

Ordinance No. 2007-03

An Ordinance of the Board of Directors of the San Miguel Consolidated Fire Protection District Adopting the California Urban-Wildland Interface Code, 2006 Edition With Certain Amendments, Additions, and Deletions

An Ordinance of the San Miguel Consolidated Fire Protection District, adopting the California Urban-Wildland Interface Code, 2006 edition, regulating and governing the mitigation of hazard to life and property from the intrusion of fire from wildland exposures, fire from adjacent structures and prevention of structure fires from spreading to wildland fuels in the San Miguel Consolidated Fire Protection District.

WHEREAS, the Board of Directors of the San Miguel Consolidated Fire Protection District does herewith find that the District has certain climatic, geologic, and topographical features that can have a deleterious effect on emergency services such as fire protection and emergency medical services; and,

WHEREAS, the Board of Directors finds that the modifications and changes to the California Urban-Wildland Interface Codes are reasonably necessary because of the following local climatic, geological and topographical conditions as identified in Attachment A,

WHEREAS, certain amendments to the California Urban-Wildland Interface Code, 2006 edition serve to mitigate to the extent possible said deleterious effects,

WHEREAS, Section 50022.1 through 50022.10, inclusive, of the Government Code and Section 13869 of the Health and Safety Code, provide authority for the adoption by reference of codes, or portion of such codes,

NOW THEREFORE, The Board of Directors of the San Miguel Consolidated Fire Protection District does ordain as follows:

Section 1

That a certain document, three (3) copies of which are on file in the office of the San Miguel Consolidated Fire Protection District, being marked and designated as the California Urban-Wildland Interface Code, 2006 edition, as published by the California Code Council, be and hereby is adopted as the Urban-Wildland Interface Code of the San Miguel Consolidated Fire Protection District, in the State of California for regulating and governing the mitigation of hazards to life and property from the intrusion of fire from wildland exposures, fire from adjacent structures and prevention of structure fires from spreading to wildland fuels as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Urban-Wildland Interface Code on file in the office of the San Miguel Consolidated Fire Protection District are hereby

referred to, adopted, and made a part hereof, as if fully set out in this Ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this Ordinance.

Section 2

The following sections are hereby revised as noted added, **(A)** deleted, **(D)** modified **(M)** or **(R)** revised to read as follows:

Chapter 1 Administration – Section 101 General

(M) Section 101.1 Title – These regulations shall be known as the Wildland-Urban-Interface Code of the San Miguel Consolidated Fire Protection District hereinafter referred to as this Code.

(R) 101.2 Scope – The provisions of this Code shall apply to the construction, alteration, movement, repair, maintenance and use of any building, structure or premises within the wildland-urban interface areas in this jurisdiction.

Buildings or conditions in existence at the time of the adoption of this Code are allowed to have their use or occupancy continued, if such condition, use or occupancy was legal at the time of the adoption of this Code, provided such continued use does not constitute a distinct danger to life or property.

Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this Code for new buildings or structures.

(R) 101.3 Objective – The objective of this Code is to establish minimum regulations consistent with nationally recognized good practice for the safeguarding of life and property. Regulations in this Code are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels. The extent of this regulation is intended to be tiered commensurate with the relative level of hazard present.

The unrestricted use of property in wildland-urban interface areas is a potential threat to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire-protection facilities to control the spread of fire in wildland-urban interface areas shall be in accordance with this Code.

This Code shall supplement the jurisdiction's building and fire codes, if such codes have been adopted, to provide for special regulations to mitigate the fire and life safety hazards of the wildland-urban interface areas.

(D) Section 101.4 Retroactivity – Delete Appendix A.

(R) 101.4 Retroactivity – The provisions of the Code shall apply to conditions arising after the adoption thereof, conditions not legally in existence at the adoption of this Code, to conditions which, in the opinion of the Code Official, constitute a distinct hazard to life or property.

Exception – Provisions of this Code that specifically apply to existing conditions are retroactive. See Sections 402.3, 601.1.

(R) 101.5 Additions or Alterations – Additions or alterations may be made to any building or structure without requiring the existing building or structure to comply with all of the requirements of this Code, provided the addition or alteration conforms to that required for a new building or structure.

Exception – Provisions of this Code that specifically apply to existing conditions are retroactive. See Sections 402.3 and 601.1. Additions or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this Code nor shall such additions or alterations cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate access in compliance with this Code or will obstruct existing exits or access; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.

(A) When additions are made to an existing structure and the addition is within the 100 foot defensible space, such addition shall be in accordance with setback distances as set forth in the Code and with Sections 504.1.2, 505.1.2 and 505.1.3 of this Code.

(M) Section 101.6 Maintenance – All buildings, structures, landscape materials, vegetation, defensible space or other devices or safeguards required by this Code shall be maintained in conformance with this Code edition. The owner or the owner’s designated agent shall be responsible for the maintenance of buildings, structures, landscape materials and vegetation.

(A) Section 101.7 Guidance Documents – The Planning Authority Having Jurisdiction (PAHJ) may prepare, circulate for public comment, disseminate and maintain guidance documents addressing the methods of ignition-resistant construction described in this Code.

These guidance documents may set out additional compliance alternatives that, in specified circumstances, can provide the same protection that is afforded by the methods required by this Code. These guidance documents may also identify practices that have been determined by PAHJ and the Fire Authority Having Jurisdiction (FAHJ) to be equivalent and they may include additional new fire-resistive technologies as they become available.

Section 102 Authority of the Code Official

(R) 102.1 Powers and Duties of the Code Official – The Code Official is hereby authorized to administer and enforce this Code, or designated sections thereof, and all Ordinances of the jurisdiction pertaining to designated wildland-urban interface areas. For such purposes, the Code Official shall have the powers of a law enforcement officer.

(R) 102.2 Interpretations, Rules and Regulations – The Code Official shall have the power to render interpretations of this Code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance to the intent and purpose of this Code.

A copy of such rules and regulations shall be filed with the clerk of the jurisdiction and shall be in effect immediately thereafter. Additional copies shall be available for distribution to the public.

(R) 102.3 Liability of the Code Official – The Code Official charged with the enforcement of this Code, acting in good faith and without malice in the discharge of the duties required by this Code or other pertinent law or Ordinance, shall not thereby be rendered personally liable for damages that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties. A suit brought against the Code Official or employee because of such act or omission performed by the Code Official or employee in the enforcement of any provision of such codes or other pertinent laws or Ordinances implemented through the enforcement of this Code or enforced by the code enforcement agency shall be defended by this jurisdiction until final termination of such proceedings, and any judgment resulting there from shall be assumed by this jurisdiction. The code enforcement agency or its parent jurisdiction shall not be held as assuming any liability by reason of the inspections authorized by this Code or any permits or certificates issued under this Code.

(R) 102.4 Other Agencies – When requested to do so by the Code Official, other officials having jurisdiction shall assist and cooperate with the Code Official in the discharge of the duties required by this Code.

Section 103 Compliance Alternatives

(R) 103.1 Practical Difficulties – When there are practical difficulties involved in carrying out the provisions of this Code, the Code Official is authorized to grant modifications for individual cases on application in writing by the owner or a duly authorized representative. The Code Official shall first find that a special individual reason makes enforcement of the strict letter of this Code impractical, the modification is in conformance to the intent and purpose of this Code and the modification does not lessen any fire protection requirements or any degree of structural integrity. The details of any action granting modifications shall be recorded and entered into the files of the code enforcement agency. If the Code Official determines that difficult terrain, danger of erosion or other unusual circumstances make strict compliance with the vegetation control provisions of the code detrimental to safety or impractical, enforcement thereof may be suspended, provided that reasonable alternative measures are taken.

(R) 103.2 Technical Assistance – To determine the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to the inspection of the Code Official, the Code Official is authorized to require the owner or the person in possession or control of the building or premises to provide, without charge to the jurisdiction, a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the Code Official and the owner and shall analyze the fire safety of the design, operation or use of the building or premises, the facilities and appurtenances situated thereon and fuel management for purposes of establishing fire hazard severity to recommend necessary changes.

(R) 103.3 Alternative Materials or Methods – The Code Official, in concurrence with approval from the Building Official and Fire Chief, is authorized to approve alternative materials or methods, provided that the Code Official finds that the proposed design, use or operation satisfactorily complies with the intent of this Code and that the alternative is, for the purpose intended, at least equivalent to the level of quality, strength, effectiveness, fire resistance, durability and safety prescribed by this Code. Approvals under the authority herein contained shall be subject to the approval of the Building Official whenever the alternate material or method involves matters regulated by the **(M)** California Building Code. The Code Official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the files of the code enforcement agency.

Section 104 Appeals

(D) Section 104 Appeals – The entire Section 104 is deleted in its entirety. Appeals shall be enforced through the locally adopted Fire Code.

Section 105 Permits

(D) Section 105 – Section 105 is deleted in its entirety. Permits shall be enforced through the locally adopted Fire Code.

Section 106 Plans and Specifications

(R) 106.1 General – Plans, engineering calculations, diagrams and other data shall be submitted in at least two sets with each application for a permit. When such plans are not prepared by an architect or engineer, the Code Official may require the applicant submitting such plans or other data to demonstrate that state law does not require that the plans be prepared by a licensed architect or engineer. The Code Official may require plans, computations and specifications to be prepared and designed by an architect or engineer licensed by the state to practice as such even if not required by state law.

Exceptions: Submission of plans, calculations, construction inspection requirements and other data, if it is found that the nature of the work applied for is such that reviewing of plans is not necessary to obtain compliance with this Code.

(R) 106.2 Information on Plans and Specifications – Plans and specifications shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in detail that it will conform to the provisions of this Code and all relevant laws, Ordinances, rules and regulations.

(R) 106.3 Site Plan – In addition to the requirements for plans in the **(M)** California Building Code, site plans shall include topography, width and percent of grade of access roads, landscape and vegetation details, locations of structures or building envelopes, existing or proposed overhead utilities, occupancy classification of buildings, types of ignition-resistant construction of buildings, structures and their appendages, roof classification of buildings, and site water supply systems.

(A) 106.3.1 Digital Maps – In addition to site plans requirements above, site plans shall also be submitted in PDF format, or a format compatible with current department mapping services.

(D) Section 106.4 – Hereby is revised by deleting the following: See Appendix B.

(R) 106.4 Vegetation Management Plans – When utilized by the permit applicant pursuant to Section 502, vegetation management plans shall be prepared and shall be submitted to the Code Official for review and approval as part of the plans required for a permit.

(R) 106.5 Fire Protection Plan – When required by the Code Official pursuant to Section 405, a fire protection plan shall be prepared and shall be submitted to the Code Official for review and approved as a part of the plans required for a permit.

(R) 106.6 Other Data and Substantiation – When required by the Code Official, the plans and specifications shall include classification of fuel loading, fuel model light, medium or heavy, and substantiating data to verify classification of fire-resistive vegetation.

