A NEW ACCESSORY DWELLING UNIT PROJECT FOR:

## SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1 LAUREL

SCOPE OF WORK:

CONSTRUCT NEW 460 S.F. ACCESSORY DWELLING UNIT.

- SLAB ON GRADE FOUNDATION

- 2X6 EXTERIOR WALLS W/ STUCCO OR FIBER CEMENT LAP SIDING EXTERIOR FINISH - STICK FRAMED ROOF WITH STANDING SEAM METAL ROOFING

- VINYL WINDOWS - HYBRID ELECTRIC WATER HEATER

UTILITY NOTES:

- NO GAS TO BE INSTALLED IN ADU

- PROPOSED ADU TO TIE INTO (E) MAIN WATER LINE - PROPOSED ADU TO TIE INTO (E) S.F.R. SEWER SERVICE. NOTE: SEWER TIE-IN MUST BE OUTSIDE OF ADU FOOTPRINT.

- ELECTRICAL SERVICE TO TIE INTO (E) S.F.R. OR CUSTOMER TO COORDINATE W/ UTILITY COMPANY TO OBTAIN (N) ELECTRICAL SERVICE AND METER

#### PROJECT SPECIFIC NOTES:

- MODIFICATIONS TO THIS PLAN SET ARE NOT ALLOWED; THESE PLANS MAY BE USED ONLY FOR CONSTRUCTION ON LOTS WITHIN THE UNINCORPORATED COUNTY OF SACRAMENTO AND ONLY IF PROPERTY OWNER EXECUTES A HOLD HARMLESS AGREEMENT TO THE SATISFACTION OF THE COUNTY OF SACRAMENTO.

DEFERRED SUBMITTALS:

- FIRE SPRINKLERS (AS NEEDED)

SITE PLAN REQUIREMENTS:

NOTE: APPLICANT IS REQUIRED TO PROVIDE A SITE PLAN (INCLUDING ALL EXISTING AND PROPOSED STRUCTURES, SIZES, LOCATIONS, USES, PLANNING DEPT SETBACKS AND ANY PUBLIC UTILITY EASEMENT(S) LOCATIONS, MAIN DWELLING ELECTRICAL PANEL LOCATION FOR A.D.U. SUB-PANEL SITUATIONS, SEWER LINE SIZE AND LOCATION ON SITE WITH CONNECTION LOCATION OF PRIMARY DWELLING SEWER MAIN, WATER SUPPLY LINE SIZE, LOCATION AND CONNECTION) AND INCORPORATE IT INTO THIS PLAN SET PRIOR TO SUBMITTING PLANS

- SEE ELEVATION SHEETS FOR ADDITIONAL INFORMATION/REQUIREMENTS TO PROVIDE DWELLING ADDRESS PER 2022 CRC R319

FIRE SPRINKLER REQUIREMENTS

PER R313.2 AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL NOT BE REQUIRED IN ACCESSORY DWELLING UNITS, PROVIDED ALL OF THE FOLLOWING ARE MET:

- THE UNIT MEETS THE DEFINITION OF AN ACCESSORY DWELLING UNIT AS DEFINED IN THE GOVERNMENT CODE SECTION 65852.2.

- THE EXISTING PRIMARY RESIDENCE DOES NOT HAVE AUTOMATIC FIRE SPRINKLERS.

- THE ACCESSORY DETACHED DWELLING UNIT DOES NOT EXCEED 1,200 SQUARE FEET IN SIZE.

- THE UNIT IS ON THE SAME LOT AS THE PRIMARY RESIDENCE.

FINAL DETERMINATION OF FIRE SPRINKLER REQUIREMENT WILL BE MADE BY LOCAL FIRE JURISDICTION.

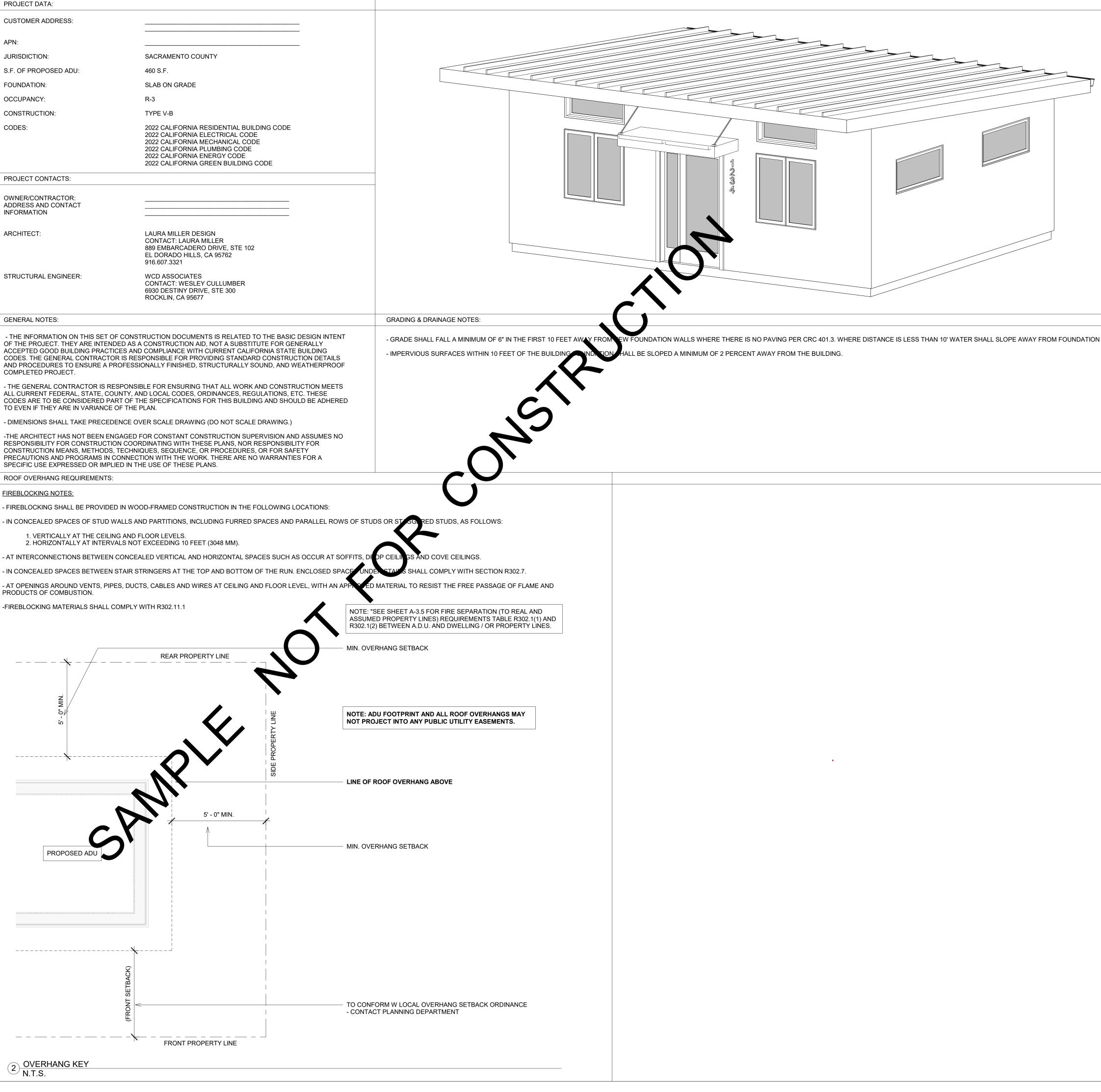
#### SHEET INDEX:

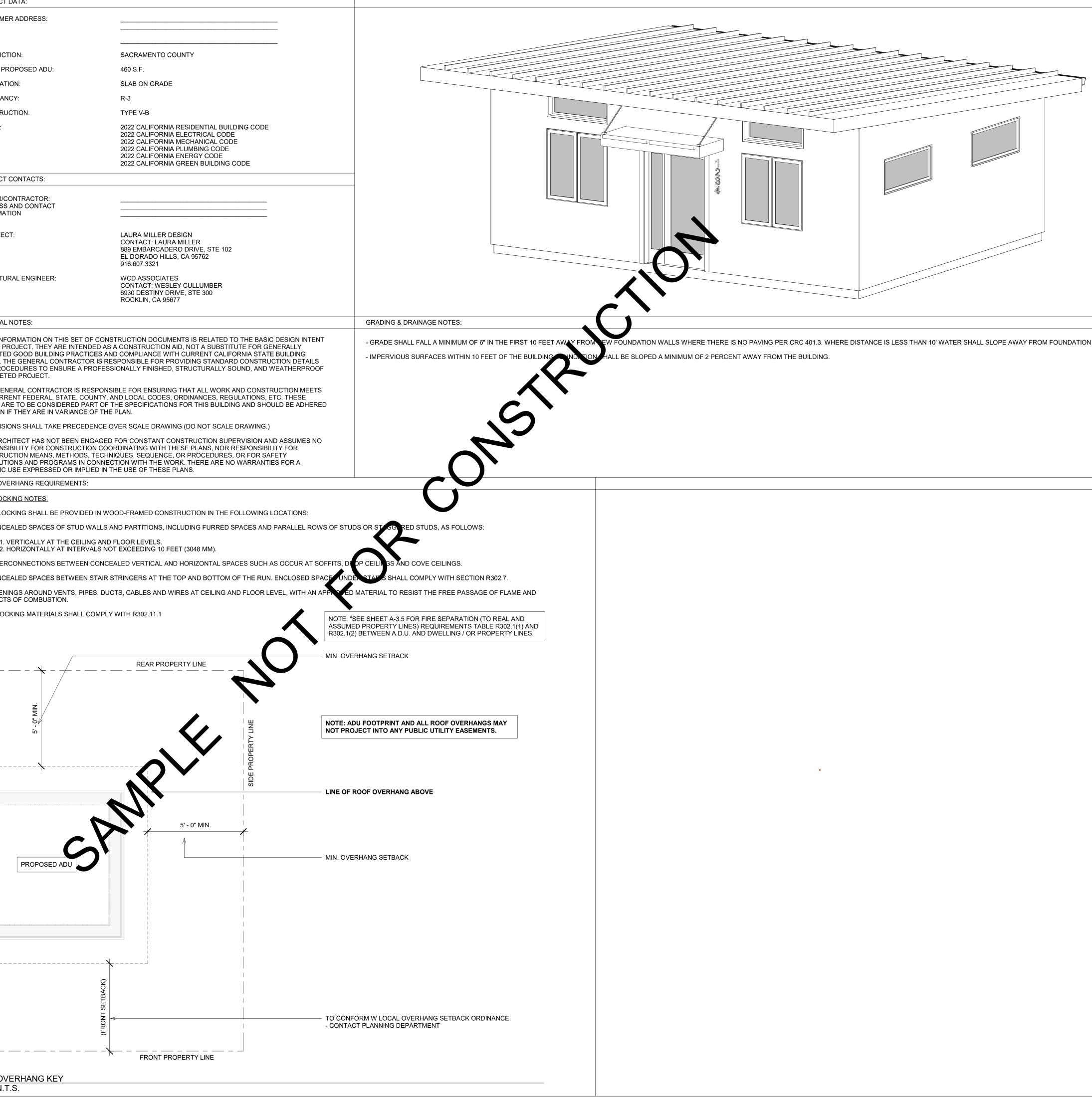
Sheet Number	Sheet Name
A-0.0	TITLE SHEET
A-0.1	CALGREEN CHECKLIST
A-0.2	CALGREEN CHECKLIST (CONT)
A-1.0	FLOOR PLAN
A-1.1	POWER PLAN
A-2.0	ROOF PLAN AND EXTERIOR ELEVATIONS
A-3.0	STUCCO SECTION DETAILS
A-3.1	STUCCO PLAN DETAILS
A-3.2	LAP SIDING SECTION DETAILS
A-3.3	LAP SIDING PLAN DETAILS
A-3.4	AWNING DETAILS
A-3.5	FIRE DETAILS
S1.0	FOUNDATION, SHEARWALL, AND RPPF FRAMING PLANS
SD1	STRUCTURAL DETAILS
SD2	STRUCTURAL DETAILS
SN1	STRUCTURAL NOTES & SPECIFICATIONS
T24-1	2022 TITLE 24 PART 6 ENERGY CODE
T24-2	2022 TITLE 24 PART 6 ENERGY CODE
T24-3	2022 TITLE 24 PART 6 ENERGY CODE
T24-4	2022 TITLE 24 PART 6 ENERGY CODE

