

KRC 2018 Kentucky Residential Code

Filename: KRC 2018 Kentucky Residential Code Final Inspection Checklist

Final Inspection Checklist

This is a checklist to guide a permit holder to be ready prior to calling for a final inspection. This listing is not intended to cover all requirements of the 2018 KRC, and cannot address all possible conditions on every jobsite. If special conditions occur on this project, check with the local building inspector for other requirements. A final inspection is made after the permitted work is complete and prior to occupancy.

(R109.1.6) The owner provides means for inspection of such work, prior to requesting the inspection.

(R109.3) (e.g. ladders, pull down stairs, site-built stairs, attic access, crawlspace access, etc.)

Exterior Site:

1. **Building permit is posted** and approved plans on site and accessible to the inspector. (The permit posted visible from street is recommended.) (R105.7)
2. The House **street number posted** on site, plainly visible from the street or road fronting the property, using **4" high numbers** on a contrasting background color. (R319)
3. The property, when located in a flood hazard area, has previously filed with the building official the **documentation of elevations** required in Section R322.1.10, a **FEMA elevation certificate** by a licensed surveyor, for construction elevation certification of the floor elevation. (R106.1.3)
4. The **driveway entrance meets the required width, gravel thickness, and location on site as established by the driveway permit** from the county road department or if applicable the state highway department. The approved correctly sized and correctly located road drainage tile is installed under the drive, when required. (These must be approved by the County Road Department and/or State Highway Department per ordinances).
5. **The final grading of the jobsite** is required to be completed and the grade at the foundation walls slopes away from the building a **minimum of 6" drop within the first 10'**. **(R401.3) The use of drains or swales is approvable when lot lines, walls etc. prevent a 6" drop within the first 10'**.(Exception 401.3)
6. **Seeding and protection of disturbed areas** of lot to prevent erosion is required to maintain final grading. (Local Erosion Control Ordinance)
7. **Hardscapes** (paved or concrete driveway aprons, sidewalks, etc.) have a minimum 2% slope away from the structure within 10 feet. (R401.3)
8. **Guardrail required for open-sided walking surface > 30 inches above floor or grade below** within 3 feet horizontally are equipped with guardrails designed per code. (R312.1.1) This applies to raised floor elevations such as porches, decks and retaining walls (R312.2). Guards are a minimum of 36" height. Guards don't allow passage of a 4 inch sphere. (R312.1.3) Guards are capable of withstanding 200 lbs. applied in any direction at any point on the rail.
9. **Carports** not open on at least two sides are inspected as garages and all fire separation requirements will apply. (R309.2)
10. **Guards at retaining walls** (R312.2) Where retaining walls with differences in grade level on either side of the wall is in excess of 30 inches and are located closer than 3 feet to a walk,

designated walking path , or driveway on the high side, such retaining walls shall be provided with guards that are constructed in accordance with Section R312.1.2 and R312.1.3.

11. **Retaining Walls and Foundation Walls.** Retaining walls and foundation walls must be completed and constructed to meet the requirements of **(R404.1)** Kentucky Amendments. *Foundation and Retaining walls shall be built per Table R404.1.2(8) and shall meet the requirements governing: maximum wall height; maximum unbalanced backfill height; minimum wall thickness in inches; and Grade number size, layout, and spacing of rebar reinforcing; and including applicable notes a.through p. of that Table. (Page 28 & 29 of Ky. Amendments, First Edition, June 2018.)*