(R) 106.7 Vicinity Plan – In addition to the requirements for site plans, plans shall include details regarding the vicinity within 300 feet (91,440 mm) of property lines, including other structures, slope, vegetation, fuel breaks, water supply systems and access roads.

(R) 106.8 Retention of Plans – One set of approved plans, specifications and computations shall be retained by the Code Official for a period of not less than ninety (90) days from date of completion of the work covered therein; and one set of approved plans and specifications shall be returned to the applicant, and said set shall be kept on the site of the building, use or work at all times during which the work authorized thereby is in progress.

Section 107 Inspections and Enforcement

107.1 Inspection

(R) 107.1.1 General – All construction or work for which a permit is required by this Code shall be subject to inspection by the Code Official and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the Code Official. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Code Official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this Code or of other Ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this Code or of other Ordinances of the jurisdiction shall not be valid.

A survey of the lot may be required by the Code Official to verify that the mitigation features are provided and the building or structure is located in accordance with the approved plans.

(R) 107.1.2 Authority to Inspect – The Code Official shall inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the Code Official for the purpose of ascertaining and causing to be corrected any conditions that could reasonably be expected to cause fire or contribute to its spread, or any violation of the purpose of this Code and of any other law or standard affecting fire safety.

(R) 107.1.3 Reinspections – To determine compliance with this Code, the Code Official may cause a structure to be reinspected. A fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made. Reinspection fees may be assessed when the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested or for deviating from plans requiring the approval of the Code Official. To obtain a reinspection, the applicant shall pay the reinspection fee as set forth in the fee schedule adopted by the jurisdiction. When reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

107.2 Enforcement

(R) 107.2.1 Authorization to Issue Corrective Orders and Notices – When the Code Official finds any building or premises that are in violation of this Code, the Code Official is authorized to issue corrective orders and notices.

(R) 107.2.2 Service of Orders and Notices – Orders and notices authorized or required by this Code shall be given or served on the owner, operator, occupant or other person responsible for the condition or violation either by verbal notification, personal service, or delivering the same to, and leaving it with, a person of suitable age and discretion on the premises; or, if no such person is found on the premises, by affixing a copy thereof in a conspicuous place on the door to the entrance of said premises and by mailing a copy thereof to such person by registered or certified mail to the person's last known address.

Orders or notices that are given verbally shall be confirmed by service in writing as herein provided.

(R) 107.3 Right of Entry – Whenever necessary to make an inspection to enforce any of the provisions of this Code, or whenever the Code Official has reasonable cause to believe that there exists in any building or on any premises any condition that makes such building or premises unsafe, the Code Official is authorized to enter such building or premises at all reasonable times to inspect the same or to perform any duty authorized by this Code, provided that if such building or premises is occupied, the Code Official shall first present proper credentials and request entry; and if such building or premises is unoccupied, the Code Official shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If such entry is refused, the Code Official shall have recourse to every remedy provided by law to secure entry. Owners, occupants or any other persons having charge, care or control of any building or premises, shall, after proper request is made as herein provided, promptly permit entry therein by the Code Official for the purpose of inspection and examination pursuant to this Code.

107.4 Compliance with Orders and Notices

(R) 107.4.1 General Compliance – Orders and notices issued or served as provided by this Code shall be complied with by the owner, operator, occupant or other person responsible for the condition or violation to which the corrective order or notice pertains.

If the building or premises is not occupied, such corrective orders or notices shall be complied with by the owner.

(R) 107.4.2 Compliance with Tags – A building or premises shall not be used when in violation of this Code as noted on a tag affixed in accordance with Section 107.4.1.

(R) 107.4.3 Removal and Destruction of Signs and Tags – A sign or tag posted or affixed by the Code Official shall not be mutilated, destroyed or removed without authorization by the Code Official.

(R) 107.4.4 Citations – Persons operating or maintaining an occupancy, premises or vehicle subject to this Code who allow a hazard to exist or fail to take immediate action to abate a hazard on such occupancy, premises or vehicle when ordered or notified to do so by the Code Official shall be guilty of a misdemeanor.

(R) 107.4.5 Unsafe Conditions – Buildings, structures or premises that constitute a fire hazard or are otherwise dangerous to human life, or which in relation to existing use constitute a hazard to safety or health or public welfare, by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster damage or abandonment as specified in this Code or any other Ordinance, are unsafe conditions. Unsafe buildings or structures shall not be used. Unsafe buildings are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal, pursuant to applicable state and local laws and codes.

Section 108 Certificate of Completion

(R) 108.1 General – No building, structure or premises shall be used or occupied, and no change in the existing occupancy classification of a building, structure, premise or portion thereof shall be made until the Code Official has issued a certificate of completion there for as provided herein. The certificate of occupancy shall not be issued until the certificate of completion indicating that the project is in compliance with this Code has been issued by the Code Official.

(R) 108.2 Certificate of Occupancy – Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this Code or of other pertinent laws and Ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this Code or other laws or Ordinances of the jurisdiction shall not be valid.

Chapter 2 Definitions – Section 201 General

(R) 201.1 Scope – Unless otherwise expressly stated, the following words and terms shall, for the purposes of this Code, have the meanings shown in this chapter.

(R) 201.2 Interchangeability – Words stated in the present tense include the future; words stated in the masculine gender include the feminine and neuter, and the singular number includes the plural and the plural the singular.

(R) 201.3 Terms Defined in Other Codes – Where terms are not defined in this Code and are defined in other California Codes, such terms shall have the meanings ascribed to them as in those codes.

(R) 201.4 Terms Not Defined – Where terms are not defined through the methods authorized by this section, such terms shall have their ordinarily accepted meanings such as the context implies.

Section 202 Definitions

(R) Accessory Structure – A building or structure used to shelter or support any material, equipment, chattel or occupancy other than a habitable building. **(A)** (See Structure).

(R) Approved – Approval by the Code Official as the result of review, investigation or tests conducted by the Code Official or by reason of accepted principles or tests by national authorities, or technical or scientific organizations.

Building – Any structure used or intended for supporting or sheltering any use or occupancy.

(M) Building Official – The officer or other designated authority charged with the administration and enforcement of the locally adopted California Building Code, or the Building Official's duly authorized representative.

Certificate of Completion – Written documentation that the project or work for which a permit was issued has been completed in conformance with requirements of this Code.

Code Official – The official designated by the jurisdiction to interpret and enforce this Code, or the Code Official’s authorized representative.

(A) Combustible Vegetation – Is material that in its natural state will readily ignite, burn and transmit fire from the vegetative growth to any structure, this includes ground fuels which are any native or landscape vegetation not considered a tree and generally in contact with the ground.

Critical Fire Weather – A set of weather conditions (usually a combination of low relative humidity and wind) whose effects on fire behavior make control difficult and threaten firefighter safety.

Defensible Space – An area either natural or man-made, 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.

(A) Discretionary Project – Discretionary project means a project, which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, Ordinances, or regulations.

Driveway – A vehicular ingress and egress route that serves no more than two buildings or structures, not including accessory structures, or more than five dwelling units.

Fire Area – The floor area, in square feet (square meters), used to determine the adequate water supply.

(A) Fire Authority Having Jurisdiction (FAHJ) – The designated entity providing enforcement of fire regulations as they relate to planning, construction and development. This entity may also provide fire suppression and other emergency services.

Fire Chief – The chief officer or the chief officer’s authorized representative of the fire department serving the jurisdiction.

(M) Fire Code – Is the California Fire Code as locally adopted with amendments.

(A) Fire Protection Plan – A document prepared for a specific project or development proposed for the wildland-urban interface area. It describes ways to minimize and mitigate the fire problems created by the project or development, with the purpose of reducing impact on the community’s fire protection delivery system.

Fire Weather – Weather conditions favorable to the ignition and rapid spread of fire. In wildfires, this generally includes high temperatures combined with strong winds and low humidity. See “Critical Fire Weather.”

Fire-Resistance Rated Construction – The use of materials and systems in the design and construction of a building or structure to safeguard against the spread of fire within a building or structure and the spread of fire to or from buildings or structures to the wildland-urban interface area.

Flame Spread Rating – As used herein refers to rating obtained according to tests conducted as specified by a nationally recognized standard.

Fuel Break – An area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for fire fighting.

(M) Fuel, Heavy – Is vegetation consisting of round wood 3 to 8 inches (76 to 203 mm) in diameter. Heavy fuels represent dense conifer stands where there is a heavy accumulation of litter and downed woody material. See applicable National Fire Danger Rating system (NFDR), fuel models G & U as described in Appendix D.

(M) Fuel, Light – Is vegetation consisting of herbaceous plants and round wood less than 1/4 inch (6.4 mm) in diameter. Light fuels represent western grasslands vegetated by annual or perennial grasses and forbs. Grasses and forbs are the primary ground fuel, but there can be enough needle litter and branch wood present from an open pine stand to contribute to the fuel loading. See applicable National Fire Danger Rating system (NFDR), fuel models A, C & L as described in Appendix D.

(M) Fuel, Medium – Is vegetation consisting of round wood 1/4 to 3 inches (6.4 mm to 76 mm) in diameter. Medium fuels represent mature, dense fields of California mixed chaparral. See applicable National Fire Danger Rating system (NFDR), fuel models B & F as described in Appendix D.

(M) Fuel Modification Zone – A strip of land where combustible vegetation has been thinned, modified or both and partially or totally replaced with approved drought-tolerant, fire-resistant, and/or irrigated plants to provide an acceptable level of risk from vegetation fires. Fuel modification reduces radiant and convective heat, thereby reducing the amount of heat exposure on the roadway or structure and providing fire suppression forces a safer area in which to take action.

Fuel Mosaic – A fuel modification system that provides for the creation of islands and irregular boundaries to reduce the visual and ecological impact of fuel modification.

Fuel-Loading – The oven-dry weight of fuels in a given area, usually expressed in pounds per acre (lb/a) (kg/ha). Loading may be referenced to fuel size or time lag categories, and may include surface fuels or total fuels.

Greenbelt – A fuel break designated for a use other than fire protection.

(A) Hazardous Fire Area – Any geographic area mapped by the State or local jurisdiction as a high, or very high fire hazard area, or as set forth by the FAHJ that contains the type and condition of vegetation, topography, weather, and structure density to potentially increase the possibility of vegetation conflagration fires shall be considered a hazardous fire area.

(M) Hazardous Materials – As defined in the locally Adopted Fire Code.

(M) Heavy Timber Construction – As described in the California Building Code.

Ignition-Resistant Construction, Class 1 – A schedule of additional requirements for construction in wildland-urban interface areas based on extreme fire hazard.

Ignition-Resistant Construction, Class 2 – A schedule of additional requirements for construction in wildland-urban interface areas based on high fire hazard.

(D) Ignition-Resistant Construction, Class 3 – Has been deleted.

(A) Ignition Source – Is any item or substance capable of energy release of a type and magnitude sufficient to ignite any flammable materials that could occur in or outside of a structure. Examples of ignition sources are storage or use of flammable gases and flammable liquids, or permanent or temporary electrical wiring and open flame devices.