CONSTRUCTION:	ΤY
CODES:	202 202 202 202 202 202 202
PROJECT CONTACTS:	
OWNER/CONTRACTOR: ADDRESS AND CONTACT INFORMATION	
ARCHITECT:	LA CC 889 EL 910
STRUCTURAL ENGINEER:	W( CC 69: RC
GENERAL NOTES:	
- THE INFORMATION ON THIS SET OF CONST OF THE PROJECT. THEY ARE INTENDED AS A ACCEPTED GOOD BUILDING PRACTICES AND CODES. THE GENERAL CONTRACTOR IS RES AND PROCEDURES TO ENSURE A PROFESSI COMPLETED PROJECT.	A CO D CO SPON
- THE GENERAL CONTRACTOR IS RESPONSI ALL CURRENT FEDERAL, STATE, COUNTY, AN CODES ARE TO BE CONSIDERED PART OF TH TO EVEN IF THEY ARE IN VARIANCE OF THE F	ND L HE S
- DIMENSIONS SHALL TAKE PRECEDENCE O	/ER

APN:

PRODUCTS OF COMBUSTION.





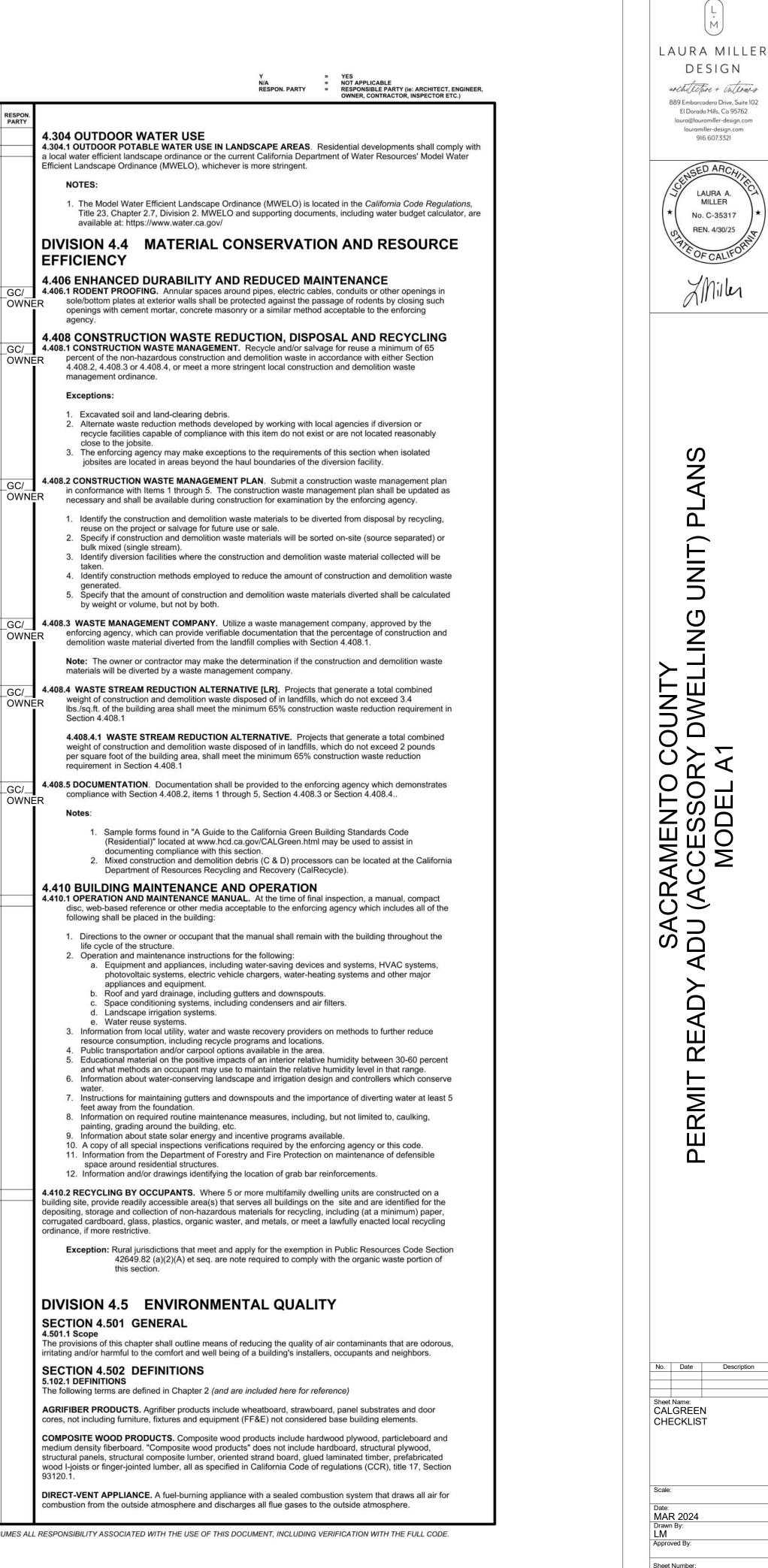
 	 	~-
	(FRONT SETBACK)	<
 	 \	

	LAURA MILLER DESIGN Architeture + interna 889 Embarcadero Drive, Suite 102 El Dorado Hills, Co 95762 Iaura@lauramiller-design.com Jouramiller-design.com 916.607.3321
	SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
-	No. Date Description
-	Scale: N.T.S. Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-0.0

# California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y N/A RESPON. PARTY	CHAPTER 3		A RESPON. PARTY	4 106 4 2 Now multifemil
	GREEN BUILDING SECTION 301 GENERAL	<u> </u>		4.106.4.2 New multifamil When parking is provided, requirements of Sections
	<b>301.1 SCOPE.</b> Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are presented unless address address the application of structures are also included in the design.			whole number. A parking space shall count as at lea applicable minimum parkir for further details.
	but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. <b>301.1.1 Additions and alterations. [HCD]</b> The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the		(	4.106.4.2.1Multifamily de than 20 sleeping units o The number of dwelling un this section.
	specific area of the addition or alteration. The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.			<b>1.EV Capable.</b> Ten of parking facilities, EVSE. Electrical loa system, including a
	<b>Note:</b> Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.			EVs at all required I The service panel of
	<b>Note:</b> On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures.			for future EV chargi Exceptions:
	Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.			1.When EV char of EV capable s 2.When EV char
	<b>301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD]</b> The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.			spaces, the r EV chargers Notes: a.Construction d future EV chargi
	SECTION 302 MIXED OCCUPANCY BUILDINGS 302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building			b.There is no red EV chargers are
	shall comply with the specific green building measures applicable to each specific occupancy. Exceptions: 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall			2.EV Ready. Twen Level 2 EV charging dwelling unit when
	comply with Chapter 4 and Appendix A4, as applicable. 2. [HCD] For purposes of <i>CAL</i> Green, live/work units, complying with Section 419 of the <i>California Building Code</i> , shall not be considered mixed occupancies. Live/Work units shall comply with		<u></u>	Exception: Areas of 4.106.4.2.2 Multifamily d
	Chapter 4 and Appendix A4, as applicable. DIVISION 4.1 PLANNING AND DESIGN ABBREVIATION DEFINITIONS:			sleeping units or guest r The number of dwelling ur this section.
	HCDDepartment of Housing and Community DevelopmentBSCCalifornia Building Standards CommissionDSA-SSDivision of the State Architect, Structural SafetyOSHPDOffice of Statewide Health Planning and DevelopmentLRLow Rise			<b>1.EV Capable</b> . Ten of parking facilities, EVSE. Electrical loa system, including a EVs at all required
	HR     High Rise       AA     Additions and Alterations       N     New			The service panel of for future EV chargi
	CHAPTER 4 RESIDENTIAL MANDATORY MEASURES			Exception: Wher parking spaces r reduced by a nu
	SECTION 4.102 DEFINITIONS			Notes: a.Construction of
	4.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference)			b.There is no re- EV chargers are
	<b>FRENCH DRAIN.</b> A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.			2.EV Ready. Twen
	<b>WATTLES.</b> Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for parimeter and inlat capteral			Level 2 EV charging dwelling unit when
IX □ _GC/	<ul> <li>used for perimeter and inlet controls.</li> <li>4.106 SITE DEVELOPMENT</li> <li>4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes,</li> </ul>			Exception: Areas <b>3.EV Chargers.</b> Fiv Where common use area and shall be av
TX GC/ OWNE	<ul> <li>4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less</li> <li>than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.</li> </ul>			When low power Le an automatic load n capacity to each sp shall have sufficien served by the ALMS have a capacity of n
	<ol> <li>Retention basins of sufficient size shall be utilized to retain storm water on the site.</li> <li>Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved</li> </ol>			capacity to the requ 4.106.4.2.2.1 Electric Electric vehicle chargin
	<ul> <li>by the enforcing agency.</li> <li>3. Compliance with a lawfully enacted storm water management ordinance.</li> </ul> Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or			Exception: Electric ve shall not be required requirements.
	are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)			4.106.4.2.2.1.1 Locati EVCS shall comply wit
	<ul> <li>4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:</li> </ul>			1.The charging sp the California Buil
	<ol> <li>Swales</li> <li>Water collection and disposal systems</li> </ol>			2.The charging sp Chapter 2, to the b
	<ol> <li>French drains</li> <li>Water retention gardens</li> <li>Other water measures which keep surface water away from buildings and aid in groundwater</li> </ol>			Exception: Electric Building Code, Ch 4.106.4.2.2.1.2, Ite
	recharge. Exception: Additions and alterations not altering the drainage path.			4.106.4.2.2.1.2 Electri The charging spaces
	<b>4.106.4 Electric vehicle (EV) charging for new construction.</b> New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the <i>California Electrical Code</i> , Article 625.			1.The minimum lengt
	Exceptions: 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and			3.One in every 25 a aisle. A 9.000 (1524
	infrastructure are not feasible based upon one or more of the following conditions: 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.			12 feet (3.58 mark
	<ol> <li>1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.</li> <li>2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.</li> </ol>			4.106.4.2.2 I.3 Access In addition to the requir comply with the access spaces and EVCS in m
	<b>4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.</b> For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit			1109A. 4.106.4.2.3 EV space 1.Single EV space req circuit. The raceway sl originate at the main s proximity to the locatio raceway termination p
	overcurrent protective device. Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in			have a 40-ampere min installed, or space(s) re Exception: A raceway
	<ul> <li>4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination</li> </ul>			installed in close prov construction in accord
	protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".			2.Multiple EV spaces re location of installed or f information on amperate electrical load calculation raceways and related of concealed areas and s