Exterior Building

1. Walls retaining earth and enclosing interior habitable space require dampproofing to finished grade. (R406.1) Where a high water table exists, waterproofing to finished grade is required. (R406.2)
2. The drain system and filter fabric required for foundations enclosing useable or habitable space below grade is required, with the system line draining to daylight on the property, completed prior to backfill installation. (R405.1) **Roof drainage (R405.1)** must discharge at least five feet from foundation walls or to an approved drain system if soils are expansive or collapsible.
3. The **exterior egress door**, not requiring access through a garage, and having direct access to a public way **is installed.** (R311.1 and R311.2). The **approvable steps to the required egress door are completed.** The **required floor or landing**, minimum of 36" by 36" or per size of door opening **is located on each side of each exterior door.** (R311.3) The door is side-hinged and net 32 inches from face of door to doorstep. (R311.2) No key or special effort allowed to operate egress door from inside. (R311.1) The floor or landing at the required egress door **cannot be more than 1.5" lower than the top of the threshold.**
4. **Floor elevations for other exterior doors.** Doors other than the required egress door shall be provided with landings or floors not more than 7 ¾" below the top of the threshold. Exterior doors have landings, minimum 36" by 36" or per size of door opening. **Exception:** A top landing is not required where a stairway of not more than two risers is located on the exterior side of the, provided that the door does not swing over the stairway. (R311.3.2)
5. **Storm and screen doors** shall be permitted to swing over exterior stairs and landings. (R311.3.3)
6. A **6" distance** maintained between top of final grade of ground **to bottom of wood or vinyl siding/trim.** (R317.1)
7. **All exterior windows, openings, and penetrations are caulked** to meet the energy code requirements.
8. **Chimneys terminate** 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)
9. Masonry chimneys shall have a concrete, metal or stone cap, a drip edge, and a caulked bond break around any flue liners in accordance with ASTM C 1283. The concrete, metal or stone cap shall be sloped to shed water. (R1003.9.1)
10. Spark arrestors are not required on masonry chimneys, but when they are installed shall meet all of the four requirements found in (R1003.9.2). A. The net free area of the arrestor shall be not less than four times the net free area of the outlet of the chimney flue it serves. B. The arrestor screen shall have heat and corrosion resistance equivalent to 19-gage galvanized steel or 24-gage

stainless steel. C. Openings shall not permit the passage of spheres having a diameter greater than ½ inch nor block the passage of spheres having a diameter less than 3/8 inch. D. The spark arrestor shall be accessible for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the flue.

11. Where a masonry or metal rain cap is installed on a masonry chimney, the net free area under the cap shall be not less than 4 times the net free area of the outlet of the chimney flue it serves. (R1003.9.3)
12. **Means of egress attachment.** Exterior landings, decks, balconies, stairs and similar facilities shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. Attachment shall not be accomplished by use of toenails or nails subject to withdrawal. (R311.5.1)
13. **Construction Debris Removal Required.** All construction materials shall be removed from site before a building is occupied or used for any purpose. (Hardin County Landfill Ordinances). ***The construction debris hauled off-site by use of an on-site dumpster or private vehicles hauling debris off-site in a routine manner. Burning of debris on-site is a violation of OSHA regulations and burial of debris on-site is a violation of the landfill adoption ordinance of Hardin County requiring waste management.***

Crawl Space (Underfloor Areas)

1. Remove all formwork materials (except ICF) and organic and other debris. The under-floor grade shall be cleaned of all vegetation and organic material. All wood forms used for placing concrete shall be removed before a building is occupied or used for any purpose. (R408.5) **All construction materials shall be removed** before a building is occupied or used for any purpose. (R408.5)
2. **Access openings: Crawl space floor openings** shall be a minimum of **18" by 24" in size.** (R408.4)
3. **Access openings: Wall openings** through a perimeter wall shall be a minimum of **16 inches high by 24 inches wide** (R408.4)
4. **A minimum of 16"high by 24" deep by 24" wide areaway** is required **in front of the crawl space access opening** when located below grade. Where any portion of the through wall access is below grade, the areaway shall be provided. The bottom of the areaway shall be below the threshold of the access opening. This opening shall not be located under a door to the residence. (R408.4)
5. **Openings sized** and located to **allow removal of mechanical equipment** in a crawl space. (R1305.1.4)
6. The **finished grade of under-floor surface** shall be permitted to be located at the bottom of the footings; however, where there is evidence that the groundwater table can rise to within 6 inches of the finished floor at the building perimeter or there is evidence that the surface water does not readily drain from the building site, the grade in the under-floor space shall be as high as the outside finished grade, unless an approved drainage system is provided. (R408.6)
7. **Clearances to soil. Girders minimum 12 inches** above exposed ground if not pressure treated or natural durable. **Joists and subfloor minimum 18 inches** above ground if not pressure treated or natural durable. Sills less than 8 inches from exposed ground pressure treated or natural durable wood. (R317.1)

