



Rancho Santa Fe Fire Protection District

Board of Directors

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FIRE PLAN CHECK CORRECTION

List for Single Family Residences, Duplexes, and Garages

Date: _____ Project Name: _____ RSF Plan Check #: _____

Address: _____ SD County Permit #: _____

Corrections circled are to be made on the plans before Fire Approval will be issued. The approval of plans and specifications does not permit the violation of any section of the Rancho Santa Fe Protection District Fire Code, County Ordinances, or State law. The following list does not necessarily include all errors and omissions.

RETURN THIS CORRECTION LIST WITH THE CORRECTED PLANS

Note: If new plans are provided when resubmitting, return at least one copy of the original stamped and checked set.

A. PLAN REQUIREMENTS:

FEE DUE: _____

1. Three sets of plans required:
 - Two sets of APPROVED Red County stamped building plans.
 - One additional photo copied Red County stamped building plan for Fire District.
 - Completed County mitigation form.
2. Due to the number and or complexity of corrections:
 - Please make corrections on new pages and slip sheet new pages into Red County stamped building plans prior to Fire District review.
 - Please make corrections on new pages and get County Building Division approval prior to Fire District review.
3. Corrections **CANNOT** be made on stamped plans and **RED INK** is not allowed.
 - Please provide a response sheet including the use of clouded changes and delta symbols.
4. Identify rooms and specify use.
5. Define all symbols and shaded areas, etc. used on the plans.
6. The Fire District will require the following conditions be placed on the project: Detailed information regarding Fire District Ordinances can be found on the District's web site at: <https://www.rsf-fire.org/ordinances/>, under plans and ordinances.
7. Unless a specific code is given; all codes referenced by Sections are from The County of San Diego's 2020 Consolidated Fire Code and Rancho Santa Fe Fire Protection District Ordinance 2020-01.

B. PLOT PLAN & SITE REQUIREMENTS:

1. **SITE INSPECTION (Note on plot plan):** Site inspection may reveal conditions which have changed since plan review. When such discrepancies arise, field inspection shall take precedence.
2. **REQUIRED FIRE HYDRANT SYSTEMS (§ CFC 507.5.1) (Note and show fire hydrant location on plot plan):** Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a fire hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exception: For Group R-3 and Group U occupancies, *equipped throughout with an approved automatic sprinkler*

system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, the distance requirement shall be not more than 600 feet (183 m).

Please conduct a fire flow analysis of the indicated fire hydrant and return results to Fire District.

3. ROAD PHASING REQUIREMENT FOR SINGLE FAMILY DWELLINGS ON EXISTING LEGAL PARCELS (§.503.2.1.1) (Note and show improvement area on plot plan):

(a) The fire access roadway requirement for widening an existing, improved and paved fire apparatus roadway shall be as provided in Table 503.2.1.1. The fire access roadway shall be constructed to extend from the property line to the nearest public road.

TABLE 503.2.1.1 - PHASING REQUIREMENT- Fire Apparatus Access Roadway - Single Family Dwellings

Number of Parcels Served	Unobstructed Road width	Roadways Over 600 foot Long
1-2	16-foot, paved	Turnouts every 400-feet
3-8	20-foot, paved	Turn-outs every 400-feet
9 or more	24-foot, paved	Not required

(b) The access roadway shall not be required to be improved for a non-habitable accessory structure or a residential addition or remodel less than 500 square feet if the access roadway has already been improved and paved to a minimum width of 20 feet. If the roadway is less than 20 feet wide, the roadway shall be widened to 20 feet. The preceding addition or remodel exception is limited to one permit per three-year period from the date of the last permit approval.

