



CONSTRUCTION INFORMATION

A guide for **RESIDENTIAL** construction in Boyle County including the cities of Danville, Perryville and Junction City.

**BOYLE COUNTY BUILDING INSPECTOR'S OFFICE
445 W. MAIN ST. PO BOX 670
DANVILLE, KY 40422
859-238-1107 859-319-4742**

CONTACT INFORMATION

Boyle County

Building Inspector: Rusty Cox

Office Phone Number: 859-238-1107 Cell: 859-319-4742

445 W. Main St. PO Box 670

Danville, KY 40422

E-mail: william.cox@boyleky.com

Danville / Boyle County Planning & Zoning: Office Phone Number: 859-238-1235

State Building Inspector: Dillon Fields Cell Phone : 606-312-9428

Electrical Inspector: Arthur Elliott Cell Phone: 859-265-1036

Plumbing Inspector: Mark Long Office Hours: Monday, Thursday (8 a.m. – 9:30 a.m.)

Office Phone Number: 859-236-3338 ext 29 Cell: 859-582-7273

HVAC Inspector: Jason DeMurray Phone Number: 270-283-1042

Health Dept. Environmentalists: Jason Stevens, Brittany Elkins Office Phone: 859-236-2053

Danville Codes Enforcement Office: Ian Young, Nina Wesley Office Phone: 859-238-1200

Kentucky Division of Building Code Enforcement: 502-573-0373

Kentucky Manufactured Housing: 502-573-1795

State Fire Marshal's Office: 502-573-0382

Kentucky Division of Plumbing: 502-573-0397

Kentucky Electrical Division: 502-573-1797

Kentucky Division for Air Quality: 502-782-6780

Boyle County Engineer: Duane Campbell 859-319-4802 **Public Works:** 859-238-1100 ext. 1002

Call Before You Dig: 811 or 800-752-6007

INTRODUCTION

This booklet is designed to help you along the way to get your project from start to completion. Boyle County (including all cities within, Danville, Perryville and Junction City) encourages new construction and we follow all applicable building codes and regulations to ensure that all completed construction projects are safe and compliant.

Boyle County adopts and enforces the current standards and codes that are adopted by the State Of Kentucky. Currently the adopted codes are :

2018 Kentucky Residential Code (based on 2015 International residential Code with KY amendments)

*The **Kentucky Building Code** is a “mini/maxi” code, meaning that it is a statewide uniform mandatory building code and no local government shall adopt or enforce any other building code; except that the **Kentucky Residential Code** shall govern detached single family dwellings, two-family dwellings and townhouses.*

Other codes also enforced in Boyle County include:

2017 National Electrical Code Kentucky Plumbing Code Kentucky HVAC Code
2015 INTERNATIONAL MECHANICAL CODE 2009 INTERNATIONAL ENERGY CODE

★ ★ ★ ★ **The 2018 Kentucky Residential Code Amendments and a list of adopted and enforced codes can be found at https://dhbc.ky.gov/Documents/KHBC_2018KYCode.pdf** ★ ★ ★ ★

All construction projects must meet the code requirements, which are minimum standards for construction. The builder or contractor is expected to have a working knowledge of these codes. It is recommended that all persons desiring to build use qualified labor with such knowledge. The building codes can be accessed online at: **<http://dhbc.ky.gov>**

In certain cases where a code does not exist to address an issue, the builder must follow the product manufacturer’s instructions or guidelines for installation of materials.

Kentucky does not require contractors or builders to be certified. This does not apply to other tradesmen who also are involved on the project. Plumbers, electricians and HVAC installers must be licensed to legally work on a project.

Kentucky law requires that all workers involved in the building trade shall abide by all regulations involving liability insurance and worker’s compensation insurance. Boyle County also has an ordinance that requires workers involved in the construction trade obtain a contractor’s or sub contractor’s license and register with the county occupational tax office.

Contractors shall provide proof of insurance, contractor’s license and worker’s comp to the building inspector in order for the start of construction to be approved.

The last page is a contractor/sub-contractor list to be filled out and returned to the building inspector before framing inspection.

ENERGY EFFICIENCY

Energy Efficiency has to be demonstrated by a choice of methods – Prescriptive, Performance or Alternative

Prescriptive– Ensuring all materials meet minimum standards for R-Value and Fenestration and show that a thermal envelope exists.