Crawl Space Ventilation

1. **Crawl Space Ventilation required** through foundation walls or exterior walls under-floor spaces, except for basements. (R408.1, R408.2)
2. **One vent opening within 3 feet of each corner.** Ventilation at crawlspace unobstructed by insulation. Ventilation at crawl space as shown on plan, minimum 1 sq. ft. of ventilation per 300 sq. ft. of under-floor space area., unless the ground surface is covered by a Class 1 vapor retarder (6-mil poly). Where Class 1 vapor retarder (black 6-mil poly) is used, the minimum net area of **ventilation openings** shall be not less than 1 sf for each 1500 sf of under-floor area. The required openings are placed to provide cross ventilation of the space. (R408.2) (R408.1) **Vapor barrier** is black 6-mil poly plastic covering crawl completely, wall to wall, with all seams lapped 12”.
3. **Ventilation openings covered** for their height and width with any of the following materials provided the least dimension of the covering shall not exceed ¼”: perforated sheet metal plates, expanded sheet metal plates, cast-iron grill or grating, extruded load bearing brick vents, hardware cloth of 0.035” wire or heavier, Corrosion resistant wire mesh. Exception: The installation of operable louvers shall not be prohibited.
4. **No ventilation required with sealed vapor retarder, insulated walls and space conditioned or provided with continuous mechanical ventilation.** (R408.3)
5. Where required, **flood resistant construction in flood hazard areas** (treated/water resistant materials, flood vents, etc.).
6. **Check for current energy code requirements in crawlspace: Black 6-mil poly** on ground, **R-19** insulation minimum between floor joists. When vapor barrier is used the vapor barrier is installed against the heated side. Insulation required to be secured in place. Ventilation at crawlspace maintained unobstructed by insulation. (R1102.1.2)

Exterior stairs, guardrails, handrails, landings, decks.

All required exterior exits, stairs, guardrails, handrails, landings and decks (R502) shall be complete, prior to the final inspection. Check with (R311.7.8) on handrail requirements. **Note: Interior stairways, landings, guardrails, handrails, nosing profile, headroom, and construction requirements, etc. are same as exterior.** **Exception:** *Interior stairs protected from the weather are not required to be constructed of pressure-preservative treated lumber unless they are installed in direct contact with concrete.*

1. Materials. (R504.3) All exterior framing materials including sleepers, joists, blocking and plywood subflooring, shall be pressure-preservative treated and dried after treatment in accordance with AWPA U1 and shall bear the label of an accredited agency.

2. Decks. (R507) Exterior Decks. Refer to this section for all required information on Exterior Decks.

This is a new section and the floor joist spans for exterior decks are not the same as those for interior floors. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. **(Combination through bolts or lag screws is the acceptable fastener method.)** Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in **Table R507.5** acting on the cantilevered portion of the deck. Cantilevered spans not exceeding the nominal depth of the joists are permitted. Spacing of deck joists with cantilevers decreases spacing per **Table R507.5**. Deck ledgers shall not be supported on stone or masonry veneer. **(R507.2.1)**

Means of Egress. (R311)

3. Stairways. Width. (R311.7.1) Stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 31.5 inches where a handrail is installed on one side and no less than 27 inches where handrails are provided on both sides. Stairways and balconies shall be positively anchored (not toe nailed) **(R311.5)**.

