

# Utah County Fire Code Requirements for Urban Wildland Interface Areas

Utah County Fire Prevention Article 9-6: Urban Wildland Interface Area Requirements

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# 9-6-1. <u>Scope</u>.

This code applies to "Large Scale Developments" which include: Recreational Resorts, Mountain Home Developments and Subdivisions in the Urban/Wildland Interface lands, and structures not included within a platted Large Scale Development. The specific needs for fire prevention in these high fire prone areas are provided in addition to other building requirements. The unincorporated areas of Utah County which will be subject to the regulations of this Article are delineated on the overlay map in Appendix "A" of this Code. The provisions of both Articles 5 and 6 of this Chapter shall apply to all areas of the Urban Interface shown in Appendix A.

# 9-6-2. <u>Access</u>.

(a) <u>Driveways</u>. Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than 150 feet from a fire apparatus access road. Driveways shall provide a minimum unobstructed width of 12 feet and a minimum of unobstructed width of 12 feet and a minimum unobstructed height of 13 feet 6 inches. Driveways in excess of 150 feet in length shall be provided with turnarounds. Driveways in excess of 200 feet in length and less than 20 feet in width shall be provided with turnouts in addition to turnarounds. A driveway shall not serve in excess of five (5) dwelling units. Driveway turnarounds shall have inside turning radii of not less than 30 feet and outside turning radii of not less than 45 feet. Driveways that connect with a road or roads at more than one (1) point may be considered as having a turnaround if all changes of direction meet the radii requirements for driveway turnarounds.

(b) <u>Grade.</u> The gradient for fire apparatus access roads and driveways shall not exceed the maximum approved by the code official. It will be up to the code official to ascertain the maximum grade based on specifications of the fire equipment providing fire protection, provided that the maximum grade shall not exceed ten percent (10%) unless a steeper grade is approved by the fire chief. (Ord. 2010-29, 11-2-10).

## 9-6-3. Emergency Water Supplies.

(a) Notwithstanding Section 508 and Appendix B of the International Fire Code and because of a greater exposure of fire in Urban Interface areas, an approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into clustered large scale developments in the Urban Interface.

(b) The minimum fire flow and flow duration shall meet the requirements of the International Fire Code.

(c) A reduction in required fire flow of up to 75 percent, as approved by the Fire Marshal, is allowed when the building is provided with a fire extinguishing system in accordance with Appendix B sections B103 and B105 of the International Fire Code, and when an adequate vegetation clearance in accordance with Section 9-6-7 of the Utah County Code is maintained.

(d) The above restrictions shall not apply to any dwelling outside of a Large Scale Development which is in the Urban Interface and is provided with a fire break as defined herein and as such firebreak is maintained by the owner - occupant. Also excluded are any "B" "E", "F", "M", and "S-2" occupancies under 900 square feet, and farm buildings.
(e) Water storage supplies shall likewise be calculated to provide the required daily culinary supply for each building lot plus the required fire flow for the building having the greatest demand.

(f) The fire flow requirements of this section shall not be applied in developments approved prior to September 15, 1978. Facilities, buildings, and structures constructed or expanded after the effective date of this paragraph, in said developments, which fail to comply with the emergency water requirements of this section shall not exceed 1500 square feet of Floor Area as defined by the International Fire Code unless a fire extinguishing system in accordance with Section 904 of the International Fire Code or listed automatic sprinkler system in accordance with 9-6-5 is installed or adequate fire flow is provided.

### 9-6-4. Structural Design and Construction.

The International Fire Code is hereby amended to include the following provisions:

(a) Structures shall not be constructed on slopes exceeding thirty percent (30%).

(b) All new homes and all new construction which constitutes more than a 50% expansion of an existing dwelling that are required to have automatic sprinkler protection shall comply with the National Fire Protection Association (N.F.P.A.) 13D requirements, modified as follows:

(1) Provide Fire Sprinklers in all garages, and mechanical (furnace) rooms.

(2) Provide Fire Sprinklers in covered decks and walkways greater than 4 feet wide.

(3) All remodeling of existing homes shall provide fire protection devices consistent with or superior to the

fire protection standards of the existing nonconforming use.

(c) Roof Coverings. Roof coverings shall be constructed of UL listed Class A or B materials in accordance with the International Building Code, or shall be constructed of an approved non-combustible roof covering. No wood roof coverings are permitted in the Urban Interface. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers. When one-half or more of an existing non-conforming roof covering needs to be replaced, the entire roof shall be brought into compliance with this code.

(d) Protection of Eaves. Combustible eaves, fascias and soffits shall be enclosed with solid materials with a minimum thickness of 3/4 inch. No exposed rafter tails shall be permitted unless constructed of heavy timber materials.

(e) Gutters and Down Spouts. Gutters and down spouts shall be constructed of noncombustible material.

(f) Exterior Walls. Exterior walls. The exterior side walls of buildings or structures shall be constructed with approved non-combustible materials or with materials approved for a minimum of 1- hour fire-resistance rated construction installed over an approved noncombustible backing. Such material shall extend from the top of the foundation to the underside of the roof sheathing. When one-half or more of an existing nonconforming exterior wall needs to be replaced, the entire exterior wall shall be brought into compliance with this code.