KI WLASUKLS, SHL			I (January 2023)		
	Y N//	A RESPON. PARTY	Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code.	A RE	S
y dwellings, hotels and motels and new residential parking facilities. parking spaces for new multifamily dwellings, hotels and motels shall meet the 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest			<b>4.106.4.2.4 Identification.</b> The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for	(	_
space served by electric vehicle supply equipment or designed as a future EV charging ast one standard automobile parking space only for the purpose of complying with any ng space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2			future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. 4.106.4.2.5 Electric Vehicle Ready Space Signage.		
evelopment projects with less than 20 dwelling units; and hotels and motels with less			Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).		
r guest rooms. its, sleeping units or guest rooms shall be based on all buildings on a project site subject to		<	4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing		
(10) percent of the total number of parking spaces on a building site, provided for all types			multifamily buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or		
shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 ad calculations shall demonstrate that the electrical panel service capacity and electrical any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all			altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.		
EV spaces at a minimum of 40 amperes. r subpanel circuit directory shall identify the overcurrent protective device space(s) reserved			1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.		
ng purposes as "EV CAPABLE" in accordance with the California Electrical Code.			2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.		
gers (Level 2 EVSE) are installed in a number equal to or greater than the required number paces.			DIVISION 4.2 ENERGY EFFICIENCY		G( D)
gers (Level 2 EVSE) are installed in a number less than the required number of EV capable number of EV capable spaces required may be reduced by a number equal to the number of			<b>4.201.1 SCOPE.</b> For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.		
installed.			DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION		
ocuments are intended to demonstrate the project's capability and capacity for facilitating	x∟	GC/	<b>4.303 INDOOR WATER USE</b> <b>4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.</b> Plumbing Adures water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections <b>4</b> .303.1.1, 303.1.2, 4.303.1.3,		
ng. quirement for EV spaces to be constructed or available until receptacles for EV charging or		OWN	and 4.303.4.4.		
installed for use. y-five (25) percent of the total number of parking spaces shall be equipped with low power			plumbing fixtures. Plumbing fixture replacement is required abor to ssuance of a certificate of final completion, certificate of occupancy, or final permit approval to the stread building department. See Civil		
receptacles. For multifamily parking facilities, no more than one receptacle is required per more than one parking space is provided for use by a single dwelling unit.			Code Section 1101.1, et seq., for the definition of a noncomplian slumbing fixture, types of residential buildings affected and other important enactment date		
parking facilities served by parking lifts.			<b>4.303.1.1 Water Closets.</b> The effective flush volume ar a water lose shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance cheria of the U.S. EPA WaterSense Specification for Tank-type Toilets.		
evelopment projects with 20 or more dwelling units, hotels and motels with 20 or more ooms. hits, sleeping units or guest rooms shall be based on all buildings on a project site subject to			<b>Note</b> : The effective flush volume of chal flush to uts is defined as the composite, average flush volume of two reduced flushes and one full rule.		
(10) percent of the total number of parking spaces on a building site, provided for all types			<b>4.303.1.2 Urinals.</b> The effective fluctuation of the line of the		
shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 and calculations shall demonstrate that the electrical panel service capacity and electrical my on-site distribution transformer(s), have sufficient capacity to simultaneously charge all			4.303.1.3 Showerheads.		
EV spaces at a minimum of 40 amperes. r subpanel circuit directory shall identify the overcurrent protective device space(s) reserved			<b>4.303.1.3.1 Single Show cheater</b> onowerheads shall have a maximum flow rate of not more than 1.8 gallons per minute 190 ost. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for whowerheads.		
ng purposes as "EV CAPABLE" in accordance with the California Electrical Code.			4.303 3.2 Multure segwerheads serving one shower. When a shower is served by more than one		
required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be mber equal to the number of EV chargers installed over the five (5) percent required.			show head, the ambined flow rate of all the showerheads and/or other shower outlets controlled by a singly valve sha not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only the shower outlet to be in operation at a time.		
			Note: A hand-held shower shall be considered a showerhead.		
ocuments shall show locations of future EV spaces. quirement for EV spaces to be constructed or available until receptacles for EV charging or			<ul><li>4.3 1.4 Farcets.</li><li>4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall</li></ul>		
installed for use. y-five (25) percent of the total number of parking spaces shall be equipped with low power			not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.		
receptacles. For multifamily parking facilities, no more than one receptacle is required per more than one parking space is provided for use by a single dwelling unit.		N	4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential		^
s of parking facilities served by parking lifts. (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE.			<ul><li>buildings shall not exceed 0.5 gallons per minute at 60 psi.</li><li>4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver</li></ul>		
e parking is provided, at least one EV charger shall be located in the common use parking vailable for use by all residents or guests.			<ul><li>more than 0.2 gallons per cycle.</li><li>4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons</li></ul>		
evel 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum recered, management system (ALMS) may be used to reduce the maximum required electrical			per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.		_
ace served by the ALMS. The electrical system and any on-site distribution transformers capacity to deliver at least 3.3 kW simultaneously to each EV chargine station (EVCS) S. The branch circuit shall have a minimum capacity of 40 amperes and installed EVSE shall not less than 30 amperes. ALMS shall not be used to reduce the amin an required electrical			<b>Note</b> : Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.		
ired EV capable spaces.			<b>4.303.1.4.5 Pre-rinse spray valves.</b> When installed, shall meet the requirements in the <i>California Code of Regulations</i> , Title 20 (Appliance		
vehicle charging stations (EVCS). g stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.			Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.		
chicle charging stations serving public accommodations, public housing, motels and hotels to comply with this section. See California Building Calle, Charles 11B, for applicable			<b>FOR REFERENCE ONLY:</b> The following table and code section have been reprinted from the <i>California Code of Regulations</i> , Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section		
on. h at least one of the following options:			1605.3 (h)(4)(A).		
ace shall be located adjacent to an accessible parking space meeting the requirements of ding Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.					
ace shall be located on an accertible route, as defined in the California Building Code, building.			STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019		
c vehicle charging stations on ignational constructed in compliance with the California apter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section			PRODUCT CLASS [spray force in ounce force (ozf)] MAXIMUM FLOW RATE (gpm)		
em 3.			Product Class 1 (≤ 5.0 ozf) 1.00		
c vehicle charging stations (EVCS) dimensions. shall sudesided to comply with the following:			Product Class 2 (> 5.0 ozf and $\leq 8.0$ ozf)       1.20         Product Class 3 (> 8.0 ozf)       1.28		
h e he ch Euspace shall be 18 feet (5486 mm). of each se' space shall be 9 feet (2743 mm).			Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]	0	_
arging paces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum (2) wide minimum aisle shall be permitted provided the minimum width of the EV space is		<u>.</u>	4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial		
is EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083			buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.		
direction.	ĭX ⊏	GC/	<b>4.303.3 Standards for plumbing fixtures and fittings.</b> Plumbing fixtures and fittings shall be installed in Raccordance with the <i>California Plumbing Code</i> , and shall meet the applicable standards referenced in Table 1701.1 of the <i>California Plumbing Code</i> .		
ements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall sibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready			1701.1 of the California Plumbing Code. NOTE:		
nultifamily developments shall comply with California Building Code, Chapter 11A, Section			THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.		
requirements. uired. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch all not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall			TABLE - MAXIMUM FIXTURE WATER USE       FIXTURE TYPE   FLOW RATE		
ervice or subpanel and shall terminate into a listed cabinet, box or enclosure in close n or the proposed location of the EV space. Construction documents shall identify the pint, receptacle or charger location, as applicable. The service panel and/ or subpanel shall			SHOWER HEADS (RESIDENTIAL) 1.8 GMP @ 80 PSI		
mum dedicated branch circuit, including branch circuit overcurrent protective device eserved to permit installation of a branch circuit overcurrent protective device.			LAVATORY FAUCETS (RESIDENTIAL) MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI		
is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is imity to the location or the proposed location of the EV space, at the time of original dance with the California Electrical Code.			LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS 0.5 GPM @ 60 PSI		
equired. Construction documents shall indicate the raceway termination point and the			KITCHEN FAUCETS 1.8 GPM @ 60 PSI		
future EV spaces, receptacles or EV chargers. Construction documents shall also provide ge of installed or future receptacles or EVSE, raceway method(s), wiring schematics and ons. Plan design shall be based upon a 40-ampere minimum branch circuit. Required			METERING FAUCETS     0.2 GAL/CYCLE       WATER CLOSET     1.28 GAL/FLUSH		
components that are planned to be installed underground, enclosed, inaccessible or in paces shall be installed at the time of original construction.		OPELIOS	URINALS 0.125 GAL/FLUSH	2011	<i>(r</i> -
CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLI	ST IS T	O BE USE	ED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASS	SUM	E



A-0.1

4/2024 1:04:12



Y N/A RESPON PARTY

# California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE **RESIDENTIAL MANDATORY MEASURES, SHEET 2** (January 2023)

