Residential Plan Checklist



Use this checklist to review your building plans. All references to IRC 2018 Code

Square Footage for:

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| Main Floor: |  |  | Carport/Covered Deck:  |  |
| Second Floor |  |  | Deck: |  |
| Rough Basement: |  |  | Remodel: |  |
| Finished Basement: |  |  | Addition: |  |
| Garage: |  |  | Other: |  |

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|  | APPLICATION FOR PERMIT: description of work, contractor’s license numbers or owner builder, signed  | CKCOG Website |
|  | CLIMATIC AND GEOGRAPHICAL DESIGN CRITERIA   | CKCOG Website (Climate Zone 5) |
|  | EXTERIOR WALLS AND OPENINGS: fire separation distance from property lines  | R302.1 & R302.2*pg. 57-57* |
|  | MINIMUM AREA DIMENSIONS AND HEIGHTS FOR HABITALE SPACES: 70 ft/2 floor space. Not < 7 feet in any horizontal dimension. Minimum ceiling height is 7’. Bathrooms, toilet rooms and laundry rooms can have a ceiling height of 6’-8”.  | R304 & R305*pg. 64* |
|  | GLAZING IN HAZARDOUS LOCATIONS: bathtubs, showers, within 24 inches of doors, within 18 inches of floors and greater than 9 sq ft, within 60 inches of stairway landings, within 36 inches of walkways and within 60” from waters edge of tubs and showers. | R308*pg. 65-69* |
|  | GARAGE SEPARATION FROM DWELLING: 1/2-inch gypsum wall board between the garage and residence, drywall to extend to gable peak or the residence sidewall and garage ceiling can be covered with 1/2-inch drywall. Garage beneath habitable rooms shall be separated from all habitable rooms by no less than 5/8-inch Type X gypsum board or equivalent on ceiling, 1/2-inch gypsum on all supporting structure. Openings between the garage and residence shall be equipped with a 1 3/8-inch-thick solid or a 20-minute fire rated door  | R302.5 *pg. 60-61* |
|  | EMERGENCY ESCAPE AND RESCUE OPENINGS: 44 inches max above floor, in every sleeping room, minimum 5.7 sq ft, 20-inch min width, 24-inch min height. Exception: Grade floor or below grade openings not < 5 sq ft.  | R310*pg. 69-71* |
|  | WINDOW WELLS AND LADDERS: 9 sq ft min area, 36 inches out from window, if deeper than 44 inches a permanently affixed ladder or steps usable with the window fully open.   | R310.2*pg. 70* |
|  | EXIT DOORS AND HALLWAYS: At least one 32 x 80 exit door is required. Hallways shall have a minimum width of 36 inches.  | R311.1*Pg. 71* |
|  | LANDINGS AT DOORS AND STAIRWAYS: 36 inches minimum in the direction of travel and must be as wide as the door. | R311.3 *pg. 71* |
|  | STAIRWAY WIDTH: 36 inches, TREADS AND RISERS: 8 1/4-inch max rise and 9-inch minimum tread, HEADROOM: 6-foot 8 inch, UNDER STAIR PROTECTION: ½ inch sheetrock, HANDRAILS: four (4) or more risers, 34 to 38 inches in height and 1 ¼ to 2 5/8 inches in diameter if circular  | R311.7*pg. 71* |

