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Vice Mayor & Councilmember District 6

CONSENT CALENDAR
September 10, 2024

To: Honorable Mayor and Members of the City Council

From: Vice Mayor Wengraf (Author), Councilmember Hahn (Co-Sponsor), Councilmember Humbert (Co-Sponsor), Councilmember Taplin (Co-Sponsor)

Subject: Amending BMC 7.52.060 to include "Wildfire Hardening" in the Real Property Transfer Tax Exceptions

RECOMMENDATION

Adopt the first reading of an Ordinance to amend Berkeley Municipal Code 7.52.060, Real Property Transfer Tax Exceptions, by adding Sub-section L, Wildfire Hardening, below Sub-section K, Seismic Upgrades.

FINANCIAL IMPLICATIONS

To be determined

CURRENT SITUATION AND ITS EFFECTS

The inherent wildfire risk Berkeley faces because of the natural topography and weather conditions is increasing due to climate change which is bringing more frequent and substantial draughts, and higher temperatures.

The City of Berkeley has and will continue to implement strategies that reduce the wildfire risk to our community, and should a wildfire occur, improve the emergency response. However, the City is able to address only a small part of the wildfire risk that the community faces as the majority of risk within the City lies on private property on and around structures that pre-date the 2008 implementation of California Building Code Chapter 7A and lack defensible space. While some of the retrofit work that must occur is inexpensive, much of it is expensive and must be completed by professionals. Thus, there is a financial challenge to getting this work completed, even for motivated residents. There is a need to be nimble and adapt our legislation to incentivize the work we know has to get done, work that will make our community resistive to ember caused ignitions and slow an advancing fire so firefighters can protect the community. This amendment will provide an opportunity and mechanism for the City to incentivize homeowners in making these improvements.

The risk of structural ignition can be reduced through "wildfire hardening" which is the process of increasing resistance to wildfire by replacing combustible materials with ignition resistant and/or non-combustible materials and other scientifically proven

actions including:

- Reducing the structure’s vulnerability to heat.
- Creating fire-resistant surfaces.
- Blocking any potential points of ingress for embers and other flammable material.

Retrofitting our homes against seismic damage and destruction has proven to be good policy; hardening against wildfire will be as well. Providing a refund of a portion of the transfer tax to harden against wildfire will incentivize owners and buyers to undertake these important upgrades and reduce our vulnerability to destruction and damage as a result of a wildfire.

Berkeley Municipal Code (BMC) Chapter 7.52 (Real Property Transfer Tax) Section .060 provides exceptions to payment of transfer tax, including to those who make seismic upgrades just before or after selling or buying their home. Up to one-third of the tax imposed by BMC 7.52 can be reduced, on a dollar-for-dollar basis, for all expenses incurred on or after October 17,1989 to "seismically retrofit".

This item recommends a similar exception for wildfire hardening expenses by adding Sub-section L. The maximum rebate shall be one-third (1/3) of the tax paid for a transfer of real property. However, the total rebate for any combination of seismic retrofit and/or wildfire hardening shall not exceed the maximum of one-third (1/3) of the tax paid per property. This shall take effect on January 1, 2025.

Qualifying upgrades and wildfire hardening projects must be completed either up to one year prior to the transfer of real property or within one year after the transfer. If the work qualifying for a rebate is completed prior to the transfer of the real property, the seller and buyer must decide who may apply for and receive the rebate. Work must be performed pursuant to a plan prepared by the applicant and approved by the Building Official, Fire Marshall or their designee.

The amendment to BMC 7.52.060 proposes to adopt the California Department of Insurance, “Safer from Wildfires” mitigation framework. According to the California Department of Insurance, “Every action under Safer from Wildfires will qualify you for an insurance discount. By doing more, you can save more.”

To be eligible for a rebate, the parcel level mitigations set forth in the California Department of Insurance “Safer from Wildfires” Framework REG-2020-00015 adopting California Code of Regulations Title 10, Chapter 5, Subchapter 4.8, Article 4, Section 2644.9 must be satisfactorily completed as determined by the Building Official (when a permit is required) and a Berkeley Fire Department Defensible Space Inspection.

Some of the hardening upgrades will require a permit and inspection by the Building Department. All design, material and construction methods must be in conformance with California Building Code, Chapter 7A. Work that requires a permit and inspection, that is completed without one, will not be eligible for the transfer tax rebate. Property owners wishing to perform their own work may not include a charge for their time but may submit for the cost of materials.

