



Inspection Checklist Residential Building Final

This Inspection Checklist reflects code requirements of the 2015 International Residential Code (IRC), 2015 Uniform Plumbing Code (UPC), 2014 National Electrical Code (NEC), and the 2015 International Fire Code (IFC)

Please verify the following before calling for a building final inspection

Permits and Plans

- Permit and approved plans are on site and accessible to the inspector. (R105.7)
- Permit information is correct (address, permit number, description of work, etc.) (R106.1)
- All other finals are approved. (R109) (Check with local jurisdiction for required finals)
- FEMA elevation certificate by licensed surveyor for construction in flood hazard areas. (R106.1.3)

Exterior

- House numbers plainly visible legible from the street of road fronting the property minimum 4" and of contrasting color. (R319)
- All exterior windows, penetrations and openings caulked. (R703.1.1)
- Chimney terminations are 2' above any roof/structure within 10' and not less than 3' above the highest point where the chimney passes through the roof. (R1003.9)
- Spark arresters installed on top of chimney. (R1003.9.2)
- 6" distance from soil to wood siding/trim. (R317.1, #5)
- The grade at the foundation falls away from the building a minimum of 6" within the first 10'. Minimum slope 5% where less than 6" fall in 10'. Swales (if using) minimum 2% slope. (R401.3 & exception)
- Carports not open on at least two sides will be inspected as garages and all fire separation requirements will apply. (R309.2)

Decks, Stairs and Walkways

- Verify that deck placement, setback, size, and materials are per approved plans.
- Deck is positively attached and supports both lateral and live loads. (40lb/sq.ft. minimum) (R301.5, R502.2)
- All deck material treated or naturally resistant to decay. Cuts, notches, and holes are treated with preservative. (R317.1, R317.1.1, R317.1.5 & R317.2)
- Fasteners and hardware for pressure preservative and fire-retardant-treated wood shall be of hot-dipped galvanized steel, stainless steel, silicon bronze or copper. (R317.3, R317.3.1 and manufacturer's requirements)

- Joists can be untreated if approved weatherproof decking membrane is used. Note: Soffits allowed when ventilated.
- Ledger for decks bolted/lagged to structure in accordance with table 507.2.1 or per approved plan.
- Deck lateral connections require a minimum (2) 1,500 lb hold-down tension devices, installed in not less than two locations (ends) per deck, installed and connected to interior parallel joists per IRC figure 507.2.4 (except decks <30" above grade.)
- Cantilevers blocked at bearing line if >12". (Table 502.3.3(2))
- Bottom of footings are minimum 12" below grade for freeze protection. (Table R301.2(1)) R403.1.4)
- Where deck is >30" vertical above the grade plane, within 3' horizontal, a guard is installed. (R312.1.1)
- 6'8" minimum headroom at stairways measured vertically from the nose of the treads, landings or platforms. (R311.7.2)
- All stairs are provided with illuminations and light switch at each floor level of 6 or more risers. Exterior stairway lighting is to be controlled from within the building. (R303.7, R303.7.1)
- Stair nosing $\frac{3}{4}$ " – 1 $\frac{1}{4}$ " required when solid risers are solid are installed except when the tread depth is 11" minimum. (R311.7.5.3)
- Open risers don't allow passage of 4" sphere, except stairs with a rise of 30" or less. (R311.7.5.1)
- Radius of curvature at the leading edge of the tread is not over 9/16". (R311.7.5.3)
- The greatest nosing projection doesn't exceed the smallest by >3/8". (R311.7.5.1)
- Stair riser maximum 7 $\frac{3}{4}$ ", treats minimum 10". (R311.7.5.1)
- Stair riser/tread maximum dimension doesn't exceed smallest by >3/8". (R311.7.5.1)
- Guards don't allow passage of 4" sphere. (R312.1.3)
- Guards installed at the sides of stairs don't allow the passage of 4 3/8" sphere. (R312.1.3 Exception 2)
- Triangle formed by riser, tread and bottom element of guardrail doesn't allow passage of 6" sphere. (R312.1.3 Exception 1)
- Guards adjacent to floor surfaces over 30" from adjacent floor or grade are a minimum 36" height to the top of the guard. (R312.1.2)
- Open sides to the stairs with a total rise of 30" above the floor or grade below have guard's minimum 34" in height when measured vertically from the stair nosing to the top of the guard. (R312.1.2 exceptions 1 & 2)
- Handrails and guards capable of withstanding 200lbs applied in any direction at any point on the rail. (IBC 1607.8.1.1)
- Handrail at stairs with 4 or more risers. (R311.7.8)
- Handrail minimum 34" to maximum 38" above nose of tread to top of handrail. (R311.7.8.1)
- Type I handrails with circular cross sections 1 $\frac{1}{4}$ "-2" diameter. (R311.7.8.3)
- Type I handrails with noncircular cross sections have a perimeter dimension of 4"-6 $\frac{1}{4}$ " with a maximum cross section of 2 $\frac{1}{4}$ ".
- Type II handrails with perimeters greater than 6 $\frac{1}{4}$ " require a graspable finger recess area on both sides of the profile. The minimum and maximum width above the recess 1 $\frac{1}{4}$ "-2 $\frac{3}{4}$ ". (R311.7.8.3)
- Handrail returns to the wall, maximum 4 $\frac{1}{2}$ " off wall with minimum 1 $\frac{1}{2}$ " clear space from inside of rail to wall. (R311.7.1, R311.7.8.2)
- Exterior doors have landings, minimum 36"x36", or per size of door opening. The floor or landing at the exit door shall not be more than 1.5" lower than the top of the threshold. Floors or landing at door other than the exit door don't have to meet this requirement. May step down 7 $\frac{3}{4}$ " below door opening unless the door swings over the landing. Where a stairway of two or fewer risers is located on the exterior side of a door, other than the required exit door, a landing is not required for the exterior side of the door. (R311.3)