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|  | GUARDRAILS (GUARDS): at floors over 30 inches above grade, 36 inches min. height, a 4-inch sphere shall not pass through  | R312*pg.74* |
|  | SMOKE DETECTORS: inside each sleeping room, outside sleeping rooms, on each level, all wired in series with battery backup  | R314*pg. 75-76* |
|  | CARBON MONOXIDE ALARMS: approved carbon monoxide detector installed outside of each sleeping area in the immediate vicinity of the bedrooms when a fuel-burning appliance is installed in dwelling units or with attached garages. | R315*pg. 76-77* |
|  | CONCRETE FOOTING SIZES AND DEPTH: SEE TABLES 403.1 (1), (2), (3) AS APPLICABLE.  | R403  *pg. 92-94*  |
|  | ANCHOR BOLTS TO FOUNDATION: max spacing 72 inches on center & not more than 12 inches from each end of plate section and or corners. Anchor straps may be substituted for bolts as long as they provide equivalent anchorage.   | R403.1.6*pg. 99* |
|  | STRUCTURAL COLUMNS: 4x4 inch min. wood, 3-inch minimum pipe, restrained to prevent lateral displacement at the bottom.   | 407*pg. 132-133* |
|  | UNDER-FLOOR VENTILATION: 1 sq ft for each 150 sq ft of underfloor space or 1 sq ft for every 1500 sq ft if covered with a class 1 vapor retarder.  | R408*pg. 133* |
|  | UNDER-FLOOR ACCESS: 24 inch by 18 inch  | R408.4*pg. 133* |
|  | FLOOR FRAMING: double under bearing partitions, blocking at bearing walls, allowable spans | R502*pg. 135-140* |
|  | HEADER & GIRDER SPANS. TABLES: 602.7(1), 602.7(2), 602.7(3). | R607*pg. 186-188* |
|  | WALL CONSTRUCTION  | R602*Pg. 173* |
|  | BRACED WALL LINES AND PANELS: within 12.5 feet of wall corner, 4 feet in length for plywood with nailing at 6 inches on center at edges and 12 inches on center in field, 8 feet for sheetrock with screws at 7 inches on center edges and field  | R602.10*Pg. 136 (2006 IRC)* |
|  | FASTENER SCHEDULE:  | TABLES R602.3(1) & R602.3(2)*pg. 174-179* |
|  | EXTERIOR WALL COVERINGS AND WEATHER BARRIERS: MUST USE 2021 IRC FOR SECTION 703.7 | R703*Starts pg. 364* |
|  | ROOF FRAMING: truss lay-out, RIDGES: 1x with width to match rafter cuts, PURLINS: 4 foot on center max. and 8 feet max length, CONNECTIONS & RAFTER TIES: at 4 feet max on center, hurricane ties (H-1), ROOF SHEATHING, and size and spacing of rafters at OVER-BUILDS  | R802*pg. 383* |
|  | ROOF VENTILATION: The minimum net free ventilation area shall be 1/150 of the area of the vented space with exceptions (only one per the 2015 IRC)  | R806*pg. 428* |
|  | ACCESSIBLE ATTIC ACCESS: 22 x 30 inches with 30 inches of vertical clearance above  | R807.1*Pg. 429* |

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|  | ICE DAM PROTECTION: ice and water shield at eaves to 24 inches inside the exterior wall line of the building  | *R905.1.2* *Pg. 436* |
|  | INSULATION VALUES IN WALLS, FLOORS, CEILINGS, WINDOWS, AND DOORS: Basement walls = R-15/19, Crawl Space Walls = R-15/19, Walls = R- 20, Floors = R-30, Ceilings = R-49, Windows = U- 0.30 *OR* RES-CHECK 2018 IECC. | N1102.1 OR 2021 PA ALTERNATIVE RESIDENTIAL ENERGY PROVISIONS |
|  | BLOWER DOOR TESTING (Mandatory) | N1102.4*pg. 482* |
|  | DUCT TESTING (Mandatory)*(Exception: Unless air handler and all ducts located entirely within conditioned space)* | N1103.3.3*pg. 484* |
|  | MECHANICAL VENTILATION REQUIRED | N1103.6*pg. 486* |
|  | CLOTHES DRYER EXHAUST: 35 feet to outside with 5-foot reduction for 90-degree bends  | M1502.4.5*pg. 485* |
|  | MECHANICAL VENT TERMINATIONS: vent terminal shall be located not less than 4 feet below, 4 feet horizontally from, or 1 foot above any door, window or gravity air inlet into a dwelling.  | M1804.2 - M1804.2.6*pg. 521* |
|  | DWV SYSTEM: Riser diagram showing plumbing fixtures, trap, and vent sizes. Vent terminations per Chapter 31. | P3005Pg. 667-671 |
|  | ELECTRICAL EQUIPMENT LOCATIONS & CLEARANCES:  | E3705.7*pg. 719*  |
|  | ILLUMINATION PER SECTION 3405.7 | Pg. 690 |
|  | REQUIRED RECEPTACLE OUTLETS IN: walls, counters, islands, floors, bathroom, outdoors, laundry, basement, garage, hallways, and mechanical room  | E3901*pg. 727-729* |
|  | ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION IN: bedrooms, kitchens, family rooms, dining rooms, living rooms, parlors, dens, hallways, rec rooms, laundry rooms and similar areas  | E3902.16*Pg. 730-731* |
|  | GFCI PROTECTION IN: bathroom and jetted tub motors, garage, outdoor, crawlspace, unfinished basement, kitchen counters, islands, dishwashers and bar sinks and electrically heated floors. | E3902*pg. 729-730* |
|  | RECEPTACLES REQUIREMENTS:TAMPER RESISTANT:  | E4002E4002.14*Pg. 757-758* |