Form #160

Code Compliance Checklist

DECKS, PORCHES AND STAIRS

Building and Safety
Permit Service Center

All plans must be submitted in electronic format as an unsecured, flattened PDF with embedded fonts. Minimum 11”x17” sheet size.

This checklist is intended to provide information and improve consistency in local application and enforcement of the California Building Code requirements as they may apply to this project.

Numbers in parenthesis refer to code sections of the 2016 edition of the California Residential Code (CRC), California Electrical Code (CEC), California Mechanical Code (CMC), California Plumbing Code (CPC), California Energy Code (CEnC) and California Green Building Standards Code (CGBSC).

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Project Information

Project Address: _____

Permit Number: _____

Permit Submittal Requirements

- ☐ **Schematic Site Plan** showing existing building footprint and the location of new/reconstructed deck/porch/stair with distances to property lines. The site plan shall also contain project information (i.e., project address, owner’s information, scope of work statement).
- ☐ **Framing Plan** showing size, spacing and span of floor joists and supporting beams/girders.
- ☐ **Foundation Plan** showing location, size and depth of supporting individual footings/piers. Foundation and framing plans can be combined if clarity is maintained.
- ☐ **Construction Sections/Details** of footings/piers, framing, connections, floor transitions, stairs, guardrails and handrails. See Code Requirements below for any additional guidance.

Code Requirements

- ☐ **Pier Size:** Piers/footings shall extend a minimum of 12 inches below undisturbed grade, shall be a minimum of 12 inches in any plan dimension, and shall have #4 bar reinforcing. Piers/footings shall be sized to accommodate tributary point loads and limit the soil bearing pressure to 1,500 pounds per square foot. [CRC §R403.1.1 and Table R401.4.1]
- ☐ **Deck Materials:** Deck framing (decking, joists, beams and posts) shall be of approved naturally durable or pressure-preservative-treated wood. [CRC §R317.1.3 and §R202]
- ☐ **Ledger Size:** Deck ledger shall be minimum 2x8 pressure treated No 2 (or better) grade lumber. [CRC §R507.2.1]
- ☐ **Ledger Flashing:** Deck ledger shall be flashed to prevent water from contacting the house band/rim joist. [CRC Table R507.2]
- ☐ **Ledger Attachment:** Ledger shall be attached with 1/2-inch minimum lag screws or bolts with washers, all hot-dip galvanized or stainless steel. [CRC §R507.2.3 and Table R507.2]
- ☐ **Framing Anchorage:** Deck framing shall be positively anchored to the primary structure for both vertical and lateral loads. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. [CRC §R507.1]
- ☐ **Tension Ties:** Deck framing shall have positive tension tie connections with floor framing. Hold-down tension devices shall be installed in not less than 2 locations per deck, within 24 inches of each end of the deck, and each device shall have an allowable design capacity of not less than 1,500 pounds; or hold-down tension devices shall be installed in not less than four locations per deck, and each device shall have an allowable stress design capacity of not less than 750 pounds. [CRC §R507.2.4]
- ☐ **Landings:** There shall be a landing or floor on each side of each exterior door. The width of each landing shall be not less than the door served. Every landing shall have a minimum dimension of 36 inches measured in the direction of travel. Exterior landings are permitted to have a slope not exceeding 1/4 unit vertical in 12 units horizontal (2-percent). [CRC §R311.3]

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Floor Elevations at Doors:

- Exterior landings at out-swinging exterior egress doors shall not be more than 1-1/2 inches lower than the top of the threshold. [CRC §R311.3.1]
- Exterior landing at in-swinging exterior egress doors shall not be more than 7-3/4 inches below the top of the threshold. [CRC §R311.3.1]
- Doors other than the required egress door shall be provided with landings not more than 7-3/4 inches below the top of the threshold. [CRC §R311.3.2]

  Exception: A landing is not required where a stairway of two or fewer risers is located on the exterior side of the door, provided the door does not swing over the stairway.

