

ENFORCEMENT

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Plan Application

Submittal Guide

(Submit 2 Sets of Plans)

PLAN REQUIREMENTS

1) GENERAL:

Submit one (1) complete set of construction documents and three (3) sets of plumbing plans that have been prepared by an individual or design professional for the construction, alteration, or repair of a structure. (See Page 7 for Architects' and Engineers' requirements.) Make sure they are legible and complete for ensuring compliance with the regulations. Plans will be reviewed for compliance with the Kentucky Building Code. Plans containing the following information shall be considered meeting the requirements for plan submittals. (See Page 3 and 4 for submission procedures.)

2) ARCHITECTS AND ENGINEERS REQUIREMENTS: See page 7

3) REQUIREMENTS FOR THE PHYSICALLY DISABLED: See Page 8

4) CODES CURRENTLY USED IN THE STATE: See Page 22

5) ARCITECTURAL PLANS:

a. SITE SURVEY:

Copy of site survey bearing signature and seal of a Kentucky registered Land Surveyor for new buildings and additions

b. SITE DIAGRAM:

A site plan indicating the size and location of all new and existing construction on the site and distances from these buildings to lot lines. Indicate new building services, utilities, location, size and finished grades.

c. CONSTUCTION PLANS:

Scale drawings showing foundation, floor plans and elevations, including structural framing details and notes for all walls, floors ceilings and roofs. Electrical, plumbing and mechanical details may be shown on more than one drawing.

d. DETAILS:

- Section: A cross section trough each typical wall showing construction details from footing to and including roof framing. It must demonstrate compliance with the Kentucky Building Code.
- Electrical Details: Indicating lighting, receptacles, motors and equipment, smoke detectors, service entrance locations (size and type overhead or underground), panel size, location and number of proposed circuits. A symbol legend shall be included.
- Plumbing Details: Plans indicating number, type and location of fixtures, type of sewage disposal system, details of disposal system (connection to domestic or septic system layout). Piping layout and riser diagrams shall be included.

6) ENERGY CONSERVATION CALCULATIONS:

The COM Check/ RES Check Forms for the necessary calculations can be downloaded from www.energycodes.gov.*

- SEISMIC DESIGN DATA & LETTER OF SPECIAL INSPECTIONS: (See Page 8) *(letter only)
- 8) FIRE SUPPRESSION DESIGN CRITERIA FORM: (See Pages 16 and 17)*

9) PLAN APPLICATION OR APPLICATION FORM:

One (1) copy of this sheet must be completed and attached to each set of drawings. (See Pages 12 and 13)*

10) PLAN REVIEW FEE:

This office must require a plan review fee to cover plan review and field inspection services provided by the Department of Housing, Buildings and Construction. The local building departments may also have a permit fee and it is recommended to check prior to submission. The fee must accompany the plans in the initial submission. Fees will also be required for shop drawings (See (13) below) and should be submitted with their respective drawings. TO CALCULATE THE FEE SEE PAGES 14 and 15.

11) AFFIDAVIT OF ASSURANCES:

One (1) copy of this form must be completed and submitted with drawings. (See Page 23)*

12) PLUMBING SUBMISSION:

When submitting plans that relate only to plumbing, the plan set is only required to have the following:

- Site plan indicating underground piping and disposal method.
- Floor plan showing layout of all fixtures. (See (3) & (5d) above)
- c. Plumbing riser diagram.
- d. Compliance with handicapped requirements, if applicable. (See Page 8)
- e. Specification book, if required.

13) SHOP DRAWINGS:

The following, when required, must be submitted by a registered engineer or a competent installing contractor, or licensed contractor.