(A) Ignition-Resistant Material – Is any product which, when tested in accordance with UBC Standard 8-1 for a period of thirty (30) minutes, shall have a flame spread of not over twenty-five (25) and show no evidence of progressive combustion. In addition, the flame front shall not progress more than 10½ feet (3,200 mm) beyond the centerline of the burner at any time during the test.

Materials shall pass the accelerated weathering test and be identified as exterior type, in accordance with UBC Standard 23-4. All materials shall bear identification showing the fire performance rating thereof. That identification shall be issued by ICC-ES/ICBO-ES or a testing facility recognized by the State Fire Marshal having a service for inspection of materials at the factory.

Fire-Retardant-Treated Wood – As defined in Section 207 or non-combustible materials as defined in Section 215 shall satisfy the intent of this section.

The enforcing agency may use other definitions of ignition-resistant material that reflect wildfire exposure to building materials and/or their materials performance in resisting ignition.

Log Wall Construction – A type of construction in which exterior walls are constructed of solid wood members and where the smallest horizontal dimension of each solid wood member is at least (six) 6 inches (152 mm).

Multi-Layered Glazed Panels – Window or door assemblies that consist of two or more independently glazed panels installed parallel to each other, having a sealed air gap in between, within a frame designed to fill completely the window or door opening in which the assembly is intended to be installed.

(A) Non-Combustible – As applied to building construction material means a material that, in the form in which it is used, is either one of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E 136 shall be considered non-combustible within the meaning of this section.
2. Material having a structural base of non-combustible material as defined in Item 1 above, with a surfacing material not over 1/8 inch (3.2 mm) thick, which has a flame spread rating of 50 or less. Flame spread rating as used herein refers to rating obtained according to tests conducted as specified in ASTM E 84.

“Non-combustible” does not apply to surface finish materials. Material required to be non-combustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material conforming to Item 1. No material shall be classed as non-combustible that is subject to increase in combustibility or flame spread rating, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition.

(M) Roof Covering – Roofs shall comply with the Building Code and have a minimum Class A 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.

Exception – On qualified historical buildings wood roof covering may be repaired or reconstructed as allowed by the State Historical Building Code.

Non-Combustible Roof Covering – One of the following:

1. Cement shingles or sheets.
2. Exposed concrete slab roof.
3. Ferrous or copper shingles or sheets.
4. Slate shingles.
5. Clay or concrete roofing tile.
6. Approved roof covering of non-combustible material.

Slope – The variation of terrain from the horizontal; the number of feet (meters) rise or fall per 100 feet (30,480 mm) measured horizontally, expressed as a percentage.

(A) Off-Site Roadway – A road, street, public highway, or private road used for fire apparatus access from a publicly maintained road to the boundary of the subject property.

(A) On-Site Roadway – A road, street, public highway, private road or driveway used for fire apparatus access within the boundaries of the subject property or land division.

(A) Planning Authority Having Jurisdiction (PAHJ) – The identified authority regulating and enforcing planning and/or construction standards.

(M) Structure – Means a residence and attached garage, building or related facility that is designed primarily for human use or habitation or buildings designed specifically to house farm animals.

Decking, fences, and similar facilities are not considered structures for the purposes of establishing the limits of the fuel modification zone. Free standing open sided shade covers, sheds, gazebos, and similar accessory structures less than 250 square feet and 30 feet or more from the main building are not considered structures for the purposes of this appendix. (Code) (See Accessory Structure.)

Tree Crown – The primary and secondary branches growing out from the main stem, together with twigs and foliage.

Unenclosed Accessory Structure – An accessory structure without a complete exterior wall system enclosing the area under roof or floor above.

(A) Vegetation Conflagration – Is an uncontrolled fire spreading through vegetative fuels, and exposing and consuming structures in the advancing path of fire.

(A) Wildland Fuel – Means any timber, brush, grass, or other flammable vegetation, living or dead, standing or down, that is not classified as fire-resistive.

(M) Wildland/Urban Interface Area – That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

Wildfire – An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures. This area is designated or identified as a hazardous fire area as determined by the FAHJ (see the definition of hazardous fire area).

Wildland – An area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities.

Chapter 3 Wildland-Urban Interface Areas – Section 301 General

301.1 Scope – The provisions of this chapter provide methodology to establish and record wildland-urban interface areas based on the findings of fact.

301.2 Objective – The objective of this chapter is to provide simple baseline criteria for determining wildland-urban interface areas.

Section 302 Wildland-Urban Interface Area Designations

(M) Section 302.1 Declaration – The legislative body shall declare the wildland-urban interface areas within the jurisdiction. The wildland-urban interface areas shall be based on the findings of fact. The wildland-urban interface area boundary shall be any geographic area mapped or otherwise identified by the State or local jurisdiction as a High Hazard, or Very High Fire Hazard area, or as set forth by the FAHJ. (See Attachment B for map.) When the type and condition of vegetation, topography, weather, and structure density, which potentially increases the probability of vegetation conflagration, exists, such area shall be considered a Hazardous Fire Area.

302.2 Mapping – The wildland-urban interface areas shall be recorded on maps and filed with the clerk of the jurisdiction. These areas shall become effective immediately thereafter.

302.3 Review of Wildland-Urban Interface Areas – The Code Official shall reevaluate and recommend modification to the wildland-urban interface areas in accordance with Section 302.1 on a three-year basis or more frequently as deemed necessary by the legislative body.

Chapter 4 Wildland-Urban Interface Area Requirements

Section 401 General

401.1 Scope – Wildland-urban interface areas shall be provided with emergency vehicle access and water supply in accordance with this chapter.

401.2 Objective – The objective of this chapter is to establish the minimum requirements for emergency vehicle access and water supply for buildings and structures located in the wildland-urban interface areas.

(M) 401.3 General Safety Precautions – General safety precautions shall be in accordance with this chapter. Delete “see also Appendix A.”

Section 402 Applicability

Section 402.1.1 Access – New subdivisions, as determined by this jurisdiction, shall be provided with fire apparatus access roads in accordance with the locally adopted Fire Code and access requirements in accordance with Section 403.

(M) Section 402.1.2 Water Supply – Individual structures hereafter constructed or relocated into or within Wildland Urban Interface Areas shall be provided with a conforming water supply in accordance with the locally adopted Fire Code.

Exceptions:

1. Structures constructed to meet the requirements for the class of ignition-resistant construction specified in Table 503.1 for a nonconforming water supply.
2. Buildings containing only private garages, carports, sheds and agricultural buildings with a floor area of not more than 600 square feet (56 m²).

(A) 402.2 Individual Structures – Individual structures shall comply with Sections 402.2.1 and 402.2.2.

402.2.1 Access – Individual structures hereafter constructed or relocated into or within wildland-urban interface areas shall be provided with fire apparatus access in accordance with the locally adopted fire code and driveways in accordance with Section 403.2. Marking of fire protection equipment shall be provided in accordance with Section 403.5 and address markers shall be provided in accordance with Section 403.6.

402.3 Existing Conditions – Existing buildings shall be provided with address markers in accordance with Section 403.6. Existing roads and fire protection equipment shall be provided with markings in accordance with Sections 403.4 and 403.5, respectively.

Section 403 Access

403.1 Restricted Access – Where emergency vehicle access is restricted because of secured access roads or driveways or where immediate access is necessary for life-saving or fire-fighting purposes, the Code Official is authorized to require a key box to be installed in an accessible location. The key box shall be of a type approved by the Code Official and shall contain keys to gain necessary access as required by the Code Official.

(M) Section 403.2. Driveways – Driveways shall be provided when any portion of an exterior wall of the first story of a building, measured in an approved manner, is located more than 150 feet (45,720 mm) from a fire apparatus access road. Driveways shall provide a minimum unobstructed width of 16 feet (4,572 mm) and a minimum unobstructed height of 13 feet 6 inches (4,115 mm). Driveways in excess of 150 feet (45,720 mm) in length shall be provided with turnarounds. Driveways in excess of 200 feet (60,960 mm) in length and less than 24 feet (6,096 mm) in width shall be provided with turnouts in addition to turnarounds. A driveway shall not serve more than two dwelling units.

When such driveways meet the requirements for an access road in accordance with the Fire Code. Driveway turnarounds shall have inside turning radii of not less than 28 feet (8,534) and outside turning radii of not less than 45 feet (13,716 mm). Driveways that connect with a road or

roads at more than one point may be considered as having a turnaround if all changes of direction required to make the turnaround meet the radii requirements for driveway turnarounds. Driveway turnouts shall be an all-weather road surface at least 10 feet (3,048 mm) wide and 30 feet (9,144 mm) long.

Driveway turnouts shall be located as required by the Code Official. Vehicle load limits shall be posted at both entrances to bridges and on driveways and private roads containing bridges. Design loads for bridges shall be established by the Code Official.

(M) Section 403.3. Fire Access Road Fire Apparatus Access Road – When required, fire apparatus access roads shall be all-weather roads with a minimum width of 24 feet (6,096 mm) and an unobstructed vertical clearance of not less than 13 feet 6 inches (4,115 mm), shall be designed to accommodate the loads and turning radii for fire apparatus, and have a gradient negotiable by the specific fire apparatus normally used at that location within the jurisdiction. Dead-end roads in excess of 150 feet (45,720 mm) in length shall be provided with turnarounds as approved by the Code Official. An all-weather road surface shall be any surface material acceptable to the Code Official that would normally allow the passage of emergency vehicles typically used to respond to that location within the jurisdiction.

The fire access roadway requirement for widening existing improved fire apparatus roadway shall be per “Table 1 – Phasing Policy - Fire Apparatus Access” and will extend from the property out to the nearest public road.

**Table 1 – Phasing Policy
Fire Apparatus Access – Single Family Dwellings**

Number of Parcels	Unobstructed Road Width	Roadways Over 600 Feet Long	Extend to Nearest Public Road
1-2	16-Feet, Paved	Turnouts Every 400-Feet	Yes
3-8	20-Feet, Paved	Turnouts Every 400-Feet	Yes
9 or More	24-Feet, Paved	Not Required	Yes

Auxiliary Structures (Non-Habitable) and Residential Additions/Remodels Less Than 500 Square Feet – The access roadway will not be required to be improved if the access roadway has already been improved to a minimum width of 20 feet. If the roadway is not 20 feet, then the roadway shall be widened per “Table 1 – Phasing Policy – Fire Apparatus Access,” but not greater than 20 feet. The preceding addition/remodel exception is limited to one permit (addition or remodel) per three-year period from the date of the last permit approval.

403.4 Marking of Roads – Approved signs or other approved notices shall be provided and maintained for access roads and driveways to identify such roads and prohibit the obstruction thereof or both. All road identification signs and supports shall be of non-combustible materials. Signs shall have minimum 4-inch-high (102 mm) reflective letters with 1/2 inch (12.7 mm)

stroke on a contrasting 6-inch-high (152 mm) sign. Road identification signage shall be mounted at a height of 7 feet (2,134 mm) from the road surface to the bottom of the sign.