Performance – Having entire area tested by a certified HERS rater and report generated/submitted to inspector.

Alternative – Using an approved software program that will specify conformity by listing all materials used and their ratings. ResCheck and ComCheck are two examples.

Insulation identification and verification

Each piece of insulation 12 inches or more in width requires a manufacturer’s mark visible after installation that identifies its R-value. As an alternative, the code requires the installer to provide certification stating the type, manufacturer, and R-value of the insulation. In addition, for fiberglass or cellulose blown-in or sprayed insulation, the certification must include:

- Initial installed thickness
- Settled thickness
- Settled R-value
- Installed density
- Coverage area
- Number of bags installed

The insulation installer must sign, date, and post the insulation certificate in a conspicuous location. This certification is in addition to the permanent certificate at the electrical panel discussed later in this chapter. When fiberglass or cellulose insulation is blown or sprayed in the joist or truss spaces of the attic, the IRC requires fixed markers to indicate the installed thickness of the insulation. At least one marker must be installed for every 300 square feet. Minimum 1-inch-high numbers must be visible from the attic access for inspection purposes.

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

FENESTRATION U-FACTOR	SKYLIGHT U- FACTOR	CEILING R-VALUE	WOOD FRAME WALL	FLOOR R- VALUE	BASEMENT WALL/ CRAWLSPACE WALL
MAX	MAX	MIN	MIN	MIN	MIN
0.35	0.60	38 (30)	13	19	10/13

The code requires that a sticker like this be placed inside the electrical panel.

Insulation installers should provide their own label attesting to the r-values of the insulation they have installed.

All installers must certify the work they have done.

