



Kittitas County Community Development Services

411 North Ruby Street Suite #2 | Ellensburg, WA 98926

Phone: (509) 962-7506 | Fax: (509) 962-7682

Fire Hazard Severity Score: 63

Map #: 21-12-27000-0002
Owner: MOUNTAINEERS, THE
Determination date: 12/21/2022
Expires: 12/21/2023

Permit #: BP-22-00977
Site address: FS RD 420 EASTON
Scored by: Joe Dietzel

A. Subdivision Design Points

1. Ingress/Egress
- | | |
|-----------------------------------|-----|
| Two or more primary roads | 1 |
| One road | 3 ✓ |
| One-way road in, one-way road out | 5 |
2. Width of Primary Road
- | | |
|-----------------------------|-----|
| 20 feet (6096 mm) or more | 1 |
| Less than 20 feet (6096 mm) | 3 ✓ |
3. Accessibility
- | | |
|-------------------------|-----|
| Road grade 5% or less | 1 |
| Road grade more than 5% | 3 ✓ |
4. Secondary Road Terminus
- | | |
|--|-----|
| Loop roads, cul-de-sacs with an outside turning radius of 45 feet (13 716 mm) or greater | 1 |
| Dead-end roads 200 feet (60 960 mm) or less in length | 3 ✓ |
| Dead-end roads greater than 200 feet (60 960 mm) in length | 5 |
5. Street Signs
- | | |
|-------------|-----|
| Present | 1 ✓ |
| Not present | 3 |

B. Vegetation (IWUIC Definitions)

1. Fuel Types
- | | |
|--------|------|
| Light | 1 |
| Medium | 5 |
| Heavy | 10 ✓ |
2. Defensible Space
- | | |
|--|------|
| 70% or more of site | 1 |
| 30% or more, but less than 70% of site | 10 |
| Less than 30% of site | 20 ✓ |

C. Topography

- | | |
|---------------------------------|------|
| 8% or less | 1 |
| More than 8%, but less than 20% | 4 |
| 20% or more, but less than 30% | 7 |
| 30% or more | 10 ✓ |

D. Roofing Material

- | | |
|--------------------|-----|
| Class A Fire Rated | 1 ✓ |
| Class B Fire Rated | 5 |
| Class C Fire Rated | 10 |
| Nonrated | 20 |

E. Fire Protection - Water Source

- | | |
|--|-----|
| 500 GPM (1892.5 L/min) hydrant within 1,000 feet (304.8 m) | 1 |
| Hydrant farther than 1,000 feet (304.8 m) or draft site | 2 |
| Water source 20 min. or less, round trip | 5 |
| Water source farther than 20 min., and 45 min. or less, round trip | 7 ✓ |
| Water source farther than 45 min., round trip | 10 |

F. Existing Building Construction Materials

- | | |
|--|-----|
| Noncombustible siding/deck | 1 ✓ |
| Noncombustible siding/combustible deck | 5 |
| Combustible siding and deck | 10 |

G. Utilities (gas and/or electric)

- | | |
|-----------------------------------|-----|
| All underground utilities | 1 ✓ |
| One underground, one above ground | 5 |
| All above ground | 10 |

Total:

- | | |
|-----------------|-----------|
| Low Hazard | 0 - 39 |
| Moderate Hazard | 40 - 59 |
| High Hazard | 60 - 74 ✓ |
| Extreme Hazard | 75+ |

High Hazard

50 Feet Defensible Space Required





KITTITAS COUNTY FIRE MARSHAL'S OFFICE

411 N. Ruby St., Suite 2, Ellensburg, WA 98926
Fire Marshal (509) 962-7000 Deputy Fire Marshal (509) 962-7657



CHAPTER 2 – DEFINITIONS

DEFENSIBLE SPACE. An area either natural or manmade, where material capable of allowing a fire to spread unchecked has been treated, cleared, or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

CHAPTER 6 - FIRE PROTECTION REQUIREMENTS

User note:

About this chapter: Chapter 6 establishes minimum fire protection requirements to mitigate the hazards to life and property from fire in the wildland-urban interface. The chapter includes both design-oriented and prescriptive mitigation strategies to reduce the hazards of fire originating within a structure spreading to wildland and fire originating in wildland spreading to structures.