403.5 Marking Of Fire Protection Equipment – Fire protection equipment and fire hydrants shall be clearly identified in a manner approved by the Code Official to prevent obstruction.

403.6 Address Markers – All buildings shall have a permanently posted address, which shall be placed at each driveway entrance and be visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter, and the address shall be visible and legible from the road on which the address is located. Address signs along one-way roads shall be visible from both the intended direction of travel and the opposite direction. Where multiple addresses are required at a single driveway, they shall be mounted on a single post, and additional signs shall be posted at locations where driveways divide. Where a roadway provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest road intersection providing access to that site.

403.7 Grade – The gradient for fire apparatus access roads and driveways shall not exceed the maximum approved by the Code Official.

Section 404 Water Supply

404.1 General – When provided in order to qualify as a conforming water supply for the purpose of Table 503.1 or as required for new subdivisions in accordance with Section 402.1.2, an approved water source shall have an adequate water supply for the use of the fire protection service to protect buildings and structures from exterior fire sources or to suppress structure fires within the wildland-urban interface area of the jurisdiction in accordance with this section.

Exception – Buildings containing only private garages, carports, sheds and agricultural buildings with a floor area of not more than 600 square feet (56 m²).

404.2 Water Sources – The point at which a water source is available for use shall be located not more than 1,000 feet (305 m) from the building and be approved by the Code Official. The distance shall be measured along an unobstructed line of travel.

Water sources shall comply with the following:

1. Man-made water sources shall have a minimum usable water volume as determined by the adequate water supply needs in accordance with Section 404.5. This water source shall be equipped with an approved hydrant. The water level of the water source shall be

maintained by rainfall, water pumped from a well, water hauled by a tanker, or by seasonal high water of a stream or river. The design, construction, location, water level maintenance, access, and access maintenance of man-made water sources shall be approved by the Code Official.

2. Natural water sources shall have a minimum annual water level or flow sufficient to meet the adequate water supply needs in accordance with Section 404.5. This water level or flow shall not be rendered unusable because of freezing. This water source shall have an approved draft site with an approved hydrant. Adequate water flow and rights for access to the water source shall be ensured in a form acceptable to the Code Official.

404.3 Draft Sites – Approved draft sites shall be provided at all natural water sources intended for use as fire protection for compliance with this Code. The design, construction, location, access and access maintenance of draft sites shall be approved by the Code Official. The draft site shall have emergency vehicle access from an access road in accordance with Section 402. The pumper access point shall be either an emergency vehicle access area alongside a conforming access road or an approved driveway no longer than 150 feet (45,720 mm). Pumper access points and access driveways shall be designed and constructed in accordance with all codes and Ordinances enforced by this jurisdiction. Pumper access points shall not require the pumper apparatus to obstruct a road or driveway.

404.4 Hydrants – All hydrants shall be designed and constructed in accordance with nationally recognized standards. The location and access shall be approved by the Code Official.

(M) 404.5 Adequate Water Supply – In Hazardous Fire Areas as defined in the locally adopted Fire Code, the water main capacity for new subdivisions shall not be less than 2,500 gallons (5 676.4 liters) per minute, unless otherwise approved by the Fire Chief.

Adequate water supply shall be determined for purposes of initial attack and flame front control as follows:

1. One-and two-family dwellings. The required water supply for one- and two-family dwellings having a fire area that does not exceed 3,600 square feet (334 m²) shall be 1,000 gallons per minute (63.1 L/s) for a minimum duration of 30 minutes. The required water supply for one- and two-family dwellings having a fire area in excess of 3,600 square feet (334 m²) shall be 1,500 gallons per minute (95 L/s) for a minimum duration of 30 minutes.

Exception: A reduction in required flow rate of 50 percent, as approved by the Code Official, is allowed when the building is provided with an approved automatic sprinkler system.

2. Buildings other than one-and two-family dwellings. The water supply required for buildings other than one- and two-family dwellings shall be as approved by the Code Official but shall not be less than 1,500 gallons per minute (95 L/s) for a duration of two hours.

Exception: A reduction in required flow rate of up to 75 percent, as approved by the Code Official, is allowed when the building is provided with an approved automatic sprinkler system. The resulting water supply shall not be less than 1,500 gallons per minute (94.6 L/s).

(D) Section 404.6 Fire Department – Delete entire section.

(M) 404.7 Obstructions – Access to all water sources required by this Code shall be unobstructed at all times. The Code Official shall not be deterred or hindered from gaining immediate access to water source equipment, fire protection equipment or hydrants.

404.8 Identification – Water sources, draft sites, hydrants and fire protection equipment and hydrants shall be clearly identified in a manner approved by the Code Official to identify location and to prevent obstruction by parking and other obstructions.

404.9 Testing and Maintenance – Water sources, draft sites, hydrants and other fire protection equipment required by this Code shall be subject to periodic tests as required by the Code Official. All such equipment installed under the provisions of this Code shall be maintained in an operative condition at all times and shall be repaired or replaced where defective. Additions, repairs, alterations and servicing of such fire protection equipment and resources shall be in accordance with approved standards.

404.10 Reliability

404.10.1 Objective – The objective of this section is to increase the reliability of water supplies by reducing the exposure of vegetative fuels to electrically powered systems.

404.10.2 Clearance of Fuel – Defensible space shall be provided around water tank structures, water supply pumps and pump houses in accordance with Section 603.

404.10.3 Standby Power – Stationary water supply facilities within the wildland-urban interface area dependent on electrical power to meet adequate water supply demands shall provide standby power systems in accordance with the Electrical Code to ensure that an uninterrupted water supply is maintained. The standby power source shall be capable of providing power for a minimum of two hours.

Exceptions:

1. When approved by the Code Official, a standby power supply is not required where the primary power service to the stationary water supply facility is underground.
2. A standby power supply is not required where the stationary water supply facility serves no more than one single-family dwelling.

Section 405 Fire Protection Plan

405.1 General – When required by the Code Official, a fire protection plan shall be prepared. As prescribed in County Guidelines for Determining Significance and Report Format and Content Requirement, Wildland Fire and Fire Protection document.

(M) Section 405.2 Content of Wildland Fire Protection Plan – The Wildland Protection Plan shall be based upon a community, site-specific wildfire risk assessment that is developed in consultation with local and state government representatives, federal agencies, and other interested parties. The plan shall consider location, topography, geology, aspect, combustible vegetation (fuel types) climatic conditions and fire history. The plan shall address water supply, access, structural ignitability, structure set back and ignition resistive building features, fire protection systems and equipment, impacts to existing emergency services, defensible space and vegetation management. The plan shall identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructures. The plan shall recommend measures that homeowners and communities shall take to reduce the ignitability of structures throughout the area addressed by the plan.

405.3 Cost – The cost of fire protection plan preparation and review shall be the responsibility of the applicant.

405.4 Plan Retention – The fire protection plan shall be retained by the Code Official.

Chapter 5 Special Building Construction Regulations – Section 501 General

501.1 Scope – Buildings and structures shall be constructed in accordance with the California Building Code and this Code.

501.2 Objective – The objective of this chapter is to establish minimum standards to locate, design and construct buildings and structures or portions thereof for the protection of life and property, to resist damage from wildfires, and to mitigate building and structure fires from spreading to wildland fuels. The minimum standards set forth in this chapter vary with the critical fire weather, slope and fuel type to provide increased protection, above the requirements set forth in the California Building Code, from the various levels of hazards.

Section 502 – Fire Hazard Severity

(M) 502.1 General – The fire hazard severity of building sites for all buildings hereafter constructed, modified or relocated into wildland-urban interface areas shall be established in accordance with Section 302.

502.2 Fire Hazard Severity Reduction – The fire hazard severity identified in Table 502.1 is allowed to be reduced by implementing an approved vegetation management plan.

**(M) Table 502.1
Fire Hazard Severity**

Fuel Model (b)	Critical Fire Weather Frequency		
	Greater than 8 days (a.)		
	Slope (%)		
	<40	41-60	>60
Light Fuel	M	M	H
Medium Fuel	E	E	E
Heavy Fuel	E	E	E

- a. Days per annum.
- b. When required by the Code Official, fuel classification shall be based on the historical fuel types for the area.
E = Extreme hazard. H = High hazard. M = Moderate hazard

Section 503 Ignition-Resistant Construction

503.1 General – Buildings and structures hereafter constructed, modified or relocated into or within wildland-urban interface areas shall meet the construction requirements in accordance with Table 503.1. Class 1, Class 2 ignition-resistant construction shall be in accordance with Sections 504 and 505, respectively.

(M) Table 503.1 Ignition-Resistant Construction

**Table 503.1
Ignition-Resistant Construction (A)**

Defensible Space (c)	Fire Hazard Severity					
	Moderate Hazard		High Hazard		Extreme Hazard	
	Water Supply (b)		Water Supply (b)		Water Supply (b)	
	Conforming (D)	Nonconforming (e)	Conforming (D)	Nonconforming (e)	Conforming (D)	Nonconforming (e)
Nonconforming	IR 2	IR 1	IR 1	IR 1 N.C.	IR 1 N.C.	Not Permitted
Conforming	IR 2	IR1	IR 1	IR 1	IR 1	IR 1 N.C.
1.5 X Conforming	Not required	IR 2	IR2	IR1	IR 1	IR 1

- (A)** Access shall be in accordance with Section 402.
- (b)** Subdivisions shall have a conforming water supply in accordance with Section 402.1.
IR 1 = Ignition-resistant construction in accordance with Section 504.
IR 2 = Ignition-resistant construction in accordance with Section 505.

N.C. = Exterior walls shall have a fire-resistance rating of not less than 1-hour and the exterior surfaces of such walls shall be non-combustible. Usage of log wall construction is allowed.

(c) Conformance based on Section 603.

(D) Conformance based on Section 404.

(e) A nonconforming water supply is any water system or source that does not comply with Section 404, including situations where there is no water supply for structure protection or fire suppression

Section 504 Class 1 Ignition-Resistant Construction

504.1 General – Class 1 ignition-resistant construction shall be in accordance with Sections 504.2 through 504.11.

(M) Sections 504.1.1 Zoning Requirements – The minimum setbacks for locating structures on a lot are set by the PAHJ. To minimize fire spread potential the FAHJ may require additional setbacks as described in Section 25.2. In no case may the setbacks required by the FAHJ be less than those established by the PAHJ.

(A) Section 504.1.2 Fire Requirements – In those jurisdictions where a FAHJ approves a fuel modification zone of less than 100 feet, all structures, including any part of a structure located within the Wildland/Urban Interface Area shall be not less than 30 feet measured perpendicular from the subject property line adjacent to Wildland Fuel. When the property line abuts a public way, the setback is measured to the centerline of the public way or street.

