



BUILDING AND SAFETY



HOMEOWNER'S GUIDE

How to Successfully Plan and Prepare for YOUR NEXT Accessory Dwelling Unit (ADU)/Junior Accessory Dwelling Unit (JADU) Project

A Step-by-Step Guide for Conversions to ADU and JADU

Homeowner’s Guide:
**How to Successfully Plan and Prepare for YOUR NEXT Accessory Dwelling Unit
(ADU)/Junior Accessory Dwelling Unit (JADU) Project**

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A Step-by-Step Guide to Completion

This document is a step-by-step guide intended to clarify and streamline the building/inspection process for garage conversion to ADU and JADU. Although there will be unforeseen conditions and issues that may arise within each Los Angeles County geographical region, this guideline is intended to provide all Owners and Contractors enough information to successfully prepare from construction planning through the final completion.

Please be prepared with your notepad, approved plans, and permits. Permits and project documents may be neatly kept in a folder or binder with all project documents and communications throughout the construction process.

It is important to carefully review each section of this document. As the project moves forward, please take note of any questions you may have during each plan review, permitting, and inspection cycle.

Los Angeles County Building and Safety Division (BSD) looks forward to partnering with you and your team for successful completion of your project.

Let's Get Started!

SITE CONDITONS: PRE- CONSTRUCTION CONSIDERATIONS AND VERIFICATIONS

This section identifies items that shall be completed by the owner, owner's agent, designer, builder, or project manager prior to construction to prevent delays in the approval and construction process. Inconsistencies and irregularities in the approved designs may cause significant delays and additional costs in the construction. It is incumbent upon the contractor and owner to clearly understand the plans and approvals required prior to starting construction. Inconsistencies and/or deficiencies identified during these initial stages shall be resolved immediately with the approving agency prior to starting work.

Remember, practice the four P's: **Prior Planning Prevents Problems.**

EPIC LA- EPICLA.LACOUNTY.GOV

Owner, Contractor, Project Manager, and Engineer/Architects – the Project Team – are responsible for the proposed project. All requests for inspection, submitting project documents, changes, modifications, special inspection reports, and engineering observations shall be entered into the EPIC LA system. It is the responsibility of the Project Team to ensure the correct email and address information for the project representative is entered into EPIC LA to receive updates and correspondences throughout the life of the project.

- **Plans** – Plans shall match plot/site plan and location and existing conditions and stamped and approved by LA County Planning and Building and Safety Division and outside agencies as required.
- **Building Permits** - Each structure is required its own permits. All required building permits shall be issued for each project and/or element of construction alteration on each structure (i.e., Demolition, Building, Electrical, Mechanical, Plumbing, Sewer, Encroachment, Fire Sprinkler, etc.).
- **Existing Footings Per Plan – Identify** footing depths and other construction requirements for existing conditions (i.e., adequate depth for embedment of hold downs and shear walls).
- **Approved Title 24 Energy Calculations** – Identify if the proposed insulations in the existing walls and ceiling cavities per proposed Title 24 Energy Calculations are adequate based on the depth of lumber and existing conditions. The Title 24 Energy Calculations shall also specify the reflective radiant barrier roof sheathing, which includes radiant barrier sheathing on all gable end walls above ceiling joists. The type of heating system, ducting, water heater plumbing insulation shall also be specified.
- **Indoor Air Quality (IAQ) and Quality Insulation Inspection (QII):** Verify Title 24 requirements for HERS and Indoor Air Quality Fans and Ventilation on the plans.

Pre-Construction Site Preparation

Pre-construction Meeting: A mandatory Pre-Construction Meeting is required prior to start of any construction. No inspections or work can take place until this meeting has been completed. **At the end**

of the meeting, *Pre-Construction Meeting Checklist* shall be signed by owner/contractor and assigned inspector.

BMP and Site Protection: Site may require fencing, sediment control and portable toilet facility. Portable toilets, materials, stockpiles, and waste containers shall be contained and maintained within the limitation of the private property. A violation may be issued for delaying inspections because these are not properly maintained.

Staging areas: Contractor/Owner shall coordinate the delivery of materials and products to ensure that all materials are properly and safely stored within the site. Special considerations shall be given for accessing the construction site to protect these materials from weather and theft.

Demolition and Grading Permits: Building permits may not be issued until demolition and/or grading permit(s) are issued.

Dig Alert: Call Dig Alert [811](tel:811) or [800-422-4133](tel:800-422-4133) before starting any ground-breaking work. Los Angeles County and CA State laws require utility location prior to any digging work to prevent damage to any underground utility or easements. There are potential life and safety issues that may cause property loss or death if encountering utility lines.

Demolition: Prior to any demolition work, Los Angeles County Environmental Programs Division (EPD) approval is required for permit issuance. Southern California Air Quality Management Division (SCAQMD) notification is required prior to any demolition for asbestos and lead paint removal. Demolition materials and waste shall be disposed of in approved Los Angeles County locations. Contractor/Owner shall keep all demolition and waste materials in approved containers and/or stockpiled with appropriate covers. All material disposal receipts shall be maintained to quantify the materials disposed, as required for final inspection approval.

Drainage & Grading: Los Angeles County Building and Safety Division Grading Section approval is required prior to grading permit issuance. All grading approvals shall be completed prior to start of any grading activity. Grading work includes site walls and initial site grading certifications prior to building permit issuance. All Best Management Practices (BMP-Erosion and Sedimentary/Dust Control Systems and Devices) shall be installed immediately. No work, equipment, dumpsters, and materials may be stored on the Public Right of Way (PROW) without an encroachment permit from Land Development Division (LDD).

Topography and Elevation: Existing/proposed location shall be differentiated on the plan. Determine if the foundation height will allow proper drainage away from the building foundation at a minimum two percent (2%) into an approved stormwater collection system. Determine if a backflow/back-water or a sewage or stormwater pump may be required.

Setback requirements: Find out if the setbacks on the approved LA County Planning plans allow the building to be built as proposed, or if there are conditions for fire that shall be properly planned prior to start of rough construction. Underground utilities, detached equipment (Electrical, A/C Compressor, Water Heater, Solar etc.) shall not be installed within 5 feet (or 60-inches) from the property line. These setback requirements also apply to accessory construction such as water slides, water features, barbeques, pools, spas, and others. Planning height requirements shall be strictly followed per the

approved LA County Planning plans. Equipment (HV/AC compressor, water heaters), accessories (water slides, fountains, or other pool water features), architectural features, and utility Lines (gas lines, pipes, sewer, water, electrical, conduits) closer than 5' feet to the property line shall have approval from LA County Planning prior to any installations. LA County Planning may approve installations up to 2 ½ feet (or 30" inches) of the property line per case-by-case basis. No feature, or other equipment may obstruct any equipment clearances, setback, or required 3 feet clearance for any emergency exit and egress system.

Utilities For the New, Proposed, and Existing

Proposed ADU/JADU may require gas, water, electrical and sewer connections. Sewer connection is required downstream of the house, or in front of the main home. Gas lines may not run under any structure and shall have shut off valves at the supply connection points and ADU entrances. Water lines shall be protected and properly installed with appropriate shut off valves. Electric utility coordination is required for potential new service.

Dig Alert: Call Dig Alert [811](tel:811) or [800-422-4133](tel:800-422-4133) to locate underground utilities.

Gas Service Line: Planning is required for gas line installations. No gas lines may be installed under any structures, including patios. The gas utility company will spot a new meter location if a second meter line is to be added prior to installing any new gas line to properly route them. All underground gas lines shall be directly buried. Metallic pipes such as epoxy coated (green) pipe or HDPE plastic (yellow high-density polyethylene) shall have no.18-gauge tracer wire suitable for direct burial and shall extend 18-inches above grade at each end. All gas lines shall be buried no less than 18 inches below grade and have ball type shut off valve at each point of connection. All unions, fittings, and joints shall be protected from corrosion with approved materials.

Water Service Line: Proposed water service lines shall be properly sized per planned fixture count and service connections. If a separate meter is requested to be installed, then the applicant shall coordinate with the water purveyor for the new waterline installation. Incoming water service shall be routed and installed at a minimum 18-inches below grade with valves at each point of connection and/or service entrances. Waterlines shall have color-coded tracer, extending 18 inches above grade on each end, as required for all non-metallic pipe such as PVC/PEX/CPVC.

Electrical Service: The owner or contractor is required to arrange with the local electric utility company to determine an acceptable equipment location if a new service is requested. JADU units do not require a separate electrical meter as they are not considered separate dwelling units. Separate permits are required for each structure and shall use the corresponding address for each structure as applicable.