- a. Fire Alarm System
- Fire Suppression System (Sprinkler, Standpipe, CO², Clean Agent, Dry Chemical, Foam, etc...)
- Fuel Installation- to Hazardous Materials Section, State Fire Marshal's Office (Gasoline, LP, Fuel Oil Tanks, etc.)
- d. Range Hood/Exhaust system
- e. Range Hood Extinguishing Systems
- f. Boilers- to Boiler Section, Division of Plumbing
- g. Pool
- h. Bleachers/ Spectator Seating
- Pre-engineered metal buildings
- Pre-fabricated wood trusses

Plans above shall be complete and include all specifications.

If these plans are to be reviewed at the time of the initial plan submittal, the plans shall be complete with all details including size, make, manufacture, anchors, hangers, covering, along with the required fee (Page 14) and a written request to review these plans.

14) ELECTRICAL INSPECTION:

Before permanent electrical service can be provided and legal occupancy is issued on a building, the wiring must be approved by a state certified electrical inspector. A fee is required by the inspector. For further information about obtaining an electrical inspector, contact your local building official or the Electrical Division at (502) 573-0373.

*can be submitted on a cd as a .pdf

PARTIAL PERMITS

The Building Code Official is authorized to issue a permit for any part of a building or structure before the complete plan package has been submitted. Upon request, the Building Code Official is also authorized to issue partial permits if a complete plan package has been filed but falls short of meeting the requirements for full permit.

The issuance of a partial permit is contingent upon adequate information and details having been filed to demonstrate compliance with all pertinent requirements of the KBC.

SITE / FOUNDATION REVIEW

The following items are required before a Site and Foundation Permit is to be issued. Not all items will be applicable on each project. All drawings shall be dimensioned and drawn to scale.

ARCHITECT/ENGINEER

The services of an Architect or Engineer shall be confirmed. When their services are required, the plans shall bear the seal and signature of the Architect and /or Engineer on each sheet. (KRS 322/323 and Table 122.1, KBC)

☐ SITE PLAN

A site plan showing the location of the building and its distance to property lines and other buildings on the same property and finished grades shall be submitted. (Section 107.2.5, KBC)

□ SITE SURVEY

A plan illustrating the location of property lines and bearing the seal and signature of a land surveyor shall be submitted. (Section 122.1, KBC and KRS 322 and 323)

□ NOTICE:

Information for the installation of underground sprinkler supply lines shown on the site plan is not covered under a site and foundation permit. A separate shop drawing review shall be required for this work. This work shall be performed by a Kentucky licensed sprinkler contractor. (refer to KRS 198B.560)

FOUNDATION PLAN

A foundation plan and details shall be submitted, including anchorage details and minimum footing depths. This includes final anchor bolt plans from preengineered metal buildings,

FLOOR PLANS

A floor plan of the building with sufficient information to identify all areas and the Use Group shall be submitted. (Chapter 3, KBC)

SEISMIC DESIGN DATA & LETTER OF SPECIAL INSPECTIONS (Sections 1603.1.5 and 1704, KBC)

CONSTRUCTION TYPE

Sufficient construction details (i.e. exterior walls, bearing structure, interior walls and floor/roof assemblies) shall be submitted to confirm the building will comply with the minimum construction required. (Chapters 5 and 6, KBC)

☐ FIRE WALLS

If a fire wall is provided, the location of this wall shall be identified on the foundation and floor plans. A full height section through the wall shall be submitted. FIRE WALL- A concrete or masonry wall, specified fire rating and structurally independent to allow collapse of construction on either side without causing collapse of the wall itself. A fire wall shall be continuous from footer to or through roof. (Section 706, KBC)

□ SUPPRESSION SYSTEM

Fire suppression design criteria form shall be submitted when the project requires a sprinkler system involving more than 10 sprinklers. This applies to limited area systems as well as full coverage systems. (Section 903.2 and 302.1.1, KBC)

ENERGY

Energy compliance forms shall be submitted for the envelope of the new building or addition. (Section 1301.1.1, KBC)

AFFIDAVIT OF ASSURANCES

An affidavit of assurances shall be submitted to document compliance with Kentucky laws for workers compensation laws. (See Page 23)

ADDITIONS

If the proposed structure is an addition to an existing structure, information confirming the following shall be submitted for the existing building: (Section 3403, KBC)

- a) Construction Type;
- b) Fire wall location, construction and fire rating;
- c) Building Area
- d) Number Stories
- e) Use group Classification; and
- Type suppression system (Full coverage of limited area).