4. SECURITY GATES (§ 503.6) (Note and show gate location on plot plan): No person shall install a security gate or security device across a fire access roadway without the fire code official's approval. Electric gate openers, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200. If approved a security gate or security device across a fire access roadway shall include:

- (a) An automatic gate across a fire access roadway or driveway shall be equipped with an approved emergency key-operated switch overriding all command functions and opening the gate.
- (b) A gate accessing more than four residences or residential lots or a gate accessing hazardous, institutional, and educational or assembly occupancy group structure, shall also be equipped with an approved emergency traffic control-activating strobe light sensor or other device approved by the fire code official, which will activate the gate on the approach of emergency apparatus.
- (c) An automatic gate shall be provided with a battery back-up or manual mechanical disconnect in case of power failure.
- (d) An automatic gate shall meet fire department policies deemed necessary by the fire code official for rapid, reliable access.
- (e) When required by the fire code official, an automatic gate in existence at the time of adoption of this chapter is required to install an approved emergency key-operated switch or other mechanism approved by the fire code official, at an approved location, which overrides all command functions and opens the gate. A property owner shall comply with this requirement within 90 days of receiving written notice to comply.
- (f) Where this section requires an approved key-operated switch, it may be dual-keyed or equipped with dual switches provided to facilitate access by law enforcement personnel.
- (g) All gates providing access from a road to a driveway shall be located a minimum of 30 feet from the nearest edge of the roadway and shall be at least two feet wider than the width of the traffic lane(s) serving the gate.

5. MARKING, FIRE APPARATUS ROADS (§ 503.3) (Note on plot plan): When required by the fire code official, approved signs or other approved notices or markings that include the words "NO PARKING FIRE LANE" shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. All new public roads, all private roads within major subdivisions and all private road easements serving four or more parcels shall be named. Road name signs shall comply with County of San Diego Department of Public Works Design Standard #DS-13.

6. ROADWAY RADIUS (§ 503.2.4) (Show on plot plan): The horizontal inside radius of a fire apparatus access road shall comply with the County of San Diego Public and Private Road Standards approved by the Board of Supervisors.

The horizontal inside radius for a private residential driveway shall be a minimum of 28 feet, as measured on the inside edge of the improvement width or as approved by the fire code official. The length of vertical curves of fire apparatus access roads shall not be less than 100 feet, or as approved by the fire code official.

7. **DEAD ENDS (§ 503.2.5) (Show turnaround on plot plan):** Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around emergency apparatus. A cul-de-sac or other approved turn-around shall be provided in residential areas where the access roadway serves more than 2 structures. The minimum unobstructed radius width for a cul-de-sac in a residential area shall be 36 feet paved, 40 feet graded, or as approved by the fire code official. The fire code official shall establish a policy identifying acceptable turnarounds for various project types. See annex section of this code for illustrations
8. **GRADE (§ 503.2.7) (Note and show grade on plot plan):** The gradient for a fire apparatus access roadway shall not exceed 15.0%. The fire code official may allow roadway grades up to 20.0% provided that the roadway surface conforms to section 503.2.3. The fire code official may require additional mitigation measures.
9. **ANGLES OF APPROACH & DEPARTURE (§ 503.2.8) (Note and show grade on plot plan):** The angles of approach and departure for fire apparatus access roads shall not exceed 7 degrees (12 percent) for the first 30' or as approved by the fire code official and shall not allow for transitions between grades that exceed 6% elevation change along any 10 foot section
10. **CROSS-SLOPE (§ 503.2.7.1) (Note and show cross slope on plot plan):** The standard cross-slope shall be 2 percent; minimum cross-slope shall be 1 percent; maximum cross-slope shall be 5 percent.
11. **SURFACE (§503.2.3) (Note and show proposed material on plot plan):** Fire apparatus access road shall be designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 lbs. unless authorized by the FAHJ) and shall be provided with an approved paved surface so as to provide all-weather driving capabilities. The paving and sub-base shall be installed to the standards specified in the County of San Diego Parking Design Manual. A residential driveway constructed of 3½" Portland cement concrete may be installed on any slope up to 20% provided that slopes over 15% have a deep broom finish perpendicular to the direction of travel or other approved surface to enhance traction.

Please submit a driveway plan to our third party soils engineer for review and approval before Fire District approval.