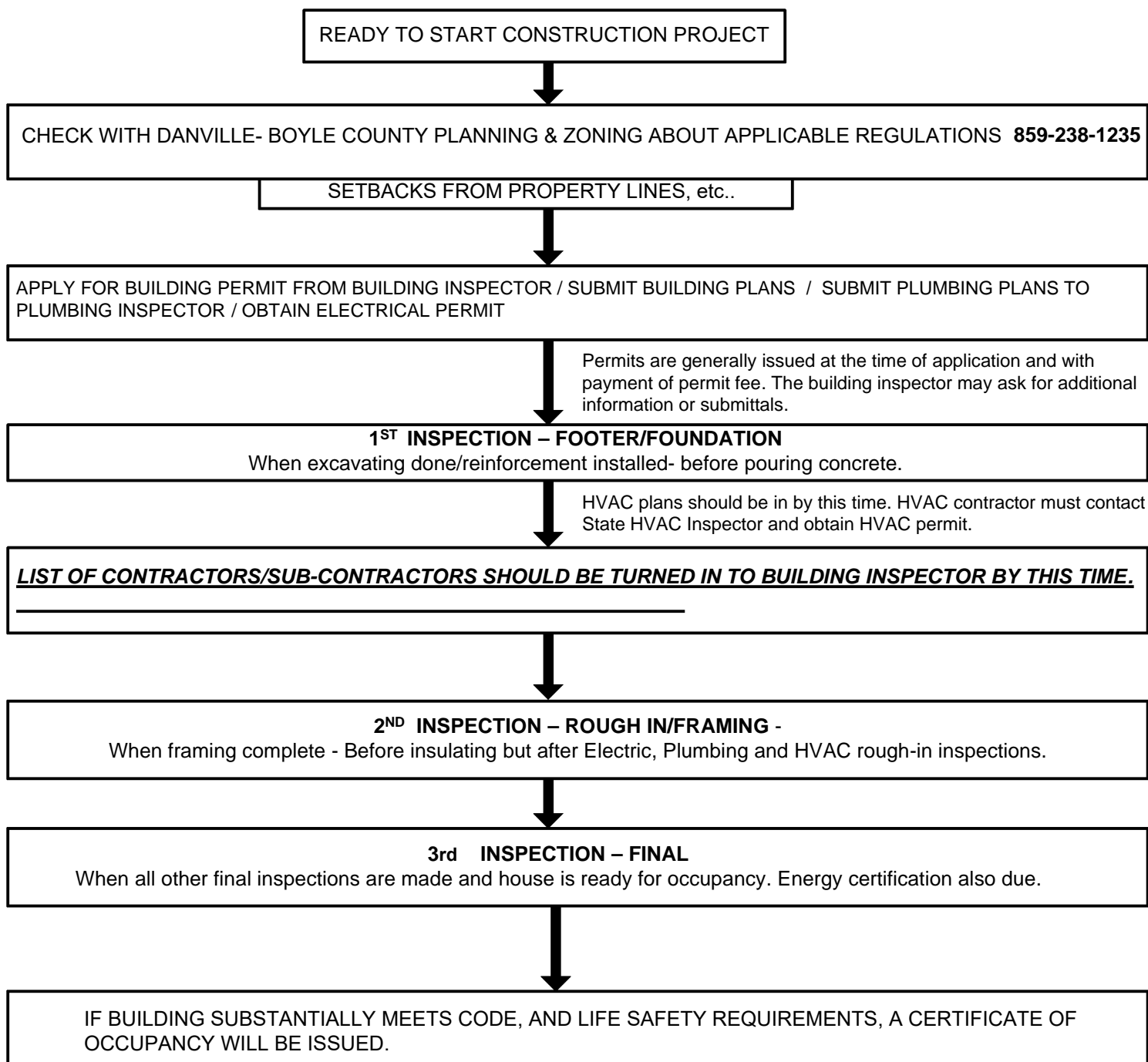
ENERGY CONSERVATION CERTIFICATE

KRC 2018

CODE METHOD: _____	DATE: _____
R-VALUES	
CEILING/ROOF _____	WALLS _____
FLOORS _____	DUCTS _____
BASEMENT WALLS _____	
U FACTOR	
WINDOWS _____	DOORS _____
HVAC	
TYPE _____ EFFICIENCY _____	
WATER HEATER	
TYPE _____ EFFICIENCY _____	
GENERAL CONTRACTOR _____	
INSULATION CONTRACTOR _____	
FORM COMPLETED BY: _____	

THIS STICKER MUST BE PLACED INSIDE ELECTRICAL PANEL BOX

PROGRESSION CHART FOR OBTAINING A PERMIT / CONSTRUCTION TIMELINE



It is the responsibility of the homeowner or contractor to notify the building inspector when the project is ready for different stages of construction inspection.

Failure to notify the building inspector can result in:

1. A stop work order being issued;
2. Tearing out of materials in order to visually inspect framing. (This can be very costly).

Many times, an inspection can be made the same day as notified, however, 1 day's notice is appreciated when possible.

All inspections are important! Do not fail to schedule them!

A building cannot be legally occupied unless a certificate of occupancy is issued by the building inspector.

RESIDENTIAL CONSTRUCTION CHECKLIST

(Not all inclusive)

THESE ARE CODE REQUIREMENTS FOUND IN THE 2018 KENTUCKY RESIDENTIAL CODE (2015 INTERNATIONAL RESIDENTIAL CODE)
ALL BUILDERS ARE EXPECTED BE FAMILIAR WITH AND TO CONSTRUCT WITHIN THESE CODES

FOOTING/FOUNDATION

- BOTTOM OF FOOTING IS MIN. 24" BELOW GRADE. IF NOT MIN. 24", THEN YOU MUST BACKFILL AND ADD 4 MORE INCHES FOR A TOTAL OF 28" BELOW GRADE
- STEPPED FOOTINGS SHALL BE REQUIRED WHEN THE SLOPE EXCEEDS 10 PERCENT (1:10).
- FOUNDATION DRAINAGE REQUIRED – TYPICALLY DRAIN PIPE AROUND PERIMETER
- CONCRETE REINFORCED WITH MINIMUM #4 REBAR – 2 RUNS SUPPORTED BY CHAIRS
- ANCHOR BOLTS/STRAPS/ MAX. 6' ON CENTER
- VAPOR BARRIER REQUIRED – MIN. 6 MIL PLASTIC
- DAMPPROOFING REQUIRED IF CRAWLSPACE IS HABITABLE OR USEABLE
- CRAWLSPACE ACCESS MIN. 16X24"
- VENTS WITHIN 3' OF EACH CORNER
- TERMITE PROTECTION – SPRAY AND/OR TERMITE SHIELDS OR USE TERMITE RESISTANT WOOD
- SHIMS FOR SUPPORT BEAMS & GIRDERS SHALL BE METAL – NO WOOD SHIMS ALLOWED

