

ORDINANCE NO. 9670 (NEW SERIES)

AN ORDINANCE AMENDING
THE COUNTY BUILDING CODE TO ADOPT THE 2001 CALIFORNIA BUILDING
CODE AND TO ADD CERTAIN FIRE-RESISTIVE
CONSTRUCTION STANDARDS

The Board of Supervisors of the County of San Diego ordains as follows:

Section 1. The Board of Supervisors finds and determines that the purpose of this ordinance is to adopt the 2001 California Building Code and to amend the San Diego County Building Code to include measures that increase the likelihood of a building or structure to withstand intrusion by fire. Building elements addressed include building design and construction methodologies that use fire resistant building materials and provide protection of structure projections including porches, decks, balconies and eaves, and structure openings including attic and eave vents and windows, with the intent of resisting the intrusion of a wildland or similar exposure fire.

Section 2. Section 51.0001 of the San Diego County Code is hereby amended to read as follows:

SEC. 51.0001. ADOPTION OF THE BUILDING CODE PORTION OF THE 2001 CALIFORNIA BUILDING STANDARDS CODE AND COUNTY AMENDMENTS THERETO.

Pursuant to Sections 17958, 17958.5 and 17958.7 of the California Health and Safety Code, the County hereby adopts the Building Code portion of the 2001 California Building Standards Code (Part 2 of Title 24 of the California Code of Regulations) with County amendments as specified in this Division. Amendments are made by specific reference to corresponding section numbers of the 2001 California Building Code.

The Building Code portion of the 2001 California Building Standards Code and the 1997 Uniform Building Code, together with the County of San Diego amendments shall be the County Building Code for the purpose of prescribing regulations in the unincorporated territory of the County of San Diego for the erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, occupancy, equipment use, height, area and maintenance of buildings and structures.

Code amendments adopted by the State of California shall take precedence over the 1997 Uniform Building Code language. The 1997 Uniform Building Code language shall be used for those code sections not adopted by the State. Local amendments adopted by the County of San Diego shall take precedence over the 2001 Building Code portion of the California Building Standards Code provisions.

Section 3. Section 51.1503.1 of the San Diego County Code is hereby amended to read as follows:

SEC. 51.1503.1. [MINIMUM RATING].

Section 1503.1 of the Building Code portion of the California Building Standards Code is hereby amended to read as follows:

1503.1 Fire Rated Roof Covering. All roof covering on single-family and two-family residential occupancies, and their accessory structures (occupancy classifications R-3 and U-1), shall have a minimum of a Class A rating. The roof covering for all other occupancies shall have a minimum of a Class B rating. For the purposes of this section, gambrel roofs, mansard roofs and other similar roof configurations are to be considered roofs regardless of the steepness of the roof pitch. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers.

Section 4. Section 51.3403.3 of the San Diego County Code is hereby amended to read as follows:

SEC. 51.3403.3. [NONSTRUCTURAL ALTERATIONS.]

Section 3403.3 of the Building Code portion of the California Building Standards Code is hereby amended to read as follows:

3403.3 Nonstructural Alterations. Alterations or repairs to an existing building or structure which are nonstructural and do not adversely affect any structural member or any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers.

EXCEPTIONS: 1. When re-roofing or repairs are made which exceed 50 percent of the projected roof area or 2,500 square feet, whichever is less, then the entire roof shall be fire rated roof coverings in conformance with section 1503.1. Roofing of residential room additions, however, may be constructed of roofing materials having the same fire rating as the existing building when the projected roof area of the addition does not exceed 50 percent of that of the existing horizontal projected roof area or 2,500 square feet, whichever is less. For the purpose of this exception re-roofing

or addition projects must be separated by at least 12 months to be considered separate projects.

