

# Utah County Ordinance Regarding Structural Design and Construction in the Wildland-Urban Interface

**9-6-4. Structural design and Construction.** The International Fire Code is hereby amended to include the following provisions:

(a) **New Structure Requirements.** New structures and expansion of existing structures in the Wildland/Urban Interface areas of Utah County shall meet the following requirements:

(1) **Automatic fire sprinkler systems.** Automatic fire sprinkler systems shall be installed in all dwellings. All other occupancies shall have fire sprinkler systems as required by the International Fire Code. Automatic fire sprinkler systems shall comply with currently adopted NFPA standards.

(2) **Roof covering.** Roofs shall have at least a Class B roof assembly or an approved noncombustible roof covering. 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, or have one layer of 72-pound (32.4 kg) mineral-surfaced, non-perforated cap sheet complying with ASTM D 3909 installed over the combustible decking.

(A) **Roof valleys.** When provided, valley flashings shall be not less than 0.019 inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, non-perforated cap sheet complying with ASTM D 3909 running the full length of the valley.

(B) **Existing roof coverings.** The roof covering on buildings or structures in existence prior to the adoption of this code that are replaced or have 50 percent or more replaced in a 12-month period shall be replaced with a roof covering required for new construction.

(3) **Protection of eaves.** Combustible eaves, fascias and soffits shall be enclosed with solid materials with a minimum thickness of  $\frac{3}{4}$  inch (19 mm). No exposed rafter tails shall be permitted unless constructed of heavy timber materials.

(4) **Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved means to prevent the accumulation of leaves and debris in the gutter.

(5) **Exterior walls.** Exterior walls of buildings or structures shall be constructed with one of the following methods: - Approved noncombustible materials - Heavy timber or log wall construction. - Fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the International Building Code. - Approved building materials installed over fire rated sheetrock or other similar noncombustible material with ignition-resistant materials on the exterior side. Such material shall extend from the top of the foundation to the underside of the roof sheathing or approved soffit.

(6) **Unenclosed under floor protection.** Buildings or structures shall have all under floor areas enclosed to the ground, with exterior walls in accordance with exterior walls requirements above. Exception: Complete enclosure shall not be required 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 fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the International Building Code.

(7) **Appendages and projections (Decks).** 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 or constructed of: - Approved noncombustible materials; or - Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code; 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 under floor areas enclosed to within 6 inches (152 mm) of the ground, in accordance with exterior wall construction above.

(8) **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.

(9) **Exterior doors.** Exterior doors shall be approved noncombustible construction, solid core wood not less than 1 ¾ -inches thick (45 mm), or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Exterior glazing requirements above.

(10) **Vents.** Attic ventilation openings, foundation or under floor 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 ¼ inch or shall be designed and approved to prevent flame or ember penetration into the structure.

(11) **Vent locations.** 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 lot lines. Under floor ventilation openings shall be located as close to grade as practical.

(12) **Detached accessory structures.** (A) Detached accessory structures located less than 50 feet (15,240 mm) from a building containing habitable space shall have exterior walls constructed in accordance with Subsection (a)(5) above. (B) When the detached accessory 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 under floor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with exterior wall requirements above or under floor protection in accordance with unenclosed under floor protection requirements above. **EXCEPTION:** The under floor area enclosure shall not be required 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 fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the International Building Code.

(13) **Spark Arrestors.** Chimneys serving fireplaces, barbecues, incinerators or decorative heating appliances in which solid or liquid fuel is used, shall be provided with a spark arrester. Spark arresters shall be constructed of woven or welded wire screening of Number 12 USA standard gage wire (0.1046 inch) (2.66 mm) having openings not exceeding ½ inch (12.7 mm). The net free area of the 1 spark arrester shall not be less than four times the net free area of the outlet of the chimney.

**EXCEPTION to Construction Requirements in the Wildland-Urban Interface:** Additions to existing non-conforming structures, involving less than a 50% expansion of the structure shall not be required to meet the requirements of new construction provided the additions or alterations meet or exceed the fire safety requirements of the existing structure.