



PICKENS COUNTY

SOUTH CAROLINA

COMMUNITY & TOURISM DEVELOPMENT

BUILDING CODES • PLANNING • STORMWATER MANAGEMENT
ENVIRONMENTAL ENFORCEMENT • PARKS • MUSEUM



CHECKLIST: RESIDENTIAL CONSTRUCTION ARE YOU READY FOR AN INSPECTION?

Attached is the Pickens County Building Codes Department Residential Checklist that reflects the **2021 edition of the International Residential Code**. **Note: This document is not intended to include all the code changes as outlined in the 2021 IRC.**

The purpose of this list is to provide home builders within Pickens County a list of items that are checked by type of inspection and by trade. Again, it is not intended to be all-inclusive. We anticipate updating this list on an annual basis as needed. Handouts are available at our office or on our website at www.pickenscountysc.com. Once you are on the main Pickens County webpage, click on Departments, Building Codes, Documents and Forms.

It is impossible to develop a complete list of all items that can be inspected without duplicating all the adopted codes. The intent of this handout is to be used as a guide, not to replace the codes. It is the responsibility of the licensed builders, owner builders, and the subcontractors to insure the homes they are constructing are in full compliance with the adopted codes and ordinances.

INSPECTION PROCEDURE

The following sequence of inspections is enforced at this time. It is the responsibility of the builder to contact the department to request an inspection. **Inspection requests must be called in before 4:00 PM to be scheduled.** Please have your permit number when calling. A \$50.00 re-inspection fee will be imposed if the scheduled inspection is not ready. It is the responsibility of the builder to provide access and means for inspection. Work shall not be done beyond the point indicated in each successive inspection unless approved by the Inspector or Building Official. No building shall be occupied until all inspections have been completed and approved and a Certificate of Occupancy has been issued.

001) Footing Inspection: When the footing/foundation is complete. Prior to pouring concrete.

006) Plumbing Under-Slab: Plumbing test is on with fittings exposed. This may be done in conjunction with the Footing Inspection.

002) Rough-In Inspection: Prior to installation of sheetrock. The house is in the dry, framing, mechanical, plumbing, and electrical roughed-in at this time. Meter base and outside disconnect in place. Grounding rods in place.

007) Electrical Panel Inspection: Breakers are installed and Panel Cover is removed (*This can be done in conjunction with the Final Inspection (003).*)

003) Final Inspection: Prior to occupancy, building is complete and all prior inspections approved. A Certificate of Occupancy will be issued the following business day once the final inspection has been approved.

