

Raytown Fire Protection District
Fire Marshal's Office
6020 Raytown Trafficway
Raytown, MO 64133
816-737-6034

Builders Packet General Information

To whom it may concern:

The Raytown Fire Protection District would like to welcome you to the City of Raytown, an area of Jackson County, Missouri. We hope that your business project is a success and an enjoyable experience. We are a completely separate agency from the City of Raytown, or Jackson County Government. We provide a full range of Fire, EMS, Investigation, and Prevention services to the citizens of Raytown. The Fire District is authorized under Missouri State Statutes (RSMO) 321.

Our coverage area mirrors the Raytown city limits. We presently have 2 stations which are strategically located in the north/south areas of the city. Our ISO is a Class 4 rating; however with planned increases in our staffing levels the Fire District is working to increase this rating to a class 3.

The Fire Marshal's office conducts commercial inspections on all property within the Fire District. We are currently enforcing the 2000 edition of the International Fire Code and reference is made to other Codes in the International code series. We also have adopted by reference the NFPA Life Safety Code 101. Please review the below listed process before seeking a permit from the Fire District. **It shall be the applicant's responsibility to see that this letter gets passed onto the job superintendent.**

[It is highly recommended that a pre-job meeting be held between the contractor and a representative of the Fire Marshal's office before construction begins.](#)

Process:

1. Submit your plans along with the Fire District application for approval from the Fire Marshal's office before any construction can take place. Commercial projects must be stamped by an engineer and/or an architect before a Plan Review will take place. **No exceptions will be allowed.** Plan review time is usually 5-10 working days. It is suggested that a pre-plan submittal meeting occur with the Fire Marshal's office. This meeting generally will last about 30 minutes to one hour and may save time during the Fire Marshal's office Plan Review Process. This review process may have been covered in the City of Raytown's Joint Review Committee meeting if you attended a Raytown Joint Review Committee meeting.

Items that may be covered if applicable are listed below. You will be asked to explain the proposed project with emphasis being placed on the below listed items.

- A. Above or below ground storage tanks.
- B. Emergency lighting.
- C. Exiting requirements in commercial type occupancies.
- D. Fire lanes, if applicable.
- E. Fire sprinkler/hood, and or detection systems.
- F. Hazardous material storage or usage.
- G. Occupancy load calculations.
- H. Fire flow requirements.
- I. Other information that may pertain to this particular type of occupancy.
- J. Fire District inspections and or process.
- K. Emergency apparatus access.
- L. Emergency exits

2. Fire flows will be evaluated for each project that is submitted for approval. Adequate fire flow must be available or a sprinkler system may be required, all Fire flows are based on the IFC 2000 Appendixes. Fire flows must be verified before any occupancy will be allowed. The minimum fire flows for commercial projects are 1500gpm.

3. No burning is allowed without a Department of Natural Resources-Fire District burn permit. Except for recreational fires used specifically for cooking, religious, or ceremonial purposes upon approval of the Fire Marshal.

4. Beginning construction without a Fire District permit and/or the required inspections can result in fines of up to \$1,000.00 and the permit fee may be doubled.

5. The Fire District will conduct a rough-in and a final inspection on all projects. Please allow two days advance notice on these required inspections. Other inspections may be performed based on the type of occupancy and the systems that are required by the IFC. Rough-in is defined as an inspection before the insulation and sheet rock are hung. Failure to call for this can result in a \$1000.00 fine.

6. The Fire District must issue a "**FINAL**" or Joint Inspection Certificate on all commercial projects before a business can be open to the public.

7. **Fire District Access and Turn radiuses:** Please incorporate the below listed turning radiuses into your commercial drawings and or subdivision plans.

Turn Radius 28' with a 20' road and 24' with a 28' road
Wall Clearance 42.3'

Please be advised that all Fire District access roads whether used for everyday traffic or just used for fire suppression efforts shall be a minimum horizontal of 20 feet and 13'6" of vertical clearance as stated in the International Fire Code 2000 edition, section 503, pages 39 and 40. Driving surfaces must be an all weather type surface and capable of handling up to a 32 ton truck. The 20 foot requirement allows the Fire District to safely position the apparatus to include the out riggers and the hoses that will connect the truck to the hydrant or engine.

If a special road is required for emergency fire department access, the road will need to be located a at a distance of at least one to one and a half times the height of the building to establish a safe collapse zone.

Collapse Zone example:

If a building that is 10 foot high, the collapse zone would be minimum distance of 15 feet from the structure itself.

If islands are used in the project, these must also meet the unobstructed clearance of 20 feet as per IFC section 503.2. Please refer to IFC Chapter 5 for further fire apparatus access requirements.

9. The Fire District will require one full set of printed drawings and one electronic.
A. These shall be on a labeled, read only, PC formatted compact disk.
B. These shall be in one of the following formats:

- a. Auto CAD (.DWG)
- b. Auto CAD (.DXF)
- c. Place able Metafile (.WMF)

(Water-Sprinkler system):

The Fire District will require a minimum of 1 set of complete sprinkler plans and a calculation sheet. These will not be returned. Certain projects may require two to three complete sets of drawings in addition to the requirements of the City.

