Residential "Wildland Urban Interface" (W.U.I.) new construction requirements and clarification for Mariposa County per the 2013 California Residential Code.

CRC section R327 "materials and construction methods for exterior wildfire exposure" is attached.

Roofs: Class A roof covering is allowed. For Class B and less, please verify in California State Fire Marshal product listing http://osfm.fire.ca.gov for approved systems. Ridge venting that is a part of the class A roof covering is allowed. Metal valley flashing (26ga) needs one layer of # 72 ASTM cap sheet installed underneath. Roof gutters (metal or plastic) need debris covering (wire or plastic mesh, etc.)

Attic Vents: "shall be protected by corrosion-resistant, noncombustible wire mesh with 1/8 - inch openings (max) or its equivalent". Eave and cornice vents may not be used unless they resist the intrusion of flame and burning embers (the SFM listed vents) into the attic area of the structure. Gable end vents shall be protected by corrosion resistant, non-combustible wire mesh with 1/8 inch openings max, or its equivalent.

Under Floor Vents: "shall be protected by corrosion-resistant, noncombustible wire mesh with 1/8 - inch openings max, or its equivalent".

Eaves: Standard exposed rafter tail framing with solid 2x bird blocking for the eaves are allowed. Eave and cornice vents may not be used unless they "resist the intrusion of flame and burning embers (the SFM listed vents) into the attic area of the structure". If you enclose the rafter tails (a soffit) you must use noncombustible materials and if you vent it you must use vents that resist the intrusion of flame and burning embers (the SFM listed vents).

Exterior walls: "Exterior walls shall be approved noncombustible or ignition-resistant material" "HardiePlank", APA 303 T1-11, SFM 12-7A-1, etc. Note: It is the permit holder's responsibility to present the building inspector with written evidence that the siding of choice meets California State Fire Marshal requirements http://osfm.fire.ca.gov at the time of siding inspection. Non-listed siding material will not be allowed. Non-rated window, door and corner trim is allowed.

Exterior windows: All exterior windows shall be insulating-glass units with at least one tempered pane in all window sections.

Exterior doors: All exterior doors shall be at least a 20 minute fire-resistance rating or equivalent (solid wood 1 3/8" thick). Raised panel solid wood doors with a tapered tongue less than 1 ¼" thick are approved (SFM standard 12-7A-1) Noncombustible vehicle access doors are allowed.

Decking Surfaces: Decking, surfaces, stair treads, risers, and landings of decks, porches, and balconies where any portion of such surface is within 10 feet of the primary structure shall be approved ignition resistant or noncombustible materials. Standard and pressure treated 2x and greater deck framing material is allowed (SFM interpretation 09-024 "CBC Ch 7A has no requirements that apply to deck support structures (joists, framing, posts, etc)."

Under-floor Appendages: The underside of kickouts and appendages (not decks) shall maintain the ignition-resistant integrity of the exterior walls.

Accessory Structures: Miscellaneous and accessory structures are per R327.10 (attached). Be aware that if you convert a non-habitable structure built after January 2008 to a habitable structure, all of the above will apply.

The above requirements are not all-inclusive. It is the permit holder's responsibly to know all of the regulations.

326.1, the first story shall be designated as the floor used for residential occupancy nearest to the street level which provides primary access to the building.

Enforcement of the provisions shall be in accordance with the Health and Safety Code Sections 13145 and 13146. No city, county, city and county, or district shall adopt or enforce any building ordinance or local rule or regulation relating to the subject of fire and life safety in large-family day-care homes which is inconsistent with those standards adopted by the State Fire Marshal, except to the extent the building ordinance or local rule or regulation applies to single-family residences in which day care is not provided.

R326.7 Special hazards. *Every unenclosed gas-fired water heater or furnace which is within the area used for child care in a large family day-care home shall be protected in such a way as to prevent children from making contact with those appliances.*

Exception: *This does not apply to kitchen stoves or ovens.*

R326.8 Exiting. *Every story or basement of a large family day-care home shall be provided with two exits which are remotely located from each other. Every required exit shall be of a size to permit the installation of a door not less than 32 inches (813mm) in clear width and not less than 6 feet 8 inches (2032 mm) in height. A manually operated horizontal sliding door may be used as one of the two required exits.*

Where basements are used for day-care purposes, one of the two required exits shall provide access directly to the exterior without entering the first story. The second exit from the basement may either pass through the story above or exit directly to the exterior.

Rooms used for day-care purposes shall not be located above the first story.