(001) FOOTING INSPECTION/CHECKLIST

FTG1	No mud or water in the footing. The builder responsible for the job is required to call and cancel the inspection if the inspection cannot be performed due to inclement weather. (R109.3)																																												
FTG2	The permit is required to be posted at all times and must be kept in a dry, accessible and easily seen location.(R105.7)																																												
FTG3	911 address numbers must be 4 inches or larger and plainly visible from the road frontage. If home is located more than 50 feet from the road, they must be posted at the entrance as well. (R319.1)																																												
FTG4	“Port-a-John” toilet facilities must be provided for construction workers. (IPC 311.1)																																												
FTG5	Verify setbacks as noted on the Land Use Permit issued by the Planning Department. It is the responsibility of the permit holder to clearly mark property pins/lines including edge of road right-of-way. Property lines shall further be identified by string lines at the time of footing inspection. No footing will be approved if the set-backs cannot be clearly verified by the building inspector.																																												
FTG6	Exterior walls located less than 5 feet from lot lines are required to be rated. Reference Table R302.1(1) on the following page. See Exceptions (State Modification #2021-06) on following page.																																												
FTG7	Remove all vegetation, topsoil and organic material from the underside of foundation. (R408.5)																																												
FTG8	All exterior footings shall be placed at least 12 inches below undisturbed soil. Formed footings are only allowed below undisturbed grade plane. (i.e. Basements). (R403.1.4)																																												
FTG9	Footings must be level, “Hog Outs” are not allowed. Bulkheads for stepped footings must be in place at time of inspection. “Cold Pours” are not allowed without a design professional. (R403.1.5)																																												
FTG10	If rebar is used in the footing, it must be installed correctly. Wooden grade stakes, red brick chairs, inadequate concrete coverage and improper splice laps/ties are not allowed. Rebar is a made for grounding electrode and a minimum No.6 AWG bare copper conductor must be bonded and extended to the electrical system. (R3608.1.2)																																												
FTG11	Soils test may be required if soil is questionable or on fill. Continuous spread footings are size based on a soil bearing pressure of 2000 psf and a roof live load of 20 psf. <i>Note: For additional footing widths and thickness for soil bearing pressure less than or greater than 2000 psf, reference Table R403.1(1), R403.1(2) and R403.1(3) out of the IRC.</i> <table border="1" data-bbox="277 999 1495 1409"><thead><tr><th></th><th>R403.1(1)</th><th>R403.1(2)</th><th>R403.1(3)</th></tr><tr><th></th><th>Conventional Light Frame Construction</th><th>Light Frame Construction with Brick Veneer</th><th>Concrete or Fully Grouted Masonry Walls</th></tr></thead><tbody><tr><td>1 Story Slab on Grade</td><td>12 x 6</td><td>12 x 6</td><td>12 x 6</td></tr><tr><td>1 Story with Crawl Space</td><td>12 x 6</td><td>12 x 6</td><td>12 x 6</td></tr><tr><td>1 Story Plus Basement</td><td>12 x 6</td><td>14 x 6</td><td>14 x 6</td></tr><tr><td>2 Story Slab on Grade</td><td>12 x 6</td><td>13 x 6</td><td>14 x 6</td></tr><tr><td>2 Story with Crawl Space</td><td>12 x 6</td><td>15 x 6</td><td>16 x 6</td></tr><tr><td>2 Story Plus Basement</td><td>14 x 6</td><td>17 x 6</td><td>19 x 8</td></tr><tr><td>3 Story Slab on Grade</td><td>12 x 6</td><td>17 x 6</td><td>19 x 7</td></tr><tr><td>3 Story with Crawl Space</td><td>14 x 6</td><td>19 x 6</td><td>21 x 9</td></tr><tr><td>3 Story Plus Basement</td><td>16 x 6</td><td>21 x 7</td><td>23 x 11</td></tr></tbody></table> <p><i>Where the building width perpendicular to the wall footing is greater than 32 feet, the footing width shall be increased by 2 inches and footing depth shall be increased by 1 inch for every 4 feet of increase in building width.</i></p>		R403.1(1)	R403.1(2)	R403.1(3)		Conventional Light Frame Construction	Light Frame Construction with Brick Veneer	Concrete or Fully Grouted Masonry Walls	1 Story Slab on Grade	12 x 6	12 x 6	12 x 6	1 Story with Crawl Space	12 x 6	12 x 6	12 x 6	1 Story Plus Basement	12 x 6	14 x 6	14 x 6	2 Story Slab on Grade	12 x 6	13 x 6	14 x 6	2 Story with Crawl Space	12 x 6	15 x 6	16 x 6	2 Story Plus Basement	14 x 6	17 x 6	19 x 8	3 Story Slab on Grade	12 x 6	17 x 6	19 x 7	3 Story with Crawl Space	14 x 6	19 x 6	21 x 9	3 Story Plus Basement	16 x 6	21 x 7	23 x 11
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FTG12	Runoff and sediment control, which would include but not be limited to, silt fences, gravel access (A Minimum of 10 Feet Wide - 3/4” Stone or larger x 50 Feet in Length) for equipment into and out of job site, must be in place and must be maintained throughout the course of the project.																																												

TABLE R302.1(1) EXTERIOR WALLS

*Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Separation Distance
Walls	(Fire Resistance Rated)	1 hour – tested in accordance w/ ASTM E119, UL 263 or section 703.3 of the International Building Code w/ exposure from both sides	0 feet
	(Not Fire Resistance Rated)	0 hours	≥ 5 feet
Projections	Not Allowed	N/A	< 2 feet
	Fire Resistance Rated	1 hour on the underside, or heavy timber, or fire retardant treated wood	≥ 2 feet to < 5 feet
	Not Fire Resistance Rated	0 hours	≥ 5 feet
Openings	Not Allowed	N/A	< 3 feet
	25% Maximum of Wall Area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
		None Required	3 feet