Y N/A RESPON. PARTY

					TAB
a 11	MAXI compo	MUM INCREMENTAL REACTIVITY (MIR). The maximum chang ound to the "Base Reactive Organic Gas (ROG) Mixture" per weig	e in weight of ozone formed by add ght of compound added, expressed	ling a to	(Less
		edths of a gram (g O <sup>3</sup> /g ROC). MIR values for individual compounds and hydrocarbon solvents a	are specified in CCR, Title 17, Secti	ons 94700	SEAL
	and 9				ARCH
	MOIS	TURE CONTENT. The weight of the water in wood expressed in	percentage of the weight of the ove	en-dry wood.	MARI
		DUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for			NON
	produ	<ul> <li>The PWMIR is the total product reactivity expressed to hundred ct (excluding container and packaging).</li> </ul>	<b>T</b> . (15)	gram of	ROAD
	Note:	PWMIR is calculated according to equations found in CCR, Title	17, Section 94521 (a).		SING
		TIVE ORGANIC COMPOUND (ROC). Any compound that has the formation in the troposphere.	ne potential, once emitted, to contril	bute to	OTHE
		A volatile organic compound (VOC) broadly defined as a chemica			SEAL
		apor pressures greater than 0.1 millimeters of mercury at room te gen and may contain oxygen, nitrogen and other elements. See C		cally contain	ARCH
	100	3 FIREPLACES	L. S.		
X	4.503	I GENERAL. Any installed gas fireplace shall be a direct-vent stove or pellet stove shall comply with U.S. EPA New Source Perl			MODI
	applic	able, and shall have a permanent label indicating they are certifie	d to meet the emission limits. Woo		MARI
	4.50 4.504 IER:ONS	stoves and fireplaces shall also comply with applicable local ordir <b>4 POLLUTANT CONTROL</b> <b>1 COVERING OF DUCT OPENINGS &amp; PROTECTION OF MEC</b> <b>5 TRUCTION</b> . At the time of rough installation, during storage on the heating, cooling and ventilating equipment, all duct and o	HANICAL EQUIPMENT DURING the construction site and until final ther related air distribution compon	ent	OTHE
		ngs shall be covered with tape, plastic, sheet metal or other method be amount of water, dust or debris which may enter the system		ency to	
	4.504	2 FINISH MATERIAL POLLUTANT CONTROL. Finish material	s shall comply with this section.		
		4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealar		nall meet the	TA
OWN	_	requirements of the following standards unless more stringent loo management district rules apply:			AF
		ದು ನಿನೇಷ	re applants applant primars and a		COL
	1	<ol> <li>Adhesives, adhesive bonding primers, adhesive prime shall comply with local or regional air pollution control</li> </ol>	or air quality management district r	ules where	CO
	1	applicable or SCAQMD Rule 1168 VOC limits, as show Such products also shall comply with the Rule 1168 pr	ohibition on the use of certain toxic		FLA
	1	compounds (chloroform, ethylene dichloride, methylen tricloroethylene), except for aerosol products, as speci	e chloride, perchloroethylene and		NO
	1			ode (in	NO
		<ol> <li>Aerosol adhesives, and smaller unit sizes of adhesives units of product, less packaging, which do not weigh n</li> </ol>	nore than 1 pound and do not consi	ist of more	SPE
		than 16 fluid ounces) shall comply with statewide VOC prohibitions on use of certain toxic compounds, of <i>Cali</i>			ALU
		commencing with section 94507.			BAS
		4.504.2.2 Paints and Coatings. Architectural paints and coating the APP Architectural Suggested Control Measure, as shown in	gs shall comply with VOC limits in T	Table 1 of	BIT
		the ARB Architectural Suggested Control Measure, as shown in apply. The VOC content limit for coatings that do not meet the d	efinitions for the specialty coatings	categories	BIT
		listed in Table 4.504.3 shall be determined by classifying the coa coating, based on its gloss, as defined in subsections 4.21, 4.36,			BO
		Board, Suggested Control Measure, and the corresponding Flat, Table 4.504.3 shall apply.			CO
GC/			atings shall most the Dradust weigh	btod MID	CO
	IER	<b>4.504.2.3 Aerosol Paints and Coatings.</b> Aerosol paints and co Limits for ROC in Section 94522(a)(2) and other requirements, in	cluding prohibitions on use of certa	ain toxic	DRI
		compounds and ozone depleting substances, in Sections 94522( Regulations, Title 17, commencing with Section 94520; and in ar			DR
		Quality Management District additionally comply with the percent 8, Rule 49.	t VOC by weight of product limits of	Regulation	FAU
GC/					FIR
		A SUA 2 A Varitication Varitication of compliance with this sactu	on shall be provided at the request	of the	
OWN		<b>4.504.2.4 Verification.</b> Verification of compliance with this section enforcing agency. Documentation may include, but is not limited		of the	
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification.		of the	FLC
UWN.		enforcing agency. Documentation may include, but is not limited		of the	FLC
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification.		of the	FLC FOI GR HIG
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification.	to, the following:	of the	FLC FOI GR HIG IND
OWN		<ul> <li>enforcing agency. Documentation may include, but is not limited</li> <li>1. Manufacturer's product specification.</li> <li>2. Field verification of on-site product containers.</li> </ul>	I to, the following:	of the	FLC FOI GR HIG IND LOV
OWN		<ul> <li>enforcing agency. Documentation may include, but is not limited</li> <li>1. Manufacturer's product specification.</li> <li>2. Field verification of on-site product containers.</li> </ul> TABLE 4.504.1 - ADHESIVE VOC LIMIT	I to, the following:	of the	FLC FOI GR HIG IND LOV MA
OWN		<ul> <li>enforcing agency. Documentation may include, but is not limited</li> <li>1. Manufacturer's product specification.</li> <li>2. Field verification of on-site product containers.</li> </ul> TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams)	I to, the following: 1,2 per Liter)	of the	FLC FOI GR IND LOV MA
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers. TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams ARCHITECTURAL APPLICATIONS	T to, the following: 1.2 per Liter) VOC LIMIT	of the	FLC FOR GR HIG IND LOV MA MA
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers. TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams ARCHITECTURAL APPLICATIONS INDOOR CARPET ADHESIVES	T to, the following: T <sub>1,2</sub> per Liter) VOC LIMIT 50	of the	FLC FOI GR HIG IND LOV MA' MA ME MU
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES	T to, the following: T <sub>1,2</sub> per Liter) VOC LIMIT 50 50	of the	FLC FOR IND LOV MA MA ME MU PRI
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150	of the	FLC FOI GR HIG IND LOV MA' MA' MA' MA' PRI PRI
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 100	of the	FLC FOR GR HIG IND LOV MA MA MA ME MU PRI RE/
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 100 60	of the	FLC FOR GR HIG IND LOV MA MA ME MU PRI PRI RE/ RE/
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 100 60 50 50	of the	FLC FOF GR HIG IND LOV MAI MAI MAI MU PRE PRI RE/ RE/ RE/ RE/
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 150 100 60 50 65	of the	FLC FOF GRJ HIG IND LOV MA( MA) ME MU PRE PRI RE/ REC ROU RUS
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 150 150 60 50 65 50 65 50	of the	FLC FOR GR HIG IND LOV MA' MA' MA' MA' MA' MA' MA' MA' MA' MA'
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 150 60 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOR GR HIG IND LOV MA MA MA MA MA MA MA MA MA MA MA MA MA
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           RUBBER FLOOR ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           COVE BASE ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 150 60 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOF GR HIG IND LOV MA( MA) MA) MA) MA) MA) MA) MA) MA) MA) MA)
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 150 60 50 65 50 50 50 50 50 50 70	of the	FLC FOR GR HIG IND LOV MA' MA' MA' MA' MA' MA' MA' MA' MA' MA'
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 60 50 65 50 50 50 50 50 50 70 100	of the	FLC FOR GR HIG IND LOV MA MA MA MA MA MA MA MA MA MA MA MA MA
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers. TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams ARCHITECTURAL APPLICATIONS INDOOR CARPET ADHESIVES CARPET PAD ADHESIVES OUTDOOR CARPET ADHESIVES OUTDOOR CARPET ADHESIVES WOOD FLOORING ADHESIVES RUBBER FLOOR ADHESIVES SUBFLOOR ADHESIVES CERAMIC TILE ADHESIVES VCT & ASPHALT TILE ADHESIVES DRYWALL & PANEL ADHESIVES MULTIPURPOSE CONSTRUCTION ADHESIVE STRUCTURAL GLAZING ADHESIVES SINGLE-PLY ROOF MEMBRANE ADHESIVES	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 100 60 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOF GR HIG IND LOV MAI MAI MAI MAI MAI MAI MAI MAI MAI MAI
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 100 60 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOF GRJ HIG IND LOV MAA MAA MAA ME MU PRE PRI REZ ROU RUS SHE CLE OP/ SPE UNI STA STC SW
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 150 150 65 50 65 50 50 50 50 70 100 250 50 50	of the	FLC FOF GR HIG IND LOV MAI MAI MAI MAI MAI MAI MAI MAI MAI MAI
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 150 60 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOR GR/ HIG IND LOV MA( MA3 ME) MU PRI PRI RE/ RE/ RE/ RE/ RE/ RE/ RE/ RU SHI CLE OP/ SPE UNI ST/ ST/ ST/ ST/ ST/
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 150 60 50 65 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOF GR HIG IND LOV MAG MAG MAG MAG MAG MAG MAG MAG MAG MAG
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           CPVC WELDING           ABS WELDING	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 150 65 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOR GR/ HIG IND LOV MA4 MA3 ME1 MU1 PR1 RE7 RE7 RE7 RE7 RE7 RE7 RE7 RE7 RE7 RE7
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           CPVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING	I to, the following:         F1.2         per Liter)         VOC LIMIT         50         50         100         60         50         50         50         100         60         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         30         510         490         325         250	of the	FLC FOF GR HIG IND LOV MAG MAG MAG MAG MAG MU PRE PRI REG ROU RUS SHE CLE OP/ SPE UNI ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/
OWN		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           WUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING           ADHESIVE PRIMER FOR PLASTIC	I to, the following:         12         per Liter)         VOC LIMIT         50         50         100         60         50         50         50         100         60         510         490         325         250         550	of the	FLC FOR GR/ HIG IND LOV MA4 MA3 ME1 MU PRI PRI RE/ RE0 R00 RU3 SHB CLE OP/ SPE UNI ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           RUBBER FLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           ABS WELDING           ABS WELDING           ABS WELDING           ADHESIVE PRIMER FOR PLASTIC           CONTACT ADHESIVE	I to, the following:         F1.2         per Liter)         VOC LIMIT         50         50         100         60         50         50         50         100         60         510         490         325         250         550         80	of the	FLC FOR GRJ HIG IND LOV MAA MA3 ME MUI PRE PRI REJ REJ REJ REJ REJ REJ RUS SHE CLE OPJ SPE UNI STJ STC SW TRJ TUE SW TRJ ZI
		enforcing agency. Documentation may include, but is not limited  1. Manufacturer's product specification.  2. Field verification of on-site product containers.  TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams ARCHITECTURAL APPLICATIONS INDOOR CARPET ADHESIVES CARPET PAD ADHESIVES OUTDOOR CARPET ADHESIVES OUTDOOR CARPET ADHESIVES WOOD FLOORING ADHESIVES RUBBER FLOOR ADHESIVES CERAMIC TILE ADHESIVES CERAMIC TILE ADHESIVES COVE BASE ADHESIVES COVE BASE ADHESIVES MULTIPURPOSE CONSTRUCTION ADHESIVE STRUCTURAL GLAZING ADHESIVES SINGLE-PLY ROOF MEMBRANE ADHESIVES OTHER ADHESIVES NOT LISTED SPECIALTY APPLICATIONS PVC WELDING CPVC WELDING ADHESIVE SPECIAL PURPOSE CONTACT ADHESIVE	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 150 65 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOR GR HIG IND LOV MA4 MA3 ME MU PRE PRI RE/ RE0 ROU RUS SHE CLE OP/ SPE UNI ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/
		enforcing agency. Documentation may include, but is not limited  1. Manufacturer's product specification.  2. Field verification of on-site product containers.  TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams ARCHITECTURAL APPLICATIONS INDOOR CARPET ADHESIVES CARPET PAD ADHESIVES CARPET PAD ADHESIVES OUTDOOR CARPET ADHESIVES OUTDOOR CARPET ADHESIVES WOOD FLOORING ADHESIVES RUBBER FLOOR ADHESIVES CERAMIC TILE ADHESIVES COVE BASE ADHESIVES COVE BASE ADHESIVES MULTIPURPOSE CONSTRUCTION ADHESIVE STRUCTURAL GLAZING ADHESIVES OTHER ADHESIVES NOT LISTED SPECIALTY APPLICATIONS PVC WELDING CPVC WELDING ABS WELDING ADHESIVE STRUCTURAL WELDING ADHESIVE STRUCTURAL WOOD MEMBER ADHESIVE	I to, the following:         F1.2         per Liter)         VOC LIMIT         50         50         100         60         510         490         325         250         50         80         250         140	of the	FLC FOR GR, HIG IND LOV MAA MA3 ME MU PRI RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers. TABLE 4.504.1 - ADHESIVE VOC LIMIT (Less Water and Less Exempt Compounds in Grams ARCHITECTURAL APPLICATIONS INDOOR CARPET ADHESIVES CARPET PAD ADHESIVES OUTDOOR CARPET ADHESIVES OUTDOOR CARPET ADHESIVES OUTDOOR CARPET ADHESIVES CERAMIC TILE ADHESIVES VCT & ASPHALT TILE ADHESIVES COVE BASE ADHESIVES MULTIPURPOSE CONSTRUCTION ADHESIVE STRUCTURAL GLAZING ADHESIVES SINGLE-PLY ROOF MEMBRANE ADHESIVES OTHER ADHESIVES NOT LISTED SPECIALTY APPLICATIONS PVC WELDING ABS WELDING ADHESIVE STRUCTURAL WOOD MEMBER ADHESI	I to, the following:         F1.2         per Liter)         VOC LIMIT         50         50         100         60         510         490         325         250         50         80         250         140	of the	FLC FOR GR HIG IND LOV MAA MA3 ME MU PRI PRI RE RC RO RO RU SHE CLE OP/ SPE UNI ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/ ST/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           WOOD FLOORING ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           OVE BASE ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           CPVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING           ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIALTY APPLICATIONS           PVC WELDING           CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 60 50 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOR GRJ HIG IND LOV MAA MAA ME MU PRE PRI REJ REJ REJ REJ REJ REJ REJ REJ REJ REJ
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           COVE BASE ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           ABS WELDING           ADHESIVE           STRUCT ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCT ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCT ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE	I to, the following:         F1.2         per Liter)         VOC LIMIT         50         50         100         60         50         80         250         80         250         140         250         30	of the	FLC FOR GR, HIG IND LOV MA4 MA3 ME MU PRI RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           DRYWALL & PANEL ADHESIVES           SUBFLOOR MEMBRANE ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           CPVC WELDING           ADHESIVE PRIMER FOR PLASTIC           CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT	T to, the following: T1.2 per Liter) VOC LIMIT 50 50 50 150 65 50 50 50 50 50 50 50 50 50 5	of the	FLC FOR GR, HIG IND LOV MA4 MA3 ME MU PRI RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           RUBBER FLOOR ADHESIVES           VOOD FLOORING ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVES           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           CPVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING           ADHESIVE PRIMER FOR PLASTIC           CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           SPECIAL PUROSE CONTACT ADHESIVE	I to, the following:         F1.2         per Liter)         VOC LIMIT         50         50         100         60         510         490         325         250         50         80         250         140         250         50         50         50         50         50         50         50         50         50         50         50         50	of the	FLC FOR GR, HIG IND LOV MA4 MA3 ME MU PRI RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams:           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING           ADHESIVE PRIMER FOR PLASTIC           CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE <td>I to, the following:         1.2         per Liter)         VOC LIMIT         50         50         100         60         50         30         50         50         50         50         50         50         50         50         50         50         50         50         50         30</td> <td>of the</td> <td>FLC FOR GR HIG IND LOV MAA MAA MAA MAA MAA MAA MAA MAA MAA MA</td>	I to, the following:         1.2         per Liter)         VOC LIMIT         50         50         100         60         50         30         50         50         50         50         50         50         50         50         50         50         50         50         50         30	of the	FLC FOR GR HIG IND LOV MAA MAA MAA MAA MAA MAA MAA MAA MAA MA
		enforcing agency. Documentation may include, but is not limited  1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT         (Less Water and Less Exempt Compounds in Grams         ARCHITECTURAL APPLICATIONS         INDOOR CARPET ADHESIVES         CARPET PAD ADHESIVES         OUTDOOR CARPET ADHESIVES         OUTDOOR CARPET ADHESIVES         OUTDOOR CARPET ADHESIVES         RUBBER FLOOR ADHESIVES         SUBFLOOR ADHESIVES         CERAMIC TILE ADHESIVES         COVE BASE ADHESIVES         COVE BASE ADHESIVES         MULTIPURPOSE CONSTRUCTION ADHESIVE         STRUCTURAL GLAZING ADHESIVES         OTHER ADHESIVES NOT LISTED         SPECIALTY APPLICATIONS         PVC WELDING         ABS WELDING         ADHESIVE PRIMER FOR PLASTIC         CONTACT ADHESIVE         SPECIAL PURPOSE CONTACT ADHESIVE         STRUCTURAL WOOD MEMBER ADHESIVE         SPECIAL PURPOSE CONTACT ADHESIVE         STRUCTURAL WOOD MEMBER ADHESIVE         SPECIAL PURPOSE CONTACT ADHESIVE         SPECIAL PURPOSE CONTACT ADHESIVE         SUBSTRATE SPECIFIC APPLICATIONS         METAL TO METAL         PLASTIC FOAMS         POROUS MATERIAL (EXCEPT WOOD)         <	Ito, the following:         F1.2         per Liter)         VOC LIMIT         50         30         30         30         30         30         80	of the	FLC FOR GR, HIG IND LOV MA4 MA3 ME MU PRI RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/ RE/
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams:           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           CARPET PAD ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           DRYWALL & PANEL ADHESIVES           MULTIPURPOSE CONSTRUCTION ADHESIVE           SINGLE-PLY ROOF MEMBRANE ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING           ADHESIVE PRIMER FOR PLASTIC           CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE <td>Ito, the following:         F1.2         per Liter)         VOC LIMIT         50         30         50         30         50         30         80         80         80         80</td> <td>of the</td> <td>FLC FOR GR HIG IND LOV MAA MAA MAA MAA MAA MAA MAA MAA MAA MA</td>	Ito, the following:         F1.2         per Liter)         VOC LIMIT         50         30         50         30         50         30         80         80         80         80	of the	FLC FOR GR HIG IND LOV MAA MAA MAA MAA MAA MAA MAA MAA MAA MA
		enforcing agency. Documentation may include, but is not limited 1. Manufacturer's product specification. 2. Field verification of on-site product containers.           TABLE 4.504.1 - ADHESIVE VOC LIMIT           (Less Water and Less Exempt Compounds in Grams)           ARCHITECTURAL APPLICATIONS           INDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           OUTDOOR CARPET ADHESIVES           WOOD FLOORING ADHESIVES           RUBBER FLOOR ADHESIVES           SUBFLOOR ADHESIVES           CERAMIC TILE ADHESIVES           VCT & ASPHALT TILE ADHESIVES           DRYWALL & PANEL ADHESIVES           OUTIPURPOSE CONSTRUCTION ADHESIVE           STRUCTURAL GLAZING ADHESIVES           OTHER ADHESIVES NOT LISTED           SPECIALTY APPLICATIONS           PVC WELDING           ABS WELDING           PLASTIC CEMENT WELDING           ADHESIVE PRIMER FOR PLASTIC           CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SPECIAL PURPOSE CONTACT ADHESIVE           STRUCTURAL WOOD MEMBER ADHESIVE           SUBSTRATE SPECIFIC APPLICATIONS           METAL TO METAL	Ito, the following:         F1.2         per Liter)         VOC LIMIT         50         30         50         30         30         30         80         30         30         80         30         80         30         80         80         80	of the	FLC FOI GR HIG IND LOV MA MA MA MA ME PRI REJ REJ REJ REJ REJ REJ REJ REJ REJ REJ

