

**MCKINNEY FIRE DEPARTMENT
FIRE MARSHAL'S OFFICE**

BUILDING CONSTRUCTION FIRE DEPARTMENT REQUIREMENTS

Building plans are reviewed to determine compliance with Fire Department requirements as they relate to building construction and layout, fire department access, protection in place, exiting and other issues as required or designated. These requirements can be found in the 2015 International Fire Code (IFC), as adopted and amended by City of McKinney.

In an effort to expedite the Fire Department's plan review process, please ensure the following list of items are incorporated into the building construction plans. Please note that not all of the below requirements pertain to all submittals and the list is not all inclusive of all the fire code requirements. This listing provides the minimum amount of information required to be reflected on the building construction drawings for the Fire Department review.

It is recommended by the Fire Marshal's Office that a pre-construction meeting is scheduled to discuss your project in detail.

GENERAL SUBMITTAL INFORMATION

1. Type of occupancy. (i.e. A – Assembly, B – Business, E – Educational, I – Institutional, M – Mercantile, S – Storage, etc.)
2. Indicate total square footage of the building and/or square footage of each separate occupancy in multiple tenant spaces.
3. Is the building to be provided with a fire sprinkler system, fire alarm system or other fire protection system?
4. An automatic system shall be installed throughout all buildings over 6,000 sq.ft, unless otherwise directed herein. For the purpose of this provision, firewalls shall not define separate buildings.

When determining the requirement for sprinkler protection, the total area under any roof overhangs, canopies, projections, or other permanent vertical structures, beyond that of the building footprint, is include the total area determination. EXAMPLE: A proposed building area is 5,800 sq. ft. Multiple canopies are indicated to cover the entrances. The total square footage of the canopies is 300 sq. ft. The total building area is calculated as: 5,800 sq. ft. + 300 sq. ft. = 6,100 sq. ft. Therefore this building would require an automatic sprinkler system. This is commonly referred to as the "drip line".

An automatic system shall be installed throughout all A-2 occupancies with an occupant load over 99 persons and/or over 5,000 sq. ft., unless otherwise directed herein or in the 2015 IFC.

An automatic system shall be installed throughout all I, R and H occupancies regardless of size.

5. Document any trade-off's or exceptions taken in accordance with Chapter 5 of the 2015 IBC.
6. An NFPA 13, not NFPA 13R, sprinkler system shall be installed throughout all R Occupancies in which a "trade off's" under Chapter 5 of the 2012 International Building Code (IBC) for a sprinkler system is taken to increase the building height or area.
7. Type of construction (Type 1, Type II, Type III, etc).
8. Documentation regarding the operation(s) of the proposed business.
 - a. A complete diagram with regards to the storage configuration may be required. Based upon this information, additional requirements with and building features may be required. Please review the 2015 IFC for any features that may be applicable to your building. EXAMPLE: Storage over 12 ft. is

BUILDING CONSTRUCTION

FIRE DEPARTMENT REQUIREMENTS

considered high-piled and the requirements of Section 32 will be required to be met.

9. Building four stories or more shall provide a stairway to the roof in accordance with IFC Section 504.3.
10. Egress plan to indicate the required exits, path of travel, travel distance and any floor fixtures. This is to include the corridor rating, travel distance, and common path of travel.
11. Wall and ceiling finishes shall be in accordance with the 2015 IFC, Table 806.3, for all corridors, rooms and enclosed spaces. The IFC contains amendments which may not be reflected in the IBC.
12. The tenant separation wall/demising wall shall be a minimum of 1-hr fire rated construction. The 1-hr rated designation shall be clearly indicated. The U.L listing number shall be provided. Higher rated walls may be required based upon occupancy and adjacent uses.
13. Indicate any types of special hazards. (i.e. medical gases, dust operations, spraying operations, etc.)
14. Will any type of special protection system be required? (i.e. ventilation, smoke dampers, smoke control, kitchen hood, storage tank)
15. Occupancy separation walls shall be in accordance with the 2015 IBC.
16. Flammable or combustible liquids tank storage.
17. A minimum of one 2A-10BC fire extinguisher per 3000 sq. ft., with a maximum travel distance of 75 ft.
18. Address must be legible from the street or fire lane.
19. Address must be provided at gas and electric meters and/or disconnecting means.
20. Alphabetic suite numbers are not permitted.
21. Emergency lighting and exit signs shall be in accordance with 2015 IBC.
22. Knox Box entry system may be required, with the box installed 6 to 7 feet above grade.
23. Arrangement of interior walls and/or drop ceiling may interfere with the operation of the fire sprinkler system.
24. Complete listing of hazardous materials, if any, and storage and location information.
25. Indicate any doors intended to be provided with a security or access control system.
26. Additional criteria as required by the Fire Marshal.