Sewer: Locate existing sewer lines and expose sewer connection points to determine the depth and routing of new sewer connections downstream of the main residence. Sewer line location services and verification are typically performed by local plumbing companies by using camera insertion into the existing septic system to ensure suitability for new connections. Sewer line starts 24-inch outside of foundation and shall be installed at a minimum of 12-inches below grade with no less than 2% slope to point of connection. Cleanouts shall be installed in certain locations and at intervals specified by Plumbing Code Requirements. It is recommended to install a 2-way cleanout based on the trade size diameter of the sewer line immediately outside of the ADU sewer line connection, within 24 inches of the building.

Backwater Valve: A **Backwater Valve Form** shall be completed prior to installing or modifying any sewer line and/or plumbing system for any building, including existing dwellings or ADUs. This includes accessories such as barbecues, pool back flush, pool house, and laundry. A backwater valve is required any time the sewer line cannot maintain the 2%* downward slope from point of connection (minimum 12-inch under earth and 24-inches outside of new ADU) to the downstream sewer trunkline connection, which is typically in front. of the main residence

*Note: 2% slope implies ¼ inch per foot or 1inch drop per 4-foot length.

Existing Roof and Framing Systems

Existing non-conforming framing systems may further require modification than the prescriptive approach (CA Residential Code) and need a registered professional architect/engineer to design.

Existing Framing and Roof Assembly: Existing framing and roof assembly shall be verified prior to start of work. This includes the verification of existing shear walls, roof/wall framing lumber sizes, and the location and distance between framing members. Owner/Contractor shall verify the span for all roof framing members and future ceiling joist assembly. All roof rafter systems shall meet the span index requirements set in the framing span table in the CA Residential code.

Also determine the existing ridge type (ridge board versus ridge beam) and condition of the existing sheathing. Roof rafter collar ties may be required if there are no direct rafter/ceiling joist heel connections. Strapping over the ridge at the exterior may be needed if lacking and will require shingle/tile roof removal.

Exterior wall openings for doors and windows shall have headers in compliance with the length and span index for exterior bearing walls from CA Residential Code. Contractor shall also verify the potential locations for eave and roof attic ventilation. Ventilation openings are prohibited next to fire setback locations. Attic access shall have sufficient headroom space.

Roofing framing, wall framing, and attic space pre-planning are critical when using *Los Angeles County Standard Notes and Details* in lieu of engineered plans. Any deviation and/or modification to these standards may require additional details from a registered architect/engineer, which may cause delays and additional costs.

NEW SEWER BACKWATER VALVE REQUIREMENT

Effective immediately no plumbing or sewer permit shall be issued for any plumbing work unless a backwater valve protection determination form is filled out and signed by the applicant. The signed copy shall be attached to the permit and electronically filed under the permit record. If a backwater valve is required, the plumbing permit application shall include a backwater valve.

BACKWATER VALVE PROTECTION DETERMINATION

Job Address: _____

Section 710.1 of the Los Angeles County Plumbing Code requires that drainage piping serving Plumbing fixtures installed on a floor level that is below the elevation of the next upstream manhole cover of the public or private main sewer serving such drainage piping shall be protected from backflow of sewage by installing an approved type of **backwater valve**.

It is the responsibility of the permittee to determine whether the relative elevations of the floor with plumbing fixtures and sewer manhole cover at this job site are such that a **backwater valve** is required.

I, _____, (print) the LICENSED CONTRACTOR / OWNER (circle one) have reviewed the conditions at the job site and have determined that:

A backwater valve is required and is installed.

No backwater valve is required. Plumbing fixtures are installed on a floor level that is not below the elevation of the next upstream manhole cover.

Signed: _____ Date: _____

REV. BACKWATERVALVE 9.23.21

BUILDING INSPECTION ROADMAP

This section is the building inspection roadmap, prepared based upon typical construction sequence and inspection procedure. It is recommended that the Project Team evaluates the *Site Conditions: Pre-Construction Considerations and Verifications* section prior to undertaking any work and/or even scheduling inspections.

A Note to the Construction Team...

It is recommended that the Owner/Builder/Contractor use this section to properly sequence inspections to expedite the approval and completion. See *Inspection Checklists (p.11-16)*.

Inspections shall be scheduled after all associated work have been completed for each periodic inspection cycle with the approved plan at the jobsite and code requirements completed. Incomplete, or work completed out of sequence, may result in an inspection FAILURE. Inspection failures may result in re-inspection fees assessed for upcoming inspections.

Coordination and communication with Los Angeles County Building and Safety Division (BSD) are essential. Please feel free to prepare your questions and/or concerns in writing ahead of time prior to your scheduled meetings.

- **Questions for Plan Review and Approval shall be directed to the Plancheck Engineer.**
- **Questions for Permit Issuance shall be directed to the local BSD District/Contract City Office.**
- **Questions for construction after a permit issuance shall be directed to County Building Inspector.**

Scheduling Inspection Frequent Asked Questions (FAQs)

How to Schedule Inspections?

Inspection requests shall be made at Epic LA, Epicla.lacounty.gov , or calling the local BSD District/Contract City Office. The requestor shall specify the date and time of the inspection service. BSD reserves the right to schedule the requested inspection based upon the staff availability. If the requested date is not available, then BSD will reschedule on the closest available date. Confirmation calls/emails/voicemail/or text on scheduled inspections shall be sent to the requestor.

When to Schedule Inspections?

Inspections shall be scheduled for anticipated dates on which the stages of construction requiring periodic inspections are completed and ready. Inspection dates for incomplete work will result in failed inspections. Multiple failed inspections will result in additional fees. If work is not ready on the day of scheduled inspection, then the inspection requestor shall cancel at a minimum of 24-hours before the scheduled date and re-schedule at a more appropriate time frame. Bad weather conditions (i.e., wet/muddy conditions), unsafe work inspection areas (i.e., unprotected electrical live wire, missing OSHA certified equipment for access) or other *force majeure* (i.e., fire, earthquake, pandemic closures, or large civil unrest), leading to a hazardous work environment for the County Inspector will result in cancelation.

How to Prepare for Inspections?

An adult over the age of 18 shall be at the site to receive the inspector, or a written notice with Permission to Enter from owner shall be posted on building next to valid permits for unattended and unoccupied structure. Minors are not allowed to assist the County Building Inspector. No dogs or animals shall be in the inspection area. The requestor shall contact the County Building inspector between 8:00 AM – 9:30 AM on the day of the inspection to determine exact time frame. The owner/contractor shall ensure that all work is exposed and readily accessible for inspection. Inspectors do not carry tools or ladders. Ladders shall be up and secured-in-place and extended sufficiently above the inspection surface (3 feet minimum) or into attic access to allow the inspector to safely enter. County inspectors will not open electrical panels for the owner/contractor. No inspection will be performed on open unattended or unopened electrical panels.

What is Required for Inspections?

A project representative shall be on site. Safe site access, permit cards, approved stamped plans, safe route to the inspection area, and OSHA approved equipment required to perform inspection shall be provided on the day of inspection.

PRE-CONSTRUCTION MEETING REQUIREMENTS

Pre-Construction Meeting

The mandatory **Pre-Construction Meeting** is the most important inspection prior to the start of work. Please make sure all Agency Referral approvals are completed and all permits have been issued. Take time to review all project documentations prior to this meeting.

The owner/contractor shall meet with the County Building Inspector on-site to review the approved plans, existing field conditions, and *Standard Notes and Details* for the proposed ADU/JADU. Both the owner and contractor are recommended to be present to ask any questions and/or voice any concerns. This pre-construction meeting shall review set-back, utility pathways and locations, connections, and existing framing and foundations. Existing conditions shall be exposed for the County Building Inspector to see and verify per the approved plans. Please feel free to ask any questions regarding the whole process during this meeting including the inspection timeline and how often and how far out are the inspections. There are no wrong questions; only ones that are not asked.

Mandatory Pre-Construction Meeting: *See attached Pre-Inspection Checklist p.11*

Address: A separate address is required for different utility connections, or different side street/driveway entrance to the proposed new dwelling. The separate address shall be obtained prior to the final inspection. All permits shall be corrected for proper records. Subordinate ADU addresses shall be posted in a conspicuous area for emergency and first responders. JADUs are not allowed to have a separate address as it is considered part of the primary dwelling unit.

Demolition and Grading/Drainage:

Demolition: All demolition shall be completed prior to the start of any construction activity, except for interior/exterior walls that shall be protected in-place where residents continue to reside. This process will require coordination and approval of the County Inspector.

Grading/Drainage: *R401.3, CBC Section 1804.0, CBC Section 4.106.3-* Elevations, slopes, and topography at the project site shall match the approved plans. Site preparation for drainage is required for retaining walls, swales, soil removal, or additions to the level of the earth to ensure all water is diverted away from the foundation into an approved catch basin. Run off shall not be diverted into any neighboring property, or public right-of-way (PROW). Contractor shall have possible additional contingency plans for erosion and runoff. All water shall exit 2% away from the new structure and all foundation sill plates shall be at a minimum of 8-inches above the existing grade. If the existing sill plate is at the same grade, then a repair detail shall be provided to the County Inspector. ADU garage conversion at, or less than 2 feet from, the property line may require a rain gutter system with down spouts to divert water away from the adjacent property. Certain sites may also require a mechanical pump properly sized to discharge water at a downstream catch basin.