504.2 - SEALANT VOC LIN	ЛІТ	
and Less Exempt Compounds in Gr	ams per Liter)	
	VOC LIMIT	
JRAL	250	
к	760	
ANE ROOF	300	
	250	
ROOF MEMBRANE	450	
	420	
RIMERS		
JRAL		
OUS	250	
	775	
TUMINOUS	500	
ж	760	
	750	

CTURAL COATINGS2,3 VOC PER LITER OF COATING, LESS V	VATER & LESS EXEMPT
ATEGORY	VOC LIMIT
NGS	50
COATINGS	100
IGH GLOSS COATINGS	150
COATINGS	
ROOF COATINGS	400
SPECIALTY COATINGS	400
S ROOF COATINGS	50
S ROOF PRIMERS	350
KERS	350
CURING COMPOUNDS	350
MASONRY SEALERS	100
SEALERS	50
OATINGS	150
HING COATINGS	350
TIVE COATINGS	350
TINGS	100
ASE COMPOUNDS	250
RTS COATINGS (SIGN PAINTS)	500
ERATURE COATINGS	420
MAINTENANCE COATINGS	250
S COATINGS1	120
CEMENT COATINGS	450
TURE COATINGS	100
IGMENTED COATINGS	500
R COATINGS	250
VENT WASH PRIMERS	42
EALERS, & UNDERCOATERS	100
PENETRATING SEALERS	
COATINGS	
INGS	50
ENTATIVE COATINGS	250
	55.718) 
	730
	550
PRIMERS, SEALERS & TERS	100
	250
ISC DANT	450
OL & ATINGS	340
	100
RELINISH COATINGS	420
OFING MEMBRANES	250
MNGS	275
SERVATIVES	350
PRIMERS	340

CIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS IN SUBSEQUENT COLUMNS IN THE TABLE.

I THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY RNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS FROM THE AIR RESOURCES BOARD.



Y	=	YES
N/A	=	NOT APPLICABLE
RESPON. PARTY	=	RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

### **CHAPTER 7**

#### INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS **702 QUALIFICATIONS**

GC/ 702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper OWNER installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- 1. State certified apprenticeship programs. 2. Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. Programs sponsored by manufacturing organizations.
- 5. Other programs acceptable to the enforcing agency.

**702.2 SPECIAL INSPECTION [HCD].** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be onsidered by the enforcing agency when evaluating the qualifications of a special inspector:

- 1. Certification by a national or regional green building program or standard publisher. 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building
- performance contractors, and home energy auditors. Successful completion of a third party apprentice training program in the appropriate trade. Other programs acceptable to the enforcing agency.
- 1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code. 2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

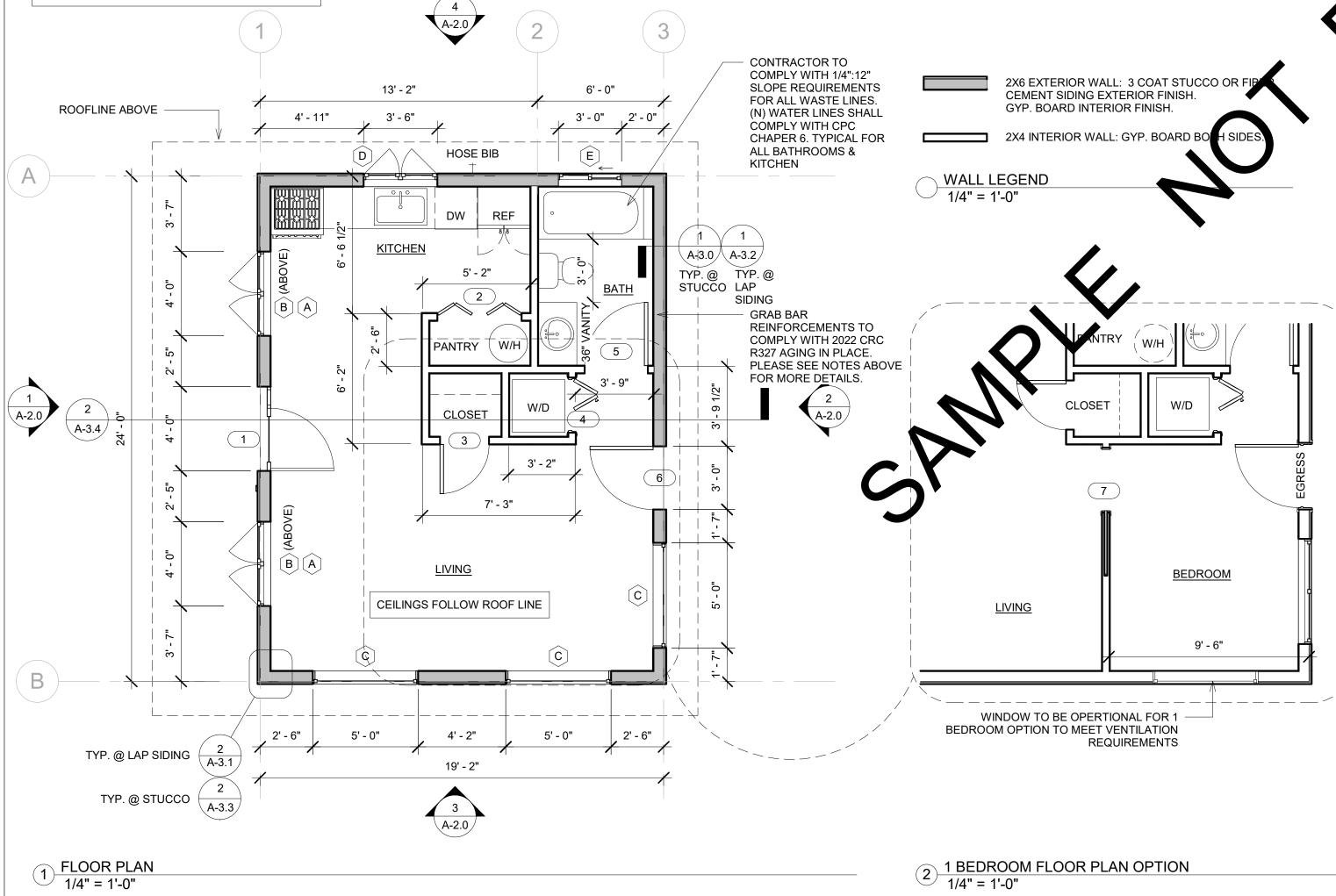
[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

