



City of Kingman  
Fire Prevention Division, Kingman Fire Department  
International Fire Code (IFC) 2006, KFD-5

## FIRE CODE REQUIREMENTS-GENERAL

### I. ACCESS

1. A fire apparatus access road shall be provided to within 150 feet (non-sprinklered buildings) or 300 feet (sprinklered buildings) of all portions of the facility and exterior ground floor walls by an approved unobstructed route. **IFC 503.1.1**
2. Show a minimum unobstructed fire apparatus access road width of 20 feet and minimum vertical clearance of 13'6" feet. **IFC 503.2.1**
3. Security gates across fire apparatus access shall be in accordance with **IFC 503.6.**
4. Show a minimum turning radii of 35 feet inside and 55 feet outside from the required fire apparatus access roads. **IFC 503.2.4**
5. Show approved means for turning fire apparatus around where the length of dead end fire apparatus access road exceeds 150 feet (no-sprinklered buildings) or 300 feet (sprinklered buildings). **IFC 503.2.5 AND IFC D 103.4.**
6. Dead-end fire apparatus access roads shall not have more than one turn for fire apparatus to back around. The total aggregate of the turn shall not be more than 90 degrees. **IFC 503.2.5**
7. Provide two separate, approved fire apparatus access roads when the number of dwelling units exceeds 30. **IFC 503.7.1**
8. Show "No Parking-Fire Lane" marking detail and show the locations on the required fire apparatus access road on a site plan. Streets 20-28' in width shall be marked on both sides. Streets 28-34' in width shall be marked on one side. **IFC 503.3, 503.7.2.1, AND 503.7.3.3**
9. When required, provide engineered calculations that the fire apparatus access roads are capable of supporting the imposed load of the apparatus (24,000 pounds per axle, total 74,000 pounds per vehicle) and shall be of all weather design. **IFC 503.2.3**
10. Show the grade of the fire apparatus access road. Whether temporary or permanent, no grade shall exceed 6%, unless the roadway is paved hard and smooth with material such as concrete or asphalt. No grade shall exceed 10%, unless formally approved by the Fire Code Official. **IFC 503.2.7**
11. Show an approved access walkway from the fire apparatus access to exterior doors and openings when required by the Fire Code Official. **IFC 504.1**
12. Show stairway access to roof and stairway signs for buildings four or more stories in height. **IFC 504.3**
13. Bridges and elevated surfaces that are part of a fire apparatus access road shall be constructed and maintained in accordance with AASHTO HB-17. **IFC 503.2.6**
14. High-Piles Combustible storage buildings shall be provided with access doors as required by Table 2306.2. **IFC 2306.6.1**

### II. WATER SUPPLY

1. The required fire flow for this building shall be per appendix B. A 50% to 75% reduction for fire sprinklers may be allowed (not less than 1500 gpm for commercial and 1000 gpm for sign family residential). **IFC 508.3 & Appendix B 105**
2. Show hydrant spacing as determined by IFC Appendix C. **IFC 508.5.1 and City of Kingman Utility Regulations Article III, 3.7**
3. Show the minimum number of fire hydrants required to be available to the building, complex or subdivision (new, relocated, or existing). **IFC 508.5 & Appendix B & C**
4. Provide required engineered hydraulic fire flow calculations. **IFC 501.3, 508.3, AND 508.3.1**
5. Show hydrants a minimum of 40 feet away from the structure/hazard they are protecting. **National Fire Protection Association (NFPA) 7.2.3, IFC 508.2.1**
6. Show hydrants a maximum of 10 feet from the fire apparatus access road. **IFC 508.5**

7. Show 3-foot clearance around and access to all fire hydrants. **IFC 508.5.4 & 508.5.5**
8. Show guard posts to protect fire hydrants that may be subjected to vehicular damage. **IFC 312 & 508.5.6**
9. A hydrant shall be located within the distances listed in IFC Appendix C, Table-C105.1, from all portions of streets and access roads adjacent to buildings. **IFC Appendix C105**
10. Fire Hydrants, FDC or fire protection system control valves shall not be obstructed. **IFC 508.5.4 & 912.3**
11. Phased systems with piping looped through future phase shall have the complete looped system installed prior to any combustible construction above-ground. **IFC 508.5.2**

### **III. TIMING OF INSTALLATIONS**

1. Provide a note on the plan: "VERTICAL CONSTRUCTION WITH COMUSTIBLE MATERIAL SHALL NOT BEGIN PRIOR TO ACCEPTANCE OF FIRE ACCESS ROADS AND FIRE HYDRANTS". **IFC 501.4**
2. Provide a note on the plan: "STRUCTURE CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL COMPLY WITH REQUIREMENTS OF IFC CHAPTER 14 AND NFPA 241". **IFC 1401.1**

### **IV. PREMISES IDENTIFICATION**

1. Submit a scaled Site Plan including all buildings, address number(s) and suite number(s) so address numbers and suite numbers can be verified. **IFC 505.1**
2. Address details are required on an elevation plan for all buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Identify height, stroke and contrasting background in accordance with **IFC 505.1**.
3. New and existing buildings at aircraft operations areas shall have approved address numbers legible and visible from the taxiway or airport fire access road fronting property per **IFC 505.1.1**.
4. Multiple tenant buildings shall have their address and suite number posted on all rear doors of each tenant space. **IFC 505.1**

### **V. KEY BOXES**

When required, provide an approved key box near exterior access door to fire sprinkler riser room or alternatively, at the main building entrance. Provide key box for lockable gates across fire apparatus roadways and required access walkways, etc. Show on elevation or plan view.

### **VI PORTABLE FIRE EXTINGUISHERS**

Show location of all required fire extinguishers. **IFC 906**

### **V11 PROTECTION OF COMMERCIAL COOKING OPERATIONS**

Each required commercial kitchen exhaust hood and duct system required by Section 609 to have a Type I hood shall be protected with an approved automatic fire-extinguishing system installed in accordance with this code. **IFC 903.2.12.2, 904.2.1, & 904.11**