Exception: When allowed by both the FAHJ and by the PAHJ zoning requirements and the wildland fire hazard is determined to be minimal, the 30 foot setback may be reduced to a minimum of 5 feet from a property line provided the entire exterior wall, eave, overhang, or any other building construction elements shall comply with the enhanced ignition-resistant construction standards of Section 26.

Note: The FAHJ may allow openings in the exterior wall facing the Wildland/Urban Interface Area if it is determined the hazard is minimal.

(A) Section 504.1.3 Future Setback Modification – All fuel modification zones shall not extend beyond the property line.

Exception: The FAHJ may approve fuel modification zones that extend beyond the property lines when legal agreements (land easement run with the land) are in place.

Section 504.1.4 Structure Setback From Slope – A single-story structure shall be setback a minimum 15 feet (4,572 mm) horizontally from top of slope to the farthest projection from a roof. A single story structure shall be less than 12 feet above grade. A two-story structure shall be setback a minimum of 30 feet (9,144 mm) measured horizontally from top of slope to the farthest projection from a roof. Structures greater than two stories may require greater setback, which is based upon a 2-to-1 slope.

(A) Section 504.1.5 Mitigation – In jurisdictions where a PAHJ or FAHJ approves a fuel modification zone of less than 100 feet (30,480 mm), Class 1 ignition-resistant construction shall be provided and or additional mitigation as determined by the FAHJ shall be provided.

(M) Section 504.2 Roof Covering – Roofs shall comply with the California Building Code and have a minimum Class A 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.

Exceptions:

1. When re-roofing or repairs are made which exceed 50 percent of the projected roof area or 2,500 square feet, whichever is less, then the entire roof shall be fire rated roof coverings in conformance with California Building Code Section 504.2. Roofing of residential room additions, however, may be constructed of roofing materials having the same fire rating as the existing building when the projected roof area of the addition does not exceed 50 percent of that of the existing horizontal projected roof area or 2,500 square feet, whichever is less. For the purpose of this exception, re-roofing or addition projects must be separated by at least 12 months to be considered separate projects.

2. On qualified historical buildings, wood roof covering may be repaired or reconstructed as allowed by the State Historical Building Code.

Section 504.2.1 Protection of Eaves – Combustible eaves, fascias and soffits shall be constructed as required in guidance documents prepared by the PAHJ.

Exception: Eave construction on additions may match the existing structure provided that the addition does not exceed 50% of the existing structure or 2,500 square feet, whichever is less. The vents in these eaves must comply with sections 26.2.4 and 26.3.2 as applicable.

(A) Section 504.2.2 Insulation – In the Urban-Wildland Interface Area, paper-faced insulation shall be prohibited in attics or ventilated spaces.

504.3 Protection of Eaves – Eaves and soffits shall be protected on the exposed underside by materials approved for a minimum of 1-hour fire resistance rated construction, 2-inch (51 mm) nominal dimension lumber, or 1-inch (25.4 mm) nominal fire retardant treated lumber or 3/4-inch (19 mm) nominal fire retardant treated plywood, identified for exterior use and meeting the requirements of Section 2303.2 of the California Building Code. Fascias are required and shall be protected on the backside by materials approved for a minimum of 1-hour fire resistance rated construction or 2-inch (51 mm) nominal dimension lumber.

(M) Section 504.4 Gutters and Downspouts – Gutters and downspouts shall be constructed of non-combustible material. Gutters shall be designed to reduce the accumulation of leaf litter and debris that contributes to roof edge ignition.

(M) 504.5 Exterior Walls – Exterior walls in the Wildland/Urban Interface Area shall comply with the provisions of the U.B.C. and with the following additional requirements:

Exterior Wall Surfacing Materials – The exterior wall surface materials shall be non-combustible or an approved alternate. In all construction, exterior walls are required to be protected with 2-inch nominal solid blocking between rafters at all roof overhangs. Wood shingle and shake wall covering shall be prohibited except for repair or replacement as noted in Section 26.2.3, item 2.

Exceptions:

1. Wood siding of 3/8-inch plywood or 3/4-inch drop siding is permitted but must have an underlayment of 1/2-inch fire-rated gypsum sheathing that is tightly butted or taped and mudded, or other ignition-resistive material as approved by the PAHJ.
2. Livestock stables less than 2,000 square feet total floor area and without restrooms are exempt from the non-combustible wall requirement if constructed a minimum of 100 feet from the property line, from any open space easement, and from any dwelling on the parcel. If a dwelling or addition to a dwelling is subsequently proposed to be constructed closer than 100 feet from a stable constructed under this exemption, the stable must be retrofitted with non-combustible exterior wall covering or be removed.
3. Heavy timber or log wall construction material shall extend from the top of the foundation to the underside of the roof sheathing.

(A) Section 504.5.1 Repair/Replacement – If 50 percent or more of an exterior wall located less than 30 feet from a property line requires repair or replacement, the entire wall shall conform to this section. If less than 50 percent of the wall requires repair or replacement, the existing wall may be repaired or replaced in kind, however, if the wall covering is wood shingle or shake, it must be repaired or replaced with fire-retardant, pressure-treated wood shingles or shakes.

504.6 Unenclosed Under Floor Protection – Buildings or structures shall have all underfloor areas enclosed to the ground with exterior walls in accordance with Section 504.5.

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.

504.7 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 or constructed of approved non-combustible materials or fire retardant treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the California 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 underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.5.

(A) Section 504.7.1 Fences and Other Attachments to Structures – The first five feet of fences and other items attached to a structure shall be constructed of non-combustible material, or pressure-treated exterior fire-retardant wood, or meet the same fire-resistive standards as the exterior walls of the structure.

Exception: Wooden gates are permitted provided that a 5-foot minimum length section of non-combustible fencing material is installed as a firebreak immediately adjacent to the gate.

(A) Section 504.7.2 Projections or Appendages – Exterior balconies, carports, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections, not meeting the 100 foot fuel modification requirements of Section 603.2, shall be of ignition-resistant construction in accordance with Sections 302.1 and 504.7.4. When such appendages or projections are attached to exterior fire-resistive walls, they shall be constructed to maintain the fire-resistive integrity of the wall. Construction details shall comply with the methods specified in guidance documents prepared by the PAHJ in accordance with Section 101.7.

Exceptions:

1. A free-standing deck or trellis less than 250 square feet in area and greater than 30 feet from the nearest structures and property lines is not required to meet the fire-resistive requirements of Appendix II-A.
2. A detached deck that is separated from the dwelling by at least 5 feet of non-combustible surface may be constructed of non-rated wood provided all of the following conditions are met:
 - a) The decking must be a minimum dimension of 2x (nominal) material.
 - b) The deck is located at or below the elevation of the dwelling ground floor level, and not exposed to any underfloor area or basement opening,
 - c) The deck is skirted from the deck walking surface to ground level with non-combustible material.
 - d) If the deck is skirted, the underdeck area must be vented in conformance with Section 504.10.

(A) Section 504.7.3 Structural Supports and Framing Members. Structural supports and framing members shall be of non-combustible construction, exterior fire-retardant-treated wood, modified heavy timber construction as described in guidance documents prepared by the PAHJ, or one-hour fire-resistive construction.

Exception: Structural supports and framing may be constructed of non-fire-rated lumber when decks, balconies, and similar projections are skirted from floor level to ground level

with non-combustible material or an approved alternate. The skirted underdeck area must be vented in conformance with Section 504.10.

(A) Section 504.7.4 Decking Surfaces

Decking surfaces, stair treads, risers, and landings of decks, porches & balconies shall be constructed of non-combustible construction, exterior fire-retardant-treated wood, modified heavy timber construction as described in guidance documents prepared by the PAHJ, one-hour fire-resistant construction, or alternative decking that passes the performance testing requirements of section 504.7.5.

(A) Section 504.7.5 Testing of Alternative Decking Materials

Alternative decking materials may be approved when tested to demonstrate passing of the performance requirements of State Fire Marshal standard 12-7A-4. The decking surface shall pass the tests in both Parts A and B of SFM 12-7A-4, however, the burning brand exposure test of Part B may be conducted with a Class “B” sized brand as specified in ASTM E-108 or UL-790.

The Conditions of Acceptance of State Fire Marshal standard 12-7A-4 shall be modified to read as follows:

Part A: Underflame Test

1. Peak heat release rate of less than or equal to 25 kW/ft² (269 kW/m²).
2. Absence of sustained flaming at the conclusion of the 40-minute observation period.
3. Absence of structural failure of any deck board.
4. Absence of falling particles that are still burning when reaching the floor.

Part B: Burning Brand Test

1. Absence of sustained flaming at the conclusion of the 40-minute observation period.
2. Absence of structural failure of any deck board.
3. Absence of falling particles that are still burning when reaching the floor.

Should one of the three replicates fail to meet the Conditions of Acceptance, three additional tests may be run. All of the additional tests must meet the Conditions of Acceptance.

Product tests shall be done by a testing laboratory accredited by the California Accreditation Service or identified by an ICC-ES/ICBO-ES report. Test results and reports must be submitted to the PAHJ for analysis and approval prior to being used within the Wildland/Urban Interface Area.

Decking materials passing the performance requirements of this section shall be identified with a grade stamp or label not more than every six feet along the length of the decking board.

(A) Section 504.7.6 Coatings – The use of paints, coatings, stains, or other surface treatments are not an approved method of protection as required in this Chapter.

(M) Section 504.8 Exterior Windows and Glazing – Glass or other transparent, translucent or opaque glazing shall be tempered glass, multi-layered glass panels (dual glazed), glass block, have a fire-protection rating of not less than 20 minutes, or other assemblies approved by the FAHJ. Glazing frames made of vinyl materials shall have welded corners, metal reinforcement in the interlock area, and be certified to ANSI/AAMA/NWDA 101/I.S.2-97 structural requirements.

(A) Section 504.8.1 Skylights – Skylights shall be tempered glass.

(M) Section 504.9 Exterior Doors – All exterior doors facing the Wildland/Urban Interface Area shall be approved non-combustible construction or ignition-resistant, solid core wood not less than 1 3/8 inches thick or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall comply with Section 504.8.

504.10 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 (0.0929 m²) each. Such vents shall be covered with non-combustible corrosion-resistant mesh with openings of 1/4 inch (6.4 mm), or shall be designed and approved to prevent flame or ember penetration into the structure.

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 (3048 mm) from property lines. Underfloor ventilation openings shall be located as close to grade as practical.

(A) Section 504.10.1 Venting in Eaves – Attic ventilation openings or ventilation louvers shall not be permitted in soffits, in eave overhangs, between rafters at eaves, or in other similar exterior overhanging areas in the Wildland/Urban Interface Area.

Exceptions:

1. Attic vents in soffits may be permitted by the FAHJ on those areas of the building that do not face the wildland fuels, when the FAHJ determines it is not a hazard.
2. When enhanced ignition-resistant construction is not required, enclosed eaves may be vented on the underside of the eave closest to the fascia provided the closest edge of the vent opening is at least 12 inches from the exterior wall. This venting must be screened or have holes of 1/4" in diameter.