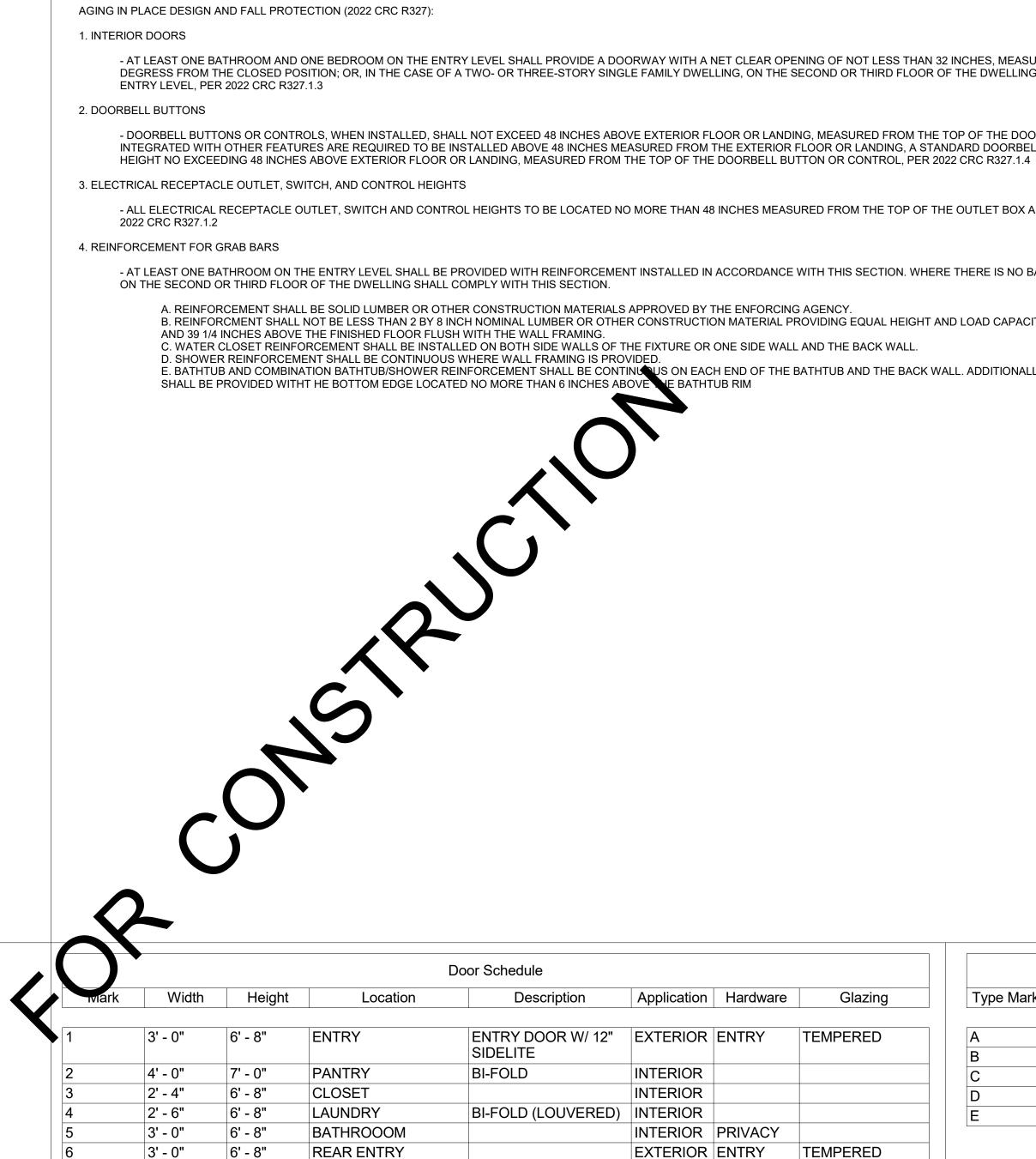
### **703 VERIFICATIONS**

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not OWNER limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

LAURA MILLER DESIGN Actilizate + interna 889 Emborcadero Drive, Suite 102 El Dorado Hills, Co 95762 Ioura@lauramiller-design.com J06.607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No.     Date     Description
Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-0.2



NOTE: ALL DIMENSIONS TO FACE OF STUD U.N.O.



- WASHER/DRYER CLOSET DOOR NOTE: A MINIMUM OF ONE SQUARE INCH OF OPENING SHALL BE PROVIDED PER 1,000 MINIMUM OF ONE 100 S.I. OPENING WITHIN 12 INCHES OF THE FLOOR AND WITHIN 12 INCHES FROM THE TOP OF THE DOU

OPTIONAL BEDROOM POCKET

EXTERIOR DOOR NOTES:

3' - 0"

3' - 0"

6' - 8"

6' - 8"

- ENTRY/EXIT DOOR MUST OPEN OVER A LANDING NOT MORE THAN 1.5" BELOW THE THRESHOLD (CRC311.3.1)

- THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED.

- EVERY LANDING SHALL HAVE A MIN. DIMENSION OF 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL (CRC311.3) WINDOW NOTES:

- ALL WINDOWS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, INCLUDING FLASHING

- WINDOWS IN BEDROOMS SHALL MEET ALL OF THE FOLLOWING EMERGENCY ESCAPE AND RESCUE REQUIREMENTS (CRC310.1): MIN 5.7 S.F. OF OPENABLE AREA (5.0 S.F. FOR GRADE LEVEL BEDROOMS) MIN 20" CLEAR WIDTH AND 24" CLEAR HEIGHT WHEN OPEN MAX SILL HEIGHT OF 44" FROM FINISHED FLOOR TO BOTTOM OF THE CLEAR OPENING

### **BATH & KITCHEN NOTES:**

- PROVIDE AN APPROVED DISHWASHER AIR GAP FITTING AS PER CPC 807.4

- MAX FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GALLONS PER MIN AT 60 PSI (CAL GREEN 4.303.1.4.4)

- WHERE A FIXTURE COMES IN CONTACT WITH THE WALL OR FLOOR, THE JOINT BETWEEN THE FIXTURE AND THE WALL OR FLOOR SHALL BE MADE WATER TIGHT AS PER CPC 402.2 - THE INSTALLATION OF A LISTED COOKING APPLIANCE OR MICROWAVE OVEN OVER A LISTED COOKING APPLIANCE SHALL CONFORM TO THE CONDITIONS OF THE UPPER APPLIANCE'S LISTING AND THE MANUF. INSTALLATION INSTRUCTIONS.

- FIXTURES SHALL BE SPACED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE.

- NO WATER CLOSET OR BIDET SHALL BE SET CLOSER THAN 15 INCHES FROM ITS CENTER TO A SIDE WALL OR OBSTRUCTION NOR CLOSER THAN 30 INCHES CENTER TO A SIMILAR FIXTURE. THE CLEAR SPACE IN FRONT OF A WATER CLOSET, LAVATORY, OR BIDET SHALL BE NOT LESS THAN 24 INCHES.

- BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FURNISHED WITH A NONABSORBENT SURFACE. SUCH SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FT ABOVE THE FLOOR (CRC 307.2).

### WATER HEATER NOTES:

- MANUFACTURE'S INSTALLATION INSTRUCTIONS FOR THE WATER HEATER AND ALL OTHER LISTED APPLIANCES SHALL BE AVAILABLE TO THE FIELD INSPECTOR AT THE TIME OF INSPECTIONS PER 2022 CRC SEC. R106. - PER CF1R: NEEA RATED WATER HEATER HEAT PUMP MODEL, RHEEM PROPH 40T2R H37515

#### - AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL SHALL PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGRESS FROM THE CLOSED POSITION; OR, IN THE CASE OF A TWO- OR THREE-STORY SINGLE FAMILY DWELLING, ON THE SECOND OR THIRD FLOOR OF THE DWELLING IF A BATHROOM OR BEDROOM IS NOT LOCATED ON THE

### - DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED, SHALL NOT EXCEED 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY. WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES MEASURED FROM THE EXTERIOR FLOOR OR LANDING, A STANDARD DOORBELL BUTTON OR CONTROL SHALL ALSO BE PROVIDED AT A

- ALL ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROL HEIGHTS TO BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES ABOVE THE FINISH FLOOR, PER

- AT LEAST ONE BATHROOM ON THE ENTRY LEVEL SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED IN ACCORDANCE WITH THIS SECTION. WHERE THERE IS NO BATHROOM ON THE ENTRYL LEVEL, AT LEASET ONE BATHROOM

B. REINFORCMENT SHALL NOT BE LESS THAN 2 BY 8 INCH NOMINAL LUMBER OR OTHER CONSTRUCTION MATERIAL PROVIDING EQUAL HEIGHT AND LOAD CAPACITY. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES

E. BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUEUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR E BATHTUB RIM

					Wine	dow Sche	dule	
Application	Hardware	Glazing	Type Mark	Count	Width	Height	Sill Height	Operation
	•							
EXTERIOR	ENTRY	TEMPERED	A	2	4' - 0"	4' - 0"	3' - 0"	CASEMENT
			В	1	4' - 0"	1' - 6"	7' - 8"	FIXED
INTERIOR			С	3	5' - 0"	2' - 0"	5' - 0"	FIXED
INTERIOR			D	1	3' - 6"	3' - 6"	3' - 6"	CASEMENT
INTERIOR			E	1	3' - 0"	1' - 6"	5' - 6"	SLIDING
INTERIOR	PRIVACY					1		
EXTERIOR	ENTRY	TEMPERED			_			
INTERIOR	PRIVACY		WINDOW INFC	RMATION	<u>:</u>			
VIDED PER 1,000 TOP OF THE DOO		MENT INPUT. A ROVIDED. (CMC 701.5)	FRAME: VINYL U VALUE: .29 SHGC: .21 ENERGY STAF LOW E GLASS <u>LIGHT &amp; VENT</u>	R CERTIFIE : YES		<u>ons</u>		

