

# International Wildland Urban-Interface Code Additions to the Fire Criteria Manual

## SECTION 1 INTRODUCTION

### 1.3.0 SITE PLAN REVIEW PROCESS

#### 1.3.1 Administrative and Jurisdiction Information

A. The site plan review process for the Fire Code shall encompass all changes in use of property, development on land or shorelines and development or construction requiring a building permit affecting or implementing fire protection, prevention or suppression. Site Plan exemptions shall be as outlined in Chapter 25-5 of the Code of the City of Austin, but such exemptions shall not waive any requirements of the Fire Code.

B. The Austin Fire Department reviews plans for compliance with the currently adopted versions of the Fire Code including the local amendments, the Wildland-Urban Interface Code (WUI), and certain applicable sections of the Building Code and for impact of the design on potential emergency operations. The type, number and location of fire-fighting appliances shall be reviewed to assure compatibility with respect to on site construction and the hazards of fire and explosion. Any site in AFD's Jurisdiction (Austin Full Purpose or Limited Purpose areas) that has been designated as Wildland-Urban Interface area will be reviewed for compliance with the WUI Code. In addition, where practical difficulties in meeting site requirements are encountered, alternate materials and methods of Fire Code compliance will be reviewed at this time.

### 1.5.0 BUILDING PERMIT REVIEW PROCESS

#### 1.5.1 Administration Information

A. The Fire Code review during the building permit review process shall encompass all structures subject to the Fire Code as amended and WUI Code or portions thereof that are constructed, remodeled, added to, relocated or that are subject to an occupancy change except as exempted by Chapter 25-12-11 of the LDC. Fire Code sections 311, 316, 503, 504, 505, 507, 510, 603, 703, 1029, 1030, and Appendix B apply to all structures including those governed by Chapter 25-12-11 of the LDC.

but won't be limited to, defensible space, vegetation, access and water supply. A copy of the red stamped approved Site Plan must be available on site for the inspector in order for the inspection to proceed. Inspections will not occur if an approved copy of the Site Plan is not provided to the inspector on site.

- B. Building Plans:** Building plans shall be inspected for compliance with the WUI Code as detailed on the approved building plans. Typical items inspected will include, but not limited to, ignition resistant construction, ember protection and proximity to the wildland area. A copy of the approved building plans must be on site for the inspector to review. Inspections will not occur if the approved building plans are not on site.

## **SECTION 4 FIRE PROTECTION RULES**

### **TABLE OF CONTENTS**

#### **4.10.0 International Wildland Urban-Interface Code**

**Commented [LM4]:** Add this to the Table of Contents

### **SECTION 4 - FIRE PROTECTION RULES**

#### **4.1.0 GENERAL**

- A. Rules made by the City of Austin for the Fire Code and the International Wildland-Urban Interface Code Area (WUI) will be contained within this section. The purpose of this section is to outline the rules issued by the City of Austin pertaining to specific codes, standards and amendments. Such rules are promulgated to administer and implement the Fire Code and the WUI Code.
- B. Rules reference appropriate International Code sections or other adopted standards. Rules are in the same order as the referenced sections.

#### **4.10.0 Provisions for the International Wildland-Urban Interface Code**

**Commented [LM5]:** New section added to Fire Criteria Manual

\*Class A roof material is any roof material considered resistant to fire and includes, but not limited to, fiberglass shingles, clay tile, concrete and metal. Combustible roof materials such as asphalt shingles, wood shingles, wood shakes or any other combustible material will not be allowed in the WUI area. Spray on fire retardants would also not be allowed as this type of treatment would not be considered permanent.

**Wildland-Urban Interface Areas.** Any developed area where conditions affecting the combustibility of both wildland and built fuels allow for the ignition and spread of fire through the combined fuel complex.

To be included in the WUI area, a site or structure would be required to be 50 feet or closer to 40 acres or more of contiguous wildland fuel. A map of the Wildland-Urban Interface Area has been developed and is available to the public for use to determine if the land and/or structure is located within the WUI area. The map can be accessed through the Austin Fire Marshal's web site.

Structures built or moved into the WUI area located more than 50 feet from and up to 1.5 miles from 40 acres or more of contiguous wildland fuels will be required to be provided with ember protection. Existing structures in these areas may be required to be provided with ember protection should these structure be declared a distinct hazard.

**DISTINCT HAZARD.** Threat to life or property from conditions affecting ignition, spread or intensity of wildfire or as determined by tables 502.1 and 503.1 or Appendix C.