Especially targeted for a systems-approach to fire protection are those new buildings that are deemed to be particularly hazardous under Chapter 5; these buildings are required to be sprinklered. Other hazard mitigation strategies include establishing around structures defensible space zones wherein combustible vegetation and trees are regulated and kept away from buildings and trees are located 10 feet crown-to crown away from each other. Additional hazards that are dealt with in Chapter 6 include spark arresters on chimneys and regulated storage of combustible materials, firewood and LP-gas.

SECTION 601 .GENERAL

601.1 Scope.

The provisions of this chapter establish general requirements for new and existing buildings, structures and premises located within *wildland-urban interface areas*.

601.2 Objective.

The objective of this chapter is to establish minimum requirements to mitigate the risk to life and property from wildland fire exposures, exposures from adjacent structures and to prevent structure fires spreading to wildland fuels.

SECTION 602 - AUTOMATIC SPRINKLER SYSTEMS

602.1 General.

An *approved* automatic sprinkler system shall be installed in all occupancies in new buildings required to meet the requirements for Class 1 ignition-resistant construction in Chapter 5. The installation of the automatic sprinkler systems shall be in accordance with nationally recognized standards.

SECTION 603 - DEFENSIBLE SPACE

603.1 Objective.

Provisions of this section are intended to modify the fuel load in areas adjacent to structures to create a *defensible space*.

603.2 Fuel modification.

Buildings or structures, constructed in compliance with the conforming *defensible space* category of Table 503.1, shall comply with the *fuel modification* distances contained in Table 603.2. For all other purposes the *fuel modification* distance shall be not less than 30 feet (9144 mm) or to the lot line, whichever is less. Distances specified in Table 603.2 shall be measured on a horizontal plane from the perimeter or projection of the building or structure as shown in Figure 603.2. Distances specified in Table 603.2 are allowed to be increased by the code official because of a site-specific analysis based on local conditions and the fire protection plan.

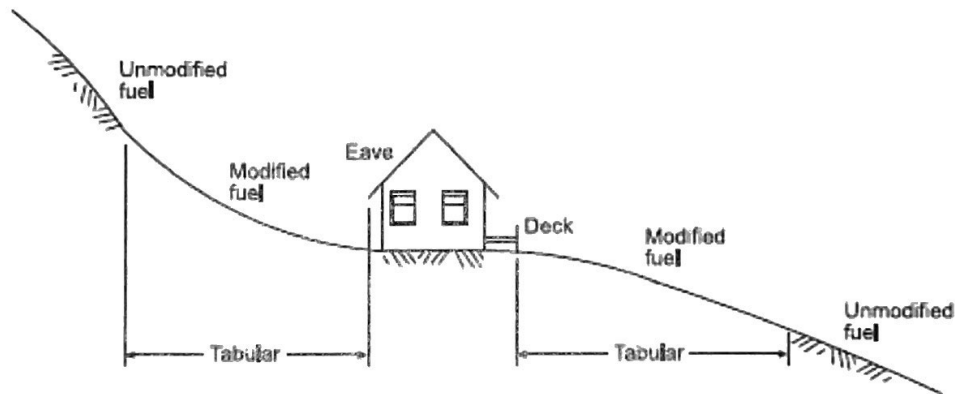
TABLE 603.2 - REQUIRED DEFENSIBLE SPACE

WILDLAND-URBAN INTERFACE AREA	FUEL MODIFICATION DISTANCE (feet) ^a
Moderate hazard	30
High hazard	50
Extreme hazard	100