10. If a sprinkler system is required to be installed, we will need two sets of drawings of the designed system along with the hydraulic calculations and a letter (***letter # 1***) listing the ***Codes*** that were incorporated into the system design. All systems must meet applicable NFPA codes and/or standards. Emphasis shall be on NFPA 13. All plans must be stamped by an engineer or a NICET Level III or above. ***Please allow for a 5% safety factor.*** A ***second letter*** must be received by the Fire Marshal's office before any testing will be observed by the Fire District for acceptance. This letter shall confirm that the proper backflow prevention device is in place, inspected, and passed. This letter must also confirm that the system installed meets the NFPA code for the particular occupancy that the system was designed for and is installed properly as per the submitted design. Any changes to the system from the original design shall be mentioned in the second letter. Once this letter is received then a date can be set for Fire District acceptance testing.

Please note the items listed below for the sprinkler system:

- A. All backflow devices used in conjunction with a fire sprinkler system must be rated for fire service use.
- B. A means must be provided for the forward testing of a backflow prevention device to insure that adequate fire flow is achieved. This test will need to meet the NFPA 13 standard. Call to schedule an appointment.
- C. All valves that supply water to the sprinkler system must be properly marked with a weather resistance securing device and all valves must be identified for the purpose of the valve.
- D. All valves shall be secured in the operating position with a lock/tamper device of some type.
- E. All fire department connections will be 4 inch Stortz fittings. The water flow alarms will be a horn and strobe.
- F. Systems with 20 heads or more shall be monitored through electronic supervision.
- G. All fire department connections shall be located on the address side of the building or at a location approved by the Fire Marshal's office.
- H. All private hydrants shall be marked white to indicate that this is a private hydrant.
- I. If hydrants are not yet in service, then a red bag shall be placed over the entire hydrant until such time the hydrant operational.
- J. All pits shall be secured with a lock.

Written documentation must be provided to the Fire Marshals office advising that the required fire flow is available as listed in the 2000 edition of the International Fire Code. Minimum acceptable fire flow is 1500gpm.

Letters:

- 1st. Design based on codes listed in the letter.
- 2nd. Letter stating the backflow device has passed the test.
- 3rd. This can be a third letter or a part of the second letter. It must confirm that the sprinkler system is installed as designed and meets all applicable sections of the listed codes that were referenced in the first letter and, and the system is ready for acceptance testing by the Fire Marshal's Office personnel.

11. Hydrant spacing for commercial projects is a hydrant every 300 feet and for residential is every 500 feet. All hydrants must have 2-(2 ½) and 1 (4 ½) inch steamer connection. All hydrant connections must face the street. All hydrants must have a three foot clear unobstructed circumference. No, trees, signs, plants or other items can be placed within three foot of a hydrant, same for all fire department connections.

12. Any plans that are changed other than to that of tenant furnishings after the Fire District permit has been issued must have Fire District approval before these changes can take place.

13. If "No Parking" areas are required, these must be painted in white Letters with a red background. Signs must read as follows, "No Parking or Stopping." Fire Lanes will be established by members of the Fire Marshal's office.

14. Electrical rooms shall be marked as "Electrical Room" as per IFC 605.3.1

15. NFPA 704 placards may be required depending on the type of business. The Fire Marshals office will determine if these are required at the time of the Plan Review process.

16. A green permit sheet will be placed in the front window for all business occupancies. This permit **must remain** in the window until a final has been completed and passed.

17. Approved Central Stations for alarm transmissions shall be UL Certified and meet applicable NFPA requirements.

18. Addresses must be posted in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

19. Knox Corporation key access boxes will be required when access to, or within a structure, or an area unduly difficult because of secured openings, or to gain access to fire protection controls, and where immediate access is necessary for life saving or fire fighting purposes, the Code Official shall require a minimum of one key lock box to be installed at a height not to exceed six feet, in an accessible location. All buildings with automatic fire alarm systems and/or automatic fire suppression sprinkler systems shall have installed an approved key lock box for access by the Raytown Fire Protection District.

Alternate Methods

Should any party feel the minimum standards of the Fire and Life Safety Code are unrealistic, alternate methods may be proposed. All alternate methods must meet or exceed the minimum requirements of the applicable code or codes. You have the right to appeal a decision or request a variance during a formal hearing with the Raytown Fire Protection Board of Directors.

We look forward to working with you on this project. If you have further questions, please contact the Fire Marshals office in order that we can discuss your project or address your questions.

Contact

The office number for the Fire Marshal's office is 816-737-6034. Business hours for the Fire Marshal's office are Monday through Friday from 0700- 0400pm. All calls must be made during normal business hours.

Sincerely,

Matt Mace
Assistant Fire Marshal