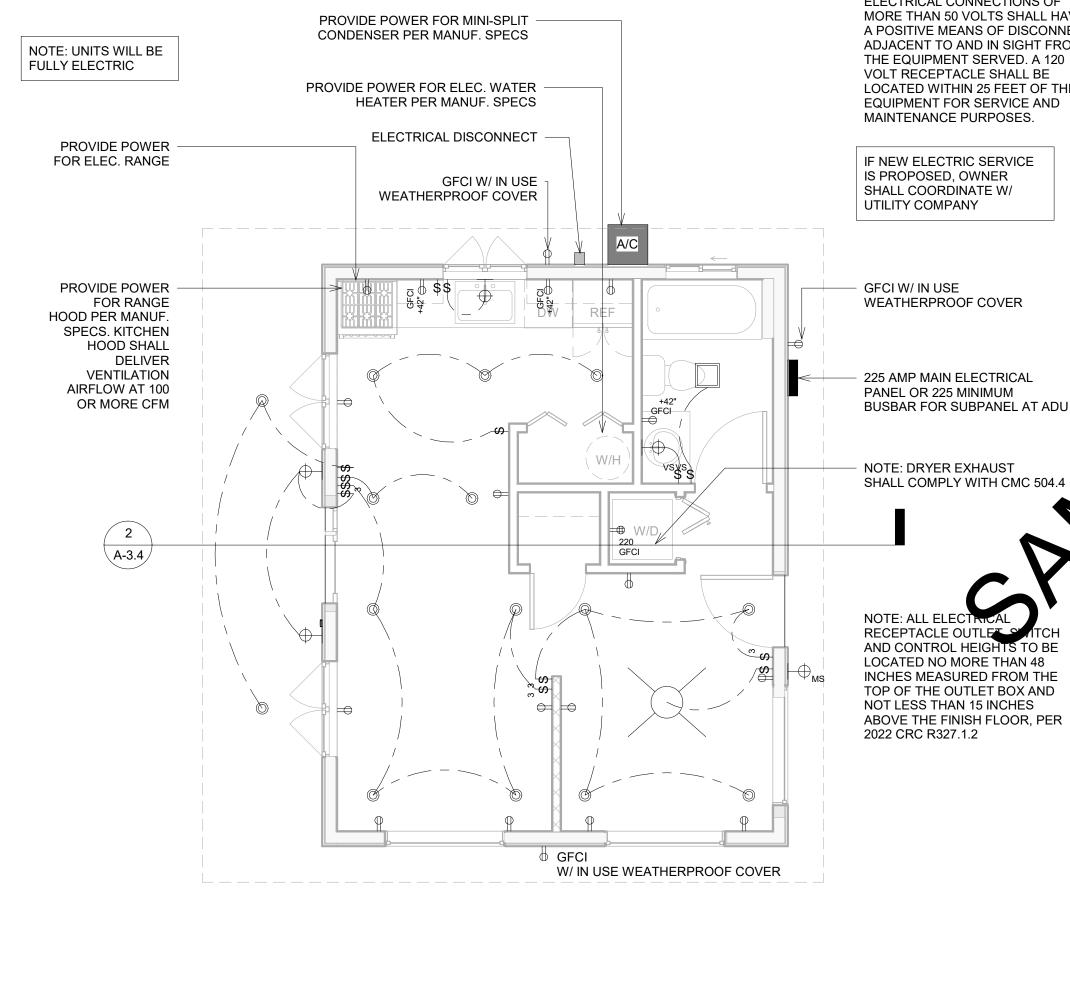
- ALL HABITABLE ROOMS ARE REQUIRED TO HAVE NATURAL LIGHT SIZED TO A MIN. OF 8% OF THE FLOOR AREA AND VENTILATION SIZED TO A MIN OF 4% OF THE FLOOR AREA. STUDIO:

460 S.F. X .08 = 36.8 S.F. NATURAL LIGHT AREA REQ'D ; 94.65 S.F. PROVIDED 460 S.F. X .04 = 18.4 S.F. VENTILATION AREA REQ'D ; 46.5 S.F. PROVIDED

**OPTIONAL BEDROOM 1:** 108 S.F. X .08 = 8.64 S.F. NATURAL LIGHT AREA REQ'D ; 20 S.F. PROVIDED 108 S.F. X .04 = 4.32 S.F. VENTILATION AREA REQ'D ; 5 S.F. PROVIDED VIA OPERATIONAL WINDOW

LAURA MILLER DESIGN architecture + interiors 889 Embarcadero Drive, Suite 102 El Dorado Hills, Ca 95762 laura@lauramiller-design.com lauramiller-design.com 916.607.3321 GED ARCH LAURA A. MILLER No. C-35317 REN. 4/30/25 OFCALIF ഗ Z Ω  $\frown$ Z C Ž DWEI ΟΟ RAN  $\odot$  $\triangleleft \supset$ ωD  $\triangleleft$  $\square$ Ш Υ RMI. Ц No. Date Description FLOOR PLAN 1/4" = 1'-0" MAR 2024 Approved By: Sheet Number:

A-1.0



NOTE: ALL ELECTRICAL RECEPTACLE OUTLE AND CONTROL HEIGHTS TO BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES ABOVE THE FINISH FLOOR, PER 2022 CRC R327.1.2

NOTE: DRYER EXHAUST

225 AMP MAIN ELECTRICAL PANEL OR 225 MINIMUM BUSBAR FOR SUBPANEL AT ADU

GFCI W/ IN USE WEATHERPROOF COVER

IF NEW ELECTRIC SERVICE IS PROPOSED, OWNER SHALL COORDINATE W/ UTILITY COMPANY

NOTE: EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS OF MORE THAN 50 VOLTS SHALL HAVE A POSITIVE MEANS OF DISCONNECT ADJACENT TO AND IN SIGHT FROM THE EQUIPMENT SERVED. A 120 VOLT RECEPTACLE SHALL BE LOCATED WITHIN 25 FEET OF THE EQUIPMENT FOR SERVICE AND MAINTENANCE PURPOSES.

GARAGES AND ACCESSORY BUILDINGS, CRAWL SPACES, UNFINISHED BASEMENTS AND BOATHOUSES. (AFCI), COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. REFERENCE CEC ART. 210.12(A). WHETHER OR NOT THE ATTACHMENT PLUG CAP IS INSERTED. ELECTRIC POWER, AND AT OUTDOOR ENTRANCES OR EXITS. SUPPORTED. MARKING SHALL INCLUDE THE MAX. WEIGHT TO BE SUPPORTED FOR CEILING FANS THAT WEIGH MORE THAN 35 LBS. 10. TYPE NM AND NMS CABLES SHALL NOT BE PERMITTED IN WET OR DAMP OCATIONS. 11. FLEXIBLE METAL CONDUIT (FMC) IS NOT PERMITTED IN A WET LOC 12. LUMINAIRES INSTALLED IN WET OR DAMP LOCATIONS SHALL BET PARTS. ALL LUMINAIRES INSTALLED IN WET LOCATIONS SHALL BE MAR LOCATIONS" OR "SUITABLE FOR DAMP LOCATIONS.". 13. ALL 15 AND 20 AMPERE, 120 AND 125 VOLT EXTERIOR F 14. BATHROOM RECEPTACLES WILL BE SUPPLIED Y A EAST ONE 20 AMP BRANCH CIRCUITS. 15. ALL NEW NON-LOCKING-TYPE 125-VOLT, 1 -16. COUNTER TOP RECEPTACLES IN THE KI DA TER S THAN 2 FEET FROM A RECEPTACLE. ANY RECEPTACLE, WHERE A RANGE, COUNTE CONSIDERED AS TWO COUNTER S. CES. TH SUPPORT BASE. COUNTERTOPS

ELECTRICAL NOTES:

EOR ALL 15A AND 20A, 125V RECEPTACLES INSTALLED IN THE FOLLWING LOCATIONS PER 2019 CEC ART 210.8(A) **17. GFIC PROTECTION IS R** - SINKS - GFCI PPD OR RECEPTACLES IN REQUIRED WITHIN AN ARC MEASUREMENT OF 6FT. FROM THE OUSIDE EDGE OF A SINK. R STALLS - GFCI PROTECTION IS REQUIRED FOR RECEPTACLES LOCATED WITHIN 6FT. OF THE OUTSIDE EDGE OF A BATHTUB OR SHOWER STALL. - BATH TUBS Q SHOW - LAUNDRY 6 - RECENTACLES INSTALLED IN LAUNDRY AREAS OF A DWELLING UNIT SHALL BE GFCI PROTECTED. - DWELLING UN SHWAŠHERS - OUTLETS (NOT REQUIRED FOR A HARDWIRED APPLIANCE) SUPPLYING DISHWASHERS IN A DWELLING UNIT MUST BE GFCI PROTECTED PER 2019 CEC ART. CEC 210.8 18. ALL PERMINENTIALLED LUMINAIRES IN DWELLING UNITS SHALL BE HIGH EFFICACY AND HAVE MANUAL ON/OFF CONTROLS AND VACANCY SENSORS OR DIMMERS EXCEPT FOR HALLWAYS & CLOSETS

ST BE SWITCHED SEPARATE FROM LIGHTING OR UTILIZE A DEVICE WHERE LIGHTING CAN BE TURNED OFF WHILE THE FAN IS RUNNING. EXCLUDES KITCHEN EXHAST HOODS. 19 FXHAUS T MUST BE SWITCHED SEPARATE FROM ALL OTHER LIGHTING.

ENTLY INSTALLED LIGHTING IN CABINETS MUST BE HIGH EFFICACY.

NG IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS MUST HAVE AT LEAST ONE LUMINAIR CONTROLLED BY VACANCY SENSORS. 3. PERMANENTLY INSTALLED OUTDOOR LIGHTING ATTACHED TO RESIDENCE OR OTHER BUILDING MUST BE HIGH EFFICACY AND MUST BE CONTROLLED BY A MANUAL ON AND OFF SWITCH AND ONE OF THESE

NTROL TYPES: - PHOTO-CONTROL AND MOTION SENSOR OR - PHOTO-CONTROL AND AUTOMATIC TIME SWITCH CONTROL OR ASTRONOMICAL TIME CLOCK THAT AUTOMATICALLY TURNS OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS OR - ENERGY MANAGMENT CONTROL SYSTEM (EMCS) THAT PROVIDES THE FUNCTIONALITY OF AN ASTRONOMICAL TIME CLOCK.

SMOKE ALARM NOTES

LESS THAN

2. SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

- IN EACH SLEEPING ROOM - OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. 3. WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF

ONE ALARM WILL ACTIVATE ALL OF THE ALARMS INTHE INDIVIDUAL UNIT.

4. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS FROM A COMMERICAL SOURCE AND SHALL BE EQUIPPED WITH A BACKUP BATTERY. CARBON MONOXIDE ALARM NOTES:

1. SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL2034. CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL2075. CARBON MONOXIDE ALARMS AND DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH R315, THE CURRENT EDITION OF NFPA 720, AND THE MANUF. INSTALLATION INSTRUCTIONS.

2. CARBON MONOXIDE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS: - OUTSIDE EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS. - ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.

3. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN THE DWELLING UNIT OR WITHIN A SLEEPING UNIT THE ALARM SHALL BE INTERCONNECTED IN A MANNER THAT ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. 4. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARYNPOWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS FROM A COMMERICAL SOURCE AND SHALL BE EQUIPPED WITH A BACKUP BATTERY.

