

STAN SHAWVER, DIRECTOR

Boone County Resource Management

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PLANNING - INSPECTIONS - ENGINEERING

DERIN CAMPBELL, CHIEF ENGINEER

EFFECTIVE 10/21/2016

The following is needed in order to process a commercial building permit. Further information/clarification can be found in Section 107 of the International Building Code (IBC).

I. Plan Submittal

- a. Three full sets and two digital copies of plans stamped by an architect or engineer licensed in the State of Missouri. Some projects will also require a digital copy of final plans with "As Builts". A copy of plans and the digital copy will be sent to the Boone County Fire Marshal for review.
 - i. If plans are for a food serving establishment (ie: restaurant, daycare, school, gas station, etc) an additional copy will need to be submitted for the Health Department.
 - ii. If within the city limits of Ashland, a full set of plans will need to be submitted for them.
- b. A site plan showing:
 - i. To scale, the size and location of all new construction and all existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades. Site plan shall be drawn in accordance with an accurate boundary line survey certifying the date of such survey. In the case of demolition, the site plan shall show all construction to be demolished and the location and size of all existing structures that will remain on site as well as any proposed structures to be constructed.
 - a) If within the smaller cities of Boone County, the city must first approve the site location.
- c. Storm water plans*.
 - *Please meet with staff prior to plan submittal to determine storm water requirements.
- d. A completed commercial building permit application with the name and phone number of who to contact upon approval of the plans.
- e. A plan review fee in the amount of \$300.00 payable to Boone County.
 - If located in Southern Boone County Fire Protection District an additional plan review fee made payable to SBCFPD as follows:
 - a) New construction \$200 plus 10 cents per square foot of the footprint.

- b) Remodels \$200 plus \$4.00 per \$1,000.00 of estimated cost of construction.
- c) All plan review fees must be paid in full before the plans will be forwarded to the building official for review.
- f. Upon receiving the required information you will be given a reference number. If you need to contact us for any reason regarding this project please reference this number. Failure to have your reference number may cause delays in retrieving information.

ALL PLANS HAVE A MINIMUM REVIEW TIME OF THREE WEEKS.

II. Commercial Building Permit (after plan approval)

When approval has been given to issue a building permit, an official from our office will contact you with information concerning when you may pick up your approved set of plans and the cost of the building permit.

- a. You will be given a copy of the plans with an "Approved" stamp on them. The stamped plans must be on site during inspections. The building inspector reserves the right not to perform an inspection if the approved plans are not on site.
- b. 24-Hour notice is required on all inspections. We may waive this requirement for footing or ground work inspections if our schedule allows.
- c. You must reference your permit number when calling for inspections. No exceptions.

III. Temporary Occupancy/Final Occupancy Inspections

- a. Prior to a Temporary Occupancy or Final inspection you must have final approval by the Health Department and from Resource Management for driveways or land disturbance (if applicable).
- b. Temporary Occupancy/Final inspections will be conducted by our department along with the Fire Marshal on Tuesday, Wednesday or Thursday between the hours of 10:00-2:00 or by special arrangement.

- [A] 106.3 Restrictions on loading. It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.
- ❖ The loads that this section is referring to are the various structural loads specified in Chapter 16. For example, Table 1607.1 includes the minimum live loads for building design. Unless the building is designed for higher loads than specified in Table 1607.1, those values are not to be exceeded. Note that the loads in Table 1607.1 are minimum live loads. A building is permitted to be designed for higher loads, in which case the higher loads would be the limit of the actual applied loads.

SECTION 107 SUBMITTAL DOCUMENTS

[A] 107.1 General. Submittal documents consisting of *construction documents*, statement of *special inspections*, geotechnical report and other data shall be submitted in two or more sets with each *permit* application. The *construction documents* shall be prepared by a *registered design professional* where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the *building official* is authorized to require additional *construction documents* to be prepared by a *registered design professional*.

Exception: The *building official* is authorized to waive the submission of *construction documents* and other data not required to be prepared by a *registered design professional* if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.

This section establishes the requirement to provide the building official with construction drawings, specifications and other documents that describe the structure or system for which a permit is sought (see Section 202 for a complete definition). It describes the information that must be included in the documents, who must prepare them and procedures for approving them.

A detailed description of the work for which an application is made must be submitted. When the work can be briefly described on the application form and the services of a registered design professional are not required, the building official may utilize judgement in determining the need for detailed documents. An example of work that may not involve the submission of detailed construction documents is the replacement of an existing 60-amp electrical service with a 200-amp service. Other sections of the code also contain specific requirements for construction documents, such as Sections 1603, 1901.4, 2101.3 and 3103.2. These provisions are intended to reflect the minimum scope of information needed to determine code compliance. Although this section specifies that "one or more" sets of construction documents be submitted, note that Section 106.3.1

requires one set of approved documents to be retained by the building official and one set to be returned to the applicant, essentially requiring at least two sets of construction documents. The building official should establish a consistent policy of the number of sets required by the jurisdiction and make this information readily available to applicants.

This section also requires the building official to determine that any state professional registration laws be complied with as they apply to the preparation of construction documents.