*Note: Reference State Modification Number 2021-06. An additional exception was added to the section

Exception 6. a. The minimum fire separation distance for improvement constructed on a lot shown on: [i] a recorded bonded or final subdivision plat, or [ii] a sketch plan, site plan, plan of phased development or preliminary plat approved by the local governing authority which was recorded or approved prior to the implementation of IRC 2012 which shows or describes lesser setbacks than the fire separation distances provided in Table R302.1(1) shall be equal to the lesser setbacks, but in no event less than 3 feet.

b. The minimum fire separation distance for improvements constructed on a lot where the local governing authority has prior to the implementation of IRC 2012: [i] accepted exactions or issued conditions, [ii] granted a special exception, [iii] entered into a development agreement, [iv] approved a variance, [v] approved a planned development district, or [vi] otherwise approved a specific development plan which contemplated or provided for setbacks less than the fire separation distances provided in Table R302.1(1) shall be equal to the lesser setback, but in no event less than 3 feet.

(006) UNDER SLAB INSPECTION/CHECKLIST		
US1		Slab inspections are required whenever any utility (plumbing, electrical or mechanical duct or condensate) is located underneath the slab. <u>Under normal circumstances</u> , trenches outside the footprint of the house (ie; septic, water lines, electrical, etc.) and Garage slabs do not require inspections. (P2503.2)
US2		Plumbing must be tested by water or air pressure test with a minimum 5 –foot head of water from the highest fitting connection, or 5-psi air pressure test. Straight runs may be covered but fittings must remain exposed. Supply water lines shall be tested under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less than 50 psi. (P2503.5, P2503.7)
US3		Properly size, fit and slope drains. (P3005)
US4		Use proper primer and solvent. Do not mix ABS and PVC. (P3003.2)
US5		Provide drain cleanouts prior to entering slab. (P3005.2)
US6		Piping (DWV, water, gas) through foundation walls shall be sleeved and be two pipe sizes greater than the pipe passing through it. Piping through concrete and metal studs shall be properly protected from impact and corrosion. (P2603)
US7		Bearing points for columns and bearing walls should be clearly defined at inspection. (R501.2)
US8		Slabs on grade within the building envelope and garages require a minimum 10-mill vapor barrier placed over 4-inch-thick base course of gravel or stone under slabs on grade. (R504.2.1, R506.2.3, State Modification 2021-37)
US9		Slabs must be a minimum 3.5 inches thick and capable of carrying all loads (R506.1)
US10		Garage floors must be sloped to facilitate the movement of liquids. (R309.1).
US11		Termite treatment is required. Provide termite treatment letter before final inspection. (R318)
US12		Radon soil gas stacks are not required, if installed, must be labeled and properly installed to avoid confusion with DWV.

The Foundation Checklist as noted below is not a separate inspection at this time but will be checked to the fullest extent possible through the course of the project. It is the builder's responsibility to make sure that the construction of the foundation meets the adopted codes and ordinances.