□ <u>FEE</u>

The architectural plan review fee shall be paid in full before any release for construction can be issued. (Section 121 KBC)

□ FAST TRACK ELECTIVE

For applicants seeking a quicker site and foundation review only- the drawings and documents identified above shall be submitted by close of business any Wednesday. Plans will be reviewed the following Friday afternoon or Monday morning for site and foundation only. The fee shall be calculated from Table 121.3.1 *plus* an additional 50% of the full fee. Additional fee shall not be less than \$400 and not more than \$3000. (Section 121.3.1.1)

SHELL REVIEW

The following items are required before a Shell permit is to be issued. Not all items will be applicable on each project. All drawings shall be dimensioned and drawn to scale.

NOTICE: The construction of interior non- load bearing partitions, interior/exterior stairs or ramps, HVAC and electrical systems, and other areas are <u>not</u> typically reviewed as part of the Shell permit. For review of such components as part of the shell review, plans shall be submitted in detail with the shell package.

ALL ITEMS FROM SITE/ FOUNDATION LIST

STRUCTURAL PLANS

All drawings pertinent to the erection of the buildings' structural system shall be submitted. These drawings shall consist of, but are not limited to, exterior/interior load bearing walls, floor/ceiling assemblies, roof structure, all pre-engineered /prefabricated systems (steel buildings, wood floor/roof trusses, and laminated systems, etc... require the seal and signature of a Kentucky licensed engineer) and pole barn/ post and frame designs (all designs that do not meet the prescriptive design for conventional framing are required to be sealed and signed by a Kentucky licensed design professional).

FIRE WALLS

If a firewall is provided or required, a floor plan shall be provided that identifies the location. A full height section (drawn to scale) shall be submitted illustrating the method and materials for construction. (Section 706, KBC)

EXTERIOR WALLS

A complete set of construction details illustrating method and materials for the construction of all exterior walls including fire ratings and opening sizes, locations, and fire ratings.

FULL BUILDING REVIEW

FOOR PLAN(S)

A floor plan illustrating location of interior partitions, means of egress including exit access, exit, and exit discharge and identification of rooms shall be submitted.

MECHANICAL/ ELECTRICAL/ PLUMBING PLANS

A complete set of mechanical, electrical and plumbing plans shall be submitted.

DOOR SCHEDULE

This schedule shall identify door size, hardware and fire ratings.

FIRE BARRIER/ FIRE PARTITION AND ALL OTHER FIRE-RESISTANCE RATED ASSEMBLIES

If such a fire rated assembly is required or provided, the floor plan shall identify its location. A full height section shall be submitted illustrating method and materials for construction. (Chapter 7, KBC)

ENERGY CONSERVATION CALCULATIONS

These calculations are required on all new buildings and additions. Com or Res Check may be utilized. A free software download is available at www.energycodes.gov. Energy calculations shall include envelope, interior and exterior lighting and mechanical compliance.

RANGEHOOD SUBMITTAL REQUIREMENTS

The following is a list of items that are required to be submitted for a complete range hood review. Please note that this office encourages the range hood contractor and hood suppression contractor to coordinate with one another and submit all required drawings in one submittal. The advantage to this coordination will result in one range hood fee of \$225.00 per hood. If suppression drawings and rangehood drawings are submitted separately this office requires a fee assessment of \$225.00 per hood plus \$150.00 per suppression system. *All code references are from the 2012 International Mechanical Code

GENERAL

- Plans include floor plan of area hood is to be installed
- Plans indicate type, dimensions, and location of all cooking appliances to be covered
- □ Plans include shop drawings of hood and duct

