GREEN BUILDING CODE CORRECTION SHEET FOR ADDITIONS AND ALTERATIONS TO RESIDENTIAL BUILDINGS (2023 LAGBC)

Plan Check Submittal Date: _____

Plan Check / Permit Application Number: _____ / _____- _____-_____

Job Address: _____

Applicant: _____ Phone: _____

P.C. Engineer: _____ Phone: _____

E-mail: _____

INSTRUCTIONS FOR PROCEEDING WITH THE PLAN CHECK (PC) PROCESS:

1. **Review corrections marked on this Plan Check Correction Sheet**, the plans, and the calculation sheets.
2. Provide a written response or reference to details pursuant to the corrections. Location of any revisions on the plans shall be identified as part of your responses. Any of the forms requested by this document can be found on-line at ***https://www.ladbs.org/forms-publications/forms/green-building***
3. Phone or email the Plan Check engineer for a verification appointment after you have addressed the corrections. Verification of corrections is only done by appointment.
4. Bring the originally checked set of plans and calculations at the time of your appointment with this plan correction sheet.
5. **If you have any questions or need clarification on any plan check matters, please contact a plan check supervisor or call our Customer Hotline at (213) 202-3400.**

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ADMINISTRATIVE

☐ 1. Complete and incorporate *Mandatory Requirements Checklist: Additions and Alterations to Residential Buildings*, Form GRN 9 (revised 01/01/2023), into the plans. (102.2)

☐ 2. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy. Refer to non-residential correction sheet for non-residential portion. (302)

PLANNING AND DESIGN

☐ 3. The *Storm Water Pollution Control*, Form GRN 1, shall be incorporated into the plans. (4.106.2)

☐ 4. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering the building. Contour lines, elevation points, and/or slope arrows may be used to show compliance with this requirement. (4.106.3)

☐ 5. For additions resulting in 500 s.f. or more of added roof area or ≥ 50% of the total roof area, whichever is greater, plans shall identify the type of roofing, manufacturer, product, and color used. Incorporate the material specifications for the roofing product used and show that it meets the following minimum SRI value or both solar reflectance and thermal emittance values:

☐ a. For Residential Buildings 1-3 stories in height:

☐ i. For roof slopes < 2:12: 3-year aged SRI value of at least 78 or both a 3-year aged solar reflectance of at least 0.65 and a thermal emittance of at least 0.85

☐ ii. For roof slopes ≥ 2:12: 3-year aged SRI value of at least 20 or both a 3-year aged solar reflectance of at least 0.25 and a thermal emittance of at least 0.85.

☐ b. For Residential Buildings 4+ stories in height:

☐ iii. For roof slopes < 2:12: 3-year aged SRI value of at least 78 or both a 3-year aged solar reflectance of at least 0.65 and a thermal emittance of at least 0.75

☐ iv. For roof slopes ≥ 2:12: 3-year aged SRI value of at least 20 or both a 3-year aged solar reflectance of at least 0.25 and a thermal emittance of at least 0.75

(4.106.5)

ENERGY EFFICIENCY

☐ 6. For additions to one- and two-family dwellings resulting in 2,000 s.f. or more of new roof area, comply with the following:

☐ a. Designate on the roof plan solar zone area(s) with total area equal to or greater than 250 sq ft. The solar zone shall be comprised of areas that have no dimension less than 5 feet and each area shall not be less than:
i. 80 sq ft for roof areas of 10,000 sq ft or less
ii. 160 sq ft for roof areas over 10,000 sq ft.

☐ b. For roof slopes > 2:12 (9.5° from horizontal), show that the solar zone is oriented between 110° and 270° of true north.

☐ c. The solar zone shall be free of obstructions and be setback at least two times the height of any obstruction, including but not limited to, vents, chimneys, equipment, parapets, and stairwells.

☐ d. For roof slopes ≤ 2:12, the solar zone shall maintain a 3 foot wide access pathway (measured from the load bearing wall to the perimeter of the solar zone) around the perimeter edges of the roof.

☐ e. For roof slopes > 2:12, the solar zone shall not be located higher than (18-inches) (3-feet) below the ridge and shall not be located closer than 18-inches to a hip or valley if placed on both sides of the hip or valley.

☐ f. For roof slopes > 2:12, provide a minimum 3 foot-wide clear access pathway (measure from the load bearing wall to the solar zone) to the ridge on all side of each roof slope where the solar zones are located.

☐ g. Plans shall indicate a location for inverters and metering equipment and a pathway for routing from the solar zone to the main service panel.

☐ h. Plans shall indicate a pathway for routing of plumbing from the solar zone to the water-heating system.

☐ i. The main service panel shall have a minimum busbar rating of 200 amps.

☐ j. Add note to plans: "The main electrical service panel shall have a reserved space to allow for installation of a double pole circuit breaker for a future solar electric installation. The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location and shall be permanently marked as 'For Future Solar Electric'."