4. Stairways. Treads and Risers. (R311.7.5). The maximum riser height shall be 8 ¼ inches (R311.7.5.1 KY Amendments) and the minimum tread depth shall be 9 inches (R311.7.5.2 KY Amendments) (plus the required ¾ inch but not more than 1 ¼ inch nosing profile). The riser height shall be measured vertically between leading edges of the adjacent treads. The tread depth shall be measured

horizontally between the vertical planes of the foremost projection of the adjacent treads and at a right angle to the tread's leading edge. The walking surface of treads and landings of a stairway shall be sloped no steeper than one unit vertical in 48 units horizontal (2 percent slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch.

5. Stairway Nosings. (R311.7.5.3) The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch.

6. Stairway nosing profile. (R311.7.5.3) A nosing not less than ¾ inch but not more than 1 ¼ inches shall be provided on stairways with solid risers. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch-diameter sphere. **(R311.7.5.1)**

Exceptions: 1. A nosing is not required where the tread depth is a minimum of eleven inches. 2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches or less.

7. Stairway Headroom. (R311.7.2). The minimum headroom in all parts of the stairway shall be not less than 6'-8" measured vertically from the sloped plane adjoining the tread nosing or from the floor surface of the landing or platform.

8. Stairway Winders. (R311.7.5.2.1). Winders are permitted, provided that the width of the tread at a point not more than 12 inches from the side where the treads are narrower is not less than 10 inches and the minimum width of any tread is not less than 6 inches. The continuous handrail required by Section R315.1 shall be located on the side where the tread is narrower.

9. Stairway Handrails. (R311.7.8) Handrails having minimum heights of 34" and maximum heights of 38", measured vertically from the nosing of the treads, shall be provided on at least one side of stairways.

10. Handrails Required. (R311.7.8) Handrails shall be provided on at least one side of each continuous run of treads or flight with 4 or more risers. All required handrails shall be continually graspable the full length of the stairs with four (4) or more risers from a point directly above the top riser of a flight to a point directly above the lowest riser of the flight. Handrails adjacent to a wall shall have a space of not less than 1 ½ inch measured between the wall and the handrail.

11. Handrail Ends shall be returned or shall terminate in newel posts or safety terminals. Exceptions: 1. Handrails shall be permitted to be interrupted by a newel post at a turn. 2. The use of a volute, turnout, or starting easing shall be allowed over the lowest tread. **(R311.7.8.2)**

12. Handrail Grip Size. (R311.7.8.3) The handgrip portion of handrails shall have a circular cross section of 1 ¼ inches minimum to 2 5/8 inches maximum. Other handrail shapes, including those complying with Figure R311.7) that provide an equivalent grasping surface are permissible. (2 x4 lumber not approved).

Edges shall have a minimum radius of 1/8 inch. All required handrails shall be one of the following types or provide equivalent graspability.

Type I. Handrails with a circular cross section shall have an outside diameter of at least 1 ¼ inches and

not greater than 2 inches. If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6 ¼ inches with a maximum cross section dimension of 2 ¼ inches.

Type II. Handrails with a perimeter greater than 6 ¼ inches shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of ¾ inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. The minimum width of the handrail above the recess shall be 1 ¼ inches to a maximum of 2 ¾ inches. Edges shall have a minimum radius of 0.01 inch.

13. Stair Handrails. (R311.7.8) Stair handrails shall be permitted to be discontinuous between the top and

the bottom of a flight of stairs where the ends of the discontinued rail are returned to a wall or post and the maximum distance between the ends of discontinued rails is not greater than 4 inches.

14. Guards Required. (R312.1). Porches, balconies, or raised floor surfaces (decks), located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height.

Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads.

Porches and decks which are enclosed with insect screening shall be equipped with guards where the walking surface is located more than 30 inches above the floor or grade below.

15. Guard Opening Limitations. (R312.1.3) Required guards on open sides of stairways, raised floor areas, decks, balconies and porches shall have intermediate rails or ornamental closures that do not allow

passage of a sphere 4 inches in diameter. Exception: 1. Openings for required guards on the sides of stair treads shall not allow a sphere 4 3/8 inches in diameter to pass through. Exception: 2. The triangular openings formed by the stair riser, stair tread, and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches cannot pass through.