FOUNDATION CHECKLIST		
FND1		½" anchor bolts are required within 12 inches of each corner and the end of each sill plate and every 6 feet. Anchor straps are allowed per manufactures' installation instructions and must be made available for the inspector at time of inspection. (R403.1.6)
FND2		All wood sills that rest on concrete or masonry and are less than 8" from grade must be pressure treated. (R317.1)
FND3		Wall thickness is based upon walls supported. Minimum thickness for single story masonry foundations is 6 inches, two stories is 8 inches. (R606.4.1). Pier and Curtain wall is allowed on light frame construction supporting a maximum of 2 stories in height using a minimum of 4 inch masonry at a maximum of 48 inches in height. (R404.1.5.3). Pier and veneer is an acceptable practice but still must meet the foundation anchorage and header span supporting the floor(s) above.
FND4		Masonry foundation walls must meet the requirements out of section R404. Any foundation wall that exceeds this would require engineering.
FND5		Backfill should not be placed against the wall until the wall has sufficient strength, anchorage and bracing. (R404.1.7)
FND6		Waterproofing and foundation drainage ("French Drains") should be installed at this time. Foundation drainage shall positively slope to daylight as site conditions warrant. Exterior waterproofing and drainage systems are required on all basements, storage spaces, habitable spaces and when the inside grade of the crawlspace is lower than the finished outside grade. (R405, R406, R408.6)
FND7		Masonry walls shall be solid units or grouted at a change in thickness. (R606.4.3)
FND8		Under floor spaces containing mechanical equipment shall be provided with an unobstructed passageway large enough to remove the largest appliance, but not less than 30" high x 22" wide and no more than 20 feet in length (M1305.1.3)
FND9		The minimum net area of crawlspace ventilation openings shall not be less than 1 square foot for each 150 square feet of under floor space area. One opening shall be within 3 feet of each corner. If ground is covered with an approved vapor retarder, the ventilation openings can be reduced to 1 square foot for each 1,500 square feet of under floor space. Notice: An 8"x 16" foundation vent does not equal to one square foot of ventilation. (R408.2)
FND10		8 inch CMU piers cannot exceed 80 inches in height. 8 inch CMU Piers over 32 inches height must be filled solid and capped. Hollow piers shall be capped with 4 inches of solid masonry or concrete or shall have the top course filled with concrete or grout. (R606.7, R606.7.1, State Modification 2021-38)
FND11		Masonry walls shall be laterally supported. (R606.6.4)
FND12		Flashing and weep holes must be installed correctly. Drilling weep holes is not an acceptable practice. (R703.4, R703.8.5, R703.8.6)

(002) ROUGH-IN INSPECTION/CHECKLIST		
R1		All sub-trade rough-ins (plumbing, gas, mechanical and electrical) must be completed and inspected before insulating. (R109.1.2)
R2		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. <u>Do not insulate except concealed walls such as behind showers and cantilevered floors.</u> Do not stack sheet rock along walls. If a door or window is back ordered (other than required egress), please weather proof the opening. (R109.1.4, R701.2)
R3		Building Thermal Envelope shall be durably sealed to limit air infiltration per the 2009 International Energy Conservation Code (IECC).
R4		The required egress door must have a clear width of 32 inches and a clear height of 78 inches. 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 square feet (821 square inches). A sleeping room is any room with a clothes closet including basements and bonus rooms. (R310, R311)
R5		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". (R311.7.2, R311.7.6)

R6	Glazing in windows in hazardous locations must be tempered. (ie; doors, next to doors, over tubs, large picture windows, etc.). Any glazing within 60 inches horizontally or vertically of a bathtub or shower is required to be tempered. Glazing within 36 inches vertically of a stair tread or landing and less than 60 inches horizontally to the bottom stair landing is required to be tempered. (R308.4, R308.4.5, R308.4.6, R308.4.7)
R7	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)
R8	Cuts, notches and holes bored in laminated veneer lumber, glue-laminated members or I-joist are not permitted beyond the manufacturer's installation instructions. 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 roof tie-downs as specified per manufacturer or as required per Table R802.11. (R502.8.2, R502.11, R802.10.1, R802.11)
R9	All load bearing members must be grade stamped. (R602.1)
R10	Any framing member that has been cut or notched beyond allowances must be reinforced. (R602.6)
R11	Wall bracing according to Ultimate Wind Speed \leq 115 mph (Table R602.10.3(1))
R12	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. (R806.1, R807.1, M1305.1.2)
R13	Fire blocking shall be in place. Use an approved material that resists the passage of flame and products of combustion around vents, pipes, ducts, cables, and wires. Seal vertically at the ceiling and floor levels and horizontal penetrations not exceeding 10 feet. (Enclosed chases, floor/ceiling penetrations, soffits, stairs and tubs, etc.) (R302.11, R302.11.1)
R14	One layer of 15# felt or other approved water-resistive barrier (House Wrap) shall be applied over studs or sheathing of all exterior walls. Do not install interior (conditioned side) vapor retarder, this will lead to moisture problems within the stud cavity (R703.2)
R15	Flash porches, exterior windows and doors and nailing flanges per manufacturer, at wall and roof intersections, etc. Wall sheathing should be at least 6 inches from grade. (R703.4, R317)
R16	A flight of stairs shall not have a vertical rise of more than 12'- 7" between floor levels or landings. (R311.7.3)
R17	Provide Lintels over masonry openings. (R606.10)
R18	A drip edge shall be provided at eaves and rake edges of asphalt shingle roofs where required by the manufacturer (State Modification 2021-40)