Note: *Nothing herein shall supersede any or all requirements of the California Title 24 Building Energy Standards (HERS/CHEERS), or the most recent Code Adoptions of the Los Angeles County Code of Regulations, Los Angeles County Green Building Standards, Los Angeles County Energy Standards, Los Angeles County Low Rise Mandatory Measures at the time of permit issuance.*

Pre-Construction Inspection Checklist for Accessory Dwelling Unit (ADU) and Junior ADU

Mandatory requirement: Project may not start until this inspection is completed.

This document is not intended for new construction projects or projects containing additions. This document is intended for ADU and Junior ADU projects in existing building such as garage conversions (both detached and attached).

Inspector/Office Overview: Inspection Process, Timelines, Inspection Checklist, Contacts, Plans/Details

Site Conditions

- Plans Approved, Permits Issued
- Dig Alert: Call before you dig **811** or **800-422-4133**
- Demolition: C&D Recycle Reuse Plan (reminder keep receipts)
- Side Yard and Rear Yard Setbacks (location of fire rated wall assemblies)
- Storm Water Flow (storm water pump if lower than street)
- Backflow- Sewer location and drainage (Sewage Ejection Pump Required if the pipe downward slope is above the connection point)

Utilities

- Existing Incoming Utility
- Electrical Connection/ SCE Coordination (Location) Separate Meters/Subpanels
- Gas Connection Location (routing of gas line)
- Additional Meter/Connection to Existing
- Sewer Connection Location Downstream of Home

Existing Structure

- Foundation/Footings (retrofit or new footings may be required)
 - Visual Condition of Existing Foundation/Slab/Footings
 - Depth of Existing Footings (verify pothole depth multiple locations as need)
 - Garage Opening footing (must have potholes verifiable footing entire length)
 - Slab Condition (vapor barrier system type per LACO Approved Systems) Vapor Barrier required prior to any interior framing
- Exterior
 - Foundation Height (Sheet flow of water away from structure)
 - Condition of Exterior walls, exposed eaves etc.
 - Condition of Existing Roof System
 - Fire setbacks for fire rated walls (eve/roof/opening protection)
 - Equipment set back location (location of future equipment)
 - Finish wall systems and Condition (Stucco/Siding Etc.) Weather Resistive Barrier in act.
- Interior
 - Existing/future Roof Framing system (Residential Roof Rafter Span Index)
 - Existing/future ceiling joist (Residential ceiling span index)
 - Existing wall Anchors and hold downs (Minimum 1/2" AB with 3x3 washers, distance apart)

- Visual Verification of existing Weather resistive barrier behind stucco/siding

Site Protection/Safety and Required BMP's

- Clean Site is a Safe Site
- Storm Water Protections, Covered Stockpiles, Covered Unattended Trenches
- No Work from Public Right of Way (PROW)

NOTES: _____

Date: _____

Owner/Contractor: _____ Inspector: _____

Conversion of Garage to Accessory Dwelling Unit# Inspection Checklist **Compliance with all 5 Inspections Required for Completion (FINAL)**

#This conversion can be either detached or attached to the existing residence It shall be single-story, with gable roof, cripple wall less than 14 feet, roofing material less 6 lbs./ft, braced prescriptively, and shall have no ASCE 7-16 vertical or horizontal irregularities, additions/increase in existing footprint, unpermitted, not located in a basement area, or within a hillside area.

(0) Complete all Pre-Planning and Coordination Requirements (Pre-Job Start Inspection-Applicant Road map and Inspection Checklist)

(1) First Inspection: Underground Utility (identify points of connection)

- (1) B1- Location / Setbacks
- (2) P2- Underfloor/Under slab Plumbing (top out test)
- (3) E3-Underground Electrical
- (4) P1- Water Service
- (5) P13 -Underground Gas Piping
- (6) P8 -Backflow Preventer
- (7) P7- Sewer Connection

(2) Second Inspection: Foundation/Slab (do not install any walls on slab until vapor barrier is approved)

- (1) 01-Special Inspection Reports
- (2) B17- Floor Slab & Steel
- (3) E2 -Service Ground (UFER if used)
- (4) B6- Anchor Bolts/ Hold Downs
- (5) B13- Limited Rough Electrical, Mechanical, Plumbing (*This is a partial rough MEP Inspection for Interior Shear walls prior to installation of Shear Wall panels*)
- (6) B16 -Fame/Bracing (*This is a partial Inspection for Exterior Shear walls for nailing prior to window installation and Shear Wall Preparation if shear walls are prepared on interior of home*)
- (7) B17- Insulation (limited to interior shear wall location-pre-shear wall inspection)

(3) Third Inspection: Final Frame- Rough Electrical-Rough Mechanical-Rough Plumbing (*insulation for walls and ceiling on site for verification)

- (1) 01-Special Inspection Reports
- (2) B27 - Vapor Barrier (vapor barrier over slab prior to interior walls)
- (3) B13-Roof Sheathing
- (4) E2- Service Ground (grounding Electrode System)
- (5) E6- Rough Wiring, E8 Rough Electrical
- (6) E7 -Distribution Panel (location and equipment clearances, main feeders disconnect where feeders enter building)
- (7) E11-Service Panel (location and equipment clearances, main feeders disconnect where feeders enter building)
- (8) B12 Window replacement/Installation (sill pan flashings, flashing/counter flashing A or B method)
- (9) E9- Smoke Detector (rough verify interconnection and locations)
- (10)M5-rough Mechanical (Indoor Air Quality Fan, Mechanical Equipment Locations)
- (11)P6- Rough Plumbing (entrance shut off, Water Heater location, top out test)

- (12)P5 Rough Gas Piping (preliminary gas test performed at this time prior to closing walls, entrance shut off)
- (13)M2- Exhaust Vent (bathroom, kitchen, laundry exhaust vents and location of termination)
- (14)M4- Duct Work
- (15)B16-Fame/Bracing (final hold down and anchorage, pre fire inspection for fire blocking/putty pads for party wall etc.)

(4) Fourth Inspection: Drywall, Shower Pan and Exterior Lath (* virtual inspection of Insulation or insulation certificate prior to this inspection)

- (1) B18- Interior Lath/Drywall
- (2) B19-Exterior Lath
- (3) B21- Rated Floor/Ceiling (termination of all fire barriers per code)
- (4) B22 -Rated Walls
- (5) P3 -Shower pan
- (6) P12 -Gas (Test/Final)

(5) Final Inspection:

- (1) O1-05 A1-A3- Final Approvals and Agency Approvals (if required) Fire Final Inspection Reports (HERS, Recycle C&D EPD Final)
- (2) B26 -Lot Drainage
- (3) E13 -Final Electrical (panel circuit labels, E7 Distribution Panels, E11 Service Panel- Arc Fault Breakers, Intersystem Bonding Bridge, Grounding Electrode System)
- (4) M13 -Final Mechanical (rodent protection for all vents/openings, painted vents, and roof penetrations)
- (5) P14- Final Plumbing (cleanouts, corrosion protection for pipes, uv protection for all abs)
- (6) Building final- B28 Address Posted, Utility Release (Gas/Electric), Signature Cards Update, EPIC LA Updated with Reports
- (7) Certificate of occupancy Issued- Certificate fees paid; all project Permits Closed in EPIC LA (2-6 Weeks for paper Cert. issuance)

****All insulation materials shall be on site during rough inspection for verification of the R-Value for ceiling and walls. Contractor shall coordinate with the inspector for photo/video/virtual inspection of insulation prior to fourth (4) inspection prior to moving forward to drywall installation. Insulation inspection with proper documentation and verification will eliminate added inspections.***

Junior Accessory Dwelling Unit^{##} Inspection Checklist
Compliance with all 5 inspections Required for completion (FINAL)

This new JADU shall be already existing in a single/multi-family dwelling. It shall have no addition or increase in footprint.

