Add new Appendix BA, Enhanced Building Resilience to the 2022 California Residential Code, Title 24, Part 2.5 with July 2024 Supplement, as follows:

APPENDIX BA
ENHANCED BUILDING RESILIENCE

SECTION BA101
GENERAL

BA101.1 Purpose. The purpose of this appendix is to promote enhanced public health, safety and general welfare and to reduce public and private property losses due to hazards and natural disasters associated with exposure to wildfires,

BA101.1.2 Scope. The Sections in this Appendix shall revise the specific sections in the 2022 California Residential Code, Title 24, Part 2.5 with July 2024 Supplement as noted.

SECTION BA302
FIRE RESISTANT CONSTRUCTION

General. In order to limit the impact of wildfires on the *building* the *building* shall comply with Section R302 in addition to BA302.1, Table BA302.1 (1) and BA302.2.4 as follows.

BA302.1 Exterior Walls and Roofs. Exterior wall and roof assemblies shall comply with Sections BA302.1.1 and BA302.1.2.

BA302.1.1 Exterior walls. Exterior wall assemblies shall have a 2-hour fire resistance rating when tested in accordance with ASTM E119, UL 263 or Section 703.3 of the *International Building Code* with exposure from the exterior. Construction, projections, openings and penetrations of exterior walls of *dwellings* and accessory buildings shall comply with Table BA302.1(1); ~~or dwellings and *accessory* buildings equipped throughout with an *automatic sprinkler system* installed in accordance with Section P2904 shall comply with Table R302.1(2).~~

Exceptions:

~~1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.~~

~~2. Walls of *individual dwelling units* and their *accessory structures* located on the same *lot*.~~

~~3. Detached tool sheds and storage sheds, play houses and similar structures exempted from *permits* are not required to provide wall protection based on location on the *lot*. Projections beyond the exterior wall shall not extend over the *lot line*.~~

~~4. Detached garages accessory to a *dwelling* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).~~

~~5~~ 1. Foundation vents installed in compliance with this code are permitted.

BA302.1.2 Roofs. Roof assemblies shall have a 2-hour fire resistance rating when tested in accordance with ASTM E119, UL 263 or Section 703.3 of the *International Building Code* with exposure from the exterior.

TABLE BA302.1(1) EXTERIOR WALLS			
EXTERIOR WALL ELEMENT		**MINIMUM FIRE-RESISTANCE RATING**	**MINIMUM FIRE SEPARATION DISTANCE**
Walls	Fire-resistance rated	1 hour – tested in accordance with ASTM E119, UL 263 or Section 703.3 of the *International Building Code* with exposure from ~~both sides~~ interior.	0-feet
	Fire-resistance rated	2 hour – tested in accordance with ASTM E119, UL 263 or Section 703.3 of the *International Building Code* with exposure from exterior.	N/A
	Non-fire-resistance rated	0 Hours with exposure from interior.	≥ 5-feet
Projections	Not allowed	NA	< 2-feet
	Fire-resistance rated	~~1 hour~~ 2-hour on the underside, ~~or heavy timber, or fire-retardant-treated wood[a,b]~~	≥ 2-feet to < ~~5-feet~~ 10-feet
	Non-fire-resistance rated	0 hours	~~≥ 5-feet~~ 10-feet
Openings in walls	Not allowed	NA	< 3-feet
	25% maximum of wall area	0 hours	3-feet
	Unlimited	0 hours	~~5-feet~~ 10-feet
Penetrations	All	Comply with R302.4	< 3-feet
		None required	3-feet

N/A = Not applicable

~~a. The fire-resistance rating shall be permitted to be reduced to 0-hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of roof sheathing.~~

~~b. The fire-resistance rating shall be permitted to be reduced to 0-hours on the underside of the rake overhang where gable vent openings are not installed.~~

BA302.2.4 Parapets for townhouses. Parapets constructed in accordance with Section R302.2.5 shall be constructed for *townhouses* as an extension of exterior walls or common walls separating *townhouse units* in accordance with the following:

1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.

2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.