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

Section 5. Section 51.0700 is hereby added to the San Diego County Code to read as follows:

SEC. 51.0700 [FIRE-RESISTANT MATERIALS AND CONSTRUCTION METHODS USED WITHIN WILDLAND AREAS]

Chapter 7A

SECTION 701A-SCOPE

Section 51.0700 applies to building materials and systems used in the design and construction of buildings and structures located within hazardous fire areas, to protect structures from fires spreading from adjacent structures or combustible vegetation. Section 51.0700 adds Chapter 7A to the County Building Code and the 700A section numbering is formatted to replicate proposed changes to the State Building Code. This Chapter is based on Appendix II-A of the County Fire Code as found at section 35.39100.030 of the San Diego County Code.

SECTION 702A – DEFINITIONS

For the purpose of Section 51.0700 of this Code, certain terms are defined as follows:

Basic Fire-Resistive Construction standards are the system of building materials and components as found at section 704A.2.

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

Defensible space is an area either natural or man-made, where material capable of allowing a fire spread unchecked has been treated, cleared or modified to slow the rate and intensity of advancing wildfire. This will create an area for increased safety for emergency fire equipment and evacuating or sheltering civilians in place and a point for fire suppression to occur.

Discretionary Project. “Discretionary Project” means a project, which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public

agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Enhanced Fire-Resistive Construction standards are the system of building materials and components as found at section 704A.3.

Fire authority-having jurisdiction (FAHJ). The designated entity providing enforcement of fire regulations as they relate to planning, construction and development. This entity may also provide fire suppression and other emergency services.

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

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

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

Off-site roadway A road, street, public highway, or private road used for fire apparatus access from a publicly maintained road to the boundary of the subject property.

On-site roadway. A road, street, public highway, private road or driveway used for fire apparatus access within the boundaries of the subject property or land division.

Planning authority-having jurisdiction (PAHJ). The identified authority regulating and enforcing planning and/or construction standards.

Structure means a residence and attached garage, building or related facility that is designed primarily for human habitation or buildings designed specifically to house farm animals. Decking, fences, and similar facilities are not considered structures for the purposes of establishing the limits of the fuel modification zone. Sheds, gazebos, and detached garages less than 250 square feet which are located within the fuel modification zone, shall be designed, constructed and placed such that they do not require the fuel modification zone to be increased beyond that required for the primary structures on the property.

Vegetation conflagration is an uncontrolled fire spreading through vegetative fuels, and exposing and consuming structures in the advancing path of fire.

Wildland fuel means any timber, brush, grass, or other flammable vegetation, living or dead, standing or down, that is not classified as fire-resistive.

Wildland/Urban Interface Area is land in an area designated or identified as a hazardous fire area (see the definition of hazardous fire area).

Tracer is any bullet or projectile incorporating a feature, which marks or traces the flight of said bullet or projectile by flame, smoke or other means, which results in fire or heat.

Tracer charge is any bullet or projectile incorporating a feature designed to create a visible or audible effect by means which result in fire or heat and shall include any incendiary bullets and projectiles.

SECTION 703A – SETBACKS FOR NEW CONSTRUCTION

703A.1 Zoning Requirements. The minimum setbacks for locating structures on a lot are set by the PAHJ. To minimize fire spread potential the FAHJ may require additional setbacks as described in Section 703A.2. In no case may the setbacks required by the FAHJ be less than those established by the PAHJ.

703A.2 Fire Requirements. In those jurisdictions where a PAHJ or FAHJ approves a fuel modification zone of less than 100 feet, all structures, including any part of a structure located within the Wildland/Urban Interface Area, shall be not less than 30 feet measured perpendicular from the subject property line adjacent to Wildland fuels. When the property line abuts a public way the setback is measured to the centerline of the public way or street.

EXCEPTION: When allowed by both the FAHJ and by the PAHJ, zoning requirements, and the wildland fire hazard is determined to be minimal the 30 foot setback may be reduced to a minimum of 5 feet from a property line provided the entire exterior wall, eave, overhang, or any other building construction elements shall comply with the enhanced fire-resistive construction standards of Section 704A.3.