(A) Section 504.10.2 Venting on Roofs and Vertical Walls – Roof vents, dormer vents, gable vents, foundation ventilation openings, ventilation openings in vertical walls, or other similar ventilation openings shall be louvered and covered with 1/4-inch, non-combustible, corrosion-

resistant metal mesh or other approved material that offers equivalent protection. Turbine attic vents shall be equipped to allow, one-way direction rotation only; they shall not free-spin in both directions.

504.11 Detached Accessory Structures – Detached accessory structures located less than 50 feet (15,240 mm) 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 non-combustible materials 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 (152 mm) of the ground, with exterior wall construction in accordance with Section 504.5 or underfloor protection in accordance with Section 504.6.

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 504.2 for roof requirements.

Section 505 Class 2 Ignition-Resistant Construction

505.1 General – Class 2 ignition-resistant construction shall be in accordance with Sections 505.2 through 505.11.

(M) Sections 505.1.1 Zoning Requirements – The minimum setbacks for locating structures on a lot are set by the PAHJ. To minimize fire spread potential the FAHJ may require additional setbacks as described in Section 25.2. In no case may the setbacks required by the FAHJ be less than those established by the PAHJ.

(A) Section 505.1.2 Fire Requirements – In those jurisdictions where a FAHJ approves a fuel modification zone of less than 100 feet, all structures, including any part of a structure located within the Wildland/Urban Interface Area shall be not less than 30 feet measured perpendicular from the subject property line adjacent to wildland fuel. When the property line abuts a public way the setback is measured to the centerline of the public way or street.

Exception: When allowed by both the FAHJ and by the PAHJ zoning requirements and the wildland fire hazard is determined to be minimal, the thirty (30) foot setback may be reduced to a minimum of five (5) feet from a property line provided the entire exterior wall, eave, overhang, or any other building construction elements shall comply with the enhanced ignition-resistant construction standards of Section 26.

Note: The FAHJ may allow openings in the exterior wall facing the wildland/Urban Interface Area if it is determined the hazard is minimal.

(A) Section 505.1.3 Future Setback Modification – All fuel modification zones shall not extend beyond the property line.

Exception: The FAHJ may approve fuel modification zones that extend beyond the property lines when legal agreements (land easement run with the land) are in place.

(A) Section 505.1.4 Structure Setback From Slope – A single story structure shall be setback a minimum fifteen (15) feet (4,572 mm) horizontally from top of slope to the farthest projection from a roof. A single story structure shall be less than twelve (12) feet above grade. A two-story structure shall be setback a minimum of thirty (30) feet (9,144 mm) measured horizontally from top of slope to the farthest projection from a roof. Structures greater than two stories may require greater setback, which is based upon a 2-to-1 slope.

(A) Section 505.1.5 Mitigation – In jurisdictions where a PAHJ or FAHJ approves a fuel modification zone of less than one hundred (100) feet (30,480 mm), Class 1 Ignition-Resistant Construction shall be provided and or additional mitigation as determined by the FAHJ.

(M) Section 505.2 Roof Coverings – Roofs shall comply with the Building Code and have a minimum Class A 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.

Exceptions:

1. When re-roofing or repairs are made which exceed 50 percent of the projected roof area or 2,500 square feet, whichever is less, then the entire roof shall be of fire rated roof coverings in conformance with Section 505.2. Roofing of residential room additions, however, may be constructed of roofing materials having the same fire rating as the existing building when the projected roof area of the addition does not exceed 50 percent of that of the existing horizontal projected roof area or 2,500 square feet, whichever is less. For the purpose of this exception, re-roofing or addition projects must be separated by at least 12 months to be considered separate projects.

2. On qualified historical buildings wood roof covering may be repaired or reconstructed as allowed by the State Historical Building Code.

(A) Section 505.2.1 Protection of Eaves – Combustible eaves, fascias and soffits shall be constructed as required in guidance documents prepared by the PAHJ.

Exception: Eave construction on additions may match the existing structure provided that the addition does not exceed 50% of the existing structure or 2,500 square feet, whichever is less. The vents in these eaves must comply with Sections 26.2.4 and 26.3.2 as applicable.

(A) Section 505.2.2 Insulation in the Urban-Wildland Interface Area – Paper-faced insulation shall be prohibited in attics or ventilated spaces.

(M) Section 505.4 Gutters and Downspouts – Gutters and downspouts shall be constructed of non-combustible material. Gutters shall be designed to reduce the accumulation of leaf litter and debris that contributes to roof edge ignition.

(M) 505.5 Exterior Walls – Exterior walls in the Wildland/Urban Interface Area shall comply with the provisions of the U.B.C. and with the following additional requirements:

Exterior Wall Surfacing Materials – The exterior wall surface materials shall be non-combustible or an approved alternate. In all construction, exterior walls are required to be protected with 2-inch nominal solid blocking between rafters at all roof overhangs. Wood shingle and shake wall coverings shall be prohibited except for repair or replacement as noted in Section 26.2.3, item 2.

Exceptions:

1. Wood siding of 3/8-inch plywood or 3/4-inch drop siding is permitted but must have an underlayment of 1/2-inch fire-rated gypsum sheathing that is tightly butted or taped and mudded, or other ignition-resistive material as approved by the PAHJ.
2. Livestock stables less than 2,000 square feet total floor area and without restrooms are exempt from the non-combustible wall requirement if constructed a minimum of 100 feet from the property line, from any open space easement, and from any dwelling on the parcel. If a dwelling or addition to a dwelling is subsequently proposed to be constructed closer than one hundred (100) feet from a stable constructed under this exemption, the stable must be retrofitted with non-combustible exterior wall covering or be removed.
3. Heavy timber or log wall construction shall extend from the top of the foundation to the underside of the roof sheathing.

(A) Section 505.5.1 Repair/Replacement – If 50 percent or more of an exterior wall located less than thirty (30) feet from a property line requires repair or replacement, the entire wall shall conform to this section. If less than 50 percent of the wall requires repair or replacement, the existing wall may be repaired or replaced in kind, however, if the wall covering is wood shingle or shake, it must be repaired or replaced with fire-retardant, pressure-treated wood shingles or shakes.

505.6 Unenclosed Under Floor Protection – Buildings or structures shall have all underfloor areas enclosed to the ground, with exterior walls in accordance with Section 505.5.

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.

505.7 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 or constructed of approved non-combustible materials or fire retardant treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the California 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 underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 505.5.

(A) Section 505.7.1 Fences and Other Attachments to Structures – The first five feet of fences and other items attached to a structure shall be constructed of non-combustible material, or pressure-treated exterior fire-retardant wood, or meet the same fire-resistive standards as the exterior walls of the structure.

Exception: Wooden gates are permitted provided that a 5-foot minimum length section of non-combustible fencing material is installed as a firebreak immediately adjacent to the gate.

(A) Section 505.7.2 Coatings – The use of paints, coatings, stains, or other surface treatments are not an approved method of protection as required in this Chapter.

(M) Section 505.8 Exterior Windows and Glazing – Glass or other transparent, translucent or opaque glazing shall be tempered glass, multi-layered glass panels (dual glazed), glass block, have a fire protection rating of not less than 20 minutes, or other assemblies approved by the FAHJ. Glazing frames made of vinyl materials shall have welded corners, metal reinforcement in the interlock area, and be certified to ANSI/AAMA/NWDA 101/I.S.2-97 structural requirements.

(M) Section 505.9 Exterior Doors – All exterior doors facing the Wildland/Urban Interface Area shall be approved non-combustible construction or ignition-resistant, solid core wood not less than 1 $\frac{3}{8}$ inches thick or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall comply with Section 504.8.

505.10 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 (0.0929 m²) each. Such vents shall be covered with non-combustible corrosion-resistant mesh with openings of 1/4 inch (6.4 mm) or shall be designed and approved to prevent flame or ember penetration into the structure.

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 ten (10) feet (3,048 mm) from property lines. Underfloor ventilation openings shall be located as close to grade as practical.

(A) Section 505.10.1 Venting in Eaves – Attic ventilation openings or ventilation louvers shall not be permitted in soffits, in eave overhangs, between rafters at eaves, or in other similar exterior overhanging areas in the Wildland/Urban Interface Area.

Exceptions:

1. Attic vents in soffits may be permitted by the FAHJ on those areas of the building that do not face the wildland fuels, when the FAHJ determines it is not a hazard.
2. When enhanced ignition-resistant construction is not required, enclosed eaves may be vented on the underside of the eave closest to the fascia provided the closest edge of the vent opening is at least 12 inches from the exterior wall. This venting must be screened or have holes 1/4" in diameter.

(A) Section 505.10.2 Venting on Roofs and Vertical Walls – Roof vents, dormer vents, gable vents, foundation ventilation openings, ventilation openings in vertical walls, or other similar ventilation openings shall be louvered and covered with 1/4-inch, non-combustible, corrosion-resistant metal mesh or other approved material that offers equivalent protection. Turbine attic vents shall be equipped to allow, one-way direction rotation only; they shall not free spin in both directions.

505.11 Detached Accessory Structures – Detached accessory structures located less than 50 feet (15,240 mm) 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 non-combustible 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 (152 mm) of the ground, with exterior wall construction in accordance with Section 505.5 or underfloor protection in accordance with Section 505.6.

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 505.2 for roof requirements.

(D) Section 506 Class 3 Ignition-Resistant Construction – Is hereby is deleted in its entirety.

Section 507 Replacement or Repair of Roof Coverings

(M) 507.1 General – When re-roofing or repairs are made which exceed 50 percent of the projected roof area or 2,500 square feet, whichever is less, then the entire roof shall be fire rated roof coverings in conformance with Section 1503.1. Roofing of residential room additions, however, may be constructed of roofing materials having the same fire rating as the existing building when the projected roof area of the addition does not exceed 50 percent of that of the existing horizontal projected roof area or 2,500 square feet, whichever is less. For the purpose of this exception re-roofing or addition projects must be separated by at least 12 months to be considered separate projects.

507.1.1 Qualified Historical Buildings – On qualified historical buildings, wood roof covering may be repaired or reconstructed as allowed by the State Historical Building Code.

Chapter 6 Fire Protection Requirements

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 mitigate structure fires from spreading to wildland fuels.

Section 602 Automatic Sprinkler Systems

(M) Section 602 Automatic Fire Sprinkler Systems – (See locally adopted Fire and Building Codes for requirements.)

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.

(M) Sections 603.2 Fuel Modification – For individual building or structures on a property, in order to qualify as a conforming defensible space for the purpose of Table 503.1, the fuel modification zone shall be achieved by removing, clearing or modifying away combustible vegetation and other flammable materials from areas within one hundred (100) feet (30,480 mm) from such buildings or structures. The distances specified in Table 603.2 shall be measured on a horizontal plane, in plan view, from the perimeter or projection of the building or structure as shown in Figure 603.2. The Code Official, because of a site-specific analysis based on local conditions and the fire protection plan, may increase distances specified in Table 603.2.