(002) PLUMBING ROUGH-IN INSPECTION/CHECKLIST

PR1	Plumbing shall be roughed-in to all locations. (R109.1.2)
PR2	PVC pipe cannot be used for any water distribution inside the building. (Table P2906.5)
PR3	The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water hammer arrestor shall be installed where quick closing valves are utilized. (P2903.5)
PR4	Drain systems shall be tested by water with no evidence of leaking. Fill to the highest flood level rim. Piping must conform to one of the standards for ABS plastic pipe, cast iron pipe, PVC plastic pipe or pressure rated pipe. (P2503.5.1, P3002.2)
PR5	Supply water lines shall be tested under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less not 50 psi. (P2503.7)
PR6	Where piping is installed through holes in plates or studs less than 1 1/4 inches from the edge of the member, shield plates shall protect the pipes. (P2603.2.1, State Modification #2021-53)
PR7	Use anti-scald shower valves. (P2708.4, State Modification #2021-57)
PR8	Vent terminals min. 6 inches above the roof. Roof boots should be installed. (P3103, P2607.1)
PR9	Vent terminals shall not be within 10 feet horizontally of openings into the building unless it is at least 3 feet higher than the opening. (P3103.5)
PR10	Access shall be provided to circulation pumps for Whirlpool Bathtubs in accordance with the Manufacturer's Installation Instructions. A copy is to be provided for the inspectors review on site. (P2720.1)
PR11	The <i>International Plumbing Code</i> is a referenced standard and may be used in conjunction with the IRC.

(002) MECHANICAL ROUGH-IN INSPECTION/CHECKLIST		
MR1		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. Test pressure shall not be more than 1 ½ times the proposed maximum working pressure, but not less than 3 psig. 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. (G2417.4, G2417.4.1)
MR2		Use only appropriate piping materials (Copper, CSST, black steel and cast 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. (G2414-G2418, M1308)
MR3		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)
MR4		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)
MR5		Fueled fired appliances shall not be located in sleeping rooms, bathrooms and storage closets unless approved by the Manufacturers Installation instructions. (G2406.2)
MR6		Air returns must be installed. Prohibited in kitchens, bathrooms, garages and within 10 feet of a fueled fired appliance. (M1602.2)
MR7		Supply boots must be installed and insulated in non-conditioned spaces conducive to condensation.
MR8		Condensate and HVAC line sets should be installed and fire-stopped. (R302.11)
MR9		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. (G2427.6.4)
MR10		Clothes dryer exhaust shall be roughed-in. Maximum length shall not exceed 35 feet from the dryer location to the wall or roof termination. (State Modification #2021-46)
MR11		Bathroom exhaust fans must be installed in every bathroom and water closet and duct run to the outdoors. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space. (R303.3, M1501.1, M1505.2)
MR12		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.

(002) ELECTRICAL ROUGH-IN INSPECTION/CHECKLIST		
ER1		Panel Box is in place. Service entrance must be run. Wiring must be run to all locations. (R109.1.2) <i>Note: A separate Electrical Panel Box Inspection is required after the Rough-In Inspection has been approved. All Breakers must be installed with panel cover removed. See Electrical Panel Inspection (EP1) on page 8.</i>
ER2		Service loads shall be computed in accordance with the code. Services over 400 amps require a design professional. (E3401.2)
ER3		An readily accessible Emergency Disconnect is required outside nearest the point of entrance of the service conductors and must be permanently marked. (E3601.8)
ER4		A grounding electrode system is required at each structure served. Each electrode specified in section E3608 shall be bonded together to form the grounding electrode system. A minimum of 2 grounding electrodes is now required and shall not be less than 6 feet apart. (E3608, E3608.4)
ER5		A four wire connection is required for stoves and dryers. (NEC 250.114(3), 250.140)
ER6		Panel box locations must meet clearance (30 inches wide and 36 inches deep by 6'- 6" high) and cannot be located in a bathroom, clothes closet or over the steps of a stairway. (E3405.5)
ER7		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. (E3901.2.1)
ER8		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 AWG wire size. (E3703)
ER9		Kitchen countertop receptacle spacing is basically every two feet on center. A minimum of two receptacles outlets shall be provided for any island over 6 feet long. At least one receptacle outlet shall be provided for the first 6 feet, or fraction thereof, of the countertop or work surface. (E3901.4.1, State Modification #2021-69)
ER10		Wiring shall be protected from abrasion and from physical damage. (E3802.3.2, Table E3802.1, E3803.1)
ER11		Holes closer than 1 ¼" from edge of member shall be protected with nail guards. (Table E3802.1)
ER12		Bond all metal water pipes. (E3609.6)
ER13		Bond each portion of a gas piping system that is likely to become energized. (G2411.1)
ER14		Use UL listed fixtures as designed or tested. (Ceiling fans, wet and damp locations, recessed can lights, etc.(E4003.10)