Wildfire hardening includes but is not limited to:

1. Class-A Fire Rated Roof Assembly
2. Clearing combustible materials including fences and gates, and any and all movable combustible objects, from the area within five (5) feet of the building being evaluated (Replace with only noncombustible materials.).
3. At least six (6) inches of noncombustible vertical clearance at the bottom of the exterior surface of the building, measured from the ground up.
4. Fire-Resistant Vents and Gutter Covers of 1/16 to 1/8 inch noncombustible, corrosion-resistant metal mesh or OSFM Category 8165 approved ember resistant vents.
5. Multi-paned windows, including dual pane windows, or functional shutters, which when closed, cover the entire window and do not have openings.
6. Enclosed eaves.
7. Remove combustible materials and debris from under decks and installation of non-combustible siding or ember resistant mesh of 1/8” or finer around deck perimeter.
8. Removal or absence of combustible structures, including sheds and other outbuildings, from the area within thirty (30) feet of the building being evaluated or, in the event that the applicant does not control the entirety of the area extending thirty feet from the building being evaluated, removal of combustible structures from as much of such area as is under the control of the applicant.
9. Block spaces between roof covering and sheathing with noncombustible materials (bird stops).
10. The property upon which the building being evaluated is situated complies with Section 4291 of the Public Resources Code, and any applicable local ordinances, governing defensible space.
11. Any other work found by the Building Official or Fire Marshal (or their designee) to substantially increase the capability a structure to withstand destruction or damage in the event of a wildfire.

Wildfire hardening increases a home’s resistance to heat, flames and embers, thereby reducing the chances of a home igniting. This also protects adjacent homes from igniting and causing a structure-to-structure fire spread through the community.

Adding Wildfire Hardening to Berkeley Municipal Code 7.52.060, Sub-section L, in addition to Seismic upgrades, supports Berkeley’s Strategic Plan Goal to create a resilient, safe, connected and prepared city.

BACKGROUND

Maintaining our housing stock is essential to the health and welfare of our city. The impacts from a wildfire are not just seen in the structures; it has devastating consequences on mental health, individual sense of security, and our financial stability as a community.

The Loma Prieta Earthquake took the Bay Area by surprise on October 17,1989. According to the California Department of Conservation, that 6.9 magnitude earthquake killed 63 people, injured close to 4,000 and displaced over 12,000 people. Less than two years later, June 25, 1991, Berkeley City Council voted for an exception on transfer property taxes to help homeowners pay for seismically upgrading their homes, and BMC 7.52.060, Sub-section K was established. In the last 10 years, the Finance Department processed approximately 1,200 seismic upgrade rebates for a total of $7.2M.

Since the seismic retrofit exception was included in BMC 7.52.060 in 1991 no expanded safety exceptions have been added. The City of Berkeley is in one of the highest wildfire risk areas in the state. We have a long history of catastrophic wildfire here in Berkeley. Most notably, in 1923, when a wildfire destroyed more than 600 homes, leaving more than 1,000 residents homeless. In 1991, the Berkeley/Oakland Tunnel Fire was responsible for 25 deaths and destroyed more than 3,000 homes. In 2024 valuation, that conflagration cost 4 billion dollars. Now is the time to amend this policy, adapt our legislation and help residents harden their homes against wildfire.

Fire science studies are decisive. Wildfire hardening reduces the chances of a home catching fire. The Home Insurance industry has taken note and adopted the components of Chapter 7A and defensible space in their evaluations of risk during the underwriting process. IBHS, the Insurance Institute for Business & Home Safety, initiated the Wildfire Prepared Home program, which incentivizes homeowners to implement home hardening best practices based on scientifically proven Wildfire Defense Standards.

Attachments: 1) Ordinance Amending Sections of 7.52.060 of the BMC – clean copy
2) California Building Code Chapter 7A
3) “Safer from Wildfires”, California Department of Insurance

ORDINANCE NO. #### -N.S.

AMENDING SECTIONS 7.52.060 OF THE BERKELEY MUNICIPAL CODE

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Berkeley Municipal Code 7.52.060, Real Property Transfer Tax Exceptions, is amended to add Sub-section L. and read as follows:

BMC 7.52.60 Sub-section L

L. 1. Up to one-third of the tax imposed by this chapter shall be rebated, on a dollar for dollar basis, for all expenses incurred on or after January 1, 2025 to "wildfire harden" either any structure which is used exclusively for residential purposes, or any mixed-use structure which contains two or more dwelling units. Multiple rebate applications may be submitted for a partial rebate of the tax paid. However, the total rebate for any combination of seismic retrofit and/or wildfire hardening shall not exceed the maximum of one-third (1/3) of the tax paid per property.

2. The term "wildfire harden" within the meaning of this chapter means work which is the process of increasing resistance to wildfire by replacing combustible materials with ignition resistant and/or non-combustible materials and other scientifically proven actions. The work must be permanent and not vegetation management or gardening adaptations that require continued maintenance. To be eligible for a rebate, the parcel level mitigations set forth in the California Department of Insurance “Safer from Wildfires” Framework REG-2020-00015 adopting California Code of Regulations Title 10, Chapter 5, Subchapter 4.8, Article 4, Section 2644.9 must be satisfactorily completed as determined by the Building Official (when a permit is required) and a Berkeley Fire Department Defensible Space Inspection. These include:

(a) All improvements must be permanent and comply with design, material and construction methods as described in the California Building Code, Chapter 7A. and BMC 19.28.030.