12. **DIMENSIONS (§ 503.2.1) (Note and show proposed width on plot plan):** The dimensions of fire apparatus access roads shall be in accordance with the following:
 - (a) Fire apparatus access roads shall have an unobstructed improved width of not less than 24 feet, except for single-family residential driveways serving no more than two residential parcels, which shall have a minimum of 16 feet of unobstructed improved width. Any of the following, which have separated lanes of one-way traffic: gated entrances with card readers, guard stations or center medians, are allowed, provided that each lane is not less than 14 feet wide.
 - (b) Fire apparatus access roads that are public or private roads which are provided or improved as a result of a Tentative Map, Tentative Parcel Map or a Major/Minor Use Permit shall have the dimensions as set forth by the County of San Diego Standards for Public and Private Roads.
 - (c) All fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches.
 - (d) Vertical clearances or road widths shall be increased when the fire code official determines that vertical clearances or road widths are not adequate to provide fire apparatus access.
 - (e) Vertical clearances or road width may be reduced when the fire code official determines the reduction does not impair access by fire apparatus. In cases where the vertical clearance has been reduced, approved signs shall be installed and maintained indicating the amount of vertical clearance.
 - (f) Driveways exceeding 150 feet in length, but less than 600 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 600 feet, turnouts shall be provided no more than 400 feet apart.

13. **ADDRESS IDENTIFICATION (§ 505.1) (Note on plot plan):** New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm) for residential buildings, 8" high with a 1" stroke for commercial and multi-family residential buildings and 12" high with a 1" stroke for industrial buildings. Where required by the fire code official, address identification shall be provided in additional approved locations to

facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

- 14. EASMENT ADDRESS SIGNS (§ 505.3): (Note on plot plan):** A road easement which is not named differently from the roadway from which it originates shall have an address sign installed and maintained listing all street numbers occurring on that easement. The sign shall be located where the easement intersects the named roadway. The numbers on the sign shall contrast with the background and have a minimum height of 4" and a minimum stroke of ½".
- 15. HOSE PULL- FIRE APPARATUS ACCESS ROADS (§ 503.1.1) (Show hose pull path of travel on plot plan):** Fire apparatus access roads, including private residential driveways, shall be required for every building hereafter constructed when any portion of an exterior wall of the first story is located more than 150 feet from the closest point of fire department vehicle access. Fire apparatus access roads, except private residential driveways, shall be provided and maintained for purposes of rapid and reliable fire apparatus access and for unobstructed traffic circulation for evacuation or relocation of civilians during a wildfire or other emergency. Fire apparatus access roads shall be provided and maintained in compliance with this section and the most recent edition and any amendments thereto, of public and private road standards as adopted by the County of San Diego (San Diego County Standards for Private Roads and Public Roads, San Diego County Department of Public Works). The fire code official may modify the requirements of this section if the modification provides equivalent access.
- 16. BRIDGES AND ELEVATED SURFACES (§ 503.2.6) (Note on plot plan):** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits and clearance limitations shall be posted at both entrances to bridges where required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained where required by the fire code official.
- 17. BRIDGES WITH ONE TRAFFIC LANE (503.2.6.1) (Note on plot plan):** When approved by the fire code official, private bridges providing access to not more than two residential dwellings may have one 12 foot wide travel lane and it shall provide for unobstructed visibility from one end to the other, and turnouts shall be provided at both ends.
- 18. TRAFFIC CALMING DEVICES (§ 503.4.1) (Note on plot plan):** Traffic calming devices (including, but not limited to, speed bumps, speed humps, speed control dips, etc.) shall be prohibited unless approved by the fire code official.
- 19. RESPONSE MAP UPDATES (§ 505.5) (Note on plot plan):** Any new development which necessitates updating emergency response maps due to new structures, hydrants, roadways or similar features shall be required to provide map updates in a format compatible with current department mapping services and shall be charged a reasonable fee for updating all response maps.
- 20. FUEL MODIFICATION (§ 4907.2) (Note and show zones on plot plan):** A fuel modification zone shall be required around every building that is designed primarily for human habitation or use or a building designed specifically to house farm animals. Decks, sheds, gazebos, freestanding open-sided shade covers and similar accessory structures less than 250 square feet and 30 feet or more from a dwelling, and fences more than 5 feet from a dwelling, are not considered structures for the establishment of a fuel modification zone. A fuel modification zone shall comply with the following:
 - (a) When a building or structure in a hazardous fire area is located 100 feet or more from the property line, the person owning or occupying the building or structure shall maintain a fuel modification zone within 100 feet of the building or structure. The area within 50 feet of a building or structure shall be cleared of vegetation that is not fire resistant and re-planted with fire-resistant plants. In the area between 50 to 100 feet from a building, all dead and dying vegetation shall be removed. Native vegetation may remain in this area provided that the vegetation is modified so that combustible vegetation does not occupy more than 50% of the square footage of this area. Weeds and annual grasses shall be maintained at a height not to exceed 6 inches. The chips from chipping of vegetation that is done on-site may remain if the chips are dispersed so they do not exceed 6 inches in depth. Trees may remain in both areas provided that the horizontal distance between crowns of adjacent trees and crowns of trees and structures is not less than 10 feet. See Figure 4907.2.
 - (b) The fire code official may increase the fuel modification zone more than the 100-foot minimum if fuel and/or topography are determined to increase the fire hazard severity.
 - (c) When a building or structure in a hazardous fire area is setback less than 100 feet from the property line, the person owning or occupying the building or structure shall meet the requirements in subsection (a) above, to the extent possible, in the area between the building or structure and the property line.