ER15	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 luminaire will not reduce the clearances required. Incandescent luminaires with open or partially enclosed lamps and pendant luminaires or lamp-holders shall be prohibited. (E4003.12)
ER16	Smoke and Carbon Monoxide detector wiring must be installed. Smoke Detectors are required inside each sleeping room, immediately outside the sleeping rooms and on each additional story including basements and habitable attics. Carbon Monoxide detectors shall be installed outside of each sleeping area within dwelling units that contain fuel-fired appliances or have attached garages. Where a fuel burning appliance is located within the bedroom or attached bathroom, a carbon monoxide alarm shall be installed within the bedroom. They must be hard wired, interconnected and have battery backup. Refer to manufacturer'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.). Note: Smoke/Carbon monoxide Detectors located in the bedrooms are required to be Arc-Fault Protected. (R315, E3902.20) <i>Note: Household Fire Alarm Systems installed in accordance with NFPA 72 and 720 that include the required smoke and carbon monoxide alarms are acceptable but are also required to be monitored by an approved supervising station.</i> <i>Note: Physical connection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.</i>
ER17	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. (E3609.7)
ER18	An intersystem bonding termination is required for Communication Systems, Cable, etc. (E3609.3)
ER19	Ceiling outlet boxes used exclusively for lighting shall be capable of supporting a luminaire weighing up to 50 pounds. A luminaire that weighs more than 50 pounds shall be supported independently of the outlet box, unless the outlet box is listed and marked for the maximum weight to be supported. (E3905.6.2)
ER20	The <i>National Electrical Code</i> is a referenced standard and may be used in conjunction with the IRC.

(007) ELECTRICAL PANEL BOX INSPECTION

EP1	All Breakers are in place and labeled. Panel Cover is removed. <i>(This can be done in conjunction with the Final Inspection (003)).</i>
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(003) FINAL INSPECTION/CHECKLIST

F1	Building must be completed and ready for inspection. Warning: Buildings may not be occupied prior to a final inspection being passed and a Certificate of Occupancy has been issued. The Building Codes department does not inspect cosmetic items, nor do a "punch list". Once the final inspection has passed, a Certificate of Occupancy will be issued the following business day. (R110.3)
F2	Prior to scheduling a final inspection, the termite treatment letter must be submitted to our office.
F3	Emergency 911 address numbers must be permanently posted on the house. If home is located more than 50 feet from the road, they must be posted at the entrance as well. Numbers must be 4 inches or larger. (R319.1)
F4	The grade away from the foundation must fall 6 inches within the first 10 feet or have adequate swale. Gutters with 5 foot downspout extensions may be required where site conditions warrant. (R401.3, R801.3)
F5	The exterior must be weather proofed and rodent proofed.
F6	The garage shall be separated from the residence and the attic area by not less than 1/2" gyp-board on the garage side. Habitable rooms above a garage shall be separated by not less than 5/8" type X gypsum board or equivalent on the ceiling side of the garage. (See Table R302.6 Below). Doors shall be 1 3/8" solid wood or metal. (R302.5.1)
F7	Garage floors shall be sloped to facilitate the flow of liquid out of the garage. (R309.1)
F8	Double cylinder (interior keyed) deadbolts are not allowed. (R311.2)
F9	A 3-foot by 3-foot landing shall be provided outside of each exterior door. The door leading from the residence to garage is considered an interior door. An exterior door, other than the required egress door, with two or less risers is exempt from the landing requirement provided the door, other than an exterior storm or screen door, does not swing over the landing. (R311.3, R311.3.2)
F10	Stairs with four or more risers require a handrail. Handrail height shall be a minimum of 34 inches and a maximum of 38 inches. Handrails must be graspable. Handrails on open sides of stairs over 30 inches from grade plane or finished floor shall be guards. Handrails must be on the inside wall of winders. (R311.7.8)