Exception: *Buildings equipped with an automatic sprinkler system throughout and which have at least one of the required exits providing access directly to the exterior. NFPA 13R may be used in large family day-care homes. The sprinkler omissions of NFPA 13R shall not apply unless approved by the enforcing agency.*

Exit doors, including manually operated horizontal sliding doors, shall be openable from the inside without use of a key or any special knowledge or effort.

SECTION R327
MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

SECTION R327.1
SCOPE, PURPOSE AND APPLICATION

R327.1.1 Scope. *This chapter applies to building materials, systems and or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section R327.2A.*

R327.1.2 Purpose. *The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.*

R327.1.3 Application. *New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date shall comply with the provisions of this chapter.*

Exceptions:

1. *Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.*
2. *Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.*
3. *Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C – Group U Agricultural Buildings), when located at least 50 feet from an applicable building.*
4. *Additions to and remodels of buildings originally constructed prior to the applicable application date.*

R327.1.3.1 Application date and where required. *New buildings for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all sections of this chapter, including all of the following areas:*

1. *All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:*
   - *1.1. Moderate Fire Hazard Severity Zones*
   - *1.2. High Fire Hazard Severity Zones*
   - *1.3. Very-High Fire Hazard Severity Zones*
2. *Land designated as Very-High Fire Hazard Severity Zone by cities and other local agencies.*
3. *Land designated as Wildland Interface Fire Area by cities and other local agencies.*

Exceptions:

1. *New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*

All of Mariposa County is located in one or more of these Zones.

2. *New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Interface Fire Area designated by cities and other local agencies for which an application for a building permit is submitted on or after December 1, 2005 but prior to July 1, 2008, shall only comply with the following sections of this chapter:*

   2.1. Section R327.5 – Roofing

   2.2. Section R327.6 – Vents

R327.1.4 Inspection and certification. *Building permit applications and final completion approvals for buildings within the scope and application of this chapter shall comply with the following:*

1. *Building permit issuance. The local building official shall, prior to construction, provide the owner or applicant a certification that the building as proposed to be built complies with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this chapter. Issuance of a building permit by the local building official for the proposed building shall be considered as complying with this section.*

2. *Building permit final. The local building official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this chapter. Issuance of a certificate of occupancy by the local building official for the proposed building shall be considered as complying with this section.*

R327.1.5 Vegetation management compliance. *Prior to building permit final approval, the property shall be in compliance with the vegetation management requirements prescribed in California Fire Code Section 4906, including California Public Resources Code 4291 or California Government Code Section 51182. Acceptable methods of compliance inspection and documentation shall be determined by the enforcing agency and may include any of the following:*

1. *Local, state, or federal fire authority or designee authorized to enforce vegetation management requirements.*

2. *Enforcing agency.*

3. *Third party inspection and certification authorized to enforce vegetation management requirements.*

4. *Property owner certification authorized by the enforcing agency.*

SECTION R327.2 DEFINITIONS

For the purposes of this chapter, certain terms are defined below:

CDF DIRECTOR *means the Director of the California Department of Forestry and Fire Protection.*

EXTERIOR COVERING. *The exposed siding or cladding material applied to the exterior side of an exterior wall, roof eave soffit, floor projection or exposed underfloor framing.*

FIRE PROTECTION PLAN *is a document prepared for a specific project or development proposed for a Wildland-Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure. The fire protection plan shall be in accordance with this chapter and the California Fire Code, Chapter 49. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted. Only locally adopted ordinances that have been filed with the California Building Standards Commission or the Department of Housing and Community Development in accordance with Section 1.1.8 shall apply.*

FIRE HAZARD SEVERITY ZONES *are geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very-High, High, or Moderate in State Responsibility Areas or as Local Agency Very-High Fire Hazard Severity Zones designated pursuant to California Government Code Sections 51175 through 51189. See California Fire Code Article 86.*

The California Code of Regulations, Title 14, Section 1280 entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

HEAVY TIMBER. *A type of construction classification specified in Section 602. For use in this chapter, heavy timber shall be sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Heavy timber walls or floors shall be sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.*

IGNITION-RESISTANT MATERIAL. *A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with wildfire exposure of burning embers and small flames, as prescribed in Section 703A and SFM Standard 12-7A-5, Ignition-Resistant Material.*

LOCAL AGENCY VERY-HIGH FIRE HAZARD SEVERITY ZONE *means an area designated by a local agency upon the recommendation of the CDF Director pursuant to Government Code Sections 51177(c), 51178 and 5118 that is not a state responsibility area and where a local agency, city, county, city and county, or district is responsible for fire protection.*

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 6 inches (152 mm).*

RAFTER TAIL. *The portion of roof rafter framing in a sloping roof assembly that projects beyond and overhangs an exterior wall.*