FRAMING

- HAVE ALL CONSTRUCTION DOCUMENTS ON CONSTRUCTION SITE (TRUSS SPECS, ETC.)
- PROPER NAILING/FASTENING SCHEDULE FOLLOWED
- USE ALL NAIL HOLES IN JOIST HANGERS
- TOP PLATE MUST BE DOUBLED, OVERLAPPED AT CORNERS, END JOINTS OFFSET BY 24"
- MINIMUM CEILING HEIGHT IN HABITABLE AREAS, HALLWAYS, CORRIDORS, BATHROOMS, LAUNDRY ROOMS AND BASEMENTS SHALL BE 7 FEET
- ROOMS WITH SLOPED CEILINGS CAN BE LOWER BUT AT LEAST 50% OF THE ROOM HEIGHT MUST BE 7 FEET.
- STAIR RISER HEIGHT MAX. 8-¼" STAIR DEPTH MIN. 9"
- UNIFORM TREADS AND RISERS (LESS THAN 3/8" DIFFERENCE IN HEIGHT & DEPTH)
-
- HANDRAIL REQUIRED IF THERE ARE 4 OR MORE RISERS ON ONE SIDE OF STAIRS / CONTINUOUS LENGTH OF STAIRS
- HANDGRIP OF HANDRAILS BETWEEN 1-¼" AND 2-5/8"
- MIN. 1-½" FROM WALL
- HEIGHT BETWEEN 34' - 38"
- GUARD FOR STAIRS MAX. 4-3/8" SPACING BETWEEN RAILS
- HANDRAIL TERMINATION INTO WALL OR NEWEL POST
- HANDRAILS / GUARDS PROVIDED FOR WALKING SURFACES/PORCHES / DECKS OVER 30 INCHES ABOVE GRADE
- GUARDRAIL HEIGHT MIN. 36"
- GUARDS PROVIDED FOR RETAINING WALLS W/ GRADE OVER 30" AND WITHIN 36" OF WALKING AREA
- LESS THAN 4" BETWEEN BALLUSTERS (RAILS)
- MINIMUM HEADROOM IN STAIRWAYS 6'-8"
- ENCLOSED ACCESSIBLE SPACES UNDER STAIRS SHALL BE PROTECTED BY ½" GYPSUM BOARD.
- FOR REQUIRED EXIT DOORS, LANDING SHALL BE MAX. 1-½" LOWER THAN TOP OF THRESHOLD (7-¾" OTHERWISE)
- LANDING IS REQUIRED WHENEVER A DOOR SWINGS OVER STAIRS
- NONGRADE FLOOR WINDOWS MIN 5.7 SQ. FT. MIN. CLEAR WIDTH 20" MIN. CLEAR HEIGHT 24" FLOOR TO SILL HT MAX. 44"
- GRADE FLOOR WINDOWS MIN 5.0 SQ. FT. MIN. CLEAR WIDTH 20" MIN. CLEAR HEIGHT 24" FLOOR TO SILL HT MAX. 44"
- FIRE CAULK USED ON VERTICLE OPENINGS IN WALL STUDS
- ATTIC ACCESS SIZE MIN. 22" X 30" FINISHED
- FIRE SEPARATION BETWEEN GARAGE AND HABITABLE AREA ABOVE MIN. 5/8" TYPE X GYPSUM
- ALL PENETRATIONS BETWEEN GARAGE AND HOUSE MUST BE SEALED
- FIRE SEPARATION (DUPLEX) 1 HR. ROOF TO FLOOR FIRE SEPARATION (TOWNHOUSE) 2 HR. ROOF TO FLOOR
- NO OPENINGS FROM GARAGE TO ANY ROOM USED FOR SLEEPING PURPOSES
- DOOR BETWEEN GARAGE AND HOUSE RATED 20 MINUTES OR 1-3/8" SOLID CORE

SEE PAGE 9

CONTINUED ON NEXT PAGE

ENGINEERED BUILDING MATERIALS

ALL TRUSSES, I-JOISTS, LAMINATED VENEER LUMBER MUST HAVE ENGINEERING SPECIFICATION SHEETS THAT ACCOMPANY THE ITEM. THESE SHOULD BE GIVEN BY THE MERCHANT WHERE THE ITEM WAS PURCHASED. THESE SPEC SHEETS SHOULD BE GIVEN TO THE BUILDING INSPECTOR. SPAN LIMITS MUST BE ON THE SPECIFICATIONS.

TRUSSES SHALL NOT BE CUT, NOTCHED, SPLICED OR ALTERED WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL.