F11	Guards in-fill components (all those except handrails), balusters and panel fillers shall be designed to withstand a horizontal applied load of 50 pounds on an area equal to one square foot. (Table R301.5)
F12	Porches, decks, balconies, ramps over 30 inches above grade plane require guards. Guards must be a minimum of 36 inches in height. Guards cannot allow a passage of a 4 inch sphere and must resist a 200 lb lateral load. Elevated screen porches require guards. (R312.1.2, R312.1.3)
F13	The crawl space shall have all vegetation and construction debris removed. Seal all foundation penetrations. (R408.5)
F14	All decks, porches and balconies must be completed and to code. (R109.1.6)
F15	Enclosed accessible areas under stairs, including unfinished basements, must have 1/2 gyp board inside walls and soffit. (R302.7)
F16	Chimneys shall extend not less than 2 feet higher than any portion of a building within 10 feet, but shall be not less than 3 feet above the highest point where the chimney passes through the roof. (R1003.9)
F17	Energy Compliance Certificate must be posted on or in the electrical panel box.
F18	Building Thermal Envelope shall be durably sealed to limit air infiltration per the 2009 International Energy Conservation Code (IECC).

Table R302.6 Dwelling/Garage Separation

SEPARATION	MATERIAL
From the residence and attics	Not less than ½ - inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage	Not less than 5/8 – inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than ½ - inch gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than ½ - inch gypsum board or equivalent applied to the interior side of exterior walls that are within this distance

(003) PLUMBING FINAL INSPECTION/CHECKLIST

PF1	A readily accessible Shut off valve on the cold-water side to the water heater. (P2903.9.2)
PF2	The water heater temperature relief valve must safely discharge to the outside of the building. The discharge pipe should be constructed of copper or CPVC. (P2804.6.1)
PF3	Water lines in attics, garages and unconditioned spaces must be protected from freezing. (P2603.5)
PF4	Provide backflow protection in accordance with the code. (P2902.3)
PF5	Provide pressure reducing valve and thermal expansion tank per code when water pressure exceeds 80 psi or a backflow prevention device or check valve is installed (P2903.3.1, P2903.4.2)
PF6	Cleanouts should be accessible. A septic cleanout within 5 feet of the foundation wall, but not closer than 18 inches should be provided.
PF7	Air admittance valves must be installed per manufacturer's installation instructions. One main stack must run to the exterior. (P3114)
PF8	Shower compartment access doors shall have a minimum clear opening of 22 inches. (P2708.1.1)

(003) MECHANICAL FINAL INSPECTION/CHECKLIST

MF1	All utilities should be connected, tested and operational. The exception is gas grills.
MF2	Gas log fireplaces shall have a shut off valve within 6 feet and in the same room. (G2420.5)
MF3	Gas lines must be labeled. Other than steel pipe & CSST, exposed piping shall be identified by a yellow label marked "Gas" in black letters and spaced a maximum of 5 feet on center. (G2412.5)
MF4	All gas appliances except decorative, require sediment traps. (G2419.4)
MF5	Fuel burning appliances shall be provided with make-up air when in a confined space. (G2407)
MF6	Water heaters located in the garage must be protected from impact by automobiles (M1307.3.1)
MF7	All appliances located in the garage having an ignition source must be elevated a minimum of 18 inches above the floor. (M1307.3)
MF8	Appliance installation shall conform to the listing and label of their manufacturer's installation instructions. Instructions shall remain with the appliance. (M1307.1)
MF9	B-vent minimum 1 inch clearance to combustibles or as required by manufacturer. (M1306.2)
MF10	Install drain pan and condensate line under appliance as required. (M1411)