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

703A.3 Future Setback Modification – All fuel modification zones shall not extend beyond the property line.

SECTION 704A - FIRE-RESISTIVE CONSTRUCTION IN A WILDLAND/URBAN INTERFACE AREA.

704A.1 General. For the purposes of this appendix this section describes the requirements of fire-resistive construction related to protecting new structures from an approaching wildfire. While these standards will provide a high level of protection to structures built in the wildland/urban interface area; there is no guarantee or assurance that compliance with these standards will prevent damage or destruction of structures by fire in all cases. Section 704A contains standards for basic, and enhanced, fire-resistive construction in the wildland/urban interface area.

704A.2 Basic Fire-Resistive Construction Requirements in the Wildland/Urban Interface Area. All structures built in the Wildland/Urban Interface Area must comply with the following basic fire-resistive construction standards:

704A.2.1 Glazing. Glass or other transparent, translucent or opaque glazing shall be tempered glass, multi-layered glass panels, glass block, have a fire-protection rating of not less than 20 minutes, or other assemblies approved by the PAHJ. Glazing frames made of vinyl materials shall have welded corners, metal reinforcement in the interlock area, and be certified to ANSI/AAMA/NWDA 101/I.S.2-97 structural requirements.

704A.2.2 Skylights. Skylights within one-half mile of the Wildland/Urban Interface Area shall be tempered glass except when the structure is protected with an automatic fire sprinkler system, the PAHJ may approve other materials.

704A.2.3 Exterior Walls. Exterior walls in the Wildland/Urban Interface Area shall comply with the provisions of the U.B.C. and with the following additional requirements:

1. Wall Surfacing Materials. The exterior wall surface materials shall be non-combustible or an approved alternate. In all construction, exterior walls are required to be protected with 2-inch nominal solid blocking between rafters at all roof overhangs. Wood shingle and shake wall covering shall be prohibited except for repair or replacement as noted in Section 704A.2.3, item 2.

EXCEPTION: Wood siding of 3/8-inch plywood or 3/4-inch drop siding is permitted but must have an underlayment of 1/2-inch fire-rated gypsum sheathing that is tightly butted or taped and mudded.

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

704A.2.4 Venting. Attic and foundation ventilation shall comply with the requirements of the Uniform Building Code as adopted by the PAHJ. Ventilation louvers and openings may be incorporated as part of access assemblies.

704A.2.4.1 Venting in Eaves. Attic ventilation openings or ventilation louvers shall not be permitted in soffits, rakes, in eave overhangs, between rafters at eaves, or in other similar exterior overhanging areas in the Wildland/Urban Interface Area.

EXCEPTIONS: 1. Attic vents in soffits may be permitted by the PAHJ on those areas of the building that do not face the wildland fuels, when the PAHJ determines it is not a hazard.

2. When enhanced fire-resistive construction is not required, enclosed eaves may be vented on the underside of the eave closest to the fascia provided the closest edge of the vent opening is at least 12 inches from the exterior wall. This venting must be screened or have holes less than 1/4" in diameter.

704A.2.4.2 Venting on Roofs and Vertical Walls. Roof vents, dormer vents, gable vents, foundation ventilation openings, ventilation openings in vertical walls, or other similar ventilation openings shall be louvered and covered with 1/4-inch, noncombustible, corrosion-resistant metal mesh or other approved material that offers equivalent protection. Turbine attic vents shall be equipped to allow, one-way direction rotation only; they shall not free spin in both directions.

704A.2.5 Protection of Eaves. Combustible eaves, fascias and soffits shall be enclosed as required in guidance documents prepared by the PAHJ in accordance with Appendix II-A, Section 29 of the County Fire Code.

EXCEPTION: Eaves of heavy timber construction are not required to be enclosed as long as attic venting is not installed in the eaves. For the purposes of this section heavy timber construction shall consist of a minimum of 4x6 rafter ties and 2x decking.