WHEN USING ENGINEERED LUMBER, FOLLOW ALL INSTRUCTIONS CONCERNING MAKING CUTS, HOLES AND NOTCHES. SHALL NOT BE CUT, NOTCHED OR BORED WITHOUT APPROVAL OF A REGISTERED DESIGN PROFESSIONAL.

STEEL BEAMS ARE ALSO ENGINEERED AND MUST BE ACCOMPANIED BY ENGINEERING SPECIFICATIONS.

ADDITIONAL LOADS FOR THE TRUSS (HVAC EQUIPMENT, WATER HEATER, ETC.) SHALL NOT BE PERMITTED WITHOUT APPROVAL.

SAFETY

SMOKE ALARMS UL AND NFPA 72 APPROVED

INSTALLED IN EACH SLEEPING ROOM

INSTALLED IN VICINITY OF BEDROOMS

ONE ALARM PER FLOOR OTHERWISE

INTERCONNECTED & PERMANENTLY WIRED / BATTERY BACKUP

LIGHT SWITCHES PROVIDED AT BOTH LEVELS OF STAIRS WITH 6 + RISERS

LIGHTING PROVIDED FOR EGRESS LANDINGS

HOUSE NUMBERS PROVIDED AND ARE LEGIBLE FROM STREET

BATHROOM VENTILATION AIR SHALL BE EXHAUSTED DIRECTLY TO OUTSIDE.

FINISH GRADE SLOPES AWAY FROM HOUSE 6" WITHIN FIRST 10' FROM HOUSE

CARBON MONOXIDE DETECTOR(S) ARE REQUIRED TO BE INSTALLED WHERE THE RESIDENCE HAS GAS FUELED APPLIANCES AND/OR AN ATTACHED GARAGE. DETECTOR CAN BE HARD WIRED OR BATTERY OPERATED.

CHECK TO SEE IF TEMPERED OR SAFETY GLASS IS REQUIRED. **SEE PAGE 14**

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA FOR BOYLE COUNTY

SUBJECT TO DAMAGE FROM								
GROUND SNOW LOAD	WIND SPEED ^d (mph)	SEISMIC DESIGN CATEGORY	WEATHERI NG	FROST LINE DEPTH	TERMITE	ICE BARRIER UNDERLAYMENT REQUIRED	AIR FREEZING INDEX	ANNUAL MEAN TEMP
15	90	B	SEVERE	24"	M - H	NO	727	54.8

SAFETY GLAZING

Check hazardous locations to determine if safety glazing is required:

- ★ Side swinging doors: all locations except for wired glass in required fire doors and jalousies All fixed
- ★ and sliding doors
- ★ All storm doors
- ★ All unframed swinging doors
- ★ All shower, bathtub, hot tub, sauna, whirlpool and steam room doors and enclosures.
- ★ Any glass less than 60 inches above a drain inlet. See Figure D

Glazing in individual fixed or operable panel: See Figure A

- ★ Adjacent to a door
- ★ Within a 24-inch arc of a closed door
- ★ With a glass bottom edge that is less than 60 inches above a floor or walking surface

Fixed Panels:

- ★ With panes exceeding 9 square feet; **and**
- ★ Where the lowest edge is less than 18 inches above the floor; **and** Where
- ★ the top edge is greater than 36 inches above the floor; **and** The walking
- ★ surface is within 36 inches of the glass.

See Figure C

All of these 4 conditions have to exist for safety glazing to be required. See Figure B

EXCEPTION TO SAFETY GLAZING: When protected by a 1-½ inch min. high horizontal bar located 36-38 inches above the walking surface. The bar must be capable of withstanding 50 lbs. per linear foot.

Glazing in walls enclosing stairway landings or within 60 inches of the top or bottom of a stairway where the bottom edge of the glass is less than 60 inches above the walking surface.