~~Exception: A parapet is not required in the preceding two cases where the roof covering complies with a minimum Class C rating as tested in accordance with ASTM E108 or UL [8] 790 and the roof decking or sheathing is of *noncombustible materials* or fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by not less than nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a distance of not less than 4 feet (1219 mm) on each side of the wall or walls and any openings or penetrations in the roof are not within 4 feet (1219 mm) of the common walls. Fire-retardant-treated wood shall meet the requirements of Sections R802.1.5 and R803.2.1.2.~~

3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher *roof deck* shall have not less than a 2-hour fire-resistance rating. The wall shall be rated for exposure from both sides.

SECTION BA337
MATERIALS AND CONSTRUCTION
METHODS FOR EXTERIOR WILDFIRE EXPOSURE

BA337.1 SCOPE, PURPOSE AND APPLICATION.

In order to limit the impact of wildfires on the *building* the *building* shall comply with Section R337 in addition to BA337.1.1 through BA337.7.10 as follows. Where there are differences between R337 and BA337, the provisions in this section shall take precedence.

BA337.1.1 Scope.

Section BA337, R337 and all subsections shall apply to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within the Wildland-Urban Interface area defined in Section BA337.2

BA337.1.2 Purpose.

The purpose of Section BA337 is to establish minimum standards for the protection of life and property by increasing the ability of a building located within the Local Responsibility Area (LRA) or the Wildland-Urban Interface Fire Area defined in Section BA337.2 to resist the intrusion of flame or burning projected by a vegetation fire and contribute to a systematic reduction in conflagration losses.

BA337.1.3 Application.

New buildings located in the Local Responsibility Area (LRA) or the Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date shall comply with the provisions of BA337 and R337. This shall include all new buildings with residential or similar occupancy type, which shall be referred to in this section as "applicable building" (see definition in Section BA337.2), as well as new buildings and structures accessory to those applicable buildings.

BA337.2 DEFINITIONS

For purposes of BA337, the following sections are to be used in conjunction with Section R337.2 - NO CHANGES

BA337.3 STANDARDS OF QUALITY

For purposes of BA337, the following sections are to be used in conjunction with Section R337.3 - NO CHANGES

BA337.4 IGNITION-RESISTANT CONSTRUCTION

For purposes of BA337, the following sections are to be used in conjunction with Section R337.4 - NO CHANGES

BA337.5 ROOFING

For purposes of BA337, the following sections are to be used in conjunction with Section R337.5 - NO CHANGES

BA337.6 VENTS

For purposes of BA337, the following sections are to be used in conjunction with Section R337.6 - NO CHANGES

BA337.7 EXTERIOR COVERINGS

For purposes of BA337, Sections BA337.7.3 through BA337.7.10 shall apply. The requirements in Sections R337.7.3 through R337.7.10 shall not apply.

BA337.7.3 Exterior wall coverings. All exterior wall coverings shall be a noncombustible material.

BA337.7.3.1 Extent of exterior wall covering. Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at the underside of all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

BA337.7.4 Exterior wall assemblies. All exterior walls shall be constructed of noncombustible materials and comply with BA337.7.4.1 and BA337.7.4.2.

BA337.7.4.1 Fire Resistance. Exterior wall assemblies shall be suitable for exterior fire exposure with a 2-hour fire-resistance rating, rated from the exterior side, as tested in accordance with ASTM E119 or UL 263.

BA337.7.5 Open roof eaves. The exposed roof deck on the underside of unenclosed roof eaves shall consist ~~of one or more~~ of the following:

1. Noncombustible material.

2. Materials approved for not less than 2-hour fire-resistance rating construction on the exterior side, as tested in accordance with ASTM E119 or UL 263

BA337.7.6 Enclosed roof eaves and roof soffits. The exposed underside of exterior porch ceiling shall be protected by ~~one or more of~~ the following:

1. Noncombustible material.
2. Materials approved for not less than 2-hour fire-resistance rating construction on the exterior side, as tested in accordance with ASTM E119 or UL 263

BA337.7.7 Exterior porch ceilings. The exposed underside of enclosed roof eaves having either boxed-in roof eave soffit with a horizontal underside, or sloping exposed surface shall be protected by ~~one or more of~~ the following:

1. Noncombustible material.
2. Materials approved for not less than 2-hour fire-resistance rating construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.

BA337.7.8 Floor projections. The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by ~~one or more of~~ the following:

1. Noncombustible material.
2. Materials approved for not less than 2-hour fire-resistance rating construction on the exterior side, as tested in accordance with ASTM E119 or UL 263.