(0) Complete all Pre-Planning and Coordination Requirements (Pre-Job Start Inspection-Applicant Roadmap and Inspection Checklist)

(1) First Inspection: Underground Utility (identify points of connection)

- (1) P2- Underfloor/Under slab Plumbing (top out test)
- (2) E3-Underground Electrical
- (3) P1- Water Service
- (4) P8 -Backflow Preventer
- (5) P7- Sewer Connection

(2) Second Inspection: Foundation/Slab (do not install any walls on slab until vapor barrier is approved *Garage)

- (1) 01-Special Inspection Reports
- (2) B17- Floor Slab & Steel (Repair if Underground Plumbing is installed)
- (3) B6- Anchor Bolts/ Hold Downs
- (4) B16 -Fame/Bracing (*This is a partial Inspection for Exterior Shear walls for nailing prior to window installation and Shear Wall Preparation if shear walls are prepared on interior of home*)
- (5) B17- Insulation (limited to interior shear wall location-pre-shear wall inspection)

(3) Third Inspection: Final Frame- Rough Electrical-Rough Mechanical-Rough Plumbing (*insulation for walls and ceiling on site for verification)

- (1) B27 Vapor Barrier (vapor barrier over slab prior to interior walls *Garage)
- (2) B13-Roof Sheathing (If Associated with an addition)
- (3) E2- Service Ground (grounding Electrode System)
- (4) E6- Rough Wiring, E8 Rough Electrical
- (5) E7 -Distribution Panel (location and equipment clearances, main feeders disconnect where feeders enter building)
- (6) E11-Service Panel (location and equipment clearances, main feeders disconnect where feeders enter building)
- (7) B12 Window replacement/Installation (sill pan flashings, flashing/counter flashing A or B method)
- (8) E9- Smoke Detector (rough verify interconnection and locations)
- (9) M5-rough Mechanical (Indoor Air Quality Fan, Mechanical Equipment Locations)
- (10) P6- Rough Plumbing (entrance shut off, Water Heater location, top out test)
- (11) P5 Rough Gas Piping (preliminary gas test performed at this time prior to closing walls, entrance shut off)
- (12) M2- Exhaust Vent (bathroom, kitchen, laundry exhaust vents and location of termination)
- (13) M4- Duct Work
- (14) B16-Fame/Bracing (final hold down and anchorage, pre fire inspection for fire blocking/putty pads for party wall etc.)

(4) Fourth Inspection: Drywall, Shower Pan and Exterior Lath (* virtual inspection of insulation or insulation certificate prior to this inspection)

- (1) B18- Interior Lath/Drywall
- (2) B19-Exterior Lath
- (3) B21- Rated Floor/Ceiling (termination of all fire barriers if required)
- (4) B22 -Rated Walls (If required)
- (5) P3 -Shower pan
- (6) P12 -Gas (Test/Final)

(5) Final Inspection:

- (1) O1-05 A1-A3- Final Approvals and Agency Approvals (if required) Fire Final Inspection Reports (HERS, Recycle C&D EPD Final)
- (2) B26 -Lot Drainage
- (3) E13 -Final Electrical (panel circuit labels, E7 Distribution Panels, E11 Service Panel- Arc Fault Breakers, Intersystem Bonding Bridge, Grounding Electrode System)
- (4) M13 -Final Mechanical (rodent protection for all vents/openings, painted vents, and roof penetrations)
- (5) P14- Final Plumbing (cleanouts, corrosion protection for pipes, UV protection for all abs)
- (6) Building final- B28 Address Posted, Utility Release (Gas/Electric), Signature Cards Update, EPICL LA Updated with Reports
- (7) Certificate of occupancy Issued- Certificate fees paid; all project Permits Closed in EPIC LA (2-6 Weeks for paper Cert. issuance)

****All insulation materials shall be on site during rough inspection for verification of the R-Value for ceiling and walls. Contractor shall coordinate with the inspector for photo/video/virtual inspection of insulation prior to fourth (4) inspection prior to moving forward to drywall installation. Insulation inspection with proper documentation and verification will eliminate added inspections.***

FIRST INSPECTION: UNDERGROUND UTILITY (Identify Points of Connection)

Underground Pre-slab Inspection Drain Waste/Utility: (For Existing Slab& Footing)

Building Corner Verification: Contractor/Inspector shall verify location of building corners per plan.

Height size and Grade: Verify measurements for heights above grade as required for finish elevations and drainage. All water must exit minimum 2% away from structure into approved locations. All foundations must extend a minimum of 8 inches above grade. See foundation inspection for exceptions.

Sewer: *CPC Section 311.1*- NO CLAY PIPE or SEWER MAY BE UNDER ANY STRUCTURE. If any clay pipe currently exists in area of addition or alteration, then clay pipes shall be abandoned in place or removed, and the sewer system re-routed to a minimum of 24-inches outside the foundation of the addition or area of alteration using approved pipe and fittings. Sewer line starts 24-inches outside of foundation and shall be installed a minimum of 12-inch below grade with no less than 2% downward slope to the point of connection. Cleanouts shall be installed in locations and intervals per Plumbing Code. It is recommended to install a 2-way cleanout of the trade size diameter from the sewer line immediately outside of the ADU at the sewer line connection within 24-inches of the building. For underground pipe fittings, all glue fittings ABS-ABS, no-hub union/coupling (rubberized) fittings are reserved for dissimilar materials such as clay-ABS, iron-ABS. No union fitting allowed on like materials. No-hub unions shall be concealed in locations that cannot be accessed such under the slab or encased in concrete.

Drain waste vent system (DWV): All drain waste vent systems shall be sized and installed per the required fixture schedule. All DWV plumbing systems shall be constructed of approved materials and fittings pursuant to the Plumbing Code. Typical drain waste systems are constructed with approved ABS Pipe and Fittings.

Bedding of pipes and barrier requirements: *CPC Section 314 Trenching, Excavation Backfill* - Drain waste system is interior and under the slab/floor of residence. Contractor shall verify cleanout location and size. Cleanouts shall be installed for each pipe and within ½" inch of the diameter of the pipe they serve. Vent location and sizes shall be specified. Combination venting can be calculated based on the pipe size and fixtures, and proper use of materials and fittings. Under floor or under slab-ABS 12-inch shall be installed and properly bedded on a clean rock free bed and covered with clean soil compacted to 90% compaction below grade to prevent deformation or alignment issues of ABS/Plastic Pipe.

Protection for Pipes and Conduits passing through slabs and footings: *CPC Section 312-313*- No fittings/connections for any pipes or plumbing systems can be embedded in concrete or encased in concrete relieving arch or sleeve is required. Sleeves are required to be two pipe size diameters greater than the pipe that is passing through. No plumbing and/or drain waste pipes may run parallel to footings, drain/waste pipes, water lines, or gas Lines. No gas line shall pass under any structure.

Raised Floors and Foundations: *Hangers and Supports CPC Table 313.3* Drain waste and underfloor plumbing require supports and/or straps at every 3 feet for pipes between ½ - inch to 1-inch in diameter and every 4 feet for pipes greater than 1-inch in diameter to support the weight of full pipes. Locations and underfloor straps shall be sufficient also to provide rodent protection. Pipe

protection may be required for dissimilar straps in locations between pipe and strap (i.e., galvanized strap/tape with ABS) using proper corrosion resistant fasteners. Fasteners shall be approved corrosion resistive types such as stainless, galvanized, zinc, hot dip “No Drywall Screws”.

Drain Waste, Vent/Sewer water Testing: 10-foot head water test required is during underground drain waste inspection. Headwater test shall be performed by sealing all openings, p-traps, and pipes. A minimum of 10-inch vent pipe shall be installed at the highest fixture or end of line and filled with water prior to inspection and monitored for leakage. The test is intended to ensure water tightness and leak detection as well as a check for pipe bedding to ensure there are no deformities under full weight.

Engineering Reports: Required engineering reports shall be submitted into [EPIC LA](#) prior to inspection. Engineering reports shall be prepared on Los Angeles County Observation Forms (copies shall be kept in field).

Special Inspection Report *Chapter 17 Special Inspections and Tests:* Required special reports shall be submitted to [EPIC LA](#) prior to the inspection. Engineering reports shall be prepared on Los Angeles County Observation Forms (copies shall be kept in field).

SECOND INSPECTION: FOUNDATION/SLAB

Note: Do not install any walls on slab until vapor barrier is approved.

Footing Depth verification: Contractor shall expose footing at each center wall and corners of structure for depth verification prior to arrival of the inspector. Depth shall meet the minimum standard and anchorage requirements for embedment depth per hold-down and hardware to be installed. Footing not matching details on the plans shall be required to be retrofitted per Los Angeles County Standard Notes and Details requiring 24-inches in depth. Note: Retrofitting existing footings may not be able to be accomplished in a single pour and may require ABC retrofit with multiple inspections and concrete placement.

Slab Thickness Verification: Slab thickness shall be uniform and not less than 4 inches.

Slab or Foundation Repair: If an existing footing and/or slab is altered, broken, or cut for utility lines, Structural Detail may be required

Engineering Reports: *See First Inspection for details.*

Special Inspection Reports: Special Inspection for “rebar” associated with slab repairs and footing dowels is not required unless specifically noted by the Building and Safety per the Special Inspection Requirements. Epoxy for hold-downs or anchors require special Inspection performed by a County approved special inspector hired by the Owner or Owners Agent. Contractor shall not employ any special inspectors. Special inspectors shall be check in and verified by BSD and approved by the County Building Inspector. *See First Inspection for details.*

Exterior and Interior Support Wall Anchorage: Contractor shall mark forms to verify minimum anchorage and hold downs - two anchor bolts with 3x3 washer per sole plate within 12inches of ends of lumber. Hold down does not count as anchor bolt. Anchorage/hold-down locations, opening locations, anchors/hold down type verification, distance between anchor bolts per plan, or shear wall schedule shall be field verified.