(A) Section 603.2.1 Fuel Modification of Brush or Vegetative Growth From Roadways

(A) 603.2.1 Clearance at Existing Off-Site Roadways – The Fire Chief and/or his/her designee is authorized to cause the area within twenty (20) feet on each side of the improved width portions of highways and private streets and/or roads which are improved, designed, or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth shall comply with the requirements of a fuel modification zone. The Fire Chief and/or his/her designee are authorized to enter upon private property to insure the fuel modification zone requirements are met.

Exception:

1. Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

Clearance for New Off-Site Roadways When Constructed and New On-Site Roadways – The area thirty (30) feet on each side of the improved width of highways, private road street and driveways shall comply with requirements of a fuel modification zone.

Exceptions:

1. Upon approval by the Fire District, the Roadway Fuel Modification Zones may be reduced provided it does not impair access.
2. Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

All roadways shall have a minimum of thirteen (13) feet six (6) inches vertical clearance free of vegetation.

**(M) Table 603.2
Required Defensible Space**

Urban-Wildland Interface Area	Fuel Modification Distance (Feet) ¹
Moderate Hazard	30
High Hazard	100
Extreme Hazard	100

¹Or as defined in a Fire Protection Plan (See Section 405).

(A) Section 603.3 Community Fuel Modification – Fuel modification zones to protect new communities shall be provided when required by the Fire Code Official in accordance with Section 603 to reduce the fuel loads adjacent to communities and structures within them.

(A) Sections 603.3.1 Land Ownership – Fuel modification zone land used to protect a community shall be under the control of an association or other common ownership established in perpetuity, for the benefit of the community to be protected.

(A) Sections 603.3.2 Plans – Plans shall be approved prior to fuel modification work. Plans shall be placed on a grading site plan shown in plan view. An elevation plan shall also be provided to indicate the length of the fuel modification zone on the slope. Plans shall include but are not limited to: (1) plan showing existing vegetation, (2) photographs showing natural condition prior to work being performed, and (3) grading plans showing location of proposed structures and set back from top of slope to all structures.

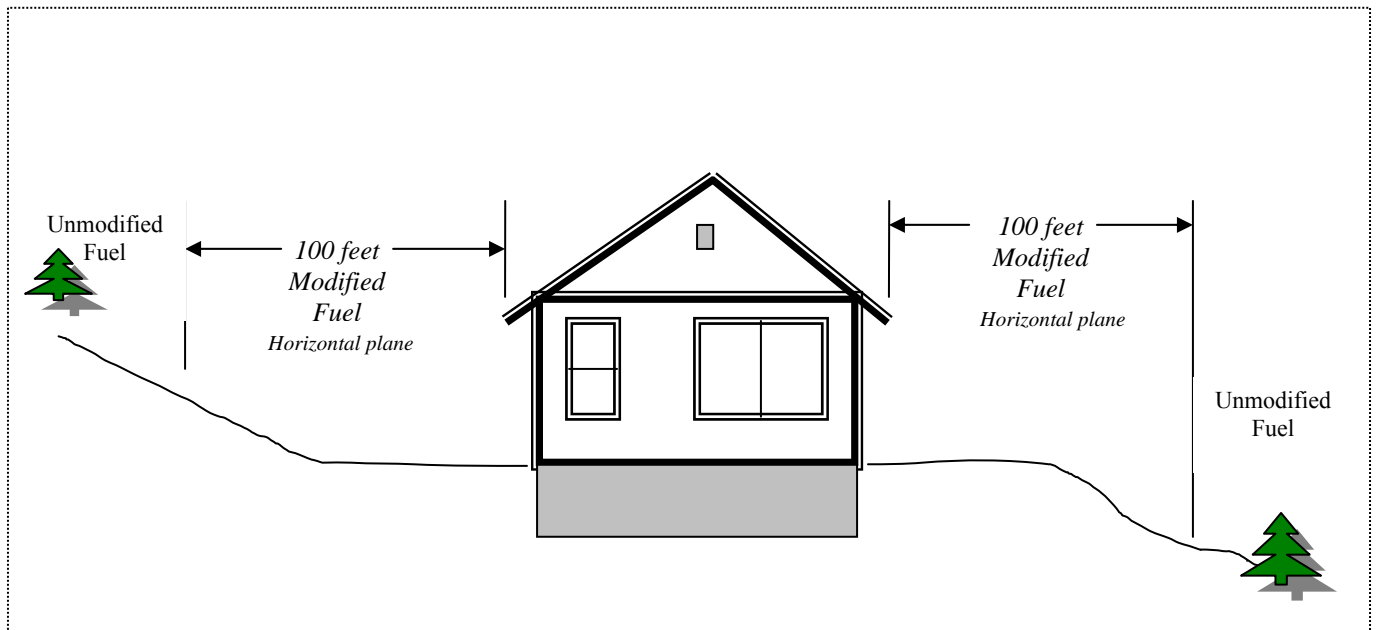
(A) Section 603.4 Fuel Modification Installations – All fuel modifications shall be installed prior to the final inspection for issuance of a certificate of occupancy.

**Table 603.2
 Required Defensible Space Wildland-Urban Interface**

Wildland-Urban Interface Area	Fuel Modification Distance (Feet)
Moderate Hazard	30
High Hazard	50
Extreme Hazard	100

(M) Figure 603.2 Measurements of Fuel Modification Distance

(M) Figure 603.2



Measurements of Fuel Modification Distance

Fire Protection Requirements

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.

(M) Sections 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 be done annually or as determined by the FAHJ and may include but not limited to the modification or removal of non-fire resistive vegetation and keeping leaves, needles and other dead vegetative material regularly removed from roofs of buildings and structures.

(M) Sections 604.4 Trees – Horizontal clearance from tree crowns to structures shall be pruned to maintain a minimum of ten (10) feet (3,048 mm) for fire resistant trees and thirty (30) feet (9,144 mm) for non-fire resistive trees. Tree crowns within the defensible space shall be pruned to remove limbs located less than six (6) feet (1,829 mm) above the ground surface adjacent to the trees. Portions of tree crowns that extend within ten (10) feet (3,048 mm) of the outlet of a chimney shall be pruned to maintain a minimum horizontal clearance of ten (10) feet (3,048 mm). Dead wood and litter shall be regularly removed from trees. Ornamental trees shall be limited to groupings of 2-3 trees with canopies for each grouping separated horizontally as described in Table 604.

(A) Table 604
Distance Between Tree Canopies

Distance Between Tree Canopies by Percent Slope ¹	
Percent of Slope	Recommended Distances Between Edge of Mature Tree Canopies ²
0 to 20	10 feet
21 to 40	20 feet
41 plus	30 feet

¹Adapted from *Wildland Home Fire Risk Meter*, Simmerman and Fischer, 1990.

²Determined from canopy dimensions as described in *Sunset Western Garden Book* (current edition).

(A) 604.5.3 Orchards, Groves or Vineyards – All orchards, groves, and vineyards shall be kept in a healthy state and maintained as described below. A ten (10) foot firebreak shall be cleared between the perimeter, orchard trees or row of grape vines and native vegetation or ornamental

landscaping. Orchards shall be kept cleaned of dead and or downed trees. Orchards and vineyards shall be free of combustible debris, dead branches and dead foliage. All dead grasses between rows of trees or vines shall be mowed or disked to bare soil.

(A) 604.5.4 Eucalyptus and Oak Trees – All trees shall be kept in a healthy state and maintained as described below. The trees shall be free of all dead, dying or diseased trees (excluding tree stumps no higher than six inches above the ground). Dead, dying or diseased trees shall include insect infested trees, no longer living, in the last stages of growth or infected by a pathogen of any type. If combustible vegetation is located underneath a tree’s drip line, the lowest branch shall be at least three times as high as the understory brush or grasses, or ten feet,

whichever is greater. This will reduce the build-up of “ladder” fuels. Firewood shall be neatly stacked and shall have a minimum of thirty (30) feet of clearance (no vegetation) around the entire firewood storage area. Debris and trimmings produced by the removal process shall be removed from the site, or if left, shall be converted into mulch by a chipping machine and evenly dispersed to maximum depth of six inches.

Section 605 Spark Arresters

605.1 General – 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 12 USA standard gage wire (0.1046 inch) (2.66 mm) having openings not exceeding 1/2 inch (12.7 mm).

605.2 Net Free Area – The net free area of the spark arrester shall not be less than four times the net free area of the outlet of the chimney.

Section 606 Liquefied Petroleum Gas Installations

606.1 General – The storage of liquefied petroleum gas (LP-gas) and the installation and maintenance of pertinent equipment shall be in accordance with the locally adopted fire code or, in the absence thereof, recognized standards.

(M) Sections 606.2 Location of Containers – LP-gas containers shall be located within the defensible space in accordance with the locally adopted fire code.

Section 607 Storage of Firewood and Combustible Materials

(M) Sections 607.1 General Storage of Firewood and Combustible Materials – 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 (9,144 mm) from structures and separated from the crown of trees by a minimum of fifteen (15) feet (4,572 mm), measured horizontally. Firewood and combustible materials not for consumption on the premises shall be stored so as to not pose a

hazard. Firewood and combustible materials not for consumption on the premises shall be stored so as to not pose a hazard.

607.2 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.

(D) Appendix B, Appendix C, Appendix E, Appendix F, and Appendix H are hereby deleted.

Section 3

That Ordinance 2002-02, An Ordinance of the Board of Directors of San Miguel Consolidated Fire Protection District Adopting Division II-A Suppression and Control hazardous Fire Areas and all other Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

Section 4

That if any section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The Board of Directors of the San Miguel Consolidated Fire Protection District hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5

That nothing in this Ordinance or in the California Urban-Wildland Interface Code, 2006 Edition, hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or Ordinance hereby repealed as cited in Section 2 of this Ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this Ordinance.

Section 6

Specific boundaries of natural or man-made features of urban-wildland interface areas shall be as shown on the wildland area interface map. See Attachment B for map.

Section 7

This Ordinance shall take effect and be in force thirty (30) days after its final passage at a public hearing as required by law, except for provisions regulated by the Hanson-Greene Act, which requires ratification by the County Board of Supervisors.

San Miguel Consolidated Fire Protection District
Ordinance No. 2007-03

First read at a regular meeting of the Board of Directors of the San Miguel Consolidated Protection District of the County of San Diego, California, held on the 8th day of November 2007. A second reading occurred at a regular meeting on the 13th day of December 2007, and finally adopted and ordered published in the manner required by law at the hearing and meeting on the 13th day of December 2007 by the following roll call vote:

Ayes:

Noes:

Absent:

Abstained:

Section 8

That this Ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect thirty (30) days from and after the date of its final passage and adoption.