(b) Structures with a wood shake roof must be replaced with a Class A fire rated roof before qualifying for the transfer tax rebate.

(c) Clearing combustible materials including fences and gates, and all movable combustible objects, from the area within five (5) feet of the building being evaluated (Replace with only noncombustible materials.).

(d) At least six (6) inches of noncombustible vertical clearance at the bottom of the exterior surface of the building, measured from the ground up.

(e) Fire-Resistant Vents and Gutter Covers of 1/16 to 1/8 inch noncombustible, corrosion-resistant metal mesh or OSFM Category 8165 approved ember resistant vents.

(f) Multi-paned windows, including dual pane windows, or functional shutters, which when closed, cover the entire window and do not have openings.

(g) Enclosed eaves.

(h) Remove combustible materials and debris from under decks and installation of non-combustible siding or ember resistant mesh of 1/8" or finer around deck perimeter.

(i) Removal or absence of combustible structures, including sheds and other outbuildings, from the area within thirty (30) feet of the building being evaluated or, in the event that the applicant does not control the entirety of the area extending thirty feet from the building being evaluated, removal of combustible structures from as much of such area as is under the control of the applicant.

(j) Block spaces between roof covering and sheathing with noncombustible materials (bird stops).

(k) The property upon which the building being evaluated is situated complies with Section 4291 of the Public Resources Code, when applicable, and any applicable local ordinances, governing defensible space.

(l) Any other work found by the Building Official or Fire Marshal (or their designee) to substantially increase the capability of those structures, specified in subsection L.1, to withstand destruction or damage in the event of a wildfire.

3. The work to wildfire harden as provided herein shall be completed either up to one-year prior to the transfer of property or as provided in subsection L.5.

4. If the work to wildfire harden structures and property provided for herein is to be performed after the transfer of property which is subject to the tax imposed by this chapter, upon completion of such work and certification by the building official as to the amount of the expenses of such work the City Manager or their designee may refund such expenses not to exceed one-third of the tax imposed to the parties to the sale in accordance with the terms of such sale. Any remaining tax shall be retained by the City.

5. From the date of the recordation of the transfer document, the applicant shall have one year to complete all wildfire hardening work and submit a wildfire hardening verification application to the Codes and Inspection Division of the City of Berkeley. If the work is not completed at the end of one year, that portion which has been completed may be credited as a rebate to the applicant upon submission of a Home Hardening verification application and substantiating documentation, as required by the codes and inspections division of the City of Berkeley, showing the dollar amount of work completed up to that date.

6. Within the one-year period established by paragraph 5, an applicant may request, and the City Manager may approve, an extension of up to one year. The City Manager or their designee may grant such an extension only for good cause. The decision of the City Manager or their designee shall be entirely within their discretion and shall be final.

(a) "Good cause" includes (i) the inability of the applicant, after a prompt and diligent search to find and retain the services of an architect, engineer, contractor or other service provider whose services are necessary for the Home Hardening work; (ii) unforeseen and unforeseeable circumstances such as a significant change in the scope of the Wildfire Hardening work due to circumstances in the field which could not reasonably have been known earlier; and (iii) serious illness or other extraordinary and unforeseeable circumstances that prevented the timely commencement or completion of the Wildfire Hardening work.

(b) "Good cause" does not include (i) ignorance of the applicable City ordinances or regulations concerning the Wildfire Hardening rebate provided in this chapter or state or local laws relating to the standards with which wildfire hardening work must comply; or (ii) any delays which were within the control or responsibility of the applicant.

Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of Council Chambers, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

CHAPTER 7A [SFM]

MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

SECTION 701A
SCOPE, PURPOSE AND APPLICATION

701A.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 702A.

701A.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 flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

701A.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.

701A.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.
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 705A – Roofing
   - 2.2. Section 706A – Attic Ventilation

701A.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.

701A.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 Sec-

tion 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 702A 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. See Section 706A for the applicable referenced sections of the Government Code and the Public Resources Code.*

SECTION 703A STANDARDS OF QUALITY

***703A.1 General.** Building material, systems, assemblies and methods of construction used in this chapter shall be in accordance with Section 703A.*

***703A.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.*

> ***703A.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 this code.*

> ***703A.4 Labeling.*** *Material and material assemblies tested in accordance with the requirements of Section 703A 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 703A.7*

703A.5 Weathering and surface treatment protection.