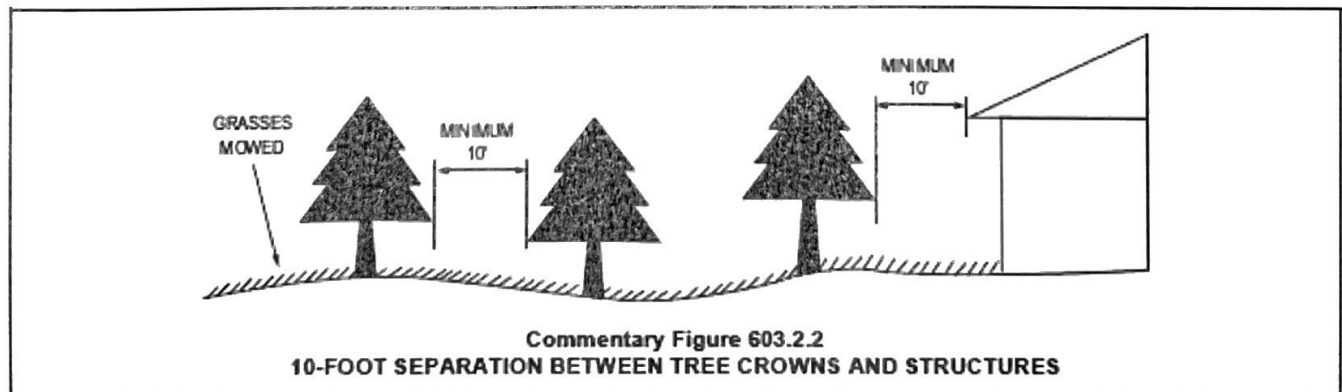
For SI: 1 foot = 304.8 mm.

a. Distances are allowed to be increased due to site-specific analysis based on local conditions and the fire protection plan.

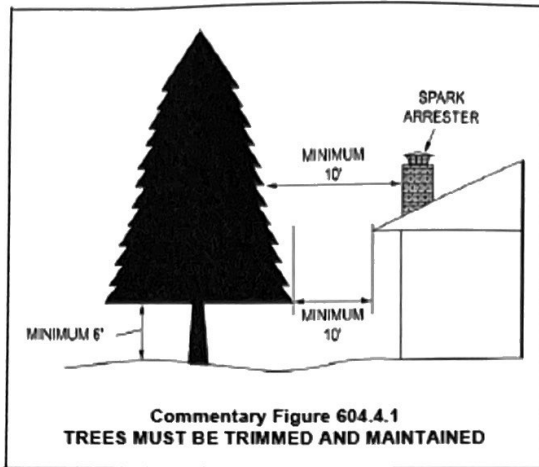
FIGURE 603.2 - MEASUREMENTS OF FUEL MODIFICATION DISTANCE



**FIGURE 603.2
MEASUREMENTS OF FUEL MODIFICATION DISTANCE**



**Commentary Figure 603.2.2
10-FOOT SEPARATION BETWEEN TREE CROWNS AND STRUCTURES**



603.2.1 Responsible party.

Persons owning, leasing, controlling, operating or maintaining buildings or structures requiring defensible spaces are responsible for modifying or removing non-fire-resistive vegetation on the property owned, leased or controlled by said person.

603.2.2 Trees.

Trees are allowed within the *defensible space*, provided that the horizontal distance between crowns of adjacent trees and crowns of trees and structures, overhead electrical facilities or unmodified fuel is not less than 10 feet (3048 mm). See Figure 603.2.2.

603.2.3 Groundcover.

Deadwood and litter shall be regularly removed from trees. Where ornamental vegetative fuels or cultivated ground cover, such as green grass, ivy, succulents or similar plants are used as ground cover, they are allowed to be within the designated *defensible space*, provided that they do not form a means of transmitting fire from the native growth to any structure.

SECTION 604 - MAINTENANCE OF DEFENSIBLE SPACE

604.1 General.

Defensible spaces required by Section 603 shall be maintained in accordance with Section 604.

604.2 Modified area.

Non-fire-resistive vegetation or growth shall be kept clear of buildings or structures, in accordance with Section 603, in such a manner as to provide a clear area for fire suppression operations.