In order to be considered a distinct hazard, a structure would be required to meet ALL of the following criteria:

- a. Located in the WUI
- b. Have non-conforming defensible space
- c. Have a non-conforming water supply
- d. Have non-conforming access
- e. Be built with combustible exterior surfaces
- f. Be located on a significantly slopped lot

#### CITY OF AUSTIN WUI RULE

International Wildland-Urban Interface Code, Reference Sections 402.1.2, 402.2.2 & International Fire Code, Reference Sections 507.3, Appendix B105.1 & B105.2

A conforming water supply capable of supplying sufficient fire flow for the most demanding structure shall be provided for sub-divisions and individual structures. This includes both

**Commented [BM8]:** The definition is intended to include ember zones. Areas are based on the factors used in the hazard severity table, within 150' of a 40 acre or larger wildland area and within 1.5 miles of a 750 acre or larger wildland area. The table only lists the more restrictive 40 acres.

**Commented [LM9]:** Clarified the definition in the WUI Code and when something would be included in the WUI area.

**Commented [BM10]:** We can work on this but it hasn't been contentious. The big decision would be if we stick to being within 1.5 miles of a 750 acre or larger wildland area or perhaps reduce it to 1 mile to be more practical.

Stay with 1.5 miles.

**Commented [LM11]:** This needs work. Please provide feedback. Is it 50 feet, 150', 1.5 miles???? Table 502.1 indicates as much as 1.5 miles. Need to lock this down, it is confusing.

**Commented [BM12]:** Latest draft proposes removing the ignition resistant construction table. To cover the not-permitted category I added a statement to section 503.1 "Permits shall not be granted for structures with extreme hazard severity, nonconforming access, nonconforming water supply, and nonconforming defensible space."

**Commented [LM13]:** Provided more guidance on what would be considered a "Distinct Hazard".

from wildfires, and to mitigate building and structure fires from spreading to wildland fuels. To determine the Hazard Severity of the property, use Table 502.1 and determine the distance from the Wildland, the slope of the property towards the Wildland and the Type of Fuel Model on the property.

For instance, a property that is less than 150 feet from the Wildland (Yellow), has a slope of between 10 and 25% (Orange) and has a medium fuel model (Blue) would be an Extreme Hazard (Red).

A property that is further than 150 feet from the Wildland (Yellow), sloped towards the Wildland less than 10% (Orange) and has a light fuel model (Blue) would be considered a Moderate Hazard (Green).

	Proximity to Contiguous (40 Acres) Wildland Fuels					
	150 to 1.5 miles			<150		
		M	M	M	M	H
	M	M	H	E	E	E
	H	H	H	E	E	E

E = Extreme hazard;

H = High hazard;

M = Moderate hazard

- a. Where required by the Fire Chief, fuel classification shall be based on the historical fuel type for the area.

## CITY OF AUSTIN WUI RULE

### Reference International Wildland-Urban Interface Code, Section 504.1 thru 504.11 Ignition Resistant Construction

It is not the intent of this section to prescribe any specific material that must be used on a structure when building, remodeling or relocating in the WUI. Examples of acceptable materials have been given throughout this section to better clarify what type of materials can be used to achieve ignition resistant construction. Providing this information in the code will reduce confusion and provide a better understanding of what will be allowed in the WUI. The materials prescribed in this section have been proven over years of testing and experience to provide the type and amount of fire resistance needed to achieve the goal of Ignition Resistant Construction. In no way does this section intend to limit the use to only these materials but instead allows the use of these proven materials as well as any "Approved Noncombustible Material".

**Commented [BM15]:** Examples here are a good idea. We could use circles the way I did in one of my presentations.

**Commented [LM16]:** Tried to simplify and give some examples to make reading these tables more easy and reduce phone calls and confusion. Not sure we can produce a color document so any other suggestion as to how to make this table a little easier to read would be appreciated.

**Commented [LM17]:** If we need to get any more specific than this or need to break each section out individually we can. I thought this section as written was pretty self-explanatory but must not have been.

Trees can be an important part of the defensible space. Trees trimmed and maintained to the proper density and height above the ground can create a shaded fuel break which can help reduce the spread of a wildfire. To reduce the spread of wild fire through the trees and between the trees to the structures, trees and vegetation should be trimmed and maintained. Trees should be maintained with a horizontal separation distance between adjacent canopies of 10 feet or more. The crowns of the trees should also maintain a separation distance of at least 10 feet between structures, overhead power lines and unmodified fuels. The canopies of the trees shall be 10 feet or more from a structure and the tree crowns shall be pruned to remove limbs located less than 6 feet above the ground surface below the canopy of the trees. Trees shall also be rimmed to maintain at least 10 feet of clearance between the tree canopy and a chimney. Deadwood, leaves and litter shall regularly be removed from and underneath the trees.

**Commented [BM21]:** I'll work on this too. Env. Comm. and Austin Heritage Tree Foundation were adamant about being included in review of this. They asked that we require tree pruning to meet specific standards. I don't think we have authority for that but we could certainly expand on recommendations. We have several existing publications to go by.