- (d) The building official and the FAHJ may provide lists of prohibited and recommended plants.
- (e) The fuel modification zone shall be located entirely on the subject property unless approved by the FAHJ. This required fuel modification zone may be reduced as allowed in subsection (c) above or increased as required by a fire protection plan.
- (f) When the subject property contains an area designated to protect biological or other sensitive habitat or resource, no building or other structure requiring a fuel modification zone shall be located so as to extend the fuel modification zone into a protected area.
- (g) Improved Property: Property owners shall be permitted to clear all flammable vegetation within a one hundred (100) foot radius of all buildings using methods, such as mowing and trimming that leave plant root structure intact to stabilize soil. Clearing is not limited to these methods and discing, which exposes bare mineral soil, may be used if deemed necessary by the FAHJ.
- (h) Where the distance from the structure to the property line of the parcel on which the building is located is less than the distance required to be cleared, (100'), the adjacent parcel owner may be required to establish the required fuel break to achieve the required distance of defensible space if such requirement is approved by the Fire Code Official.

There is no guarantee or assurance that compliance with these standards will prevent damage or destruction of structures by wildland fire in all cases.

- 21. HOME IGNITION ZONE 1 - IMMEDIATE ZONE 0-5' (§ 4907.4.1) (Note on plot plan):** Meaning from exterior wall surface of the building extending 5 feet on a horizontal plane. This zone shall be constructed of continuous hardscape or limited fire resistant plantings acceptable to the FAHJ. Vegetation in this zone shall not exceed 6" to 18" in height and irrigation is required. Removal of combustible materials surrounding the exterior wall area and maintaining area free and clear of combustible materials. The use of mulch and other combustible materials shall be prohibited.
- 22. HOME IGNITION ZONE 2 - INTERMEDIATE ZONE 5' to 50' (§ 4907.4.2) (Note on plot plan):** Means from the immediate edge of zone 1 extending out in a horizontal plane. This zone shall consist of planting of low growth, drought tolerant and fire resistive plant species. The height of the plants in this zone starts at 6" adjacent to Zone 1 and extending in a linear fashion up to a maximum of 18" at intersection with Zone 3. Vegetation in this zone shall be irrigated and not exceed 10' in height and shall be moderate in nature. Trees shall not exceed 30' in height and be limited or as approved by the FAHJ. Firewood inside this zone shall be piled minimum of 30' away from all buildings and structures. Cords of firewood shall also be maintained at least 10' from property lines and not stacked under tree canopies drip lines.
- 23. HOME IGNITION ZONE 3 - EXTENDED ZONE 50'-100' (§ 4907.4.3) (Note on plot plan):** Means from the immediate edge of Zone 2 extending out in a horizontal plane for 50'. This zone consists of planting of drought tolerant and fire resistive plant species of moderate height. Brush and plants shall be limbed up off the ground so the lowest branches are 1/3 height of bush/tree/plant or up to 6' off the ground on mature trees. This area would be considered selective clearing of natural vegetation and dense chaparral by removing a minimum 50% of the square footage of this area.
- 24. STRUCTURE SET BACK FROM SLOPE (§ 4907.1.3) (Note and show top of slope setback on plot plan):** Single-story buildings and structures shall be setback a minimum 15 feet horizontally from top of slope to the farthest projection from a roof. A single-story building and structure shall be less than 12 feet above grade. A two-story building and structure shall be setback a minimum of 30 feet horizontally from top of slope to the farthest projection from a roof. Buildings and structures greater than two stories may require a greater setback when the slope is greater than 2 to 1.
- 25. GENERAL FIRE SETBACKS (§ 4907.1.1) (Note and show All Setbacks and Property Lines):** Buildings and structures shall be setback a minimum of 30 feet from property lines and biological open space easements unless existing permitted buildings and structures are located within 30 feet of the property line or the County Zoning Ordinance requires a greater minimum. When the property line abuts a roadway, the setback shall be measured from the centerline of the roadway.