604.3 Responsibility.

Persons owning, leasing, controlling, operating or maintaining buildings or structures are responsible for maintenance of *defensible spaces*. Maintenance of the *defensible space* shall include modifying or removing non-fire-resistive vegetation and keeping leaves, needles and other dead vegetative material regularly removed from roofs of buildings and structures.

604.4 Trees.

Tree crowns extending to within 10 feet (3048 mm) of any structure shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm). Tree crowns within the *defensible space*

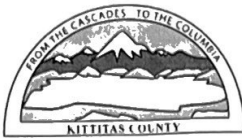
shall be pruned to remove limbs located less than 6 feet (1829 mm) above the ground surface adjacent to the trees.

604.4.1 Chimney clearance.

Portions of tree crowns that extend to within 10 feet (3048 mm) of the outlet of a chimney shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm).

604.4.2 Deadwood removed.

Deadwood and litter shall be regularly removed from trees.



CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Recipient:

Date: **10/13/2022**

Tax ID: **21-12-27000-0002**

Parcel Number: **606535**

Site Address: **FS RD 420 EASTON, EASTON, WA 98115**

2018 IRC Table R301.2(1) (See KCC SECTION 14.04.020 for footnotes)

GROUND SNOW LOAD	WIND SPEED ^(d) (mph)	SEISMIC DESIGN CATEGORY ^(f)	WEATHERING ^(a)	FROST LINE DEPTH ^(b)	TERMITE ^(c)	WINTER DESIGN TEMP ^(e)	ICE BARRIER UNDERLAYMENT REQUIRED ^(h)	FLOOD HAZARDS ^(g)	AIR FREEZING INDEX ⁽ⁱ⁾	MEAN ANNUAL TEMP ^(j)
Min. 30 psf Roof	110	C, D0 & D1 are present	Severe	24"	Slight to Moderate	2°F	Yes	A through C	1,000–2,000	50°F

Snow Load Information

Roof Snow Load Formula: $(PF) = (0.7)(CE)(CT)(I)(PG)$

3926 ELEVATION

X **0.078** ISO

0.7 COEFF	1.2 (CE) EXPOSURE FACTOR	1.1 Heated 1.2 Unheated (CT) THERMAL FACTOR	1 (I) IMPORTANCE FACTOR	307 psf (PG) GROUND SNOW LOAD	=	284 psf For Heated Structures 310 psf For Unheated Structures (PF) ROOF SNOW LOAD
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ALSO, See ASCE 7.10 for other snow load issues

Section 7.4 Pitch Reduction. Do not reduce where snow cannot slide off roof. (Valley, Pitch Breaks, etc)

Section 7.6 Unbalanced Roof Snow Loads.

Section 7.7 Drifts on Lower Roofs/ Decks.

Section 7.9 Sliding Snow ON Lower Roofs/Decks.

See 2018 Washington State Energy Code Climate Zone 5 (see <http://www.energy.wsu.edu>)

Other Design Criteria

Building Code: 2018 IBC & 2018 IRC

Wind Speed: 110 MPH

Exposure: B C

Prescriptive IRC

Seismic Zone: **D1**

Roof Class: **CLASS A**

Frost Depth: 24 inches



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WILDLAND URBAN INTERFACE (WUI) PLAN REVIEW

DUE TO THE FIRE HAZARD SEVERITY SCORE FOR YOUR PARCEL AND THAT THE PARCEL **DOES** RESIDE INSIDE OF A FIRE RESPONSE DISTRICT YOU MUST COMPLY WITH THIS ENTIRE FORM.

READ: IMPORTANT

ALL APPLICABLE PERMIT CARDS WILL BE LOCATED ONSITE AT TIME OF INSPECTION OR A FAIL WILL BE GIVEN AND A \$65 REINSPECTION FEE WILL BE ADDED TO THE PARCEL'S ACCOUNT.