703A.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.*

703A.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.*

703A.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.*

703A.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.*

703A.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 chapter.*

703A.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.*

703A.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-minute 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-minute 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 2.2lb (1kg) burning "Class A" size 12"x12"x 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 704A
IGNITION-RESISTANT CONSTRUCTION

704A.1 General. *The materials prescribed herein for ignition resistance shall conform to the requirements of this chapter.*

704A.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.*

704A.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.*
3. *Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in Section 1505.6 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 705A
ROOFING

705A.1 General. Roofs shall comply with the requirements of Chapter 7A and Chapter 15. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

705A.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.

705A.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.

705A.4 Roof gutters. Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.

SECTION 706A
VENTS

706A.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 and Sections 706A.1 through 706A.3 to resist building ignition from the intrusion of burning embers and flame through the ventilation openings.

706A.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 (3.2mm).
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.

706A.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 706A.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 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 707A
EXTERIOR COVERING

707A.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.

707A.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 709A.4 only

707A.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*

707A.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.*

707A.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*

707A.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*

707A.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.*

707A.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.*

707A.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.*

707A.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 708A
EXTERIOR WINDOWS AND DOORS

708A.1 General.

708A.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*

708A.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*

708A.2.2 Structural glass veneer. *The wall assembly behind structural glass veneer shall comply with Section 707A.3.*

708A.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.*

708A.3.1 Exterior door glazing. *Glazing in exterior doors shall comply with Section 708A.2.1.*

SECTION 709A
DECKING

709A.1 General. *The walking surface material of decks, porches, balconies and stairs shall comply with the requirements of this section.*

709A.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.*

709A.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 710A
ACCESSORY STRUCTURES

710A.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.*

710A.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.*

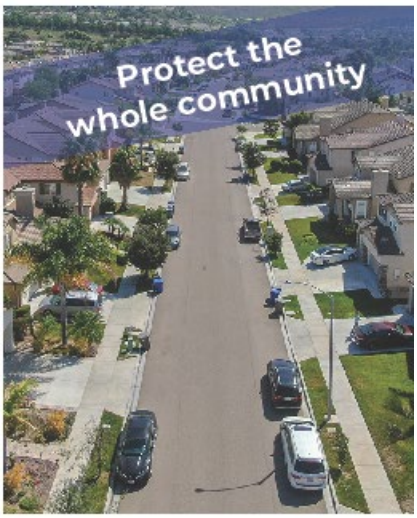
710A.3 Where required. *Accessory structures shall comply with the requirements of this section.*

710A.3.1 *Attached accessory structures shall comply with the requirements of this section.*

710A.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.*

710A.4. Requirements. *When required by the enforcing agency accessory structures shall be constructed of noncombustible or ignition-resistant materials.*

Being Safer from Wildfires Can Help With Your Insurance



Safer from Wildfires is a ground-up approach to wildfire resilience with three layers of protection — for the structure, the immediate surroundings, and the community. Following these achievable steps can help you save money on your insurance.

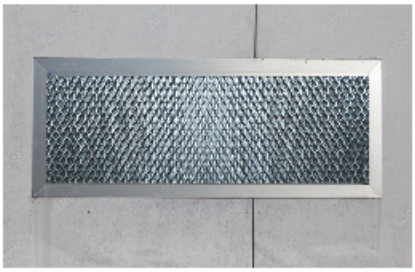
Cal OES

Public Utilities Commission

Safer from Wildfires was created by an interagency partnership between Insurance Commissioner Ricardo Lara and the emergency response and readiness agencies in Governor Gavin Newsom's administration. Learn more at insurance.ca.gov

3 Ways to Get Started with Safer from Wildfires

Don't know where to start? Here are 3 low-cost steps you can take today.



Keep embers out
Installing 1/16 to 1/8 inch noncombustible, corrosion-resistant metal mesh screens over attic vents can keep wind-blown embers out of your house.

Clear the first 5 feet
Removing greenery and replacing wood chips with stone or decomposed granite 5 feet around your home prevents fire from getting a foot in the door.

Be safer together
With Firewise USA, communities as small as 8 dwelling units or as big as 2,500 can create an action plan and start being safer together. Firewise USA is a nationally recognized program with proven results, sponsored by the National Fire Prevention Association.

Do more, save more

Every action under Safer from Wildfires will qualify you for an insurance discount. By doing more, you can save more.

- Class A fire-rated roof
- 5-foot ember-resistant zone around the structure
- Noncombustible 6 inches at the bottom of walls
- Ember- and fire-resistant vents
- Double pane windows or added shutters
- Enclosed eaves
- Cleared vegetation and debris from under decks
- Move sheds and outbuildings at least 30 feet away
- Trim trees and remove brush in compliance with state and local defensible space laws
- Neighborhoods can form a Firewise USA community
- Cities, counties, and local districts can become certified as a Fire Risk Reduction Community

Scan to find more resources