16. Landings at doors. (R311.3) There shall be a floor or landing on each side of each exterior door. The width of each landing shall be not less than the door served. Every landing shall have a dimension of not less than 36 inches measured in the direction of travel. The slope at exterior landings shall not exceed ¼ unit vertical in 12 units horizontal. The floor or landing at a door shall not be more than 1.5 inches lower than the top of the threshold. **(R311.3.1) Exception:** The landing or floor on the exterior side shall not be more than 8 ¼" below the top of the threshold provided the door does not swing over the landing or floor.

Exception: 1. Other than the required exit door, where the vertical elevation measured between the interior finish floor and the exterior finish grade, patio or deck does not exceed 30 inches, a landing is not required for the exterior side of the door provided the door, other than an exterior storm or screen door, does not swing over the stairway. **(R311.3.2 KY Amendments)**

Exception: 2. The landing at an exterior doorway shall not be more than 8 ¼ inches below the top of the threshold, provided the door other than an exterior storm or screen door, does not swing over the landing.

Required egress doors shall have landings. **(R311.3.1 KY Amendments)** Exception

17. Landings for stairways. (R311.7.6) There shall be a floor or landing at the top and the bottom of each

stairway. The width perpendicular to the direction of travel shall be not less than the width of the flight served. Landings of shapes other than square or rectangular shall be permitted provided that the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required

landing width. Where the stairway has a straight run, the depth in the direction of travel shall be not less than 36 inches. of each landing shall not be less than the stairway or door served. Every landing shall have

a minimum dimension of 36 inches measured in the direction of travel. A floor or landing is required on each side of each exit doors and top and bottom of stairs. The floor or landing at the door shall not be more than 1.5 inches below top of threshold. **(R311.4.3 KY Amendments)**. The landing shall be permitted to have a slope not to exceed 0.25 units vertical in 12 units horizontal. Floor or landing maximum 1 ½ inches below door threshold. **(R311.3)**.

18. Attachment of decks or porches. (R311.5.1) Required exterior egress balconies (*example: decks or porches*), exterior exit stairways and similar means of egress components shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. **Such attachment shall not be accomplished by use of toenails or nails subject to withdrawal.** (*Use lag screws or combination through bolts approved for use with pressure treated wood*).

19. Exterior doors. Storm and screen doors shall be permitted to swing over exterior stairs and landings. **(R311.3.3)** *If there is no storm or screen door and the home's exterior egress door swings out, there must be a landing on the outside of the home before starting down the stairs. Refer to landings for stairways. (R311.7.6)*

Interior

- 1. Egress Doors (R311.2). KY Amendments.** Not less than one egress door shall be provided for each dwelling unit. The egress door shall be side hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Exterior egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

Garages Attached

- Garage floor surface of approved noncombustible material (e.g.: concrete). Floors used for parking of vehicles sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway. (R309.1)
- Single-family dwellings garages separated from residence and its attic area by not less than ½" gypsum board on walls applied to the garage side or equivalent. (Table R302.6)
- Single-family dwellings garages separated from residence and from habitable rooms above the garage by not less than 5/8" Type X gypsum board or equivalent applied to the garage side. (Table R302.6)
- Structures supporting a floor/ceiling assembly used for separation required by this section covered with not less than ½" gypsum board or equivalent. (Table R302.6)
- Openings from a private garage into a room used for sleeping purposes shall not be permitted. (R302.5.1)
- Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8" in thickness, solid or honeycomb core steel doors not less than 1 3/8" thick, or 20-minute fire-rated doors. (R302.5.1)
- Duct Penetrations. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet steel or other approved material and *shall not have openings in 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, R302.11 Fireblocking)

Attics

1. **Attic Access.** (R807). Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that exceed 30 square feet and have a vertical height of 30 inches or more. The rough-framed opening shall not be less than 22 inches by 30 inches and shall be located in a hallway or other readily accessible location. A 30-inch minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. The attic access opening shall also be insulated to R-38 and be weather-stripped at perimeter edges. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened and to provide a permanent means of maintaining the installed R-Value of the loose fill insulation. (2009 IECC, 402.2.3). See *Section M1305.1.3* for access requirements when mechanical equipment is located in attics.