BA337.7.9 Underfloor protection. The underfloor area of elevated or overhang buildings shall be enclosed to grade with noncombustible foundation walls in accordance with the requirements of Section R404 or the underside of the exposed underfloor shall be protected by ~~one or more of~~ the following:

1. Noncombustible material.
2. Materials approved for not less than 2-hour fire-resistance rating construction on the exterior side, as tested in accordance with ASTM E119 or UL 263

BA337.7.10 Underside of appendages. When required by the enforcing agency, the underside of overhanging appendages shall be enclosed to grade with noncombustible foundation walls in accordance with the requirements of Section R404 or the underside of the exposed underfloor shall be protected by ~~one or more of~~ the following:

1. Noncombustible material.
2. Materials approved for not less than 2-hour fire-resistance rating construction on the exterior side, as tested in accordance with ASTM E119 or UL 263

SECTION BA401

In order to limit the impact of fires on the *building* the *building* shall comply with Section R401 in addition to BA401.1 as follows.

BA401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for buildings. In addition to the provisions of this chapter, the design and construction of foundations in flood hazard areas as established by Table R301.2 shall meet the provisions of Section R322. Wood foundations shall not be permitted to be used ~~designed and installed in accordance with AWC PWF~~.

~~**Exception:** The provisions of this chapter shall be permitted to be used for wood foundations only in the following situations:~~

~~1. In buildings that have not more than two floors and a roof.~~

~~2. Where interior *basement* and foundation walls are constructed at intervals not exceeding 50 feet (15 240 mm). Wood foundations in Seismic Design Category D0, D1 or D2 shall be designed in accordance with accepted engineering practice.~~

SECTION BA402
MATERIALS

In order to limit the impact of fires on the *building* the *building* shall comply with Section R402 in addition to BA402.1 as follows.

BA402.1 Wood Foundations. Wood foundation systems shall ~~be designed in accordance with the provisions of this code~~ not be permitted to be used for *buildings* constructed in accordance with this code.

SECTION BA403
FOOTINGS

In order to limit the impact of fires on the *building* the *building* shall comply with Section R403 in addition to BA403.1 as follows.

BA403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, ~~crushed stone footings, wood foundations,~~ or other *approved* noncombustible structural systems that shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

SECTION BA404
FOUNDATION AND RETAINING WALLS

In order to limit the impact of fires on the *building* the *building* shall comply with Section R404 in addition to BA404.2 as follows.

BA404.2 Wood Foundation walls. Wood foundation walls shall not be permitted to be used. ~~be constructed in accordance with the provisions of Sections R404.2.1 through R404.2.6 and with the details shown in Figures R403.1(2) and R403.1(3).~~

SECTION BA407
COLUMNS

In order to limit the impact of fires on the *building* the *building* shall comply with Section R407 in addition to BA407.1 as follows.

BA407.1 Wood column protection. Wood columns shall not be permitted to be used for any of the building foundation. ~~be protected against decay as set forth in Section R317.~~

SECTION BA501
GENERAL

In order to limit the impact of fires on the *building* the *building* shall comply with Section R501 in addition to BA501.2 as follows.

BA501.2 Requirements. Floor construction shall be capable of accommodating all loads in accordance with Section R301 and of transmitting the resulting loads to the supporting structural elements. Wood floor framing in accordance with Section R502 shall not extend into any portion of the vertical plane of exterior walls.

SECTION BA601
GENERAL

In order to limit the impact of fires on the *building* the *building* shall comply with Section R601 in addition to BA601.2 as follows.

R601.2 Requirements. Wall construction shall be capable of accommodating all loads imposed in accordance with Section R301 and of transmitting the resulting loads to the supporting structural elements. Wood wall framing in accordance with Section R602 shall not be used in any portion of the vertical plane of exterior walls.

SECTION BA703
EXTERIOR COVERING

In order to limit the impact of fires on the *building* the *building* shall comply with Section R703 in addition to BA337.7.3.

SECTION BA801
GENERAL

In order to limit the impact of fires on the *building* the *building* shall comply with Section R801 in addition to BA801.2 as follows.

BA801.2 Requirements. Roof and ceiling construction shall be capable of accommodating all loads imposed in accordance with Section R301 and of transmitting the resulting loads to the supporting structural elements. Wood roof framing in accordance with Section R502 and wood roof sheathing in accordance with Section R803 shall not be used for construction of the roof assemblies.