ROOF EAVE. *The lower portion of a sloping roof assembly that projects beyond and overhangs an exterior wall at the lower end of the rafter tails. Roof eaves may be either "open" or "enclosed." Open roof eaves have exposed rafter tails and an unenclosed space on the underside of the roof deck. Enclosed roof eaves have a boxed-in roof eave soffit with a horizontal underside or sloping rafter tails with an exterior covering applied to the underside of the rafter tails.*

ROOF EAVE SOFFIT. *An enclosed boxed-in soffit under a roof eave with exterior covering material applied to the soffit framing creating a horizontal surface on the exposed underside.*

STATE RESPONSIBILITY AREA *means lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing forest fires is primarily the responsibility of the state.*

WILDFIRE *is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property or resources as defined in Public Resources Code Sections 4103 and 4104.*

WILDFIRE EXPOSURE *is one or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.*

WILDLAND-URBAN INTERFACE FIRE AREA *is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.*

SECTION R327.3
STANDARDS OF QUALITY

R327.3.1 General. *Building material, systems, assemblies and methods of construction used in this chapter shall be in accordance with Section R327.3.*

R327.3.2 Qualification by testing. *Material and material assemblies tested in accordance with the requirements of Section 703A shall be accepted for use when the results and conditions of those tests are met. Product evaluation testing of material and material assemblies shall be approved or listed by the State Fire Marshal, or identified in a current report issued by an approved agency.*

R327.3.3 Approved agency. *Product evaluation testing shall be performed by an approved agency as defined in Section 1702. The scope of accreditation for the approved agency shall include building product compliance with code.*

R327.3.4 Labeling. *Material and material assemblies tested in accordance with the requirements of section R327.3 shall bear an identification label showing the fire test results. That identification label shall be issued by a testing and/or inspecting agency approved by the State Fire Marshal.*

1. *Identification mark of the approved testing and/or inspecting agency.*
2. *Contact and identification information of the manufacturer.*
3. *Model number or identification of the product or material.*
4. *Pre-test weathering specified in this chapter.*
5. *Compliance standard as described under Section R327.3.7.*

R327.3.5 Weathering and surface treatment protection.

R327.3.5.1 General. *Material and material assemblies tested in accordance with the requirements of Section 703A shall maintain their fire test performance under conditions of use when installed in accordance with the manufacturers instructions.*

R327.3.5.2 Weathering. *Fire-retardant-treated wood and fire-retardant-treated wood shingles and shakes shall meet the fire test performance requirements of this chapter after being subjected to the weathering conditions contained in the following standards, as applicable to the materials and the conditions of use.*

R327.3.5.2.1 Fire-retardant-treated wood. *Fire-retardant-treated wood shall be tested in accordance with ASTM D 2898, "Standard Practice for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing (Method A)" and the requirements of Section 2303.2.*

R327.3.5.2.2 Fire-retardant-treated wood shingles and shakes. *Fire-retardant-treated wood shingles and shakes shall be approved and listed by the State Fire Marshal in accordance with Section 208(c), Title 19 California Code of Regulations.*

R327.3.5.3 Surface treatment protection. *The use of paints, coatings, stains, or other surface treatments are not an approved method of protection as required in this section.*

R327.3.6 Alternates for materials, design, tests and methods of construction. *The enforcing agency is permitted to modify the provisions of this chapter for site-specific conditions in accordance with Section 1.11.2.4. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted in accordance with the California Fire Code, Chapter 49.*

R327.3.7 Standards of quality. *The State Fire Marshal standards for exterior wildfire exposure protection listed below and as referenced in this chapter are located in the California Referenced Standards Code, Part 12 and Chapter 35 of this code.*

SFM Standard 12-7A-1, *Exterior Wall Siding and Sheathing. A fire resistance test standard consisting*

of a 150 kW intensity direct flame exposure for a 10 minutes duration.

SFM Standard 12-7A-2, *Exterior Windows. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for a 8 minutes duration.*

SFM Standard 12-7A-3, *Horizontal Projection Underside A fire resistance test standard consisting of a 300 kW intensity direct flame exposure for a 10 minute duration.*

SFM Standard 12-7A- 4, *Decking. A two-part test consisting of a heat release rate (Part A) deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3 minute duration, and a (Part B) sustained deck assembly combustion test consisting of a deck upper surface burning ember exposure with a 12 mph wind for 40 minutes using a 2.2 lb (1 kg) burning "Class A" size 12" × 12" × 2.25" (300 mm x 300 mm x 57 mm) roof test brand.*

