries in clothes closets must meet the required clearances from the fixture to the nearest point of storage space. Fixtures designed for incandescent bulbs must meet the required clearances for incandescent luminaries. Inserting a fluorescent bulb in a incandescent luminary will not reduce the clearances required. (E3903.11)
Smoke detector wiring must be installed. One is required inside each sleeping room, immediately outside the sleeping room and each floor level of habitable spaces. They must be hard wired, interconnected and have battery backup. Refer to manufacture's installation instructions for specific application but in general, they must be located within 12 inches of the ceiling and 3 feet from any source of air movement (returns, registers, ceiling fans, etc).
Where installed in or attached to a building or structure, metal piping systems, including gas piping capable of becoming energized, shall be bonded to the service equipment enclosure or one or more of the grounding electrodes used. The points of attachment of the bonding jumper(s) must be accessible. (E3509.7)
The <i>National Electrical Code</i> is referenced standard and may be used in conjunction with the IRC.

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