Smoke Alarms

1. **Smoke alarms**, listed and labeled UL 217, and installed in accordance with NFPA 72 and Section R314, which receive their primary power from the building wiring and when interrupted shall receive power from a battery, are required. Single and multiple station smoke alarms shall be installed in the following locations: 1. in each sleeping room; 2. outside of each separate sleeping area in the vicinity of the bedrooms; and 3. on each additional story of the dwelling, including the basement and habitable attics. When more than one smoke alarm is required to be installed the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. (R314). Smoke alarms shall be installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by *Section R314.3*.

Carbon Monoxide Alarms

1. For new construction, an approved carbon monoxide alarm shall be installed when either or both of the following conditions exist: 1. The dwelling unit contains a fuel-fired appliance. 2. The dwelling unit has an attached garage with an opening that communicates with the dwelling unit. *Carbon monoxide alarms shall be installed outside of each sleeping area in the immediate vicinity of the bedrooms. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.* (R315.2.1) Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms. (R315.4). Carbon monoxide detection systems approved installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. (R315.2). These alarms shall receive their primary power from the building wiring and shall have battery backup. Where required in existing dwellings. The code now specifically recognizes wireless technology in lieu of interconnection for smoke alarm installations in both new and existing dwelling units. Photoelectric and ionization types of wireless smoke alarms are available, as well as wireless carbon monoxide (CO) alarms. All wireless smoke alarms are listed to UL 217, Single and Multiple Smoke Alarms.

Windows and Glazing

1. **Bedroom Egress Window required. Emergency escape & rescue.** A minimum of one window in each sleeping room must meet the size requirements for an *emergency escape window unit*. The window information shown does not indicate a designation as egress windows. Confirm with your supplier and builder that at least one window unit in each bedroom is an egress window. Grade floor emergency escape window openings shall have a minimum net clear opening of 5 square feet. Second floor emergency escape window openings shall have a minimum net clear opening of 5.7 square feet. (R310.1) Some window units may meet requirements to mandate safety glazing, refer to KRC *Section R308.4 Hazardous locations*. They shall have a sill height of not more than 44 inches measured from finished floor to bottom of clear opening.

2. Emergency escape and rescue openings must be operational from inside the *dwelling* without the use of a key or special knowledge or effort. (R311.2)

Safety Glazing

1. 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)
2. 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 the 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:
 - a. Exposed area of an individual pane greater than 9 sq.ft.
 - b. Bottom edge less than 18" above the floor.
 - c. Top edge greater than 36" above the floor.
 - d. One or more walking surfaces within 36" horizontally of the glazing.
 - e. 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 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)

Energy Code Minimum Requirements

1. **Energy Efficiency.** (N1101) This building is required to meet the compliance requirements of the *International Energy Conservation Code 2009* or by meeting the requirements of this chapter. The insulation thickness and R-ratings used for walls, attic ceilings, floors, and crawl spaces shall be as

established in the 2009 International Energy Conservation Code. Kentucky is located in Climate Zone 4. The minimum insulation requirements accepted are as follows: Roof/ceiling: R-38; Frame Walls: R-13; Mass Walls (solid wood log, solid concrete, or masonry): R-5 (exterior), (R-10 (Interior); Floor over outdoor air or unconditioned spaces: R-19; Basement Mass Walls Continuous R-10, Basement cavity wall insulation R-13; Slab edge width R-10/Depth 2 ft.; Crawl Space wall: R-10 or cavity wall insulation of R-13.; Fenestrations U Factor (windows and glazed doors) 0.35 maximum U-value. *The yellow "Insulation Values in Home" sticker must be completed properly, signed and pasted in the inside of the door cover of electrical main panel box, prior to requesting a final inspection for building occupancy. The permanently installed insulation depth rulers are required in the attic at a rate of one depth ruler per each 300 SF of insulation.* Programmable thermostats are required on the heating & cooling systems. (Mandatory 10-1-12).