Do not Frame on interior slab until an approved membrane protection and/or vapor barrier is installed. If not shown on plans, then field inspector may approve one of the products listed in the approved Los Angeles County.

New Slab and Footings/Additions to Existing Attached or Detached Garage

Building Corner Verification: *See details on First Inspection.*

Height size and Grade: *See details on First Inspection.*

Depth: Typical depth of new footing is minimum 2 inches deep & 12 -inches wide in earth with two no.4 rebars at top and bottom with three inches to earth clearance. No rebar can be in contact with earth. All reinforcements, anchor bolts, or hold-downs shall be secured in place

Raised Foundation: Minimum 18-inches clear to the bottom of any floor joists for proposed crawlspace. More space may be required if any equipment such as a furnace is in this space. Properly sized opening from the exterior shall be provided for maintenance and access.

Required reinforcement: Reinforcement shall be size as no. 4 rebars installed two bars top and bottom of continuous footings and secured in place with ties, overlapped at typically 32-inches. Proper bends, clearances to earth (3 inches minimum), with adequate proper support shall be provide. There will be no lifting of steel mats or exposed steel reinforcement during inspections.

Concrete Encased Electrode ("UFER") Grounding Electrode, if installed: One or more bare or zinc galvanized or other electrically conductive coated steel reinforcing bars or rods of not less than 1/2 inch in diameter, installed in one continuous 20 ft length (or 20 ft in total length using multiple pieces welded together or held together using steel tie wires).

Slab Steel: No. 4 rebars secured-in-place and placed 16-inch each way on center supported on chairs/adobe blocks providing a minimum of 3 inches of encasement for all steel when earth supported.

Hold down, anchors etc.: See *Exterior and Interior Support Wall Anchorage section*.

Shear Walls: Location and opening locations, anchors/hold down type verification, distance between anchor bolts, or shear wall schedule shall be verified in the field.

Pre-Slab Bedding and Vapor Barrier: *Section R506.2.3-* Existing concrete slab/floor and repairs of slab/floors will need to be provided with a vapor retarder prior to installing any walls or base/sole plates. Alternate materials can be proposed to prevent the passage of water and vapors.

Approved vapor retarders are:

1. ICC ESR#1413 – Regard Waterproofing and Crack Prevention Membrane.
2. ICC ESR #2417 – LATICRETE Hydro Ban.
3. ICC ESR #2785 – Polycoat-Aquatight and Flexideck.
4. ICC ESR#3474 – Mapelastic AquaDefense Waterproofing Membrane

Refer to Research Bulletin RB11 for any other proposed alternate product.

Engineering Observation Reports. See First Inspection Details.

Special Inspection Reports: See First Inspection Details.

THIRD INSPECTION: Final Frame- Rough (MEP) Mechanical, Electrical, Plumbing

Note: Insulation for walls and ceiling shall be on site for verification

Rough Frame/ MEP: This inspection is to verify the preliminary installation of framing, mechanical, electrical, and plumbing that may be concealed within the walls and ceilings prior to insulation and drywall installation.

Boring and notching of framing Members: *R502.8 Joists, R602.6 Exterior Walls, R802.7.7 Rafters-* Installation of (MEP) mechanical, electrical and plumbing systems shall not reduce the strength and integrity of lumber. Connections of wood framing and/or placement mechanical, electrical, and plumbing equipment shall be away from potential harm and damage. Notching and/or boring of holes to allow the passage of pipes shall not exceed the limits of the code. If a hole or notch exceeds the maximum threshold, then each board/stud shall be adequately braced, repaired, or replaced in addition to plated to protect the pipes from any nails or screws that may penetrated the pipe. No framing member may be cut or notched more than 40% of its width. Drilled or bored holes through lumber cannot exceed 25% the width of lumber. Rafters and ceiling Joists may not be bored within 2 inches of the top or bottom edges. Notches in rafters/ceiling joists may not be in the middle third of the lumber or exceed 1/6 the depth of the wood. Typical repair straps are metal no.16 gauge which is typically 1 ¼ inches wide x 15 inches, and 21 inches x 30 inches long. Nail plate protection is required when the MEP is within 1.5-inch of the face on either side of the framing member.

Heating Required: *Section R303.9* - Every dwelling unit be provided with heating facilities. Mechanical code section 311.4 and section 6.1 of ASHRAE 62.2 prohibit the transfer of air between adjacent dwelling units. A separate heating unit is required for each dwelling unit. *Section 120.2(a) of the Energy Standards* specifies that each dwelling unit shall be controlled by an individual thermostatic control. All heating elements (mini-split, FAU, wall furnace) shall be installed per manufacturers' specifications. Installation instructions shall be kept on site until the heating system has been inspected and approved for clearances and safety.

Protection of MEP - Fire Stopping: All holes in all framing systems with a top plate or bottom plate leading to an attic or crawl space shall be sealed to stop hot gases via caulking, fire foam, fire caulking, fire putty etc. Openings from pipes, wires, conduits, drains etc. shall be fire stopped to prevent the passing of hot gases from any annular wall space. Difficult-to-seal areas around ducts or other pipes may be protected by tightly filling the area with a minimum of 16-inches vertical height unfaced fiberglass insulation. Steel nail plate protection shall be provided over all electrical, mechanical, and plumbing systems passing through any framed assembly within 1.25 -inch for either face (interior/exterior) of the stud or framing member.

Rough Mechanical: All vent terminations/vents shall be protected with corrosion resistive rodent/debris protector having no more than ¼inches inch opening. Attic, intake/exhaust vents, dryer vent, kitchen vent, etc.) including opening from the attics place air into the interior wall space. Most venting, HERS listing verification, and required inspection are provided in the Title 24/Energy Calculations.

Types of Vents: There are 3 types of vents. *No screws, fasteners or rivets shall penetrate the inner wall of any vents, except at the connection/transition/flue collar.*

Type B Vent: *CPC Section 509* -Multi-layer vent with locking collar typically used in concealed spaces and attic for passing hot gasses from water heaters, furnace, wall furnaces. Typical clearances 5/8-inch to combustibles with approved fittings, fire topped spacer, and required at every floor/ceiling level penetrated.

Single Wall Vent: Typically used in open or exterior spaces passing hot gasses from water heaters, furnace, wall furnaces and or conveying fans. Single wall vents require a transition fitting when passing from an exposed location (garage, closet) to a concealed space (attic, wall).

Cat III 1738: Side Wall Vent – Only approved systems can terminate on a side wall

Kitchen Hood Vent- *Mechanical Code, Section 506.3-506.6* – 4-inch to 6-inch minimum diameter for metal smooth wall vent duct/pipe is required for all kitchen vents to the exterior of the home. The discharge point through the roof or wall system may not be closer than 3' feet from any building opening and 10' feet away from any intake. NO Flexible Duct adapters will be approved. Dedicated electrical connection shall be in proximity of the future hood, fan, or vent.

Bathroom/Laundry Room Vent Fan- *R303.3.1 Bathroom exhaust fans-* Installation of bathroom/laundry vent fans are required in each bathroom. Bathroom fan shall be operated by a humidistat sensor built into the fan or controlled by a humidistat switch. Combination light sensor/humidistat switches are readily available. Exhaust duct for Bathroom, Laundry shall exhaust to the exterior of the home where the discharge point may not be closer than 3 feet from any building opening (Doors, window) and 10 feet away from any intake. All fans shall be ENERGY STAR complaint.

Laundry Dryer Duct: *Mechanical Code, Section 504.4-* Dryer duct is limited to 35 feet in length. Each laundry room shall have an exhaust duct for dryer and not less than 4 inches in diameter. It shall exhaust to the exterior of the home and the discharge point may not be closer than 3 feet from any building opening and 10' feet away from any intake. A smooth wall hard pipe (IAPMO approved dryer duct) can be installed up to 35 feet. Flexible dryer attachment ducts may not exceed 8 feet.

Heating/Airconditioning: Duct work shall be installed with Energy Rating System (HERS) R-8 insulation as indicated on the approved Title 24 Energy forms. All ducts, registers, and intakes shall be tightly sealed temporarily until the completion of construction to prevent contamination. All duct work shall be supported and strapped per the manufacturer and code Requirements with approved straps or hangers. Do not fasten duct work between ceiling /roof joists or be direct contact with a roof or ceiling. Support ductwork not closer than the depth of the exposed insulation and/or framing system.