SFM Standard 12-7A-4A, *Decking Alternate Method A. A heat release rate deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3 minute duration.*

SFM Standard 12-7A-5, *Ignition-Resistant Material. A generic building material surface burning flame spread test standard consisting of an extended 30 minute ASTM E84 or UL 723 test method as is used for Fire-Retardant-Treated wood.*

SECTION R327.4
IGNITION RESISTANT CONSTRUCTION

R327.4.1 General. *The materials prescribed herein for ignition resistance shall conform to the requirements of this chapter.*

R327.4.2 Ignition-resistant material. *Ignition-resistant material shall be determined in accordance with the test procedures set forth in SFM Standard 12-7A-5 "Ignition-Resistant Material" or in accordance with this section.*

R327.4.3 Alternative methods for determining Ignition-resistant material. *Any one of the following shall be accepted as meeting the definition of ignition-resistant material:*

1. *Noncombustible material. Material that complies with the definition for noncombustible materials in Section 202*
2. *Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use that complies with the requirements of Section 2303.2 of the California Building Code.*
3. *Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in Section 1505.6 of the California Building Code and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an Ignition-resistant wall covering material when installed over solid sheathing.*

SECTION R327.5
ROOFING

R327.5.1 General. *Roofs shall comply with the requirements of Sections R327 and R902. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.*

R327.5.2 Roof coverings. *Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be firestopped with approved materials or have one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D 3909 installed over the combustible decking.*

R327.5.3 Roof valleys. *Where valley flashing is installed, the flashing shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D 3909, at least 36-inch-wide (914 mm) running the full length of the valley.*

R327.5.4 Roof gutters. *Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.*

SECTION R327.6
VENTS

R327.6.1 General. *Where provided, ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation shall be in accordance with Section 1203 of the California Building Code and Sections R327.6.1 through R327.6.3 of this section to resist building ignition from the intrusion of burning embers and flame through the ventilation opening.*

R327.6.2 Requirements. *Ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials, or other devices that meet the following requirements:*

1. *The dimensions of the openings therein shall be a minimum of $^1/_{16}$ inch (1.6 mm) and shall not exceed $^1/_8$ inch (3.2 mm).*
2. *The materials used shall be noncombustible.*

   Exception: *Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.*

3. *The materials used shall be corrosion resistant.*

R327.6.3 Ventilation openings on the underside of eaves and cornices. *Vents shall not be installed on the underside of eaves and cornices.*

Exceptions:

1. *The enforcing agency may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.*
2. *Vents complying with the requirements of Section R327.6.2 may be installed on the underside of eaves and cornices in accordance with either one of the following conditions:*

   2.1. *The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the California Building Code or,*

   2.2. *The exterior wall covering and exposed underside of the eave are of noncombustible material, or ignition-resistant-materials as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the vent is located more than 12 feet from the ground or walking surface of a deck, porch, patio, or similar surface.*

SECTION R327.7
EXTERIOR COVERING

R327.7.1 Scope. *The provisions of this section shall govern the materials and construction methods used to resist building ignition and/or safeguard against the intrusion of flames resulting from small ember and short-term direct flame contact exposure.*

R327.7.2 General. *The following exterior covering materials and/or assemblies shall comply with this section:*

1. *Exterior wall covering material.*
2. *Exterior wall assembly.*
3. *Exterior exposed underside of roof eave overhangs,*
4. *Exterior exposed underside of roof eave soffits.*
5. *Exposed underside of exterior porch ceilings.*
6. *Exterior exposed underside of floor projections.*
7. *Exterior underfloor areas.*

Exceptions:

1. *Exterior wall architectural trim, embellishments, fascias and gutters.*
2. *Roof or wall top cornice projections and similar assemblies.*
3. *Roof assembly projections over gable end walls..*
4. *Solid wood rafter tails and solid wood blocking installed between rafters having minimum dimension 2 inch (50.8 mm) nominal.*
5. *Deck walking surfaces shall comply with Section R327.9 only.*

R327.7.3 Exterior walls. *The exterior wall covering or wall assembly shall comply with one of the following requirements:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *Heavy timber exterior wall assembly.*
4. *Log wall construction assembly.*
5. *Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.*

Exception: *Any of the following shall be deemed to meet the assembly performance criteria and intent of this section:*

1. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing.*
2. *The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*

R327.7.3.1 Extent of exterior wall covering. *Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2 inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.*

R327.7.4 Open roof eaves. *The exposed roof deck on the underside of unenclosed roof eaves shall consist of one of the following:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck.*
4. *The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the roof deck designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*

Exceptions: *The following materials do not require protection:*

1. *Solid wood rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).*
2. *Solid wood blocking installed between rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).*
3. *Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.*
4. *Fascia and other architectural trim boards.*