Utilities Final Inspections Dates and Final Approval Sticker Installed On-Site, and Other Documentation Required

Termite Pretreatment Documentation

1. **Termite Treatment Required. (R318.1) Protection from subterranean termites shall have been completed using a method in compliance with Section R318.1 Provide documentation in writing indicating and confirming the type of treatment provided. (Section R318).** Termite Infestation Probability Map. **Table R301.2(1).** All counties in Kentucky are deemed to be "Moderate to Heavy" for likelihood of damage from termite infestation. (Kentucky Amendments) There has been a history of local subterranean termite damage. Shields placed on top of an exterior foundation wall are permitted to be used **only** if in combination with another approved method of protection. **(R317.1.3) Geographical areas.** *(Typically chemical termiticide treatment).*

Septic System

1. The **septic** tank system must be inspected and approved, with a (green sticker clearly visible), by the environmentalist office through the local health department. *Written verification from the environmentalist office that property has been approved is required prior to requesting a final inspection for building occupancy. (270-769-0312). Hardin County Environmentalist Office: John Taylor, phone 270-769-0312. In Larue County the Larue County Environmentalist Office is Jake Hanley at 270-358-8665.*

Electrical

1. The **electrical wiring** and associated electrical systems in this project must be installed as per the requirements of the *2017 NFPA 70 National Electrical Code (mandatory 1-1-2019)*. Electrical inspections rough in and final are arranged through this office. *The approved rough-in sticker (red-orange) must be clearly visible on the site prior to requesting a framing inspection and the approved final electrical sticker (green) placed by the electrical inspector must be present inside of the door cover of electrical main panel box at time of Final Inspection request for Certificate of Occupancy at completion of this project.*

HVAC (Mechanical)

1. The **mechanical systems (heating, ventilation and air conditioning)** installed in this project must meet the minimum requirements set out in the *2015 International Mechanical Code*. Bathroom Exhaust fans are required to vent directly to the outside and must pass through the exterior finishes material and be terminated into an appropriately designed protective grille. *(Sec. 401.6)* Clothes dryer vents are required to be of minimum 4" diameter metal duct smooth on the inside, vented directly to the outside, tape joints with approved labeled metallic tape (no duct tape), and terminate into a back draft outlet terminal. The maximum length of a clothes dryer exhaust shall not exceed 25 feet in length (for electric) (35 feet for gas

or per manufacturer's instructions) from the dryer location to the outlet terminal. (Sec. M1502.4.4.1 and labeled in accordance with Section M1502.4.5). Programmable thermostats are required on the heating & cooling systems, in the 2009 International Energy Conservation Code. *It is required by state law for the certified licensed HVAC contractor installer to obtain the state HVAC permit and obtain the rough-in and final mechanical inspections for the heating and cooling system to be installed in this project. **Required inspection stickers must be visible at Rough and Final inspection times.** To obtain these inspections, provide a scaled floor plan for all floors of the project showing all required HVAC system requirements (room names, furnace, ducts-supply and return, registers, etc.) and Manual J and Manual D information pertaining to your project, supplied by the HVAC licensed contractor doing this project.*

Gas

1. The **gas system and its connections**, where available, must be inspected and approved by the local natural gas system provider, and/or the local propane system provider.

Plumbing

1. The **plumbing** installation must meet the currently adopted *Kentucky State Plumbing Law, Regulations and Code (815 KAR Chapter 20)* and be inspected and approved by the local plumbing inspector. Office phone number (270-769-3071). *The green rough-in inspection sticker must be clearly visible on site prior to requesting a framing inspection and **the green final inspection sticker must be visible on the water heater prior to requesting the final inspection.***

Sewer

1. The new **sewer system connections**, where available, must be inspected and approved by the local sewer system provider.