Exception: Heavy timber or log wall construction, with a minimum thickness of 8 inches.

(g) Unenclosed Underfloor Protection. Buildings or structures shall have all underfloor areas enclosed to the ground, with exterior walls in accordance with Section 9-6-4(f).

**Exception**: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction, or are protected by an approved outside sprinkler system.

(h) **Appendages and Projections**. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction, constructed with approved noncombustible materials, or protected by an approved outside sprinkler system. When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches of the ground, with exterior wall construction in accordance with Section 9-6-4(f), or shall be protected by an approved outside sprinkler system.

(I) **Exterior Glazing**. Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire-protection rating of not less than 20 minutes.

(j) **Exterior Doors**. Exterior doors shall be approved non-combustible construction, solid core wood not less than 1 3/4-inches thick, or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Section 9-6-4(I).

Exception: Vehicle access doors.

(k) Vents. Attic ventilation openings, foundation or underfloor vents or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/4 inch. Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least 10 feet from property lines. Underfloor ventilation openings shall be located as close to grade as practical.

(1) **Detached Accessory Structures**. Detached accessory structures located less than 50 feet from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction, heavy timber, log wall construction, or constructed with approved noncombustible material on the exterior side. When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches of the ground, with exterior wall construction in accordance with Section 9-6-4(f) or underfloor protection in accordance with Section 9-6-4(g).

**Exception**: The enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire resistance-rated construction or heavy timber construction. See Section 9-6-4 (c) for roof requirements. (Ord. 2010-29, 11-2-10)

#### 9-6-5. Manufactured Homes.

Where manufactured homes are permitted, they shall meet all applicable construction and safety standards and shall be provided with full skirting constructed of noncombustible materials. Any porches and sun-decks shall be constructed of non-combustible or listed fire-retardant materials.

## 9-6-6. Vegetative Clearance.

(a) Notification. The Utah County Fire Marshal shall be notified, in writing, and a site plan submitted for approval before development or construction of any structure commences so that vegetation can be evaluated and ample clearance around structure(s) can be determined.

(b) Minimum Requirements. Unless otherwise specified by the Fire Marshal, minimum vegetation clearance will be as follows:

(1) Clusters. Each cluster shall be located to provide a fire break of a width of 100 feet or more, depending on topography and fuels, constructed around the development. This area shall be free of all dead and downed material. Mature trees within the break shall be pruned up to a minimum of six feet above the ground so that no limbs are contiguous with ground fuels. The remaining ground vegetation shall be trimmed not to exceed 6 inches in height.
 (2) Structures. Vegetation shall be cleared and maintained to a maximum of 4 in. in height within 30 ft. of the structure and a maximum of 18 in. from 30 to 50 feet. Areas beyond 50 feet shall be determined by the Fire Marshal.
 (3) Trees. Trees within 50 feet of a structure shall comply with the following:

(A) Canopies shall be a minimum of 10 feet apart.

(B) Canopies shall not be permitted to extend within 10' from under eaves, decks, or balconies or chimney openings.

(C) Trees within 50 feet of a structure shall be pruned to a height of 10 feet above the ground, trees less than

35 feet in height shall have the lower half pruned.

(D) All trees within 50 feet of a structure shall be kept free of dead or dying materials.

(4) Dead Vegetative Material. All dead vegetative material shall be removed and maintained clear within 50 ft. of any structure.

(5) Propane or Fuel tanks. Ground vegetation around tanks shall be maintained no higher than 4 inches for a minimum of 10 foot radius. Trees and brush shall be trimmed maintaining a minimum of three feet above the tank.

(6) Fire Hydrants. Vegetation or other obstructions shall be maintained below 4 inches high. Clearance shall be provided three feet on all sides of the hydrant and extend to the roadway.

(7) Disposal of Flammable Vegetation and Fuels. Disposal, including chipping, burying, or removal to an approved landfill shall be completed prior to final inspection of a building permit. Open Burning of these materials is prohibited.(d) Recreational Fires.

(1) Recreational open fires shall be located a minimum of 25' from a structure or combustible material unless contained in an approved barbecue pit located a minimum of 10' from combustible foliage, walls, or roofs. An opening in the overhead canopy shall be provided to prevent the pyrolysis of the foliage.

(2) The pile of fuel to be burned in the fire area for recreational fires shall not be larger than 3' in diameter and 2' high.

(3) A garden hose connected to a water supply or other approved fire-extinguishing equipment shall be readily available for use at recreational fires.

(4) Recreational fires are required to be constantly attended by a person knowledgeable in the use of the fireextinguishing equipment. The attendant shall supervise the burning material until the fire has been extinguished.

#### 9-6-7. Storage of Firewood and Combustible Materials.

(a) General. Firewood and combustible material shall not be stored in unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs. When required by the code official, storage of firewood and combustible material stored in the defensible space shall be located a minimum of thirty (30) feet from structures and separated from the crown of trees by a minimum horizontal distance of fifteen (15) feet.
(b) Storage for off-site use. Firewood and combustible materials not for consumption on the premises shall be stored so as to not pose a hazard.

#### 9-6-8. Fireworks.

Fireworks shall not be used or possessed in Urban-Wildland Interface areas. (Ord. 2010-29, 11-2-10)