HAZARDOUS MATERIALS

27. Please see our Hazardous Materials Submittal Guidelines for additional information regarding required plans submittal requirements. All occupancies containing hazardous materials regulated by Chapter 50, or other sections of the Fire Code, shall be required to have a permit. The permit shall be valid for one year and will be required to be renewed annually.
28. Building construction and fire protection features shall comply with the applicable requirements of IFC Chapter 50.

HIGH-PILED STORAGE

29. High-piled storage is defined as the storage of combustible materials in closely packed piles of combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet in height;
30. Please see our High-Piled Storage Submittal Guidelines for additional information regarding required building features, fire protection and plan submittal requirements. All occupancies containing high-piled storage regulated by Chapter 23, or other sections of the fire code, shall be required to have a permit. The permit shall be valid for one year and will be required to be renewed annually.
31. Building construction and fire protection features shall comply with the applicable requirements of IFC Chapter 32.
32. A rack storage plan is required prior to fire sprinkler plan approval.

The following items are listed to aid the applicant in what will be required to complete the project that is not included in the building plan review. This is intended as a partial list only, and is not all-inclusive. If the modification/installation of a fire protection system shall be required, the Fire Department Building Plan Review shall indicate the type(s) of fire protection system required.

BUILDING CONSTRUCTION FIRE DEPARTMENT REQUIREMENTS

Additional fire protection systems and or building construction components may be required as a result of the Fire Departments review of your building construction drawings.

FIRE PROTECTION & ACCESS SYSTEMS

33. A Texas Department of Insurance licensed fire alarm contractor must install the Fire Alarm System. Plans must be submitted to the Fire Department for review and approval.
34. A Texas Department of Insurance licensed fire sprinkler contractor must install the overhead Fire Sprinkler System. Plans must be submitted to the Fire Department for review and approval.
35. A Texas Department of Insurance licensed fire sprinkler contractor must install the underground Fire Sprinkler System. Plans must be submitted to the Fire Department for review and approval.
36. A Texas Department of Insurance licensed fire extinguisher contractor must install the Kitchen Hood/Paint Spray Booth extinguishing system. Plans must be submitted to the Fire Department for review and approval.
37. A Texas Commission of Environment Quality licensed underground storage tank contractor must install the underground storage tank system. Plans must be submitted to the Fire Department for review and approval.
38. All access controlled egress doors shall meet the requirements of IFC Sections 1010.1.9.7 through 1010.1.9.10. "Access - Controlled Egress Doors". Access control doors are required to be reviewed, approved and permitted by the Fire Department.
39. All smoke control and pressurization systems shall meet the requirements of IFC/IBC Chapters 909 and 910. Plans must be submitted to the Fire and Building Departments for review and approval under separate instrument.
40. Building plans are not reviewed, or approved, for fire protection system installation.

THIRD PARTY REVIEW

41. Effective November 1st, 2013, the Fire Department has instituted a Third Party Plan Review Process for submittals meeting specific criteria. Information on this process can be found in Information Notice 2013-02.

All access control criteria for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the 2015 International Fire Code, as adopted and amended by City of McKinney.

This guide does not replace, nor supersede any codes and/or ordinances adopted by the City of McKinney, or determinations and positions of the Fire Chief or Fire Marshal.