R327.7.5 Enclosed roof eaves and roof eave soffits. *The exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by one of the following:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit.*
4. *The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*
5. *Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.*

Exceptions: *The following materials do not require protection:*

1. *Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.*
2. *Fascia and other architectural trim boards.*

R327.7.6 Exterior porch ceilings. *The exposed underside of exterior porch ceilings shall be protected by one of the following:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind the exterior covering on the underside of the ceiling.*
4. *The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the ceiling assembly including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*
5. *Porch ceiling assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.*

Exception: *Architectural trim boards.*

R327.7.7 Floor projections. *The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one of the following:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.*
4. *The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor projection including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*
5. *The underside of a floor projection assembly that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.*

Exception: *Architectural trim boards.*

R327.7.8 Underfloor protection. *The underfloor area of elevated or overhanging buildings shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.*
4. *The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*
5. *The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.*

Exception: *Heavy-timber structural columns and beams do not require protection.*

R327.7.8 Underside of appendages. *When required by the enforcing agency the underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:*

1. *Noncombustible material.*
2. *Ignition-Resistant material.*
3. *One layer of $^5/_8$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.*
4. *The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.*
5. *The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.*

Exception: *Heavy-timber structural columns and beams do not require protection.*

SECTION R327.8
EXTERIOR WINDOWS AND DOORS

R327.8.1 General.

R327.8.2 Exterior glazing. *The following exterior glazing materials and/or assemblies shall comply with this section:*

1. *Exterior windows.*
2. *Exterior glazed doors.*
3. *Glazed openings within exterior doors.*
4. *Glazed openings within exterior garage doors.*
5. *Exterior structural glass veneer.*

R327.8.2.1 Exterior windows and exterior glazed door assembly requirements. *Exterior windows and exterior glazed door assemblies shall comply with one of the following requirements:*

1. *Be constructed of multipane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or*
2. *Be constructed of glass block units, or*
3. *Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or*
4. *Be tested to meet the performance requirements of SFM Standard 12-7A-2.*

R327.8.2.2 Structural glass veneer. *The wall assembly behind structural glass veneer shall comply with section R327.7.3.*

R327.8.3 Exterior doors. *Exterior doors shall comply with one of the following:*

1. *The exterior surface or cladding shall be of noncombustible or Ignition-resistant material, or*
2. *Shall be constructed of solid core wood that comply with the following requirements:*
   - *2.1. Stiles and rails shall not be less than $1^3/_8$ inches thick*
   - *2.2. Raised panels shall not be less than $1^1/_4$ inches thick, except for the exterior perimeter of the raised panel that may taper to a tongue not less than $^3/_8$ inch thick.*
3. *Shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.*
4. *Shall be tested to meet the performance requirements of SFM Standard 12-7A-1.*

R327.8.3.1 Exterior door glazing. *Glazing in exterior doors shall comply with Section 708A.2.1.*

SECTION R327.9
DECKING

R327.9.1 General. *The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section.*

R327.9.2 Where required. *The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section when any portion of such surface is within 10 feet (3048 mm) of the building.*

R327.9.3 Decking surfaces. *The walking surface material of decks, porches, balconies and stairs shall be constructed with one of the following materials:*

1. *Ignition-resistant material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5.*
2. *Exterior fire retardant treated wood.*
3. *Noncombustible material.*
4. *Any material that complies with the performance requirements of SFM Standard 12-7A-4A when attached exterior wall covering is also either noncombustible or ignition-resistant material.*

   Exception: *Wall material may be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E 84 with a Class B flame spread rating.*

SECTION R327.10
ACCESSORY STRUCTURES

R327.10.1 General. *Accessory and miscellaneous structures, other than buildings covered by Section 701A.3, which pose a significant exterior exposure hazard to applicable buildings during wildfires shall be constructed to conform to the ignition resistance requirements of this section.*

R327.10.2 Applicability. *The provisions of this section shall apply to trellises, arbors, patio covers, carports, gazebos, and similar structures of an accessory or miscellaneous character.*

Exceptions:

1. *Decks shall comply with the requirements of Section 709A.*
2. *Awnings and canopies shall comply with the requirements of Section 3105.*

R327.10.3 Where required. *Accessory structures shall comply with the requirements of this section.*

R327.10.3.1 *Attached accessory structures shall comply with the requirements of this section.*

R327.10.3.2 *When required by the enforcing agency, detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this section.*

R327.10.4. Requirements. *When required by the enforcing agency accessory structures shall be constructed of noncombustible or ignition-resistant materials.*