Exception: When both the building official and the FAHJ determine that the hazard from a wildland fire is not significant or when the terrain, parcel size or other constraints on the parcel make the required setback infeasible, the building official may allow the setback to be less than 30 feet when allowed by the Zoning Ordinance.

Please contact the plan reviewer to schedule a site visit for setback reduction.

- 26. LANDSCAPE PLANS (§ 4907.5) (Note on plot plan):** New residential custom homes, production tract homes, multi-family residential and commercial buildings shall submit landscape plans to the (insert fire district name) and obtain approval for the plan prior to the framing inspection. Landscape plan submittals shall include a readable scale, the delineation of a 100-foot fuel modification zone, depiction of existing vegetation, all irrigated areas, a plant legend with

both botanical and common names and identification of all plant material symbols.

27. LANDSCAPING INSTALLATION (§ 4907.5.2) (Note on plot plan): All landscaping shall be installed prior to final inspection for issuance of certificate of occupancy.

28. LOCATION OF LPG TANK, ABOVE GROUND STORAGE (§ 6104.3) (Note and show tank locations on plot plan): The minimum separation between containers and buildings, public ways or lines of adjoining property that can be built upon is: 5 feet for containers less than 125 gallons; 10 feet for containers 125 gallons to 500 gallons; 25 feet for containers 501 to 2,000 gallons.

29. CLEARANCE TO COMBUSTIBLES (§ 6107.3) (Note on plot plan): Weeds, grass, brush, trash and other combustible materials shall be kept not less than 10 feet (3048 mm) from LP-gas tanks or containers.

C. BUILDING CONSTRUCTION AND FEATURES

1. AUTOMATIC FIRE SPRINKLER SYSTEMS - WHERE REQUIRED (§ 903.2) (Note on plot plan): Approved automatic sprinkler systems shall be installed in all new buildings. For the purpose of automatic sprinkler systems, buildings separated by less than 10 feet from adjacent buildings shall be considered one building. Fire barriers and partitions, regardless of rating, shall not be considered as creating separate buildings for purposes of determining automatic sprinkler system requirements. Mezzanines shall be included in the total square footage calculation. All new buildings constructed shall have an approved NFPA 13, NFPA 13R or NFPA 13D automatic sprinkler system installed as per 903.3.1.1, 903.3.1.2 or 903.3.1.3. The Fire Code Official has the final decision of which NFPA 13 standard to apply, NFPA 13R or NFPA 13D as required due to access, water supply and travel time. Third party review required prior to submittal to the Fire District.

Exceptions:

1. Group U occupancies not greater than 500 square feet, when the building is 20 feet or more from an adjacent building and 30 feet from property line measured from the farthest projection from the building.
2. Agricultural buildings constructed of wood or metal frames over which fabric or similar material is stretched, which are specifically used as green houses are exempt from the automatic sprinkler system requirements unless physically connected to other building.