Figure A

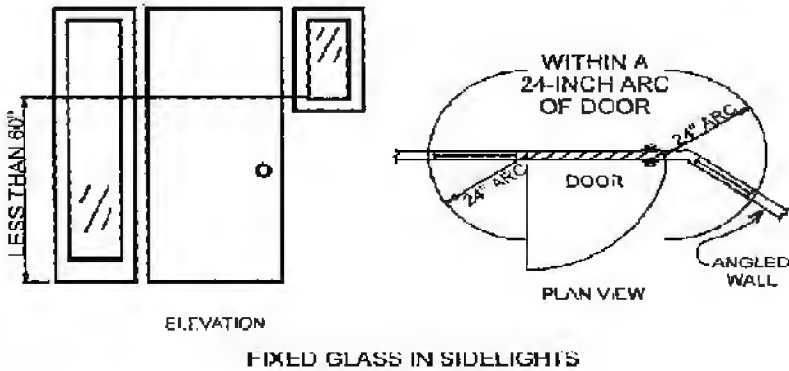


Figure B

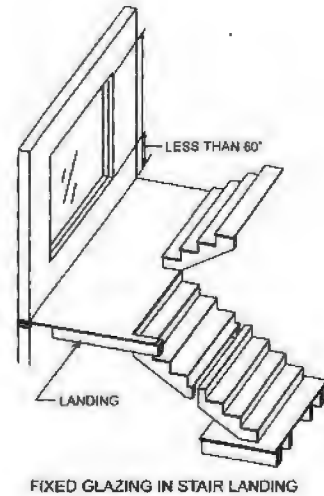


Figure C

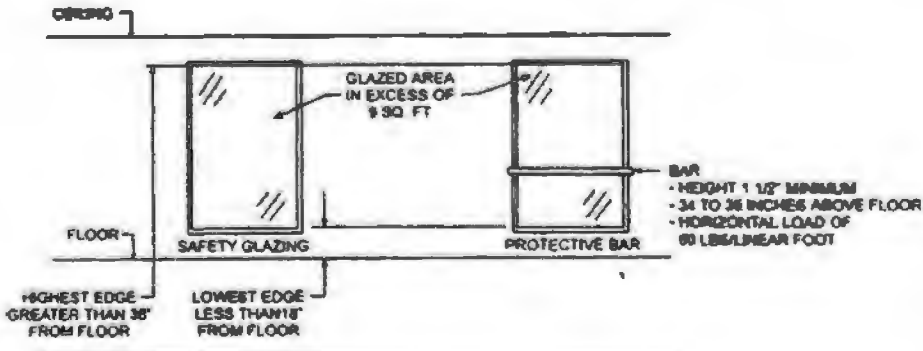
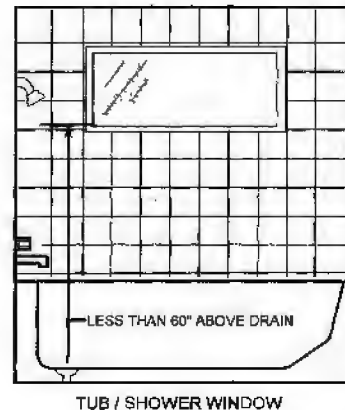
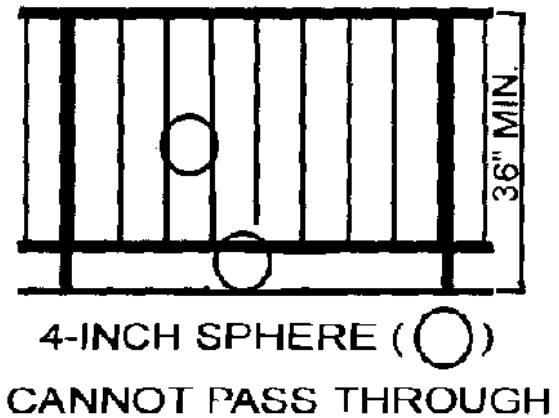
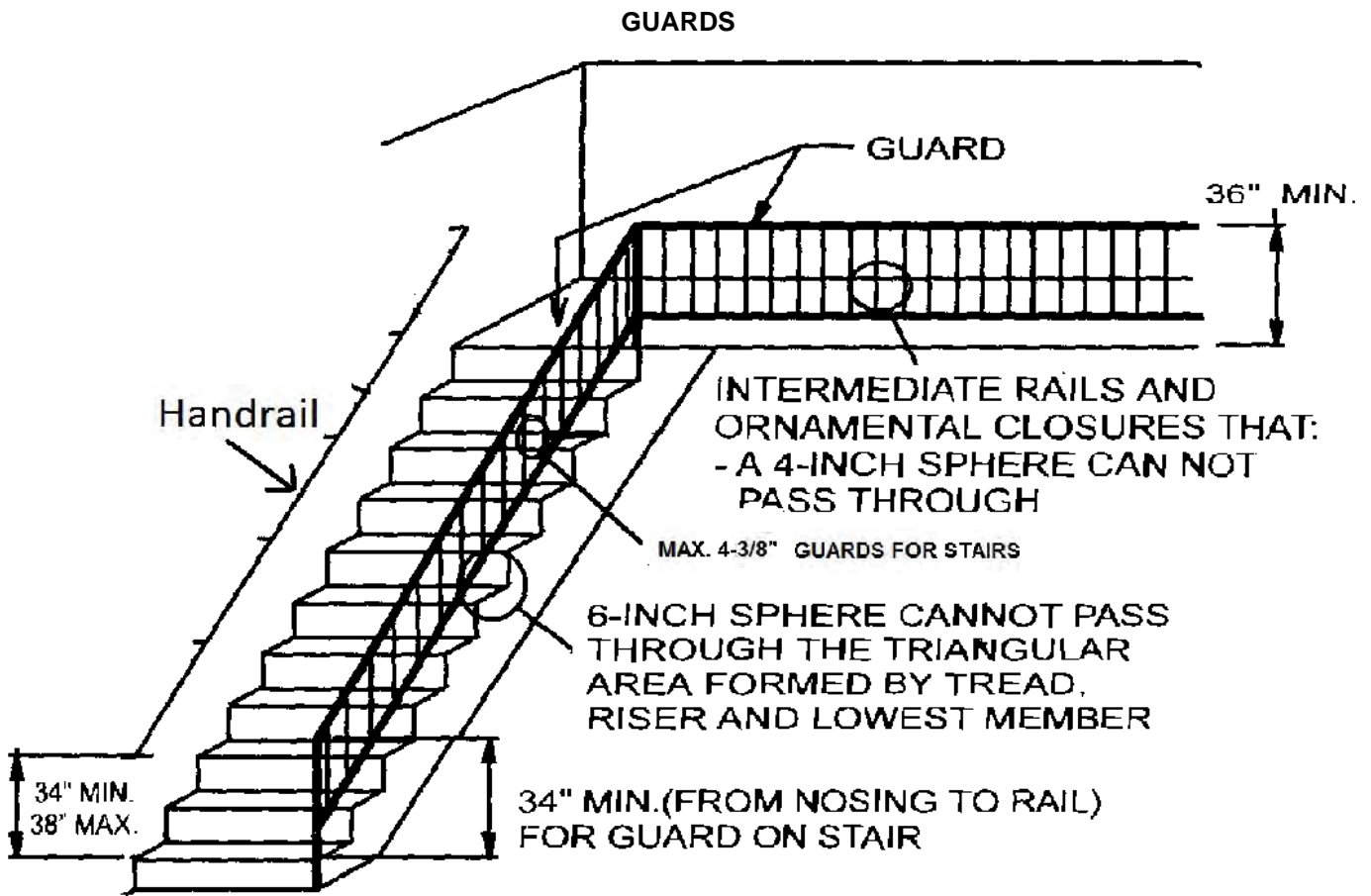


