



# Unified Fire Authority Development Guidelines

The Unified Fire Authority Fire Prevention Bureau has prepared the following guidelines to assist you with the development and design of your project:

**INFORMATION ON CONSTRUCTION DOCUMENTS:** *Construction documents* shall be drawn to scale upon suitable material. Electronic media documents are allowed to be submitted when *approved* by the *fire code 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 *fire code official*. [ IFC 105.4.2]

**BUILDINGS UNDER CONSTRUCTION:** Buildings undergoing construction and alteration must comply with Chapter 14 of the IFC. Fire apparatus access roads and water supplies for fire protection are required to be installed before any combustibles can be on the site. Fire protection and fire department access must be installed and made serviceable prior to and during the time of construction. [IFC 1410]

**FIRE IMPACT FEE ASSESSMENT:** Impact fees will be assessed and collected as a condition for building permit approval. Fire Impact Fees are assessed on all new residential and commercial construction. **New Single Family Residential {per unit} \$481.46. Fee will be paid at the time of issuance of a building permit.**

**UTAH WILDLAND-URBAN INTERFACE:** Buildings constructed within the designated wildland-urban interface area shall comply with the requirements listed in the 2006 Utah Wildland-Urban Interface Code. **See attached Wildland Submittal Guide.**

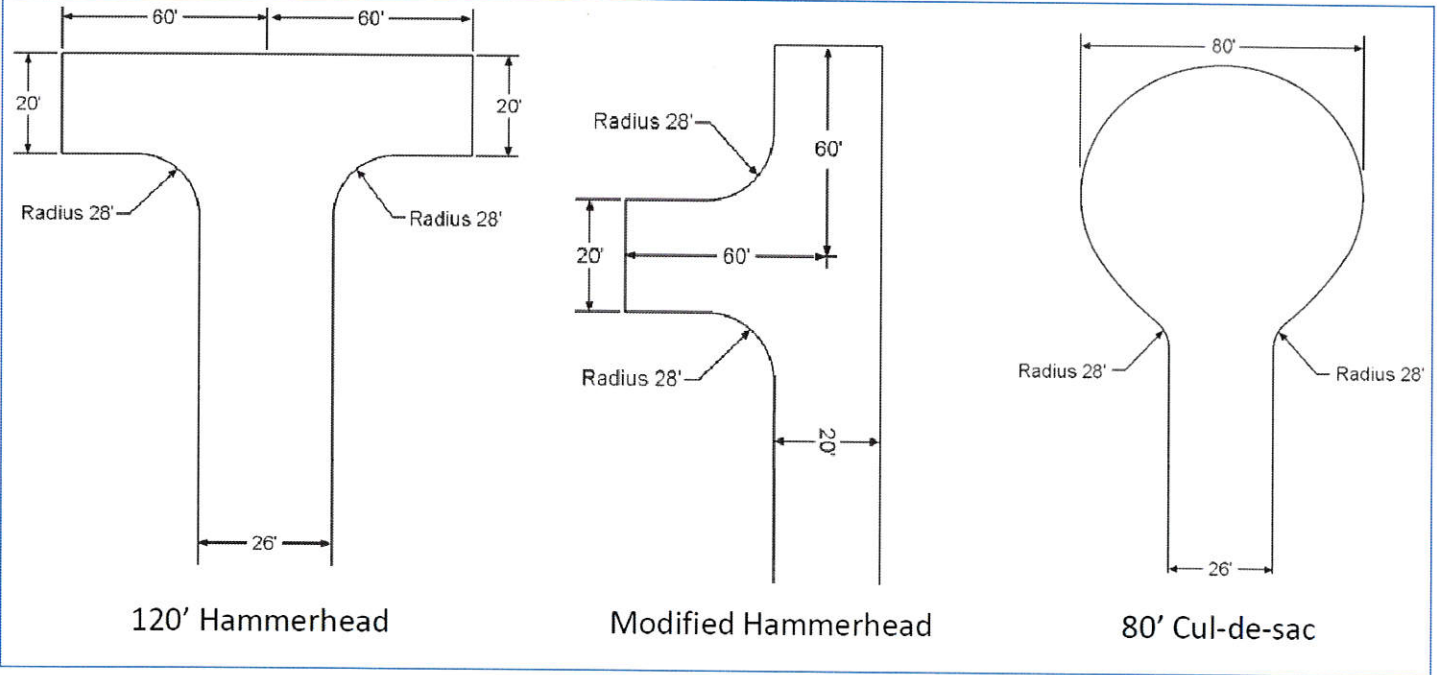
1. **OCCUPANCY CLASSIFICATION:** Identify the Occupancy Classification(s) for the building in accordance with the IBC, Chapter 3.
2. **ACTUAL AREA OF STRUCTURE:** Provide the actual area calculated for the building.
3. **ACTUAL HEIGHT OF STRUCTURE:** Provide the actual height (stories and feet) for the building.
4. **TYPE OF CONSTRUCTION:** Identify the type of construction for the building. [IBC Ch 6 and Table 601]
5. **BUILDING CROSS-SECTIONAL VIEW:** Provide a cross-sectional view for the building. This will be helpful for showing the construction type, roof construction arrangement and interior construction features.
6. **FIRE FLOW REQUIREMENT:** Fire Flow is based on the following:
  - 6.1. Building Construction Type.
  - 6.2. Building Fire Area.
  - 6.3. Fire Sprinkler System.

