

WUI Code Defensible Space Rule Overview

Section 601 rule describes how fire protection requirements, mainly defensible space, could be required:

- 101.2, Scope, allows use or occupancy to continue if it was legal at time of adoption of the code and does not constitute a distinct hazard.
 - Code official can require fire protection requirements, including defensible space, for illegal use or distinct hazard.
 - Distinct hazard also linked by definition to table 502.1, Fire Hazard Severity, and Appendix C, Fire Hazard Severity Form.
- 101.4, Retroactivity, says code applies to conditions arising on and after the effective date.
- 107.2.1, Permits Required, describes conditions that would not allow a permit to be issued. A property owner would therefore need to correct at least one of the conditions to be able to obtain a permit; reduce hazard severity, or provide conforming access, water supply or defensible space.
 - If defensible space is chosen then Chapter 6 requirements would apply.
 - If reduction of fire hazard severity is chosen then either a vegetation management plan per 502.2 could be provided or Appendix C could be used to reduce the rating score to below 75. Chapter 6 requirements would apply to both a vegetation management plan as well as the defensible space component of Appendix C if it is used to reduce points.
- 401.3 references general safety precautions and triggers Appendix A by direct reference. Appendix A covers things that are mostly covered by other City regulations but gives the Fire Marshall added authority for certain activities and uses including provision of defensible space:
 - Vegetation control for
 - Roadways, 10' clear either side
 - Electrical transmission and distribution lines
 - Obstruction of access or defensible space
 - Clearance requirements for ignition source control
 - Storage of hazardous materials
 - Protection of pumps and water supply storage facilities
 - Land use limitations for temporary uses

Section 603, Defensible Space and 604, Maintenance of defensible space:

- When required or allowed shall be not less than 30' or to property line and may be increased or decreased by the Fire Marshall based on site specific analysis.
- Fuel modification distances in table 603.2 are available for increases or decreases but not directly linked since table 503.1 for ignition resistant construction was deleted. **Deletion of table 503.1 means defensible space would not be an option to avoid ignition resistant construction.**
- Defensible space minimum requirements:
 - Clear area for fire suppression
 - Within 15' of structure
 - 6' wide by 8' high for firefighter access with hand tools and/or hose lays
 - Ground cover fire transfer to tree canopies or structures
 - 6' clearance from canopy or structure allowing for future growth

WUI Code Defensible Space Rule Overview

- Consideration for tree and structure flammability
- Groundcover includes understory plants and shrubs
- Tree and structure flammability described
- Tree canopy separation not required unless high flammable or grouped trees near structures.
- Property owner responsible for maintaining clearances

Draft rule:

CITY OF AUSTIN WUI RULE

Reference International Wildland-Urban Interface Code, Section 601, General.

Chapter 6 covers minimum fire protection requirements to reduce risk of loss of life and property from wildfire exposures in WUI areas. Property owners have access to assistance through AFD, on-line resources, community groups, and qualified consultants to determine wildfire risk on a property and if that risk warrants protections beyond these minimum requirements. Preparation and situational awareness are critical for wildfire safety. Ready, Set, Go!® and Firewise USA® local programs and the Austin – Travis County Community Wildfire Protection Plan provide detailed information.

Provisions of Chapter 6 primarily apply to new buildings, structures and premises located within the wildland-urban interface areas since section 101.4, Retroactivity, calls for provisions of the WUI code to apply to conditions that arise beginning on and after the effective date of this code. However, the WUI code grants authority to the code official under section 101.2, Scope, that allows a use or occupancy to continue if it was legal at the time of adoption of the WUI code and the use does not constitute a distinct danger to life or property. Under this authority the code official can require fire protection requirements to reduce wildfire risk from an illegal use or distinct danger. Distinct hazard as defined by this code includes conditions described in table 502.1, Fire Hazard Severity, or Appendix C.

Chapter 6 provisions are available to property owners to obtain permits to develop a property that has the conditions of section 107.2.1, a subsection of 107.2, Permits Required. Section 107.2.1 lists conditions of a property that would not allow a permit to be issued; (a) an extreme hazard severity as set forth in Table 502.1; (b) nonconforming access; (c) nonconforming water supply; and (d) nonconforming defensible space. A property owner would need to correct at least one of these conditions to be eligible to obtain a permit to build on or develop the property. If parts (a) or (d) are used to correct the property condition then section 603, Defensible Space, of this chapter would apply. A property owner could also choose to correct (a) by implementing a vegetation management plan per section 502.2, Fire Hazard Severity Reduction (separate administrative rule).

WUI Code Defensible Space Rule Overview

Appendix C, Fire Hazard Severity Form, is available to reduce hazard severity. If defensible space is proposed to reduce the score on the form then it shall be per section 603.