Stairways:

- Stairways shall not be less than 36 inches in clear width above the handrails. Handrail projections are limited to not more than 4-1/2 inches on either side of the stairway. [CRC §R311.7.1]
- Headroom shall not be less than 6 feet 8 inches measured vertically from the sloped line adjoining the tread nosings. [CRC R311.7.2]
- Riser height shall not exceed 7-3/4 inches. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. [CRC §R311.7.5.1]
- Tread depth (measured between the nosings) shall be at least 10 inches. The largest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch. [CRC §R311.7.5.2]
- Nosings not less than 3/4 inch but not more than 1-1/4 inch shall be provided on stairways with solid risers if the tread depth is less than 11 inches. The radius of curvature at the nosing shall be not greater than 9/16 inch. [CRC §R311.7.5.3]
- Open risers are permitted, provided that the openings located more than 30 inches, as measured vertically, to the floor or grade below do not permit the passage of a 4 inch diameter sphere. [CRC §R311.7.5.1]

Handrails:

- Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers. [CRC §R311.7.8]
- The top of handrails shall be 34 to 38 inches above the tread nosings. [CRC §R311.7.8.1].
- Handrails ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1-1/2 inch between the wall and the handrails. [CRC §R311.7.8.2]
- Handrails shall be grippable and shall be of one of the following types:
- **Type I:** Handrails with a circular cross-section of not less than 1-1/4 inches and not greater than 2 inches in diameter. If the handrail is not circular, it shall have a perimeter dimension of not less than 4 inches and not greater than 6-1/4 inches with a cross section dimension of not more than 2-1/4 inches. [CRC §R311.7.8.3]
- **Type II:** Handrails with a perimeter greater than 6-1/4 inches shall have a graspable finger recess area on both sides of the profile. The minimum width of the handrail above the recess shall be not less than 1-1/4 inches and not more than of 2-3/4 inches. [CRC §R311.7.8.3]

Guards:

- Guards shall be located along open sides of walking surfaces including decks, porches, landings, stairs, ramps that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally if the edge of the open side. [CRC §R312.1.1]
- Guards shall be not less than 42 inches high measured vertically above the walking surface, adjacent walking surface or the line connecting the leading edges of the treads. Guards on the open side of stairs shall have a height not less than 34 inches measured vertically from a line connecting the leading edges of treads. [CRC §R312.1.2]
- Guards shall not have openings from the walking surface to the required guard height which allow passage of a sphere 4 inches in diameter. Guards on the open sides of stairs shall not have openings which allow passage of a sphere 4-3/8 inch in diameter. [CRC §R312.3]
- Guards and handrails shall be capable to withstand a single concentrated load of 200 pounds applied in any direction at any point along the top of the rail. [CRC Table R301.5]

- Guard in-fill components, balusters and panel fillers shall be capable to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement. [CRC Table R301.5]

☐ **Fire Zone Decking:** The walking surface material of decks, porches, balconies and stairs shall be of one of the following: [CRC §R337.9.3]

- Ignition-resistant material that complies with the performance requirements of both SFM Standard 12-7A-4 and 12-7A-5 (materials shall bear identification issued by ICC-ES or a testing agency recognized by the State Fire Marshal); or
- Non-combustible materials; or
- Materials passing performance requirements of SFM Standard 12-7A-4A when the exterior wall covering is also either a noncombustible or ignition-resistant material. Exception: Wall materials may be of any material that otherwise complies with CRC §R337 when the decking surface material complies with the performance requirements ASTM E 84 with a Class B flame spread rating.

☐ **Smoke Alarms:** Dwellings are to be equipped with smoke alarms installed in the following locations: [CRC §314]

- In each existing sleeping room.
- Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- On each story including basements and habitable attics and not including crawl spaces and uninhabitable attics.
- Installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by CRC §R314.3.

☐ **Carbon Monoxide Alarms:** Dwellings that have attached garages with an opening that communicates with the dwelling unit, or fuel burning appliances, or fire place are to be equipped with carbon monoxide alarms installed in the following locations: [CRC §R315.3]

- Outside 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. A carbon monoxide alarm shall be installed within the bedroom.

☐ **Alarm Interconnection and Power:** Smoke and carbon monoxide alarms are required to be interconnected such that activation of one alarm will activate all of the alarms and shall receive their primary power from the building wiring. Exception: Where repairs or alterations to existing buildings do not result in the removal of wall and ceiling finishes and there is no access by means of attic, basement or crawl space. [CRC §314 and §315]

Additional:

I certify that I have read and acknowledged all of the Code Requirements noted above. I accept full responsibility for complying with all of the above requirements, as applicable to my project. I further agree that if I fail to comply with the code requirements, due to error or omission, I will correct all deficiencies prior to final inspection.

Name | Signature | Date

Check One: ☐ Contractor ☐ Owner ☐ Owner's Agent