MF11	Attics and crawlspaces containing appliances shall be provided with a clear and unobstructed passageway not more than 20 feet from access opening unless it meets an exception. (M1305.1.2, M1305.1.3)
MF12	Ductwork must be properly supported and insulated. Ducts in attics must be raised off ceiling joist. Ducts in crawlspace must be raised a minimum 4 inches off grade. Ducts located in a garage must conform to Section R302.5.2. (M1601.4)
MF13	Foundations and supports for outdoor mechanical systems shall be raised at least 3 inches above the finished grade, and shall also conform to the Manufacturer's Installation Instructions. (M1305, M1401.4)
MF14	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)

(003) ELECTRICAL FINAL INSPECTION/CHECKLIST

EF1	Smoke and Carbon Monoxide detectors shall be operable per the IRC and NFPA 72 & 720. Detectors shall be hardwired, interconnected with battery backup, and located per code. (R314, R315). Note: Smoke/Carbon Monoxide Detectors located in the bedrooms are required to be Arc-Fault Protected. Note: Household Fire Alarm Systems installed in accordance with NFPA 72 and 720 that include the required smoke and carbon monoxide alarms are acceptable but are also required to be monitored by an approved supervising station. Note: Physical connection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.
EF2	Ground Fault Circuit Interrupters (GFCI) required in all damp locations and in the following: bathrooms, garages, kitchen countertops, outdoors, crawlspaces, laundry rooms, kitchen dishwashers, unfinished basements and sinks. (E3902)
EF3	Arc-Fault Circuit-Interrupters (AFCI) required in all branch circuits that supply 120 volt, single-phase, 15 and 20 amp outlets installed (E3902.16) in: <i>Family Rooms, Dining Rooms, Living Rooms, Parlors, Libraries, Dens, Bedrooms, Sunrooms, Recreation Rooms, Closets, Hallways and similar rooms or areas. (State Modification IRC 2018 41)</i>
EF4	Tamper Resistant Outlets are required in all 125 volt 15 and 20 amp receptacles in areas specified in Section E3901.1 (E4002.14, State Modification #2021-75) <u>Exceptions:</u> 1) Receptacles located more than 5'-6" above the floor. 2) Receptacles that are part of a luminaire or appliance. 3) A single receptacle for a single appliance or a duplex receptacle for two appliances where such receptacles are located in spaces dedicated for the appliances served and not easily moved.
EF5	All switches, receptacles and junction boxes must have covers on them. Lighting fixtures must have operable bulbs in them. (E4004.1)
EF6	Circuit board must be legibly marked. Unused opening effectively closed. Each disconnecting means shall be legibly marked to indicate its purpose. The marking shall have the durability to withstand the environment involved. (E3404.13, E3404.6)
EF7	No contamination of electrical equipment. (Paint over-spray, insects, bird nests, etc.) (E3404.7)
EF8	Circuit breakers must be sized to match wires. (E3702.14)
EF9	Hydro-massage tub motors and GFCI's must be accessible. Access shall be provided to circulation pumps for Whirlpool Bathtubs in accordance with the Manufacturer's Installation Instructions. A copy is to be provided for the inspectors review on site. (P2720.1)
EF10	Disconnects for dishwasher, waste disposal and trash compactors may be a chord and plug. (E4101.3)
EF11	Disconnect for water heater and HVAC shall be at the unit. (E4101.5)
EF12	"In use covers" are required for outlets located in "wet locations". (E4002.10)
EF13	A receptacle is required on the front and back of each dwelling unit within 6'-6" of grade and on balconies, decks and porches that are accessible from inside the dwelling. (E3901.7)
EF14	A switch controlled lighting outlet is required in every habitable room, bath, hallway, stairway, attached garage, storage and appliances in attics or crawl spaces, basements and each exterior grade exit. (E3903)
EF15	Bathtub or shower spaces cannot have switches, receptacles, pendent fixtures or ceiling fans. (E4003.11)
EF16	In unfinished basements, conductors of sizes 6 AWG and larger shall not require additional protection when attached directly to the bottom of the floor joist. Smaller cables shall run either through bored holes or on a running board. (E3802.4, State Modification #2021-67)