- [A] 107.2 Construction documents. *Construction documents* shall be in accordance with Sections 107.2.1 through 107.2.5.
- This section provides instructions regarding the information and form of construction documents.
- [A] 107.2.1 Information on construction documents. Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.
- ❖ The construction documents are required to be of a quality and detail such that the building official can determine that the work conforms to the code and other applicable laws and regulations. General statements on the documents, such as "all work must comply with the International Building Code," are not an acceptable substitute for showing the required information. The following subsections and sections in other chapters indicated in the commentary to Sections 107.2.2 through 107.2.5 specify the detailed information that must be shown on the submitted documents. When specifically allowed by the building official, documents can be submitted in electronic form.
- [A] 107.2.2 Fire protection system shop drawings. Shop drawings for the *fire protection system(s)* shall be submitted to indicate conformance to this code and the *construction documents* and shall be *approved* prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.
- Since the fire protection contractor(s) may not have been selected at the time a permit is issued for construction of a building, detailed shop drawings for fire protection systems are not available. Because they provide the information necessary to determine code compliance, as specified in the appropriate referenced standard in Chapter 9, they must be submitted and approved by the building official before the contractor can begin installing the system. For example, the professional responsible for the design of an automatic sprinkler system should determine that the water supply is adequate, but will not be able to prepare a final set of hydraulic calculations if the specific

materials and pipe sizes, lengths and arrangements have not been identified. Once the installing contractor is selected, specific hydraulic calculations can be prepared. Factors, such as classification of the hazard, amount of water supply available and the density or concentration to be achieved by the system, are to be included with the submission of the shop drawings. Specific data sheets identifying sprinklers, pipe dimensions, power requirements for smoke detectors, etc., should also be included with the submission

[A] 107.2.3 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

❖ The complete means of egress system is required to be indicated on the plans to permit the building official to initiate a review and identify pertinent code requirements for each component. Additionally, requiring such information to be reflected in the construction documents requires the designer not only to become familiar with the code, but also to be aware of egress principles, concepts and purposes. The need to ensure that the means of egress leads to a public way is also a consideration during the plan review. Such an evaluation cannot be made without the inclusion of a site plan, as required by Section 107.2.5.

Information essential for determining the required capacity of the egress components (see Section 1005) and the number of egress components required from a space (see Sections 1014.1 and 1018.1) must be provided. The designer must be aware of the occupancy of a space and properly identify that information, along with its resultant occupant load, on the construction documents. In occupancies in Groups I-1, R-2 and R-3, the occupant load can be readily determined with little difference in the number so that the designation of the occupant load on the construction documents is not required.

The exit discharge path to the public way must also be shown on the construction documents. The exit discharge path to the public way is an important component of the means of egress system for all buildings or structures. The exit discharge path needs to be delineated on the submitted and approved plans to ensure the path is reviewed for compliance with the provisions of the code. This will also provide an historical reference once the building is occupied to ensure the exit discharge path is maintained as intended for the life of the building or structure unless modifications are approved.

[A] 107.2.4 Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior

wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

This section specifically identifies details of exterior wall construction that are critical to the weather resistance of the wall and requires those details to be provided on the construction documents. Where the weather resistance of the exterior wall assembly is based on tests, the submitted documentation is to describe the details of the wall envelope and the test procedure that was used. This provides the building official with the information necessary to determine code compliance.

[A] 107.2.5 Site plan. The *construction documents* submitted with the application for *permit* shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from *lot lines*, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and *design flood* elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The *building official* is authorized to waive or modify the requirement for a site plan when the application for *permit* is for *alteration* or repair or when otherwise warranted.

Certain code requirements are dependent on the structure's location on the lot (see Sections 506.2, 507, 705, 1025 and 1206) and the topography of the site (see Sections 1104, 1107.7.4 and 1804.3). As a result, a scaled site plan containing the data listed in this section is required to permit review for compliance. The building official can waive the requirement for a site plan when it is not required to determine code compliance, such as work involving only interior alterations or repairs.

[A] 107.2.5.1 Design flood elevations. Where *design flood* elevations are not specified, they shall be established in accordance with Section 1612.3.1.

A large percentage of areas that are mapped as special flood hazard areas by the NFIP do not have either flood elevations or floodway designations (floodways are areas along riverine bodies of water that convey the bulk of floodwaters). Section 1612.3 gives the authority to the code official to require use of data which may be obtained from other sources, or to require the applicant to develop flood hazard data.