704A.2.6 Roof Covering. Roofs in hazardous fire areas shall comply with section 51.1503.1 of this Code and have a minimum Class A roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers.¹

¹ This section is from the 2003 International Urban-Wildland Interface Code as published by the International Code Council, Inc.

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

704A.2.7 Unenclosed Underfloor Protection. Buildings or structures shall have all underfloor areas enclosed to the ground with exterior walls in accordance with Section 704A.2.3.²

EXCEPTION: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance rated construction or heavy timber construction.

704A.2.8 Insulation. In the Wildland/Urban Interface Area, paper-faced insulation shall be prohibited in attics or ventilated spaces.

704A.2.9 Automatic Fire Sprinklers. When a reduction of the fuel modification zone to less than 100 feet is approved, an automatic fire sprinkler system may be required, and approved by the PAHJ.

704A.3 Enhanced Fire-Resistive Construction Requirements in the Wildland/Urban Interface Area.

704A.3.1 Where Required. The PAHJ/FAHJ shall require a structure to be of enhanced fire-resistive construction when it is determined that any of the following conditions apply:

1. When the 100 feet fuel modification zone is reduced in accordance with Section 16.1, exception 3 of the County Fire Code.
2. The development is located above a slope that will influence fire behavior, and with dense chaparral or highly combustible trees, unless it can be demonstrated that flame fronts will not impact the structure.
3. When reduction of setbacks required by Section 703A are allowed by the FAHJ.
4. Where there is high fuel load, such as dense chaparral or eucalyptus, unless it can be demonstrated that the flame fronts will not impact the structure.

Enhanced fire-resistive construction includes all items in Section 704A.2 plus the following additional requirements:

² Same

704A.3.2 Venting. Attic ventilation openings or ventilation louvers shall not be permitted in soffits, rakes, in eave overhangs, between rafters at eaves, or in other similar exterior overhanging areas when enhanced fire-resistive construction is required.

704A.3.3 Gutters and Downspouts. Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be designed to reduce the accumulation of leaf litter and debris that contributes to roof edge ignition.³

704A.3.4 Exterior Doors. Exterior doors shall be approved non-combustible construction, solid core wood not less than 1 ¾ inches thick or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall comply with Section 704A.2.1.⁴

704A.3.5 Fences and Other Attachments to Structures. The first five feet of fences and other items attached to a structure shall be constructed of non-combustible material or meet the same fire-resistive standards as the exterior walls of the structure.

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

704A.3.6 Projections. Exterior balconies, carports, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections, not meeting the 100 foot fuel modification requirements of Section 16 of the County Fire Code, shall be of non-combustible construction, fire-retardant-treated wood, heavy timber construction, or one-hour fire-resistive construction. When such appendages and projections are attached to exterior fire-resistive walls, they shall be constructed to maintain the fire-resistive integrity of the wall. Construction details shall comply with the methods specified in guidance documents prepared by the PAHJ in accordance with Section 29 of the County Fire Code.

EXCEPTION: In lieu of the fire protection outlined above, decks, balconies, and similar projections may be enclosed from floor level to ground level, enclosing the projection to the exterior wall of the building with materials approved for one-hour construction or protected by an approved automatic fire sprinkler system.

704A.3.7 Skylights. Skylights shall be tempered glass or a class “A” rated assembly.

³ This section is from the 2003 International Urban-Wildland Interface Code as published by the International Code Council, Inc.

⁴ This section is from the 2003 International Urban-Wildland Interface Code as published by the International Code Council, Inc.

Section 6. Effective Date. This ordinance shall take effect and be in force thirty (30) days after its passage, and before the expiration of fifteen (15) days after its passage, a summary hereof shall be published once with the names of the members of this Board voting for and against it in the Daily Commerce, a newspaper of general circulation published in the County of San Diego.

PASSED, APPROVED, AND ADOPTED this 14th day of July, 2004.