(4.211.4, Energy Code §110.10, LAFD Requirement No.96)

☐ 7. For additions to residential buildings, other than one- and two-family dwellings, resulting in 2,000 s.f. or more of added roof area, comply with the following:

☐ a. Designate on the roof plan solar zone area(s) with total area equal to or greater than 15% of the building's roof area. The solar zone shall be comprised of areas that have no dimension less than 5 feet and each area shall not be less than:
i. 80 sq ft for roof areas of 10,000 sq ft or less
ii. 160 sq ft for roof areas over 10,000 sq ft.

☐ b. For roof slopes > 2:12 (9.5° from horizontal), show that the solar zone is oriented between 110° and 270° of true north.

☐ c. The solar zone shall be free of obstructions and be setback at least two times the height of any obstruction, including but not limited to, vents, chimneys, equipment, parapets, and stairwells.

☐ d. For roof slopes ≤ 2:12, a minimum 4 foot center line axis pathway shall be provided on both axes of the roof.

☐ e. For roof slopes ≤ 2:12, a minimum 4-foot straight line pathway shall be provided from the access path to roof standpipes, roof access hatches, skylights and/or ventilation hatches.

☐ f. For roof slopes ≤ 2:12, the solar zone shall allow for a (6-foot) (4-foot) wide clear perimeter access around the edges of the roof.

☐ g. For roof slopes > 2:12, the solar zone not be located higher than (18-inches)(3 feet) below the ridge and shall not be located closer than 18-inches to a hip or valley if placed on both sides of the hip or valley.

☐ h. For roof slopes > 2:12, provide a minimum 3 foot-wide clear access pathway (measured from the load bearing wall to the solar zone) to the ridge of all side of each slope where the solar zones are located.

☐ i. Plans shall indicate a location for inverters and metering equipment and a pathway for routing from the solar zone to the main service panel.

☐ j. Plans shall indicate a pathway for routing of plumbing from the solar zone to the water-heating system.

(4.211.4, Energy Code §110.10, LAFD Requirement No.96)

☐ 8. Add note to plans: "A copy of the construction documents or a comparable document indicating the information from Energy Code Sections 110.10(b) through 110.10(c) shall be provided to the occupant."

(Energy Code §110.10(d))

WATER EFFICIENCY AND CONSERVATION

☐ 9. Add note to plans: "The flow rates for all new plumbing fixtures shall comply with the maximum flow rates specified in Section 4.303.1" (4.303.1)

☐ 10. Document on drawings: "When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to only allow one showerhead to be in operation at a time." (4.303.1.3.2)

☐ 11. Attach GRN 16 and comply with the listed maximum flow rates or provide computations demonstrating a 20 percent reduction in the building's "water use baseline" as established in Table 4.303.4.1. (4.303.4)

☐ 12. Rehabilitated landscapes of 2,500 sq. ft. and new landscape areas of 500 square feet or more are subject to the Model Water Efficient Landscape Ordinance (MWELO). Refer to the MWELO supplemental correction sheet for additional comments. (4.304.1)

☐ 13. Show location of irrigation controller(s) on plans. Irrigation controller(s) shall be either weather- or soil-based under any of the following conditions:

- ☐ a. Any newly-installed irrigation controller(s); or
- ☐ b. On sites with 500 square feet or more of cumulative irrigated landscape areas.

(4.304.2)

☐ 14. Add note to plans: "For projects that include landscape work, the *Landscape Certification*, Form GRN 12, shall be completed prior to final inspection approval." (State Assembly Bill No. 1881)

☐ 15. For buildings on sites with at least 500 square feet of new landscape area and where the entire potable water system is being replaced, a dedicated landscape water meter shall be installed for outdoor water use. (4.304.3)

☐ 16. For other than single-family dwellings, add note to plans: "Locks shall be installed on all publicly accessible exterior faucets and hose bibs." (4.304.4)

☐ 17. Add note to plans: "For one- and two-family dwellings, any permanently installed outdoor in-ground swimming pool or spa shall be equipped with a cover having a manual or power-operated reel system. For irregular-shaped pools where it is infeasible to cover 100 percent of the pool due to its irregular shape, a minimum of 80 percent of the pool shall be covered." (4.304.5)

☐ 18. For buildings on sites with at least 500 square feet of new landscape area and where the main building's drain is replaced, add note to plans: "For sites with over 500 square feet of landscape area, waste piping shall be arranged to permit discharge from the clothes washer, bathtub, showers, and bathroom/restrooms wash basins to be used for a future graywater irrigation system." (4.305.1)

☐ 19. Where the entire potable water system is being replaced, add note to plans: "Water used in the building for water closets, urinals, floor drains, and process cooling and heating shall come from city-recycle water if available for use within 200 feet of the property line." (4.305.2)

☐ 20. For additions and alterations where the entire potable water system is being replaced, add note to plans: "The hot water system shall not allow more than 0.6 gallons of water to be delivered to any fixture before hot water arrives or shall comply with either Los Angeles Plumbing Code Section 610.4.1.2 or 610.4.1.3."

MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

☐ 21. Show or state on plans that annular spaces around pipes, electric cables, conduits, or other openings in the sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry, or metal plates. Piping prone to corrosion shall be protected in accordance with Section 313.0 of the Los Angeles Plumbing Code. (4.406.1)

☐ 22. Provide flashing details for all new roof valleys, around new windows and doors, and at new chimney to roof intersections on the building plans. (4.407.3)

☐ 23. Add note to plans: "Materials delivered to the construction site shall be protected from rain or other sources of moisture." (4.407.4)

☐ 24. Construction waste shall be reduced by 65%. Indicate how construction waste will be handled:

- ☐ a. City of Los Angeles certified hauler
- ☐ b. Source separated on site (Incorporate waste management plan onto plans)

(4.408.1)

☐ 25. Note on the drawings: "An Operation and Maintenance Manual including, at a minimum, the items listed in Section 4.410.1, shall be completed and placed in the building at the time of final inspection." Form GRN 6 (4.410.1)

ENVIRONMENTAL QUALITY

☐ 26. Plans shall state that the fireplace is direct-vent, sealed combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet

the emission limits. Incorporate manufacturer's specifications onto plans. (4.503.1)

☐ 27. Wood burning fireplaces and other wood burning devices are prohibited. (AQMD Rule 445)

☐ 28. Add note to plans: "All duct and other related air distribution component openings shall be covered with tape, plastic, or sheet metal until the final startup of the heating, cooling and ventilating equipment." (4.504.1)

☐ 29. Add note to plans: "Architectural paints and coatings, adhesives, caulks and sealants shall comply with the Volatile Organic Compound (VOC) limits listed in Tables 4.504.1- 4.504.3." (4.504.2.1-4.504.2.3)

☐ 30. The *VOCs and Formaldehyde Limits,* Form GRN 11, shall be incorporated into the plans.

☐ 31. Add the following notes to plans:

☐ a. The *VOC Content Verification Checklist,* Form GRN 2, shall be completed and verified prior to final inspection approval. The manufacturer's specifications showing VOC content for all applicable products shall be readily available at the job site and be provided to the field inspector for verification. (4.504.2.4)

☐ b. All new carpet installed in the building interior shall meet the testing and product requirements of one of the following:

i. Carpet and Rug Institute's Green Label Plus Program
ii. California Department of Public Health's Specification 01350
iii. NSF/ANSI 140 at the Gold level
iv. Scientific Certifications Systems Indoor Advantage™ Gold

(4.504.3)

☐ c. All new carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program. (4.504.3.1)

☐ d. 80% of the total area receiving resilient flooring shall comply with one or more of the following:

i. Certified as a CHPS Low-Emitting Material in the CHPS High Performance Products Database
ii. Certified under UL GREENGUARD Gold
iii. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program
iv. Meet the California Department of Public Health's Specification 01350

(4.504.4)

☐ e. New hardwood plywood, particle board, and medium density fiberboard composite wood products used in the interior or exterior of the building shall meet the formaldehyde limits listed in Table 4.504.5. (4.504.5)

☐ f. The *Formaldehyde Emissions Verification Checklist,* Form GRN 3, shall be completed prior to final inspection approval. The manufacturer's specifications showing formaldehyde content for all applicable wood products shall be readily available at the job site and be provided to the field inspector for verification. (4.504.5)

☐ g. Mechanically ventilated buildings shall provide regularly occupied areas of the building with a MERV 13 filter for outside and return air. Filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. (4.504.6)

☐ h. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed until it is inspected and found to be satisfactory by the building inspector. (4.505.3)

☐ i. The heating and air-conditioning systems shall be sized and designed using ANSI/ACCA Manual J-2011, ANSI/ACCA 29-D-2014 or ASHRAE handbooks and have their equipment selected in accordance with ANSI/ACCA 3 Manual S-2014. (4.507.2)

☐ 32. A 4-inch thick base of ½ inch or larger clean aggregate shall be provided for the proposed slab on grade construction. Show on details. (4.505.2.1)

☐ 33. A vapor barrier shall be provided in direct contact with concrete for the proposed slab on grade construction. Show on details. (4.505.2.1)

☐ 34. Show location of newly installed exhaust fans for bathrooms containing bathtubs, showers, or tub/shower combinations. Plans shall state that the bathroom exhaust fans comply with the following:

☐ i. Fans shall be ENERGY STAR compliant and be ducted to terminate to the outside of the building.
☐ ii. Fans, not functioning as a component of a whole house ventilation system, must be controlled by a humidity control.

(4.506.1)

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ADDITIONAL CORRECTIONS / COMMENTS

No.		Code Sec. No.
	When the building plans are complete, please coordinate with your Green plan checker to arrange verification/review of revised plans. Provide revised plans, correction sheet and marked set for Green stamping and approval.	

No.		Code Sec. No.