- [A] 107.3 Examination of documents. The building official shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.
- The requirements of this section are related to those found in Section 105.3.1 regarding the action of the building official in response to a permit application. The building official can delegate review of the construction documents to subordinates as provided for in Section 103.3.
- [A] 107.3.1 Approval of construction documents. When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.
- ❖ The building official must stamp or otherwise endorse as "Reviewed for Code Compliance" the construction documents on which the permit is based. One set of approved construction documents must be kept on the construction site to serve as the basis for all subsequent inspections. To avoid confusion, the construction documents on the site must be the documents that were approved and stamped. This is because inspections are to be performed with regard to the approved documents, not the code itself. Additionally, the contractor cannot determine compliance with the approved construction documents unless they are readily available. If the approved construction documents are not available, the inspection should be postponed and work on the project halted.
- [A] 107.3.2 Previous approvals. This code shall not require changes in the *construction documents*, construction or designated occupancy of a structure for which a lawful *permit* has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.
- If a permit is issued and construction proceeds at a normal pace and a new edition of the code is adopted by the legislative body, requiring that the building be constructed to conform to the new code is unreasonable. This section provides for the continuity of permits issued under previous codes, as long as such permits are being "actively prosecuted" subsequent to the effective date of the ordinance adopting this edition of the code.
- [A] 107.3.3 Phased approval. The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the founda-

- tion or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a *permit* for the entire structure will be granted.
- The building official has the authority to issue a partial permit to allow for the practice of "fast tracking" a job. Any construction under a partial permit is "at the holder's own risk" and "without assurance that a permit for the entire structure will be granted." The building official is under no obligation to accept work or issue a complete permit in violation of the code, ordinances or statutes simply because a partial permit had been issued. Fast tracking puts an unusual administrative and technical burden on the building official. The purpose is to proceed with construction while the design continues for other aspects of the work. Coordinating and correlating the code aspects into the project in phases requires attention to detail and project tracking so that all code issues are addressed. The coordination of these submittals is the responsibility of the registered design professional in responsible charge described in Section 107.3.4.

[A] 107.3.4 Design professional in responsible charge. When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

At the time of permit application and at various intervals during a project, the code requires detailed technical information to be submitted to the building official. This will vary depending on the complexity of the project, but typically includes the construction documents with supporting information, applications utilizing the phased approval procedure in Section 107.3.3 and reports from engineers, inspectors and testing agencies required in Chapter 17. Since these documents and reports are prepared by numerous individuals, firms and agencies, it is necessary to have a single person charged with responsibility for coordinating their submittal to the building official. This person is the point of contact for the building official for all information relating to the project. Otherwise, the building official could waste time and effort attempting to locate the source of accurate information when trying to resolve an issue such as a discrepancy in plans submitted by different designers. The requirement that the owner engage a person to act as the design professional in responsible charge is applicable to projects where the construction documents are required by law to be prepared by a registered design professional (see Section 107.1) and when required by the building official. The person employed by the owner to act as the design professional in responsible charge must be identified on the permit application, but the owner can change the designated person at any time during the course of the review process or work, provided the building official is so notified in writing.

[A] 107.3.4.1 Deferred submittals. For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the *building official* within a specified period.

Deferral of any submittal items shall have the prior approval of the *building official*. The *registered design professional in responsible charge* shall list the deferred submittals on the *construction documents* for review by the *building official*.

Documents for deferred submittal items shall be submitted to the *registered design professional in responsible charge* who shall review them and forward them to the *building official* with a notation indicating that the deferred submittal documents have been reviewed and found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the deferred submittal documents have been *approved* by the *building official*.

- Often, especially on larger projects, details of certain building parts are not available at the time of permit issuance because they have not yet been designed; for example, exterior cladding, prefabricated items such as trusses and stairs and the components of fire protection systems (see Section 107.2.2). The design professional in responsible charge must identify on the construction documents the items to be included in any deferred submittals. Documents required for the approval of deferred items must be reviewed by the design professional in responsible charge for compatibility with the design of the building, forwarded to the building official with a notation that this is the case and approved by the building official before installation of the items. Sufficient time must be allowed for the approval process. Note that deferred submittals differ from the phased permits described in Section 107.3.3 in that they occur after the permit for the building is issued and are not for work covered by separate permits.
- [A] 107.4 Amended construction documents. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction docu-

ments shall be resubmitted for approval as an amended set of construction documents.

- Any amendments to the approved construction documents must be filed before constructing the amended item. In the broadest sense, amendments include all addenda, change orders, revised drawings and marked-up shop drawings. Building officials should maintain a policy that all amendments be submitted for review. Otherwise, a significant amendment may not be submitted because of misinterpretation, resulting in an activity that is not approved and that causes a needless delay in obtaining approval of the finished work.
- [A] 107.5 Retention of construction documents. One set of approved construction documents shall be retained by the building official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws.
- ❖ A set of the approved construction documents must be kept by the building official as may be required by state or local laws, but for a period of no less than 180 days after the work is complete. Questions regarding an item shown on the approved documents may arise in the period immediately following completion of the work and the documents should be available for review. See Section 104.7 for requirements to retain other records that are generated as a result of the work.

SECTION 108 TEMPORARY STRUCTURES AND USES

- [A] 108.1 General. The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.
- ❖ In the course of construction or other activities, structures that have a limited service life are often necessary. This section contains the administrative provisions that permit such temporary structures without full compliance with the code requirements for permanently occupied structures. This section should not be confused with the scope of Section 3103, which regulates temporary structures larger than 120 square feet (11 m²) in area.

This section allows the building official to issue permits for temporary structures or uses. The applicant must specify the time period desired for the temporary structure or use, but the approval period cannot exceed 180 days. Structures or uses that are temporary but are anticipated to be in existence for more than 180 days are required to conform to code requirements for permanent structures and uses. The section also authorizes the building official to grant