2. AUTOMATIC FIRE SPRINKLER SYSTEMS - ADDITONS (§ 903.2(a)) (Note on plot plan): An automatic sprinkler system may be required to be installed throughout the building when the addition is more than 50% of the existing building or when the altered building will exceed a fire flow as calculated pursuant to section 507.3. The fire code official may require an automatic sprinkler system to be installed in buildings where no water main exists to provide the required fire flow or where a special hazard exists, such as poor access roads, steep grades and canyon rims, hazardous brush and response times greater than 5 minutes by a fire department. The fire code official may require that other protective measures be taken based on existing conditions and/or potential hazards. The preceding addition or remodel exception is limited to one permit per three-year period from the date of the last permit approval.

3. AUTOMATIC FIRE SPRINKLER SYSTEMS - REMODELS OR RECONSTRUCTIONS (§ 903.2(b)) (Note on plot plan): The fire code official may require an automatic sprinkler system to be installed throughout buildings if a remodel or reconstruction includes significant modification to the interior or roof of the building. The fire code official may require that other protective measures be taken based on existing conditions and/or potential hazards. The preceding addition or remodel exception is limited to one permit per three-year period from the date of the last permit approval.

4. AUTOMATIC FIRE SPRINKLER SYSTEM – GROUP U OCCUPANCIES (§ 903.2(c)) (Note on plot plan): For Group U Occupancies greater than 500 square feet, an approved automatic sprinkler system shall be installed as per NFPA 13D edition referenced in Chapter 80 CFC or as approved by the FAHJ.

5. FIRE SPRINKLER SYSTEM MONITORING AND ALARMS (§ 903.4) (Note on plot plan): Automatic sprinkler systems with more than 100 fire sprinklers protecting one-family and two-family and group U occupancies.

6. SMOKE ALARMS - NEW CONSTRUCTION (§ CFC 907.2.10.2) (Note and show locations on electrical sheets): Single or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-2.1, R-2.2, R-3, R-3.1, and R-4 regardless of occupant load at all of the following locations:

- (a) On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
- (b) In each room used for sleeping purposes.
- (c) In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable

attics.

- (d) In a group R-3.1 occupancies, in addition to the above, smoke alarms shall be provided throughout the habitable areas of dwelling unit except kitchens.

7. SMOKE ALARMS - POWER SOURCE (§ CFC 907.2.10.6) (Note on electrical sheets): In new construction and in newly classified Group R-3.1 occupancies, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

8. INTERCONNECTION (§ CFC 907.2.10.5) (Note on electrical sheets): Where more than one smoke alarm is required to be installed within an individual *dwelling unit* or *sleeping unit* in Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

- Please show the wiring diagram of all the smoke and carbon monoxide alarms being interconnected on the electrical sheets.
- A residential fire alarm system cannot take the place of the interconnection of smoke and carbon monoxide alarms.

9. SMOKE ALARM - EXISTING BUILDINGS (§ CFC 1103.8.3) (Note on electrical sheets): Smoke alarms are permitted to be solely battery operated in existing buildings where construction is not taking place, in buildings that are not served from a commercial power source, and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for building wiring without the removal of interior finishes.

10. SMOKE ALARM - SPECIFIC LOCATIONS (§ NFPA 72 Section 29.8.3.4) (Note and show locations on electrical sheets): The installation of smoke alarms and smoke detectors shall comply with the following requirements:

1. *Smoke alarms and smoke detectors shall not be located where ambient conditions, including humidity and temperature, are outside the limits specified by the manufacturer's published instructions.*
2. *Smoke alarms and smoke detectors shall not be located within unfinished attics or garages or in other spaces where temperatures can fall below 40°F (4°C) or exceed 100°F (38°C).*
3. *Smoke alarms or smoke detectors shall be installed a minimum 20 feet horizontal distance from a permanently installed cooking appliance.*
4. *Smoke alarms shall be installed not less than a 3-foot horizontal distance from the door opening of a bathroom that contains a bathtub or shower unless this would prevent the placement of a smoke alarm required.*
5. *Smoke alarms and smoke detectors shall not be installed within a 36" horizontal path from supply registers of a forced air heating or cooling system.*
6. *Smoke alarms and smoke detectors shall not be installed within a 36" horizontal path from the tip of the blade of a ceiling-suspended fan.*