Attic/Crawl Space Vents: *R806.1 Ventilation Attic- R408.1 Ventilation Underfloor/crawlspace-* Fresh air Attic Vents are required by code to remove moisture from all enclosed spaces. Heat removal requires Mechanical Ventilation such as whole house fan or thermally activated (heat activated) attic fan or solar attic fan.

Forced Air/Wall Furnace Vent: *CPC Section 509-* Wall furnace vents (oval vent) require approved shoe plate/firestop space straps and attic guard shield where the vent passes through the cut top plate. A wall

furnace shoe plate/firestop spacer is a shield that closes the opening around the wall furnace vent at the top plate into the attic with a metal stop/firestop. Additionally, a shoe plate/firestop spacer is equipped with a strap to tie the top plate together on either side where it has been cut out/removed. Wall furnace attic guard is a heat shield that is installed in the attic space to prevent fires.

Attic/Crawlspace Ventilation: *R806.1 Ventilation required, 1202.4.1.1 Ventilation area for crawl spaces* - Attic and Crawl Space Ventilation is for air to transfer and removal of moisture to prevent fungus, mildew, and decay that can cause harm to the structure and the occupants, Ventilation Calculations are based on the Title 24 Energy and Building Code.

IAQ Indoor Air Quality/Whole House Fan: All fans shall be ENERGY STAR compliant. Whole House Ventilation require (IAQ Indoor Air Quality) a continuous operating exhaust fan, or intermittently operated ventilation that shall be rated at **1.0 sone or less**. Intermittently operated local exhaust fans shall be rated at 3.0 sones or less. IAQ/Whole House Fan is required for fresh air circulation to reduce gasses from appliances, chemicals released from furniture, finishes and building materials that can create an unhealthy environment. The switch for this fan is located 5 ½-6' feet above the floor to prevent anyone from accidentally turning the fan off while the building is occupied. IAQ Fan switches installed in a high may be used with a timer that can be purchased at most building supply companies.

Rough Electrical: *CEC Article 100 and Article 300* - Rough electrical inspection is for the installation of wires and devices installed throughout the interior and exterior of the ADU. All electrical equipment and devices shall be listed and installed per the manufacturer's instructions. Contractor is required to install all electrical equipment and devices per the manufacturer and the Electrical Code, whichever is more restrictive. Where valid permit records are not found for existing installations, modifications may be necessary to meet current code requirements. Existing underground conduit without valid permit records may need to be exposed entirely for inspection.

Electrical Service: *CEC Section 230.2* - Electrical code only permits one service per building. An attached or detached ADU may request a separate meter from Southern California Edison, but in no case shall there be two service drops to the same building.

Equipment listing, labeling, and identification: *CEC Sections 110.2, 110.3* - Equipment can only be accepted for installation and use in local jurisdictions provided the following conditions are met:

- All equipment (including conductors) shall be listed or certified by an OSHA accredited Nationally Recognized Testing Laboratory (NRTL) and shall conform to electrical code requirements.
- Listed or certified equipment shall bear the label, symbol, or other accepted identifying mark of the approved testing agency to identify the equipment as "listed", "certified," and/or "approved."

Fire Stopping- CHAPTER 3 BUILDING PLANNING – See section Protection of MEP: Fire Stopping,

Nail Plate Protection – Steel plates shall be provided over all electrical, mechanical, and plumbing systems passing through any framed assembly within 1.25 inches for either face (interior/exterior) of the stud or framing member.

Outdoor - All exterior electrical devices and equipment shall be suitable for the environment and rated for outdoor use.

Electrical Subpanels – Important Notes: Unless noted by the manufacturer and listing agency, exterior subpanels shall be installed on a weather protected surface without any open/unprotected holes behind them (surface wall mount only). Do not caulk around any surface mounted enclosures. Conduits that exit from the interior wall to the outside and enter the back of the panel shall have an appropriate fitting. Interior rated panels may not be used in any exterior environment. Do not cover, conceal, or house any electrical panel unless it meets all the required clearances of the electrical, mechanical, and building code requirements. “Shanty covers” or build out covers (“doghouses”) are strictly prohibited and are not to be used. Panels and devices may not be placed over abandoned panels or junction boxes.

Underground Electrical Conduit: *CEC 300.5* - All underground conduits shall be buried at a depth no less than 18 inches. Between detached structures, underground conduits are likely necessary as overhead feeders between structures is not likely to be approved.

Existing underground conduit without valid permit records may need to be exposed entirely for inspection.

Feeder Size: *CEC Section 310.12* – Feeder conductors between structures and panels shall be properly sized to the corresponding overcurrent protection device. Typical ADU feeders are based on a 100-amp panel.

Disconnecting Means at Detached Structure: *CEC Sections 225.31, 225.32* - For a detached structure, a readily accessible disconnecting means is required outside of the building or inside at the point nearest where the feeders enter the building.

Panel/Subpanel Location: *CEC Section 110.26* - Electrical panels and subpanels shall be installed in a location with sufficient working space clearance. The required working space is defined by the following dimensions:

- 3 feet deep measured from the front of the equipment enclosure.
- 30 inches wide (or the width of the equipment if it is wider than 30 inches).
- 6’6” vertical clearance measured from the grade/floor in front of the equipment.

The equipment doors are additionally required to open at least 90 degrees.

Grounding Electrode and Grounding Electrode Conductor: *CEC Article 250* – Buildings with more than one multi-wire branch circuit (i.e., more than 2 branch circuits) require a complete grounding electrode system. A complete grounding electrode system shall include a connection to a metallic water pipe electrode (within 5 feet of the pipe entrance into that building) supplemented by at least one additional electrode type. If the supplemental electrode is a ground rod, then there should be two ground rods spaced at least 6 feet apart. A grounding electrode system may need to be installed at both the building with the electrical service and at the detached structure with a subpanel.

Gas piping shall not be used as a grounding electrode per *CEC Section 250.52(B)*. Gas piping may however be bonded via one of the options in *CEC Section 250.104(B)*.

CEC Section and Table 250.66 – The Grounding Electrode Conductor (GEC) shall be sized to *Table 250.66*. Where the GEC is the sole connection to a concrete encased electrode (“ufer”) and does not continue to other electrode types, it is not required to be larger than 4 AWG copper. Where the GEC is the sole connection to grounding rods and does not continue to other electrode types, it is not required to be larger than 6 AWG copper.

Bonding: *CEC Section 250.104* - Bonding of metal piping systems and exposed structural metal. Metal water piping shall be bonded. The bonding jumper shall be sized in accordance with Section 250.66, based on the size of the feeder or branch circuit conductors that supply the building.

Intersystem Bonding Bridge: *CEC Section 250.94 Bonding for Other Systems* – When a new service is installed, or a new subpanel is installed at a detached structure, an intersystem bonding termination device shall be provided.

Surge Protective Device: *CEC Section 230.97* – All new services supplying dwelling units shall be provided with a Type 1 or Type 2 surge-protective device (SPD).

Required Dedicated Circuits: *CEC Section 210.11(C)* - All dwelling units shall be provided a minimum of two small appliance branch circuits, one laundry circuit, and one bathroom circuit. If a garage is present, there must also be at least one circuit for garage receptacle outlets.

Receptacles/Outlets: *CEC Section 210.52* - General purpose receptacle outlets shall be spaced such that one is always within 6 feet of wall space (that is, maximum 12 feet spacing between outlets). Kitchen countertop outlets shall be spaced such that one is always within 2 feet of counter space (that is maximum 4 feet spacing between outlets). At least one receptacle outlet shall be provided within 3 ft of each sink in a bathroom. A receptacle outlet shall be provided at outdoors at the front and at the back of each dwelling unit. A receptacle outlet shall be provided on each balcony, deck, and porch (if present). At least one receptacle outlet shall be provided in laundry areas designated for the installation of the laundry equipment.

Size (AWG) of Wire: See CEC Table 310.16 and Section 240.4(D)

- For a 15-Amp circuit, minimum #14 copper wire or #12 aluminum/copper-clad aluminum wire shall be used.
- For a 20-Amp circuit, minimum #12 copper wire or #10 aluminum/copper-clad aluminum wire shall be used.
- For a 30-Amp circuit, minimum #10 copper wire or #8 aluminum/copper-clad aluminum wire shall be used.

Routing/Protection: All wires shall be installed in locations that are not subject to physical damage unless protected in conduits. A commonly used wiring method in residential projects is non-metallic (NM) cable (“Romex”). Wires through studs and framing members shall always be installed not closer than 1.25” of the stud face or they shall be protected with metal nail plates.

NM Cable Support: *CEC Section 334.30* - Type NM (nonmetallic) cable shall be secured at intervals not exceeding 4 1/2 feet and within 12 inches of each box.