THE PARCEL'S ADDRESS SIGN WILL BE MOUNTED IN A NONOBSTRUCTED AREA IN ACCORDANCE WITH KITTITAS COUNTY CODE OR THE INSPECTION WILL FAIL AND A \$65 REINSPECTION FEE WILL BE ADDED TO THE PARCEL'S ACCOUNT.

THE PROPERTY LINES WILL BE CLEARLY MARKED AND IDENTIFIED OR THE INSPECTION WILL FAIL AND A \$65 REINSPECTION FEE WILL BE ADDED TO THE PARCEL'S ACCOUNT.

THE APPROPRIATE BUILDING PLANS WILL BE ONSITE OR THE INSPECTION WILL FAIL AND A \$65 REINSPECTION FEE WILL BE ADDED TO THE PARCEL'S ACCOUNT.

The following codes shall govern all aspects of construction: 2018 International Building Code, 2018 International Residential Code, 2018 International Fire Code, 2018 International Mechanical Code, 2018 International Fuel Gas Code, 2018 International Existing Building Code, 2016 Washington State Energy Code, 2021 National Fuel Gas Code NFPA 58, 2013 National Fire Protection Association International Wildland-Urban Interface Code NFPA 1143.
ISSUANCE OR GRANTING OF A PERMIT SHALL NOT BE CONSIDERED AN ENDORSEMENT OR AN APPROVAL OF, ANY VIOLATION OF THE PROVISIONS OF ANY APPLICABLE CODE OR JURISDICTION OF THE JURISDICTION, NOR SHALL IT BE IMPLIED ACCEPTANCE OF ANY VIOLATION THAT OCCUR ON SITE.

505.1 CLASS 2 IGNITION-RESISTANT CONSTRUCTION shall be in accordance with Sections 505.2 through 505.11



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WILDLAND URBAN INTERFACE (WUI) PLAN REVIEW
SPRINKLERS REQUIRED – MITIGATION ALLOWED

PERMIT #:		PLANS EXAMINER:	
OWNER:		CONTRACTOR:	
SITE ADDRESS:		TAX PARCEL NO.:	
STRUCTURE TYPE:		ROOF CLASS:	Choose an item
CONSTRUCTION CLASS:	IR1	FIRE SPRINKLER:	YES
DEFENSIBLE SPACE:		SQ FOOTAGE:	Kittitas County CDS
DISTANCE REQ'D:	100' Or To Property Line		

PERMIT COPY
DEC 22 2022
KITTITAS CO CDS

RECEIVED

The following codes shall govern all aspects of construction: 2015 International Building Code, 2015 International Residential Code, 2015 International Fire Code, 2015 International Mechanical Code, 2015 International Fuel Gas Code, 2015 Uniform Plumbing Code, 2015 Washington State Energy Code, 2015 National Fuel Gas Code NFPA 54, 2014 Liquefied Petroleum Gas Code NFPA 58, 2015 International Wildland Urban Interface Code. THE ISSUANCE OR GRANTING OF A PERMIT SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF THE PROVISIONS OF ANY APPLICABLE CODE OR ORDINANCE OF THE JURISDICTION, NOR SHALL IT BE IMPLIED ACCEPTANCE OF ANY CHANGES THAT OCCUR ON SITE.

504.1 CLASS I IGNITION-RESISTANT CONSTRUCTION shall be in accordance with Sections 504.2 through 504.11

602.1 General.

APPROVED AUTOMATIC SPRINKLER SYSTEM shall be installed in all occupancies in new buildings required to comply with Class I Ignition-Resistant Construction. The installation of the automatic sprinkler system shall be in accordance with nationally recognized standards.

1. Submit a fire sprinkler system plan and permit application to the Fire Marshal's Office.
2. A framing inspection will not be performed until the sprinkler system is inspected and approved by the Fire Marshal.

Exception: Extending to 1.5 times the required defensible space with a *conforming water system* or 2.5 times the required defensible space per Table 503.1 KCC 20.10 Wildland Urban Interface Code will mitigate the sprinkler requirement.