11. SMOKE ALARM - SPECIFIC LOCATIONS (§ NFPA 72 Section 17.7.3.2.4.2) (Note and show locations on electrical sheets): For level ceilings, the following shall apply:

1. For ceilings with beam depths of less than 10 percent of the ceiling height (0.1 H), smooth ceiling spacing shall be permitted. Spot-type smoke detectors shall be permitted to be located on ceilings or on the bottom of beams.
2. For ceilings with beam depths equal to or greater than 10 percent of the ceiling height (0.1 H), the following shall apply:
 - (a) Where beam spacing is equal to or greater than 40 percent of the ceiling height (0.4 H), spot-type detectors shall be located on the ceiling in each beam pocket.
 - (b) Where beam spacing is less than 40 percent of the ceiling height (0.4 H), the following shall be permitted for spot detectors:
 - i. Smooth ceiling spacing in the direction parallel to the beams and at one-half smooth ceiling spacing in the direction perpendicular to the beams
 - ii. Location of detectors either on the ceiling or on the bottom of the beams
3. For beam pockets formed by intersecting beams, including waffle or pan-type ceilings, the following shall apply:
 - (a) For beam depths less than 10 percent of the ceiling height (0.1 H), spacing shall be in accordance with 17.7.3.2.4.2(1).
 - (b) For beam depths greater than or equal to 10 percent of the ceiling height (0.1 H), spacing shall be in accordance with 17.7.3.2.4.2(2).

4. For corridors 15 feet (4.6 m) in width or less having ceiling beams or solid joists perpendicular to the corridor length, the following shall apply:
 - (a) Smooth ceiling spacing shall be permitted.
 - (b) Location of spot-type smoke detectors on ceilings, sidewalls, or the bottom of beams or solid joists.
5. For rooms of 900 ft² (84m²) or less, the following shall be permitted:
 - (a) Use of smooth ceiling spacing
 - (b) Location of spot-type smoke detectors on ceilings or on the bottom of beams

- 12. CARBON MONOXIDE DETECTORS - FUEL BURNING APPLIANCES & FUEL BURNING FIREPLACES (§ CFC 915.2.1) (Note and show locations on electrical sheets):** Carbon monoxide detection shall be installed in dwelling units in the following locations: Outside of each separate sleeping area in the immediate vicinity of the bedrooms. On every occupiable level of a dwelling unit, including basements. Where a fuel burning appliance is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom.
- 13. ROOFING COVERING & VALLEYS (§ CBC 705A) (Note on roof plan):** Shall be Class “A” rated assemblies for a Very High Fire Hazard Zone:
- (a) Roof gutters - Prevent debris accumulation
 - (b) Bird stops - Prevent ember intrusion
 - (c) Replacement - More than 50% or more 2,500 square feet roof area
- 14. ATTIC VENTILATION (§ CBC 706A) (Note on roof plan and call out specific make and model):** Prevent intrusion of flame and embers (ember resistant “ER” approved models only) into the attic.
- (a) Please call out the make and model of Ember Resistant vents being used.
 - (b) The use of 1/8” non-combustible mesh is no longer acceptable.
- 15. EAVE OR CORNICE VENTS (§ CBC 706A.3) (Note on roof plan):** Not allowed in exterior overhang areas.
- (a) Eave protection - Shall be protected by ignition resistant materials
- 16. SPARK ARRESTERS (§ 603.6.6) (Note on roof plan):** All buildings and structures having a chimney, flue or stovepipe attached to a fireplace, stove, barbecue or other solid or liquid fuel burning equipment or device shall have the chimney, flue or stovepipe equipped with an approved spark arrester. An approved spark arrester is a device intended to prevent sparks from escaping into the atmosphere, constructed of welded or woven wire mesh, 12-gauge thickness or larger, with openings no greater than ½” inch, or other alternative material the FAHJ determines provides equal or better protection.
- 17. SOLAR PATHWAYS TO RIDGE (§ 1204.2.1.1) (Note and show setbacks on roof plan):** At least two 36-inch-wide pathways on separate roof planes, from lowest roof edge to ridge, shall be provided on all buildings. At least one pathway shall be provided on the street or driveway side of the roof.
- 18. SOLAR SETBACKS AT RIDGE (§ 1204.2.1.2) (Note and show setbacks on roof plan):** For photovoltaic arrays occupying less than 33 percent of the total roof area, a setback of not less than 18 inches wide is required on both sides of the horizontal ridge. For photovoltaic arrays occupying more than 33 percent of the total roof area, a setback of not less than 36 inches wide is required on both sides of the horizontal ridge.
- Exceptions: Where an automatic sprinkler system is installed within the dwelling in accordance with section 903.3.1.3 setbacks at the ridge shall conform to one of the following:
1. For photovoltaic arrays occupying 66 percent or less of the total roof area, a setback of not less than 18 inches wide is required on both sides of the horizontal ridge.
 2. For photovoltaic arrays occupying more than 66 percent of the total roof area, a setback of not less than 36 inches wide is required on both sides of the horizontal ridge.
- 19. GLAZING MATERIALS (§ CBC 708A.2.1) (Provide window schedule and call out every exterior window):** Shall be a minimum dual pane with a single pane tempered.
- 20. VINYL WINDOWS (§ CBC 708A.2.1) (Note on plot plan and window schedule):** Shall meet the following characteristics:

- (a) Frame and sash are comprised of vinyl material with welded corners
- (b) Metal reinforcement in the interlock area
- (c) Glazed with insulating glass, annealed or tempered
- (d) One pane tempered of dual pane window(s)

21. SKYLIGHTS (§ CBC 708A.2.1) (Note in window schedule): One pane tempered Glass.

22. OPERABLE SKYLIGHTS (§ CBC 708A.2.2) (Note in window schedule): Shall be protected by a non-combustible mesh screen where the dimensions of the openings in the screen shall not exceed 1/8" (3.2 mm).

23. EXTERIOR WALLS (§ CBC 707A.3) (Note on plot plan): Shall be noncombustible, ignition-resistant materials

- (a) Exterior wall covering - Shall extend from the top the foundation and terminate at roof
- (b) Repair/Replacement of exterior wall - Less than 30 feet from property line
- (c) Exterior wall Vents - Prevent intrusion of flame and embers into the structure

24. EXTERIOR DOORS (§ CBC 708A.3) (Provide exterior door schedule and reflect doors on floor plan): Approved noncombustible construction or 20 minute rated.

Please call out dual pane single pane tempered for all exterior doors with glazing in the door schedule.

25. GARAGE DOOR PERIMETER GAP (§ CBC 708A.4) (Note on plot plan): Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding 1/8" (3.2 mm).

26. DECKING SURFACES (§ CBC 709A.3) (Note on plot plan and call out decking material): The walking surface material of decks, porches, balconies, and stairs shall be constructed of ignition resistant or non-combustible materials.

Please see the attached list of acceptable decking materials by the County of San Diego Building Division and RSFFPD.

27. COMBUSTIBLE FENCES AND OTHER COMBUSTIBLE ATTACHMENTS TO STRUCTURES (§ CBC 7A) (Note on plot plan): Fences and other structures less than five feet from a building – non-combustible.

28. CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE (§ CBC 703A.7) (Note on plot plan): Wildland Urban Interface Special Building Construction Regulations are located in the 2019 California Building Code and amendments for the County of San Diego for the following construction features:

- (a) SFM Standard 12-7A-1 Exterior Wall Siding and Sheathing
- (b) SFM Standard 12-7A-2 Exterior Windows
- (c) SFM Standard 12-7A-3 Under Eave
- (d) SFM Standard 12-7A-4 Decking
- (e) SFM Standard 12-7A-5 Ignition-Resistant Building Materials