Rough Smoke and Carbon Monoxide Detector: *CRC Section R314 Smoke Detectors, CRC Section 315 Carbon Monoxide Alarms* - A smoke detector is required in each bedroom. A smoke and carbon monoxide detectors are required in each room adjacent to or hallway leading to a bedroom. Locations of smoke and carbon monoxide detectors in the rough stage shall be located not closer than 3 feet from any fan, exhaust, intake, or high flow area to include bathroom doors containing a shower or tub. All devices shall be hardwired and interconnected on a dedicated combination arc fault breaker.

Rough Plumbing: Rough plumbing inspection reviews and tests plumbing and gas lines prior to closing the walls and ceilings in addition to reviewing the location of future appliances and equipment.

Hot and Cold-Water Plumbing Lines- *CPC Section 301.2.1 Marking-* All pipes and fixtures shall be marked with approved standards and listing agency. *CPC Section 309.4 Installation-* They shall be installed in a workmanlike manner per applicable codes and standards.

Low Water Fixtures (*All fixtures must meet low water requirements*): All plumbing fixtures and fittings shall comply flow rates as indicated on the most recently approved County of Los Angeles Green Building Standards Code.

Pipe Hangers and Supports: *CPC Section 313.*

Lining of Shower Compartments and Curb Height: *CPC Section 408.5 Finished Curb Height and Threshold, CPC Section 408.7 Lining for Shower Receptors*

Gas Lines- Gas lines shall be installed and tested for leaks and defects prior to concealing any gas lines in walls, ceiling, or floor assembly.

- Per *CPC Section 1208.4 Sizing of Gas Piping Systems*, gas piping shall be sized in accordance with Table 1208.4.1.
- Per *CPC Section 313.7 Supports*, gas piping shall be supported in accordance with Table 1210.2.4.1.
- Per *Gas Pipe Test Section 318.2 and 1213.3*, gas piping shall be sized and installed to supply the maximum demand for the fixtures served per code. Gas lines shall be capped at the first and last point of connection for testing. Testing shall be performed with a pressure gauge. The pipe shall be charged with air CO₂ or nitrogen to 10 psi for 15 minutes and CSST shall be tested at 30 psi for 30 minutes.
- Per *CPC 1208.8 Workmanship and Defects*, gas pipe shall be free of burrs and defects. Per *CPC 1208.6.9 Protective Coating*, when gas pipes are exposed to weather or corrosion, then all exposed parts or pipes shall be coated with a corrosion resistant coating.

Venting of Drain Waste: Drain waste vents shall be tested during the rough inspection. Drain waste vents shall be filled with water up to 10-feet for detection of leaks. Reminder that ALL concealed abs fittings shall be “ALL GLUE” fittings. Mechanical joints and fittings may not be concealed unless the fittings are specifically designed and approved for use in concealed spaces. Plumbing vent pipes must exit the building through roof system with the appropriate size roof flashing. Vent pipe shall be properly sized based upon the size of the combined drain waste system the vent serves. All fittings and materials must comply with approved plumbing codes and standards.

Laundry Hookups: Laundry hookups and drains shall be provided with appropriate vent and p-trap. Drain/standpipe must extend no less than 24 inches above the p -trap.

Shower Pan: *CPC Section 408*- Shower pan shall be installed per section 408 with approved liners and materials installed per the manufacturer's requirements. Shower pan test requires the owner to block the drain with an internal fitted stop/test plug and fill the shower pan no less than 1 inch above the drain inlet with water, up to the finished curb, or threshold whichever is greater.

Roof Penetrations: Vents and pipes penetrating roof systems shall be properly flashed and sealed. Pipes and vents exposed to weather shall be protected with a UV/Corrosion weather resistive coating.

Cleanouts: All cleanouts shall be cut flush and provided with an approved removable cover. Cleanouts exposed to ultraviolet (UV) rays and weather shall be protected with a weather resistive coating.

FRAMING:

All framing shall be completed per plan with proper fastening. Framing shall have tight/close fitting joints and proper overlaps with the required hangers and hardware properly installed. Framing that has notching and boring shall be properly repaired, replaced, strapped, blocked and/or braced (case-by-case basis) per the County Inspectors recommendation.

Fire Rated Openings: *Table R302.1(1) or R302.1(2)*- Existing garage conversions to an ADU and existing walls within 5 feet of the property line need to be fire-rated. Although the walls may be already existing, they may need to be modified to comply with the fire rating and opening protection requirements.

Required Hold Downs and Anchor Bolts: Verification of the minimum anchorage and hold downs. Two anchor bolts with 3x3 washer per sole plate within 12" of ends of lumber. *See also Second Inspection - Exterior and Interior Support Wall Anchorage.*

Roof Framing Systems: Roof Framing systems shall meet the required span index for all framing members per *Residential Code Section R802 Table R802.4.1.*

Ceiling Joists: Ceiling joists must meet the span index table per *Residential Code Section R804.3.1.*

Attic Access Opening: *Residential Code Section R807*- Attic access opening is required where an attic has 30 inches, or more measured from the top of the ceiling framing to the bottom of the roof framing joists. The framed opening shall not be less than 22 inches x 30 inches long located in a hallway or other location with easy access. Attic access cover shall have the same fire rating as the wall or ceiling on where it is located. Attic access opening shall be fitted with a weatherstrip or gasket seal to maintain the energy efficiency standards.

Window and Door Openings: *Code section R-609, R703.4*- All window and door openings shall be properly labeled and tested in accordance with ASTM E330. Windows and doors shall be fastened and installed per manufacturers requirements. All window and door openings are required to be weatherproofed, flashed and counter flashed per code and manufacturers requirements. Retrofit windows may not be used or installed unless in an existing approved opening containing a framed and weather tight assembly. All new window and door installations shall comply with new installation requirements. Impact resistant and safety glass (protective systems) shall comply with *Residential Code Section R609.62*, which requires safety glass shall be permanently marked or etched.

INSULATION - Insulation shall be installed per the California Energy Calculations or Measures on the Title 24 Energy Sheets of the approved plans. Inspection shall be coordinated with the County Inspector. Virtual inspection may be accomplished on a case-by-case basis for insulation if no MEP corrections exist. HERs/CHEERS Certified Inspection may be accepted. Please coordinate with County Inspector prior to installing drywall.

FOURTH INSPECTION: Drywall, Shower Pan, Exterior Lath

Note: Insulation inspection shall be completed and approved prior to installation of any drywall

Drywall: Drywall shall not be installed until weather protection has been provided on the exterior of the structure.

Code Section R703.1- Drywall installation inspection is required for the verification of the Type of Drywall and thickness (1/2-inch, 5/8-inch, multi-layer) per the approved plans. Certain projects with separation requirements may require a pre-drywall (per-fire) inspection for concealed spaces. Typical fire rated walls require fire rated dry wall commonly known as Type-X or 5/8" inch Type-X.

In existing Jr. ADU projects and attached ADU projects, the drywall thickness and type should be indicated on plans, if there is any discrepancy, then the County inspector shall determine the required application per code. Installations shall be at the ceiling first. Joints shall be staggered on opposite sides of walls. There shall be no joints over windows or doors.

Drywall Fastening:

- **Screws** shall be spaced a maximum: WALLS: 12" o.c. CEILINGS: 12" o.c.
- **Nails** shall be spaced a maximum: WALLS: 7" o.c. CEILINGS: 7" o.c.
- Fasteners shall be placed not less than 3/8 inch from edges and ends of wallboard and shall not fracture the face paper of wallboard. [ASTM C840.7.1.5].
- **Water Resistant Gypsum (Greenboard)** shall not be used in the following per *Code Section R702.3.7*: a) areas subject to continuous high humidity and b) areas with direct exposure to water.
- Tile backer board installed per manufacturer's installation instructions (with listed fasteners) installation instructions on site for inspection.
- **Electrical flush type outlet boxes shall** be installed so that the front edge of the box, plaster ring, extension ring, or listed extender will not be set back of the finished surface more than 1/4 inch per *CEC Section 314.20*.

Shower Pan: See *Third Inspection – Shower pan*.

Exterior Lath: *Water Resistance Code Section R703.1.1-* Exterior wall envelope shall be constructed that prevents the accumulation of moisture and provides a weather resistive barrier behind the exterior cladding or covering.

- *Weatherproofing Code Section R703.2-* One layer of no.15 asphalt felt free from holes and breaks complying with ASTM D226 for type 1 felt or other approved barrier shall be applied over all studs and sheathing on exterior walls with joints overlapped a minimum of 6 inches.
- *Wall Covering R703.3-* Wall coverings shall be installed and fastened per the manufacturer's installation requirements. All wall covering systems nominal thickness per Table R703.1(1)
- *Weep Screeds Code Section R703.7.2.1-* A minimum of No.26 galvanized sheet gauge corrosion resistant weep screed or plastic weep screed with a minimum vertical flange of 3 ½ inch shall be provided at, or below the foundation plate line on the exterior stud walls in accordance with ASTM C926. Weep screed shall be placed a minimum of 4 inches above earth, or 2 inches above paved areas.