Interior

- Single family garages separated from the residence and it's attic area by not less than $\frac{1}{2}$ " gypsum board applied to the garage side. Garges beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8" type x gypsum board or equivalent. Structures supporting a floor/ceiling assembly are protected by a minimum $\frac{1}{2}$ " gypsum board or equal. (Table R302.6)
- Garage door to house is weather-stripped

- Primary heat source cannot be woodstove. Any woodstove or pellet stove must be EPA certified.
- Ducts in garages which penetrate the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet metal and can have no openings into the garage. (R302.5.2)
- Other penetrations through garage walls and ceilings are filled with approved material to resist free passage of flame and smoke. (R302.5.3, R302.1.1)
- 1 3/8" solid door or 20-minute fire-rated door equipped with a self-closing device between house and garage. (R302.5.1)

Attics

- Attic accesses required to areas exceeding 30 square feet and which have a vertical height of 30" or greater. (R807.1)
- Accesses located in hallways or other readily accessible location. (R807.1)
- Attic access unobstructed 22"x30" or large enough to remove the largest piece of mechanical equipment intact. (R302.5.1, R807.1, M1305.1.3)
- Access door insulated and gasketed at insulated ceilings and surrounding curb is minimum 12" height. (R402.1.2.4)
- Proper insulation and thickness installed. (R402.2.1)
- Blow-in insulation has not filled/blocked baffles. Maintain 1" clearance between roof sheathing and insulation. (R860.3)
- Blow-in insulation must have 1" clearance to gas fired exhaust vents.

Crawl Spaces

- Floor crawl access 18" X 24". (R408.4)
- Openings through a perimeter wall to crawl 16" X 24". (R408.4)
- Ventilation at crawl space unobstructed by insulation.
- Venting at crawl space as shown on plan minimum 1 sq.ft./ 300sq ft. (R408.1, R408.2)
- Vapor barrier is black 6 mil. Plastic, covering crawl completely, wall to wall, with all seams lapped 12".
- R-30 insulation is installed against bottom on floor and secured in place.
- Pressure treated wood posting installed at basements or cellars or supported by piers or metal pedestals projecting 1" above floor or finished grade and 6" above exposed earth and separated by an approved impervious moisture barrier. (R317.1.4)
- Pressure treated wood posting installed in crawl spaces or unexcavated areas, supported by a concrete pier or metal pedestal 8" above exposed earth and separated by an approved impervious moisture barrier. (R317.1.4)
- Remove all debris from the crawl space. (R408.5)
- Floors constructed of lumber less than 2" X 10" dimensional lumber to be fire protected on the underside where a crawl space is for storage or houses fuel burning equipment. (R302.13)
- Where required, floor resistant construction in flood hazard areas (treated/water resistant materials, flood vents, etc.)

Stairs and Handrails

- For differing stair types and requirements see R311.7, R311.7.9.
- Stair riser maximum 7 3/4", treads minimum 10". (R311.7.4)
- Stair riser/tread maximum dimension doesn't exceed smallest by >3/8". (R311.7.4)
- 6' 8" minimum headroom at stairways measured vertically from the nose of the treads, landings or platforms. (R311.7.2)