Mike Blood, Board President

ATTEST

Patrick J. Briggs, Board Secretary

Approved:

Approved as to Form:

August F. Ghio, Fire Chief

Scott C. Smith, District Counsel

**Attachment A
Findings**

**For Revision of the
San Miguel Consolidated Fire Protection District
Amendments to the California Urban-Wildland Interface Code, 2006 Edition**

As required by Health and Safety Code Section 17958, the San Miguel Consolidated Fire Protection District Board of Directors does herewith make express findings that amendments to the California Building Standards Code are necessary for the protection of the public health, safety and welfare due certain climatic, topographic or geological features existing in the County of San Diego.

Definitions

Climate – The average course or condition of the weather at a particular place over a period of many years, as exhibited in absolute extremes, means and frequencies of given departures from these means (i.e., of temperature, wind velocity, precipitation and other weather elements).

Topography – The configuration of landmass surface, including its relief (elevation) and the position of its natural and man-made features that affect the ability to cross or transit a terrain.

Geography – A science that deals with the earth and its life, especially the description of land, sea, air, and the distribution of plant and animal life including man and his industries with reference to the mutual relations of these diverse elements. *Webster's Third New California Dictionary*.

Climatic Considerations

There are two types of climates: macro and micro. A macro climate affects an entire region and gives the area a general environmental context. A micro climate is a specific variation that could be related to the other two factors, topography and geography. A micro climate may cover a relatively small area or be able to encompass an entire community, as opposed to another community in the same county.

Climatic consideration should be given to the extremes, means and anomalies of the following weather elements:

1. Temperatures.
2. Relative humidities.
3. Precipitation and flooding conditions.
4. Wind speed and duration of periods of high velocity.
5. Wind direction.
6. Fog and other atmospheric conditions.

What is essential in creating an urban-wildland overlay are the data that suggest the existence of critical fire weather in the jurisdiction.

Topographic Considerations

Topographic considerations should be given to the presence of the following topographical elements:

1. Elevation and ranges of elevation.
2. Location of ridges, drainages and escarpments.
3. Percent of grade (slope).
4. Location of roads, bridges and railroads.
5. Other topographical features, such as aspect exposure.

This information becomes an important part of creating an analysis of urban-wildland areas because topography and slope are key elements (along with fuel type) that create the need for specific ignition-resistance requirements in this Code.

Geographic Considerations

Geography should be evaluated to determine the relationship between man-made improvements (creating an exposure) and factors such as the following:

1. Fuel types, concentration in a mosaic and distribution of fuel types.
2. Earthquake fault zones.
3. Hazardous material routes.
4. Artificial boundaries created by jurisdictional boundaries.
5. Vulnerability of infrastructure to damage by climate and topographical concerns.

Fuel types are the final component of the findings that suggest the need for identifying urban-wildland areas in a jurisdiction. Review Appendix D for a brief description of the various fuel models that relate to the specific areas under evaluation.

The following matrix lists the San Miguel Consolidated Fire Protection District amendments and the corresponding express findings. Minor editorial changes or typographical corrections to the California Urban-Wildland Interface Code, 2006 edition are not shown in these findings. The full texts of the proposed San Miguel Consolidated Fire Protection District amendments are shown in San Miguel Consolidated Fire Protection District California Urban-Wildland Interface Code, 2006 edition.

Matrix of Findings		
Section	Page Number	Finding Number(s)
Chapter 1 Administration		
101 General	Page 1	6
103 Compliance Alternatives	Page 2	6
104 Appeals	Page 2-3	Deleted referred to Fire Code
105 Permits	Page 4	Deleted referred to Fire

San Miguel Consolidated Fire Protection District
Ordinance No. 2007-03

		Code
106 Plans and Specifications	Page 4	1, 2, 5, 7
Chapter 2 Definitions		
202 Definitions	Page 7-8	All
Chapter 3 Urban-Wildland Interface Areas		
302 Urban-Wildland Interface Area Designations	Page 9	6,7
Chapter 4 Urban-Wildland Interface Area Requirements		
401 General	Page 11	All
402 Applicability	Page 11	All
403 Access	Page 11	All
404 Water Supply	Page 12-13	All
405 Fire Protection Plan	Page 13	5,6,7
Chapter 5 Special Building Construction		
501 General	Page 15	All
502 Fire Hazard Severity	Page 15	All
503 Ignition-resistant Construction	Page 15	All
504 Class 1 Ignition-resistant Construction	Page 15-17	All
505 Class 2 Ignition-resistant Construction	Page 17	All
506 Class 3 Ignition-resistant Construction	Page 17	Deleted entire Section 506
507 Replacement or Repair of Roof Coverings	Page 18	All

San Miguel Consolidated Fire Protection District
Ordinance No. 2007-03

Chapter 6 Fire-Protection Requirements		
602 Automatic Fire Sprinkler Systems	Page 19	Referred to Fire Code
603 Defensible Space	Page 19	All
604 Maintenance of Defensible Space	Page 12	All
604 Distance between Tree Canopies Table	Page 20	All
604.5.3 Orchards, Groves or Vineyards	Page 20	All
604.5.4 Eucalyptus and Oak Trees	Page 20	All
605 Spark Arresters	Page 20	Referred to Fire Code
606 Liquefied Petroleum Gas Installations	Page 20	Referred to Fire Code
607 Storage of Firewood and Combustible Materials	Page 20	6
Appendix B, Appendix C, Appendix E, Appendix F, Appendix H	Page 23 Page 27 Page 29 Page 35 Page 39 Page 41	Deleted Deleted Deleted Deleted Deleted Deleted

Findings for the California Urban-Wildland Interface Code, 2006 Edition

Finding 1

The San Miguel Consolidated Fire Protection District is situated on the slopes of and at the base of coastal mountains, with drainage from the eastern portion of the District, including the Sweetwater River, Forrester Creek, Casa De Oro Creek, Mexican Canyon and Spring Valley Drainages, which when flooded, could result in conditions rendering fire department vehicular traffic access unduly burdensome or impossible.

Further, the flood conditions described above carries the potential for overcoming the ability of the Fire District to aid or assist in fire control, evacuations, rescues and the emergency tasks and demands inherent in such situations. The potential for the aforementioned flooding conditions to result in limiting Fire District emergency vehicular traffic, with resulting overtaxing Fire District personnel, may further cause a substantial or total lack of protection against fire for the buildings and structures located within the jurisdiction.

Finding 2

The San Miguel Consolidated Fire Protection District is situated near several known major faults, each capable of generating earthquakes of significant magnitude. These include the Rose Canyon Fault, and the Silver Strand Faults, located generally west of the District, and the Elsinore Fault, the Agua Caliente Fault, located east of the District. These faults are subject to becoming active at any time; the San Miguel Consolidated Fire Protection District is particularly vulnerable to devastation should such an earthquake occur.

The potential effects of earthquake activity include isolating the San Miguel Consolidated Fire Protection District from the surrounding area and restricting or eliminating internal circulation due to the potential for collapsing of highway overpasses and underpasses, along with other bridges in the District, or an earth slide, and the potential for vertical movement rendering surface travel unduly burdensome or impossible.

Finding 3

The San Miguel Consolidated Fire Protection District is bisected by San Diego County Highways 94 and 125. These highways are heavily traveled by transportation vehicles carrying known toxic, flammable, explosive and hazardous materials.

The potential for release or threatened release of a hazardous material along this route and others within the District is likely given the volume transported daily. Incidents of this nature will normally require all available emergency response personnel to prevent injury and loss of life, and to prevent, as far as practicable, property loss. Emergency personnel responding to such aforementioned incidents may be unduly impeded and delayed in accomplishing an emergency response as a result of this situation. With the potential result of undue and unnecessary risk to the protection of life and public safety and, in particular, endangering residents and occupants in buildings or structures without the protection of automatic fire sprinklers.

Finding 4

The San Miguel Consolidated Fire Protection District and Southern California are semi-arid regions and experience water shortages from time to time. Those shortages can have a severely adverse effect on water availability for firefighting. Fires starting in sprinklered buildings are typically controlled by one or two sprinkler heads, flowing as little as 13 gallons per minute.

Hose streams used by engine companies on well-established structure fires operate at about 250 gallons per minute each, and the estimated water need for a typical residential fire is 1,250 to 1,500 gallons per minute, according to the Insurance Service Office and the Uniform Fire Code.

Under circumstances such as lack of water infrastructure, earthquakes, multiple fires and wildland fires within a community, the limited water demand needs of residential fire sprinklers would control and extinguish many fires before they spread from building to wildland. In such a disaster, water demands needed for conflagration firefighting probably would not be available.

Finding 5

The topography of the San Miguel Consolidated Fire Protection District presents problems in delivery of emergency services, including fire protection. Hilly terrain has narrow, winding roads with little circulation, preventing rapid access and orderly evacuation. Much of these hills are covered with highly non-fire resistive natural vegetation. In addition to access and evacuation problems, the terrain makes delivery of water extremely difficult. Some hill areas are served by water tank and pump systems are subject to failure in fire, high winds, earthquake and other power failure situations.

The aforementioned problems support the imposition of fire protection requirements greater than those set forth in the Building Code or Fire Code.

Finding 6

The seasonal climatic conditions during the late summer and fall create numerous serious difficulties regarding the control of and protection against fires in the San Miguel Consolidated Fire Protection District. The hot, dry weather typical of this area in summer and fall, coupled with Santa Ana winds and low humidity frequently results in wildfires that threaten or could threaten the San Miguel Consolidated Fire Protection District.

Although some code requirements, such as fire-resistive roof classification, have a direct bearing on building survival in a wildland fire situation, others, such as residential fire sprinklers, may also have a positive effect. In dry climate on low humidity days, many materials are much more easily ignited. More fires are likely to occur and any fire, once started, can expand extremely rapidly. Residential fire sprinklers can arrest a fire starting within a structure before the fire is able to spread to adjacent brush and structures.

A seasonal wind also have the potential for interfering with emergency vehicle access, delaying or making impossible fire responses, because of toppling of extensive plantings of dense chaparral, eucalyptus and coniferous trees. The trees are subject to uprooting in strong winds due to relatively small root bases compared to the tree itself. The aforementioned problems support the imposition of fire protection requirements greater than those set forth in the Building Code or Fire Code.

Finding 7

Due to the topography in much of the San Miguel Consolidated Fire Protection District, roadway condition, gates, angle of approach or departure, steeply sloping roadways and grades are common. In addition, combining potentially severe rainstorms and ground water retention of many areas of the District where there is expansive soil. This produces a condition wherein the moisture content of the soil is sufficient that roadways become damaged due to soil expansion and shrinkage. All weather, paved surfaces capable of supporting the imposed loads of fire apparatus are necessary to ensure access of emergency response personnel. These roadways, gates, approach angles, steep slopes and grades can also make it difficult for fire apparatus and other emergency vehicles to access a site. It is therefore essential that these roadway accesses be provided with proper all weather, paved surfaces, angle of approach, grades and gate access.