TYPE I HOODS

- Shop drawings from the range hood manufacturer or fabricator of factory built UL 710/ UL 710B hoods are exempt from certain IMC requirements including exhaust quantities
- Documentation/details that the Type I hood is designed to automatically activate exhaust fan via a heat sensor or other approved means
- □ Documentation/details that the Type I hood is constructed of minimum #18 gage steel or minimum #20 US STD gauge stainless steel
- Documentation/details that joints on hoods are liquid tight welds
- Provide drawing illustrating clearance to combustibles to hood (18" minimum, exception T 308.6)
- For canopy hoods document the height and overhang of hood over cooking surface
- □ For non-canopy hoods document that the hood is a Minimum of 3 feet above the cooking surface

EXHAUST QUANITITIES

(For non UL 710 hoods or site fabricated hoods)

Provide calculations on the minimum exhaust quantities based on the type of cooking appliance

- □ Extra Heavy Duty appliances
- Heavy Duty appliances
- □ Medium Duty appliances
- □ Light Duty appliances (Type I & II Hoods)
- □ Non canopy

MAKE UP AIR (TYPE | & II HOODS)

- □ Makeup air quantities and method of introduction
 Please note amount ≥ 90% of exhaust air quantity
- □ Provide manufacturer's specifications for the make up unit Including supply amount ranges.
- Demonstrate that make up air is tempered to within 10 degrees of conditioned spaced

GREASE FILTERS

Provide manufacturer's specifications on the grease filters demonstrating that they are listed installed at an angle of 45 degrees and installed a minimum height above the cooking surface based on the type of cooking and Table 507.11

DUCTS SERVING TYPE I HOODS

- □ Document that the duct is constructed of Min. # 16 STD steel or Min. # 18 STD Stainless Steel
- Document that all joints in duct are liquid tight welds and that duct is welded to hood
- ☐ Demonstrate that the hood meets the minimum duct velocity (Sq. ft. of duct ÷ exhaust quantity)
- □ Shaft enclosure details if duct is required to be enclosed in a shaft
- Documentation illustrating that duct is a minimum of 40 inches above roof surface or 10 feet above adjoining grade
- Manufacturer's specifications on the up blast fan to be installed illustrating that the supply ranges meet the minimum exhaust quantities
- Provide drawing illustrating clearance to combustibles from the duct (18 min. exception T308.6)

SUPRESSION SYSTEMS

- Suppression drawings for the hood signed and sealed by a KY rangehood contractor and layout suppression contractor
- Drawing illustrating a manual and automatic means of activating the sprinkler system
- □ Location of manual pulls illustrating the location is a minimum of 10 feet from hood not to exceed 20 feet mounted 42 minimum to 48 inches maximum above the floor
- Documentation that fuel sources for the cooking appliances shall automatically disconnect upon activation of suppression system and be capable of manual reset
- □ Location of a Class K fire extinguisher when cooking involves the use of animal oils or fats

TYPE II HOODS

- Documentation that the Type I hood is constructed of minimum #22 Mfg. STD gauge steel or minimum #24 US STD gauge stainless steel
- Documentation that joints on hoods are liquid tight welds
- Documentation that exhaust terminations are not within 10 foot of air intake openings or shall be 2 feet above air intake opening if outlet is within 10 feet

Type II Ducts and Plenums

- □ Documentation that ducts and plenums are constructed of rigid metallic material
- □ Bracing in accordance with Chapter 6

Dishwasher Appliances Exhaust Quantities Roof Guards:

If required, document the location and details of roof guards for fans that are within 10 feet of roof edge and more than 30 inches above grade or roof

PROFESSIONAL DESIGN REQUIREMENTS

(SEE KRS 322 & 323 FOR COMPLETE REQUIREMENTS OR SECTION 122.1, KBC)

TABLE 122.1 LICENSED DESIGN PROFESSIONAL SEALS

NOTE: Projects involving new structures, additions or renovations require licensed design professional services when the building size or calculated occupant load exceeds the limits indicated by Table 122.1