In addition to the requirements of this chapter, Appendix A, General Requirements, referred to in 403.1, has provisions related to defensible space. Those provisions include vegetation control for roadways and electrical transmission and distribution lines, access restrictions that prohibit vehicles from obstructing defensible space, clearance requirements for ignition source control, control of storage, protection of pumps and water storage facilities, and land use limitations.

CITY OF AUSTIN WUI RULE

Reference International Wildland-Urban Interface Code, Section 603, Defensible Space and Section 604, Maintenance of Defensible Space.

When required, or allowed, defensible space shall be provided per this section and shall be not less than 30 feet from the structure or to the property line, whichever is less. The code official may increase or decrease this distance based on site-specific analysis.

Reference to table 503.1 in section 603.2, Fuel modification, is negated since table 503.1 was not adopted from the ICC model WUI code. The table was no longer needed since the 3 classes of ignition resistant construction were combined into 1 and defensible space is not offered as an option to not use ignition resistant construction in WUI areas. Fuel modification distances in table 603.2 can still be used as a reference for increasing distances based on hazard severity. The administrative rule for section 601 details authority for requiring or allowing defensible space for use or occupancy distinct dangers or property conditions that would not allow a permit.

Conditions for increased or decreased defensible space dimensions include but are not limited to: hazard severity, structure ignition potential, topography, proximity to wildland fuels, proximity to other structures, space for fire suppression operations, access, water supply, and factors that influence the rate and spread of fire near the structure.

Owner or applicant shall submit information necessary to demonstrate compliance with this section including defensible space fuel modification distance, structure ignition potential (required for site plans and building permits), tree and ground cover descriptions, and any other features of the landscape that would affect fire rate of spread or intensity (i.e. natural features such as rock outcrops or bluffs, water features, retaining walls, hardscape, flammable fences, etc.).

For extenuating circumstances or if required by the code official the owner or applicant may provide a defensible space plan prepared by a qualified arborist, registered professional landscape architect, or other qualified professional.

Submittals or plans will be reviewed for minimum requirements for; a) clear areas for fire suppression operations, b) ground cover potential for fire transfer to tree canopies or structures, and c) tree maintenance to prevent fire from entering or spreading through tree canopies.

WUI Code Defensible Space Rule Overview

Ignition potential of the structure will be taken into consideration. In no way will these standards supersede City code regulations regarding endangered species habitat, property maintenance, land clearing, vegetation removal, critical environmental features protection or tree protection. Land Development Code required landscaping will be accommodated to the greatest extent feasible and reasonable.

Clear areas for fire suppression operations shall be provided within the defensible space and/or at a minimum within 15 feet of structures and appendages and shall be minimum 6 feet width and 8 feet height to allow firefighting personnel with hand tools or firehoses access to all sides of the structure. Ground cover is allowed as long as it does not impeded reasonable access by a firefighter equipped as such.

Ground cover potential for fire transfer to tree canopies or structures can be addressed by providing minimum 6 feet clearance between the ground cover and the tree canopy or flammable parts of structures. The distance should allow for growth of the ground cover and take into consideration flammability of trees or structure components. Groundcover includes understory plants and shrubs.

Tree flammability can be affected by canopy density, leaf resin, and prevalence of dead material. Open canopy trees with low resin leaves such as Texas Red Oak, Pecan, and Cottonwood are examples of low flammability trees while dense canopy trees with high resin leaves such as junipers (Eastern Redcedar, Ash Juniper), Italian Cypress and Yaupon Holly are examples of high flammability trees. Review will typically look for the minimum 6 feet of clearance from ground cover and structures. Qualified arborists with the Texas Wildfire Risk Reduction qualification or other qualified professionals should be consulted to support adequate minimum clearance distances or for consideration to deviate from the minimum.

Structure flammability can be based on sections 503 and 504 of this code but should consider presence of transfer materials such as debris in roof gutters and next to structures, flammable lattices, and items addressed in other sections of chapter 6. Fire transfer materials not regulated by this code can also include items such as flammable door mats, lawn furniture cushions or other flammable items near the structure. Temporary exposures such as open doors (including garage doors) or windows can also provide for fire transfer or exposure to embers.

As stated in the section 601 administrative rule other programs provide detailed recommendations for wildfire protection that go beyond these minimum requirements. One relevant exception is that best management practices for Central Texas vegetation types is to maintain tree canopy cover to retain soil moisture and reduce the rate of growth of fine, flashy fuels that can increase the rate of spread of fire in the landscape. Submittals and plans will not be reviewed for tree canopy separation except for high flammable trees near structures or in groups.