The Design Team needs to contact the appropriate water company to determine available water supply for this area. Also, the Design Team needs to determine the allowances needed for seasonal and daily fluctuations as a result of increased demands or changes in the operation of the water system. A reduction in required fire-flow of 50 percent, as *approved*, is allowed when the building is equipped with an *approved automatic sprinkler system*.

7. **FIRE HYDRANT LOCATIONS:** Provide a site plan to UFA for review and approval prior to construction that exhibits the requirements from section 508 of the IFC and the following:
  - 7.1. **On-Site Fire Hydrants:** When any portion of a building is in excess of 400-feet from a fire hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility, on-site fire hydrants and mains capable of supplying the required fire flow must be provided. [IFC 507.5.1]
  - 7.2. **Timing of Installation:** Water supplies for fire hydrant system are required to be installed and made serviceable prior to and during the time of construction. [IFC 501.4]
8. **NUMBER OF HYDRANTS:** The minimum number of fire hydrants, the hydrant spacing requirements and required access roads for a proposed or newly constructed building shall not be less than what is listed in the International Fire Code. [IFC C103.1]
9. **EXISTING HYDRANTS:** An existing hydrant can be used to meet the hydrant requirements if it is located with 250' of the property frontage or within 600' of the proposed building. **Show existing hydrants to be used on site utility plan.**

10. **FIRE DEPARTMENT ACCESS:** Provide a site plan to the UFA for review and approval prior to construction that exhibits the requirements from section 503 of the IFC and the following:
  - 10.1. **Building and Facilities:** Fire apparatus access roads must be provided such that no portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150-feet from fire apparatus access as measured by an approved route around the exterior of the building or facility. [IFC 503.1.1]
  - 10.2. **Specifications:** Fire Department Access must be of an all-weather surface, a minimum clear width of 20-feet and a minimum vertical clear height of 13-feet 6-inches (13'-6"). [IFC 503.2.1]
  - 10.3. **Surface:** Fire apparatus access roads must be designed and maintained to support the imposed loads of 75,000 lbs for fire apparatus. [IFC 503.2.3 & D102.1]
  - 10.4. **Turning Radius:** The turning radius of 28-feet must be provided for the fire apparatus access road. [IFC Figure D103.1]
  - 10.5. **Dead Ends:** Dead-end fire apparatus access roads in excess of 150-feet in length must be provided with approved provisions for the turning around of fire apparatus. [IFC 503.2.5]
  - 10.6. **Bridges and Elevated Surfaces:** When a bridge or an elevated surface is part of a fire apparatus access road, it must be constructed and maintained in accordance with AASHTO Standard Specification for Highway Bridges and must be designed for a live loading sufficient to carry the imposed loads of fire apparatus. [IFC 503.2.6]
  - 10.7. **Grade:** The gradient for a fire apparatus access road must not exceed 10%, unless approved by the UFA. [IFC 503.2.7]
  - 10.8. **Access Road Identification:** Approved signs must be provided and maintained for fire apparatus access roads to identify the road and prohibit the obstruction thereof or both. [IFC 503.3] See attached diagram for Fire Apparatus Access Roads.
  
11. **PREMISES IDENTIFICATION:** All new buildings must have approved address numbers, building numbers and approved building identification placed in such a position as to be plainly visible and legible from the street or road fronting the property. Address numbers must contrast with their background, and be Arabic numerals or alphabet letters. The numbers and characters must be a minimum of 6-inches in height, with a ½-inch stroke. [IFC 505.1]
  
12. **STREET OR ROAD SIGNS:** Streets and roads must be identified with approved signs. Temporary signs must be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs must be a minimum of 6-inches in height, with a ½-inch stroke, weather resistant and be maintained until replaced by permanent signs. Provide site that shows location of temporary signs. [IFC 505.2]

FIRE DEPARTMENT TURNAROUND DIAGRAM



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