GROUP CLASSIFICATION OR SPECIAL USE	BUILDING SIZE ° (square feet)	CALCULATED * OCCUPANT LOAD	ARCHITECT	ENGINEER	EITHER	NONE
Assembly	-	100°	X	X		
Business	10,000	100	X	X		1100000
Educational	Any size	Any size	X	X		
Factory & industrial	20,000	_			X	
High hazard	Any size	Any size			X	
Institutional	Any size	Any size	Х	Х		
Mercantile		100	X	X		
Residential	12 dwelling units ⁹	50 ⁹	X	X		
Storage ^e	20,000	_	_		Х	
Public works projects	Any	Any				
		SPECIAL USE	S		^_	
Church buildings ^f	6,000	400	Х	Х		
Day care	3,500 ⁶	100 ^b	X	$\frac{x}{x}$		
Farm Structures	Any size	Any size				X
Mixed uses	Note c	Note c	X	X		
Smaller buildings	Note d	Note d	(<u></u>			X
Nonbuilding structures		_				X
	CONT. 0					^

- a. Assembly uses having 700 square feet to 1,500 square feet may actually have calculated occupant load exceeding 100 persons depending on the specific use of assembly areas.
- b. Net floor area occupied by clients is 35 square feet per client and calculated occupant load is actually client load.
- c. Buildings having two or more different uses require both architect and engineer when the combined calculated occupant load exceeds 100 persons, unless the mixed uses are exclusively factory, high hazard or storage.
- d.Smaller buildings of any use having total area or calculated occupant load less than specified for that use do not require licensed design professional services.
- e.Projects involving additions to existing buildings shall include existing building areas and/or calculated occupant loads when determining requirements for licensed design professional services. Use the actual occupant load if it is greater than the calculated occupant load.
- f. No architect or engineer is required unless the church building size reaches 6,000 total square feet or a calculated occupant load of 400 persons.
- g. The number of dwelling units shall be the determining factor. However, for a dormitory or boarding home, the occupant load shall be determined by area or actual occupant load.

*The occupant load shall be calculated using the different occupiable area within the structure to determine the requirement for an architect and engineer. To determine the calculated occupant load, please see the T1004.1.1, KBC (below).

Table 1004.1.2

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

OCCUPANCY	FLOOR AREA IN SQ. FT. PER OCCUPANT		
Accessory storage area, mechanical equipment room	300 gross		
Agricultural building	300 gross		
Aircraft hangars	500 gross		
Airport terminal	300 gloss		
Baggage claim Baggage handling Concourse Waiting areas Assembly	20 gross 300 gross 100 gross 15 gross		
Gaming floors (keno, slots, etc.) Exhibit Gallery and Museum	11 gross 30 net		
Assembly with fixed seats	See Section 1004.4		
Assembly without fixed seats Concentrated (chairs only — not fixed) Standing space Unconcentrated (tables and chairs)	7 net 5 net 15 net		

Bowling centers, allow 5 persons for each lane			
including 15 feet of runway, and for additional areas			
Business areas	7 net		
Courtrooms — other than fixed seating areas	100 gross		
Daycare	40 net		
Dormitories	35 net		
Educational	50 gross		
Classroom area			
	20 net		
Shops and other vocational room areas Exercise rooms	50 net		
	50 gross		
H-5 Fabrication and manufacturing areas	200 gross		
Industrial areas ^a	100 gross		
Institutional areas	807 05 Sept 05		
Inpatient treatment areas	240 gross		
Outpatient areas	100 gross		
Sleeping areas	120 gross		
Kitchens, commercial	200 gross		
Library	11 20001		
Reading rooms Stack area	50 net		
	100 gross		
Mall buildings – covered and open	See Section 402.8.2		
Locker rooms	50 gross		
Mercantile			
Areas on other floors	60 gross		
Basements and grade floor areas	30 gross		
Storage, stock and shipping areas	300 gross		
Parking garages	200 gross		
Residential	200 gross		
Skating rinks, swimming pools			
Rinks and pools	50 gross		
Decks	15 gross		
Stages and platforms	15 net		
Accessory storage areas, mechanical			
equipment room	300 gross		
Warehouses	500 gross		