Figure D





STAIRS

R311.5.3.1 RISER HEIGHT

The maximum riser height shall be 8 1/4" (210mm)

R311.5.3.2 TREAD DEPTH

The minimum tread depth shall be 9" (229mm)

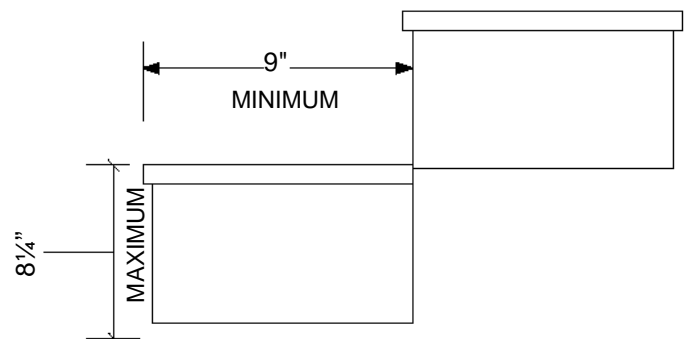
The greatest riser height shall not exceed the smallest riser height by more than 3/8" (9.5mm)

The greatest tread depth shall not exceed the smallest tread depth by more than 3/8" (9.5mm)

R311.5 STAIRWAY WIDTH

Not less than 36" clearance above handrails. Min. clear width at or below handrail is 31.5" or 27" if handrail on both sides.