- All stairs are provided with illumination, and light switch at each floor level of 6 or more risers. Exterior stairway lighting is to be controlled from within the building. (R303.7, R303.7.1)
- Stair nosing $\frac{3}{4}$ " – $1\frac{1}{4}$ " required when solid risers are installed except when the tread depth is 11" minimum. (R311.7.5.3)
- Open risers don't allow passage of 4" sphere, except stairs with a rise of 30" or less. (R311.7.5.1)
- Radius of curvature at the leading edge of the tread is not over $\frac{9}{16}$ "
- The greatest nosing projection doesn't exceed the smallest by $>\frac{3}{8}$ ". (R311.7.5.3)
- Stair riser maximum $7\frac{3}{4}$ ", treads minimum 10". (R311.7.5.1)
- Stair riser/tread maximum dimension doesn't exceed smallest by $>\frac{3}{8}$ ". (R311.7.5.1)
- Guards don't allow passage of 4" sphere. (R312.1.3)
- Guards installed at the sides of stairs don't the passage of $4\frac{3}{8}$ " sphere. (R312.1.3 Exception 2)
- Triangle formed by riser, tread and bottom element of guardrail doesn't allow passage of 6" sphere. (R312.1.3 Exception 1)
- Guards adjacent to floor surfaces over 30" from adjacent floor or grade are a minimum 36" height to the top of the guard. (R312.1.2)
- Open sides of stairs with a total rise of 30" above the floor or grade below have guards minimum 34" in height when measured vertically from the stair nosing to the top of guard. (R312.1.2 Exceptions 1 & 2)
- Handrails and guards capable of withstanding 200lbs applied in any direction of any point on the rail. (IBC 1607.8.1.1)
- Handrail at stairs with 4 or more risers. (R311.7.8)
- Handrail minimum 34" to maximum 38" above nose of tread to top of handrail. (R311.7.8.1)
- Type I handrails with circular cross sections $1\frac{1}{4}$ "- 2" diameter. (R3.7.8.3)
- Type I handrails with noncircular cross sections have a perimeter dimension of 4 "- $6\frac{1}{4}$ " with a maximum cross section of $2\frac{1}{4}$ ". (R311.7.8.3)
- Type II handrails with perimeters greater than $6\frac{1}{4}$ " require a graspable finger recess area on both sides of the profile. The minimum & maximum width above the recess is $1\frac{1}{4}$ "- $2\frac{3}{4}$ ". (R311.7.8.3)
- Handrail returns to wall, maximum $4\frac{1}{2}$ " off wall with minimum $1\frac{1}{2}$ " clear space from inside of rail to wall. (R311.7.1, R311.7.8.2)

Smoke Alarms/ Automatic Sprinkler Systems

- Smoke alarms required when interior alterations, repairs or additions requiring a building permit occur. (R314.2.2)
- Alarms are interconnected and hard wired unless the area of work does not result in the removal of interior wall or ceiling finishes exposing the structure unless there is an attic, crawl space, or basement available which could provide access for the hard wiring. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activations of one alarm. (R314.4)
- Smoke alarms at every floor level, in each bedroom and in hallways serving bedrooms. (If a room as a closet it qualifies as a bedroom.) (R314.3, NFPA 72)
- Smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA72. (R314.1)
- Carbon Monoxide detectors shall be installed at every floor level and adjacent sleeping areas. (R315.1)
- Final inspection for automatic sprinkler system (where required) approved prior to building final.

Windows and Glazing

- Bedroom window sill not more than 44" from the floor to bottom of window opening. Minimum 5.7 sq.ft. clear opening, 20" minimum width, and 24" minimum height. Grade floor openings may have a minimum of 5 sq. ft. clear opening. (R310.2.1)
- Emergency escape and rescue openings must be operational from the inside without the use of keys, tools or special knowledge.

- Safety glazing installed in hazardous locations is marked with type and thickness. Mark is acid etched, sandblasted, ceramic-fired, embossed or made by other permanent means. (R308.1)
- Safety glazing is installed at hazardous locations. (R308.4)
 1. Glazing in swinging doors except jalousies.
 2. Glazing in fixed and sliding panels of sliding door assemblies and panels in sliding and bifold closet door assemblies.
 3. Glazing in storm doors.
 4. Glazing in all unframed swinging doors.
 5. Glazing in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs, and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of glazing is less than 60" above any standing or walking surface.
 6. Glazing in fixed or operable panels adjacent to a door where the nearest vertical edge is within a 24" arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60" above the walking surface. Except, where there is an intervening wall or partition between door and glazing or where the door accesses a closet 3' or less in depth.
 7. Glazing in an individual fixed or operable panel, when all of the following apply:
 - 7.1. Expose area of an individual pane greater than 9 sq.ft.
 - 7.2. Bottom edge less than 18" above the floor.
 - 7.3. Top edge greater than 36" above the floor.
 - 7.4. One or more walking surfaces within 36" horizontally of the glazing.Exception: Where a protective 1 ½" wide bar is installed on the accessible side of the glazing 34"-38" above the floor and capable of withstanding a load of 50lbs per linear foot.
 8. Glazing in railings regardless of area or height above a walking surface. Includes structural baluster panels and nonstructural in-fill panels.
 9. Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60" above a walking surface and within 60" horizontally of the water's edge.
 10. Glazing adjacent to stairways, landings and ramps within 36" horizontally of a walking surface when the exposed surface of the glass is less than 36" above the plane of the adjacent walking surface. Except where a handrail or guard is installed per IBC Sections 1013 & 1607.7.
 11. Glazing adjacent to stairways within a 60" arc horizontally of the bottom tread of a stairway less than 180 degrees from the bottom tread nosing, when the exposed surface of the glass is less than 36" above the nose of the tread. Exception: When the side of the stair, landing or ramp has a guard or handrail with balusters or in-fill panels and the plane of the glass is more than 18" from the railing. (R308.4.7)