FIFTH & FINAL INSPECTION: Final Building, Mechanical, Electrical, Plumbing

Building Final: Building final cannot be accomplished until all the Electrical, Plumbing, Mechanical, Sewer permits are final in addition to other **AGENCY REFERRAL APPROVALS** if required (example: Environmental Programs Division, Land Development Division, Los Angeles County Fire, Grading and Drainage, Planning/Code Enforcement, Mapping and Property Assignment)

Address/Separate Address: If a separate address is required for utility connections and/or side street/driveway entrance, then the new separate address shall be issued prior to final. See *Pre-Construction Meeting for details*.

All Mechanical, Electrical Plumbing permits shall be final or final upon corrections. Exterior finishes shall be completed to meet the weather protection and energy requirements. Fire set back requirements shall be completed as required. All grading/drainage devices and flow requirements shall be met. All electrical, mechanical, plumbing systems shall be tested by owner with the required compliance test results provided to the County Inspector.

Mechanical Final: Mechanical systems shall be operational and tested prior to final inspection.

- **HERS:** California HERS/CHEERS testing is required for all new installations of heating and air Conditioning Systems including mini-split Systems. California requires field verification diagnostics to be performed by a third-party testing agency to verify compliance with the California Energy Standards.
- **Vents:** All exterior and interior vents shall be properly sealed from water and other elements in addition shall be protected to prevent rodents from entering the vents and/or wall, roof ceilings with non-corrosive screen having openings not more than 1/4 inches.

Plumbing Final: A shower curtain rod or shower enclosure is required at plumbing final. All plumbing fixtures shall meet low water fixture requirements pursuant to the most recent low water fixture standards. In addition, each fixture shall be installed in accordance with the manufacturer's installation requirements. All toilets, shower pans, and fixtures shall be properly sealed with approved caulking or sealant on the finished non-absorbent surfaces to prevent water from entering concealed spaces.

Shut off Valves: Hot/cold water and gas valves shall be accessible and installed at each point of connection prior to the fixture or appliance connection line in accordance with the code. It is strictly prohibited to conceal gas and water valves in locations that would require the use of tools or demolition to access.

Gas Piping, Test/ Final: Gas shut off valves shall be installed at the point where gas pipe is connected and immediately prior to gas entering the building. Additionally, gas shut off valves shall be installed at all points of connection for appliances as required. Gas pipe exposed to weather and corrosion shall be provided with a protective coating. Final *Gas Pipe Test Section 318.2 and 1213.3*, gas piping shall be sized and installed to supply the maximum demand for the fixtures served per code. Gas lines shall be capped at the first and last point of connection for testing. Testing shall be performed with a pressure gauge. Pipe shall be charged with CO₂ or nitrogen to 10 psi for 15 minutes. CSST shall be tested at 30 psi for 30 minutes. Gas pipe serving appliances such as hot water heater and furnace shall be provided with a sediment trap installed prior to the flexible appliance gas connection. If appliances use hard pipe

connections, then a threaded union shall be installed after the sediment trap prior to appliance connection.

ELECTRICAL FINAL:

Ground Fault Interrupt (GFCI) Breakers/Receptacles: *CEC Section 210.8(A)* - GFCI protection is required for all new receptacles rated 125-250 volt, installed in bathrooms, garages, accessory buildings that have a floor located below grade level not intended as habitable space, outdoors, crawl spaces (at or below grade level), basements, countertop surfaces in kitchens, within 6 feet of a sink, boathouses, within 6 feet of a bathtub or shower stall, and laundry areas.

Outdoor Receptacle Outlets: **CEC Section 210.8(A), 406.9(B)** - Outdoor receptacle outlets are required to have GFCI protection. These receptacle outlets shall additionally be the weather resistant type ("WR") and shall be installed in a weatherproof ("WP") outlet box that is equipped with an "extra duty" rated cover.

Tamper Resistant Receptacles: *CEC Section 406.12* – Dwelling unit receptacle outlets shall be the tamper resistant ("TR") type. This is applicable to all receptacle outlets required by Section 210.52, which is almost all areas in the dwelling.

Arc Fault Circuit Interrupter Protection (AFCI): *CEC Section 210.12* - AFCI protection is required for any new branch circuits rated 120-volt, 15- or 20-amperes installed in dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, and similar rooms/areas. Branch circuits in these areas that are modified, replaced, or extended more than six feet shall have AFCI protection. Branch circuits in these areas where additional outlets or devices are added shall have AFCI protection.

Dual Function Breakers Available: Arc Fault and Ground Fault protection are both required in some locations, such as kitchens and laundry rooms. Dual function AFCI/GFCI circuit breakers or dual function AFCI/GFACI receptacle outlets can be used. Alternatively, AFCI circuit breakers and GFCI type receptacle outlets can be used to satisfy the overlapping requirements in such areas.

Lighting Requirements: *Energy Standards Section 150.0(k)* - All lighting shall meet high luminous efficacy requirements of Table 150.0-A. Recessed downlights shall not contain screw base lamp sockets.

Indoor Lighting Control Requirements: *Energy Standards Section 150.0(k)* - Readily accessible wall mounted dimming controls shall be provided in habitable spaces (such as living rooms, dining rooms, kitchens, bedrooms). Lighting controlled by a vacancy sensor is exempt from having a dimmer control. An occupancy or vacancy sensor shall be provided for at least one luminaire in bathrooms, garages, laundry rooms, utility rooms, and walk-in closets.

Exterior Lighting Control Requirements: *Energy Standards Section 150.0(k)* - All exterior lights are required to have a manual ON/OFF switch and the choice of either (1) a photocell with motion sensor, (2) a photocell with an automatic time switch control, or (3) an astronomical time clock control.

Electrical Panel/Subpanel Location: *CEC Section 110.26* - Electrical panels and subpanels shall be installed in a location with sufficient working space clearance. The required working space is defined by a box with the following dimensions:

- 3 feet deep measured from the front of the equipment enclosure.
- 30 inches wide (or the width of the equipment if it is wider than 30 inches).
- 6'6" vertical clearance measured from the grade/floor in front of the equipment.

The equipment doors are additionally required to open at least 90 degrees.

FINAL SITE CONDITIONS:

Building at FINAL INSPECTION: Site requirements may include barriers and protections for pool and spa safety barriers when an opening leads to a pools or spa.

A FINAL WORD...

Upon Completion of all required inspections and approvals, a new Certificate of Occupancy (i.e., C-of-O) will be issued by your local Building and Safety Office. You may now enjoy the benefits of your new ADU/JADU.

Congratulations and thank you for your patience, time, and investment and partnering with us at Los Angeles County Department of Public Works Building and Safety!

We look forward to hearing with you again soon.

ADDITIONAL RESOURCES:

- HCD Accessory Dwelling Unit Handbook: <https://www.hcd.ca.gov/sites/default/files/2022-07/ADUHandbookUpdate.pdf>
- LA County Planning ADU Website: <https://planning.lacounty.gov/adu>
- LA County Planning EPIC LA Guide <https://planning.lacounty.gov/view/epic-la>
- ADU Step-by-Step Guide: https://planning.lacounty.gov/assets/upl/project/adu_step-by-step-guide.pdf
- Los Angeles County Public Works - BSD <https://dpw.lacounty.gov/building-and-safety/>
- EPIC LA https://epicla.lacounty.gov/energov_prod/SelfService/#/home
- EPIC LA Help – Building and Safety https://epicla.lacounty.gov/help/bsd_help.html
- Los Angeles County BSD Publications <https://dpw.lacounty.gov/bsd/content/publications.aspx>
- Los Angeles County BSD ADU Guidelines (FAQs)<https://dpw.lacounty.gov/bsd/lib/fp/Building/Residential/Accessory%20Dwelling%20Units/ADU%20Guideline.Pdf>
- Los Angeles County BSD Minimum Submittal Requirements<https://dpw.lacounty.gov/bsd/lib/fp/Building/Residential/Accessory%20Dwelling%20Units/Minimum%20Plan%20Submittal%20Guidelines%20for%20ADUs.pdf>
- Los Angeles County Existing Single-Story Garage Conversion to Accessory Dwelling Unit & Junior Accessory Dwelling Unit Standard Notes & Details
<https://dpw.lacounty.gov/bsd/lib/fp/Building/Residential/Accessory%20Dwelling%20Units/Garage%20Conversion%20to%20ADU%20&%20JADU%20Standard%20Notes%20and%20Details.pdf>
- Homeowner Brochure:
<https://dpw.lacounty.gov/bsd/lib/fp/Building/Residential/Accessory%20Dwelling%20Units/Homeowner%20Guide%20to%20Garage%20Conversion%20to%20ADU%20&%20JADU.pdf>