ACCESSIBILITY REQUIREMENTS FOR PHYSICALLY DISABLED

All new buildings and facilities, including temporary structures and their associated sites and facilities, shall be accessible to persons with disabilities, including, but not limited to OCCUPANTS, EMPLOYEES, STUDENTS, SPECTATORS, PARTICIPANTS, AND VISITORS. (Section 1103.1, KBC) REVIEW SECTION 1103.2, KBC FOR EXCEPTIONS.

When work involves alterations, additions, change of occupancy or alterations affecting an area of primary function, please review Section 3409 of the IBC.

STRUCTURAL LOADS

1603.1.5 Earthquake Design Data: Where earthquake loads are applicable, the following earthquake design data shall be indicated on the construction documents:

1. Seismic use group.

- 2. Spectral response coefficients S ps and S p1.
- Site Class
- 4. Basic seismic-force-resisting system.

- 5. Design base shear
- 6. Analysis procedure
- 7. Seismic Design Category

STRUCTURAL TEST AND SPECIAL INSPECTIONS

1704.1.1, KBC Building Permit Requirement: The permit applicant shall submit a Statement of *Special Inspections* as a condition for permit issuance. This statement shall include a complete list of materials and work requiring *special inspection* by this section. The inspections to be performed and a list of the individuals, approved agencies and firms intended to be retained for conducting such inspections shall be included. The special inspectors shall be provided by the owner and shall be qualified and approved for the inspection of the work.

EXCEPTIONS:

- Special inspections are not required for work for which a design professional is not required by Section 122.1, KBC. (refer to page 7)
- Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statues and regulations governing the professional registration and certification of engineers or architects.
- Unless otherwise required by the building official, special inspections are not required for occupancies in Group R-3
 as applicable in Section 101.2, KBC and occupancies in Group U that are accessory to a residential occupancy
 including, but not limited to, those listed in Section 312.1, KBC.
- Unless otherwise required by the building official, special inspections are not required for buildings assigned to Category I per Table 1604.5, KBC.

CODES CURRENTLY ADOPTED BY KENTUCKY

2013 Kentucky Building Code (Based on the 2012 International Building Code)

2013 Kentucky Residential Code (Based on the 2012 International Residential Code)

2012 International Mechanical Code

2012 International Fire Code (New construction projects, only when specifically referenced by the body of KBC)

2012 International Energy Conservation Code (Effective Oct 1, 2014)

2009 ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities

2013 Kentucky State Plumbing Law, Regulations & Code (815 KAR Chapter 20)

State Boiler Regulation (KRS 236, 815 KAR 15)

2012 NFPA 1 Fire Prevention Code (as directed by 815 KAR 10:60 Kentucky Standards of Safety)

2010 NFPA 13- Standard for the Installation of Sprinkler Systems

2010 NFPA 13D- Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

2010 NFPA 13R- Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height

2010 NFPA 14-Standpipe, Hose Systems

2009 NFPA 54- National Fuel Gas Code

2014 NFPA 70 National Electrical Code (Effective Oct 1, 2014)

2010 NFPA 72- National Fire Alarm and Signaling Code

2000 NFPA 101- Life Safety Code (Health Care Facilities)

GB-03-01- (not updated yet, this is still based on the 2007 KBC), SEAoK- Special Inspection Guidelines http://seaok.org

The above is for reference only and is only representative of the many codes and standards currently used in Kentucky. For specific applications not listed above, contact the Department of Housing, Buildings and Construction, Division of Building Codes Enforcement at (502) 573-0373 or refer to Chapter 35 of the KBC.