R311.5.2 STAIRWAY HEADROOM



All parts of the stairway – not less than 6'-8" measured from the nosing, platform or floor

FOR PRE 1978 BUILDINGS - EPA LEAD RULES

What Is the Lead-Based Paint Renovation, Repair and Painting Program (RRP)?

- The Lead-Based Paint Renovation, Repair and Painting Program is a federal regulatory program affecting contractors, property managers, and others who disturb painted surfaces.
- It applies to **residential houses, apartments, and child-occupied facilities such as schools and day-care centers built before 1978.**
- It includes pre-renovation education requirements as well as training, certification, and work practice requirements.
 - Pre-renovation education requirements:
 - Contractors, property managers, and others who perform renovations for compensation in residential houses, apartments, and child-occupied facilities built before 1978 are required to distribute a lead pamphlet before starting renovation work.
 - Training, certification, and work practice requirements:
 - Firms are required to be certified, their employees must be trained (either as a certified renovator or on-the job by a certified renovator) in use of lead-safe work practices, and lead-safe work practices that minimize occupants' exposure to lead hazards must be followed.
 - Renovation is broadly defined as any activity that disturbs painted surfaces and includes most repair, remodeling, and maintenance activities, including window replacement.
 - The program includes requirements implementing both Section 402(c) and 406(b) of the Toxic Substances Control Act (TSCA). (www.epa.gov/lead/pubs/titleten.html)
- EPA's lead regulations can be found at 40 CFR Part 745, Subpart E.

Contractors or Agents who plan to renovate, repair or repaint should visit the following website: <http://www.epa.gov/lead/>

Contractors or Agents who plan to renovate, repair or repaint must also contact the Boyle County building inspector. For projects requiring a building permit, certification must be proven to the inspector before work can begin.

911 Addressing

9-1-1 Addressing and Posting of Numbers

The 911 addressing initiative is designed to assist you in an emergency. The goals of 911 addressing are to help emergency service workers to get to your house quickly and to provide you with an address that is not easily confused with other addresses in the county. To obtain an address, please contact 911 Addressing Coordinator at 859-238-1109.

Homes within the city are addressed the typical 102-104-106 addresses on a designated even number side of a street or road.

The Cities and county ordinances require the posting of your 911 Addressing issued address as follows:

Each address must be posted with numbers 3 inches or taller

Numbers must be easily readable from the roadway

Numbers should be a different color than the background

If you have no mailbox, numbers must be posted at the entrance to the driveway near the roadway

Numbers cannot be hidden by bushes, flowers or foliage

The following are suggested additional posting of address numbers:

If one driveway serves more than one house, the address should also be posted at the point at which each individual driveway splits off

If your mailbox is located on the opposite side of a four lane road, please also post your address at the driveway to eliminate confusion

Numbers should be on both sides of the mailbox and should not be blocked by the flag when in the down position.

If building a new home, post the address in some fashion at the end of the driveway during construction, should someone be injured on the worksite

Replace worn, damaged or missing numbers.

If house is near the roadway or street also post the number on the front of the house.

Do not paint over the number.

Do not place gold color numbers on a treated post as they will fade to the color of the post.

**Please fill out the following form, detach, and return to the building inspector
BEFORE FRAMING INSPECTION**

CONTRACTOR /SUB CONTRACTORS

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PROJECT/ADDRESS

OWNER

CONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

SUBCONTRACTOR / TYPE WORK _____

ADDRESS/PHONE # _____

Boyle County, Kentucky Contractor's License Application

Please provide the following information and submit to the Boyle County Building Inspector. You may submit in person, regular mail or by e-mail. Contractor's license will be issued once payment of **\$50.00** is received by the building inspection office. License will be valid for 1 year from date of issue. **A license is required to work in all areas of Boyle County.**

Business Name	_____
Address	_____
City	_____ State _____ Zip Code _____
Phone #	_____
E-mail	_____

In person, license can be obtained in Boyle County Inspector's office, Danville City Hall between 8:30 - 4:00. Mon-Fri

To submit by mail, send (with check) to: Boyle County Building Inspector, PO Box 670 Danville, KY 40422

Debit and Credit cards can be accepted over the telephone or in person.

To submit by e-mail, send completed form to: **rcox@boyleky.com**

**Questions? Contact building inspector:
859-238-1107 or 859-319-4742**

Make checks payable to: Boyle County Fiscal Court