5. CARBON MONOXIDE ALARMS COMBINED WITH SMOKE ALARMS SHALL COMPLY WITH SECTION R315, ALL APPLICABLE STANDARDS, AND REQUIREMENTS FOR LISTING AND APPROVAL BY THE OFFICE OF THE STATE FIRE MARSHALL, FOR SMOKE ALARMS.

ENERGY COMPLIANCE:

- SOLAR READY BUILDINGS, SHALL MEET THE REQUIREMENTS OF SECTION 110.10 APPLICABLE TO THE BUILDING PROJECT - ENERGY STORAGE SYSTEMS (ESS) READY. ALL SINGLE FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING. ALL ELECTRICAL COMPONENTS SHALL BE

1. AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:

INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE:

A. ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN 1 INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL" SHALL INCLUDE ALL BACKED-UP LOAD CIRCUITS.

2. A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THERE SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.

3. THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS

4. SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.

- ELECTRIC COOKTOP READY. SYSTEMS USING GAS OR PROPANE COOKTOP TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING: 1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE COOKTOP AND ACCESSIBLE TO THE COOKTOP WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 50 AMPS MINIMUM. THE BLANK COVER SHALL BE INDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

2. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC COOKTOP INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

R/CARBON MONOXIDE ALARM ARM IS INSTALLED WITHIN 20' OF A PHOTOELECTRIC ALARM PER CRC 314.3.3 NGLE POLE SWITCH E: PROVIDE DIMMER IN KITCHEN BEDROOMS & LIVING AREAS SINGLE POLE VACANCY SENSOR SWITCH

3-WAY SWITCH

DETEC

DUPLEX OUTLET, ARCH FAULT PROTECTED & TAMPER PROOF

220 VOLT OUTLET

GFCI DUPLEX OUTLET, ARC FAULT & TAMPER PROOF NOTE: PROVIDE WEATHER-PROOF COVER FOR ALL EXTERIOR OUTLETS.

6" RECESSED LED CAN

SUITABLE FOR WET LOCATION 6" RECESSED LED CAN

WALL MOUNTED LIGHT FIXTURE

WALL MOUNTED LIGHT FIXTURE W/ MOTION SENSOR

CEILING MOUNTED LIGHT FIXTURE

CEILING FAN/LIGHT COMBINATION 'W' DENOTES WET LOCATION RATED FAN

PANASONIC WHISPER CEILING VENTILATION FAN/LIGHT COMBO W/ HUMIDISTAT. NOTE: NEWLY INSTALLED BATHROOM EXHAUST FANS SHALL BE ENERGY STAR COMPLIANT AND SHALL BE DUCTED TO TERMINATE TO THE OUTSIDE OF THE BUILDING. BATHROOM EXHAUST FAN SHALL DELIVER VENTILATION AIRFLOW AT 50 OR MORE CFM

POWER PLAN LEGEND

1/4" = 1'-0"

 $\odot$  $\vdash \oplus$  $\vdash \oplus$  $\leftrightarrow$ 

(S)

1. PROVIDE 2 OR MORE 20-AMP SMALL APPLIANCE BRANCH CIRCUITS TO SERVE ALL COUNTERTOP, WALL AND FLOOR RECEPTACLES IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS. RECEPTACLE OUTLETS SHALL BE INSTALLED AT EACH WALL, ISLAND, AND PENINSULA COUNTER SPACE IN KITCHENS AND DINING ROOMS. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. 2. PROVIDE GFCI PROTECTION TO ALL 125 VOLT, 15 AND 20 AMP RECEPTACLES SERVING COUNTERTOP SURFACES IN KITCHENS, WITHIN 6 FEET OF LAUNDRY, UTILITY AND WET BAR SINKS, IN BATHROOMS,

3. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE. RECEPTACLE OUTLETS ARE REQUIRED IN WALLS 2 FEET OR GREATER. HALLWAYS OF 10 FEET OR MORE IN LENGTH SHALL HAVE AT LEAST ONE RECEPTACLE OUTLET.

4. NEW 120-VOLT, SINGLE PHASE, 15- AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHEN, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER

5.DWELLINGS WITH DIRECT GRADE LEVEL ACCESS SHALL HAVE AT LEAST ONE RECEPTACLE OUTLET WITHIN 6.5 FEET OF GRADE LEVEL AT THE FRONT AND BACK OF THE DWELLING. ALL 125 VOLT. 15 AND 20 AMP, RECEPTACLES INSTALLED OUTDOORS SHALL BE GFCI PROTECTED. RECEPTACLES INSTALLED OUTDOORS IN AN EXTERIOR WET LOCATION SHALL HAVE AN ENCLOSURE THAT IS WEATHERPROOF

6. AT LEAST ONE WALL SWITCH-CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EVERY HABITABLE ROOM, IN BATHROOM, HALLWAYS, STAIRWAYS, ATTACHED GARAGES, DETACHED GARAGES WITH

7. LOCATION AND INSTALLATION REQUIREMENTS FOR LUMINARIES SHALL COMPLY WITH ALL APLLICABLE PROVISIONS OF THE 2022 CALIFORNIA ELECTRICAL CODE ARTICLE 410. FIXTURES SHALL BE SECURELY

8. A FIXTURE THAT WEIGHS MORE THAN 6 POUNDS OR EXCEEDS 16 INCHES IN ANY DIMENSION SHALL NOT BE SUPPORTED BY THE SCREW SHELL OF A LAMP HOLDER.

9. OUTLET BOXES OR OUTLET BOX SYSTEMS USED AS THE SOLE SUPPORT OF A CEILING-SUSPENDED FAN SHALL BE LISTED AND MARKED BY THE MANUF. AS SUITABLE FOR THIS PURPOSE. THE REQUIRED

AL ED SUCH THAT WATER CANNOT ENTER OR ACCUMULATE IN WIRING COMPARTMENTS, LAMPHOLDERS, OR OTHER ELECTRICAL ED, SUITABLE FOR WET LOCATIONS." ALL LUMINAIRES INSTALLED IN DAMP LOCATIONS SHALL BE MARKED "SUITABLE FOR WET

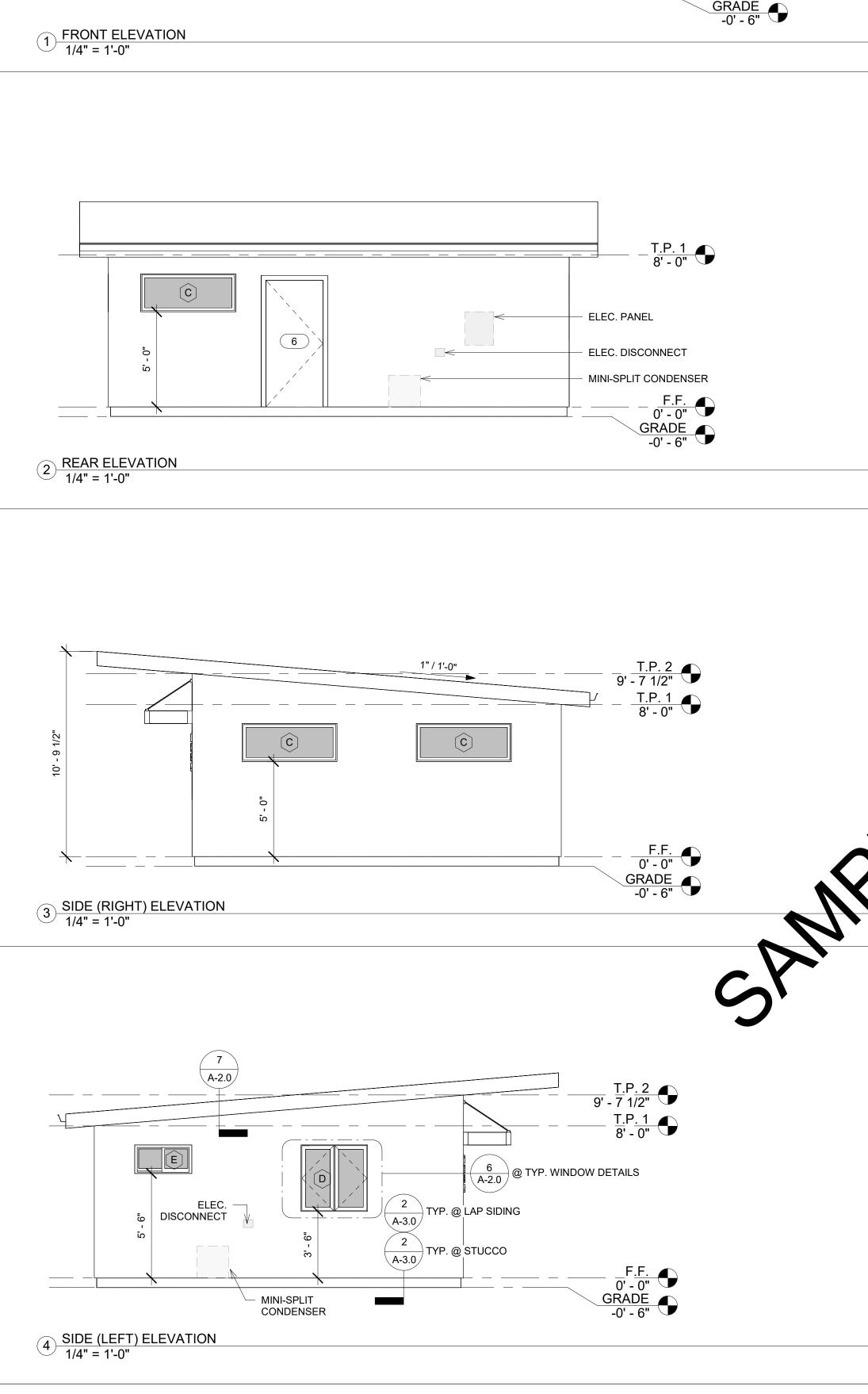
LES SHALL BE PROTECTED BY AN "IN-USE" WEATHERPROOF COVER.

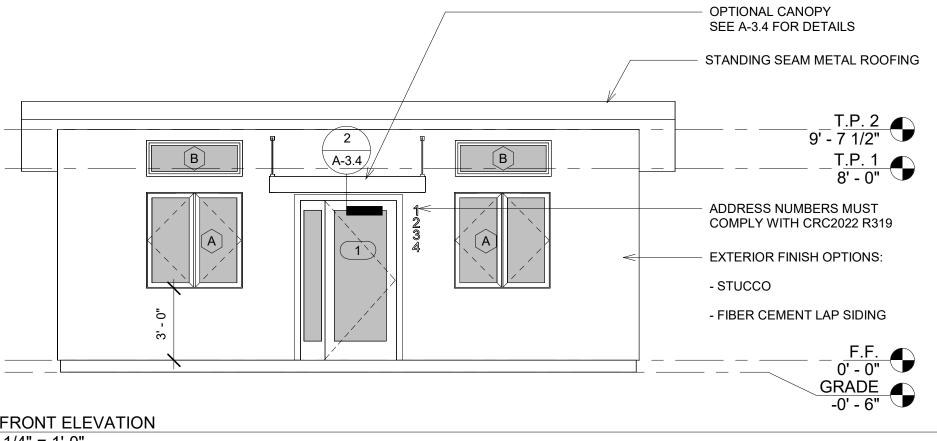
AND 20-AMP2RE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES

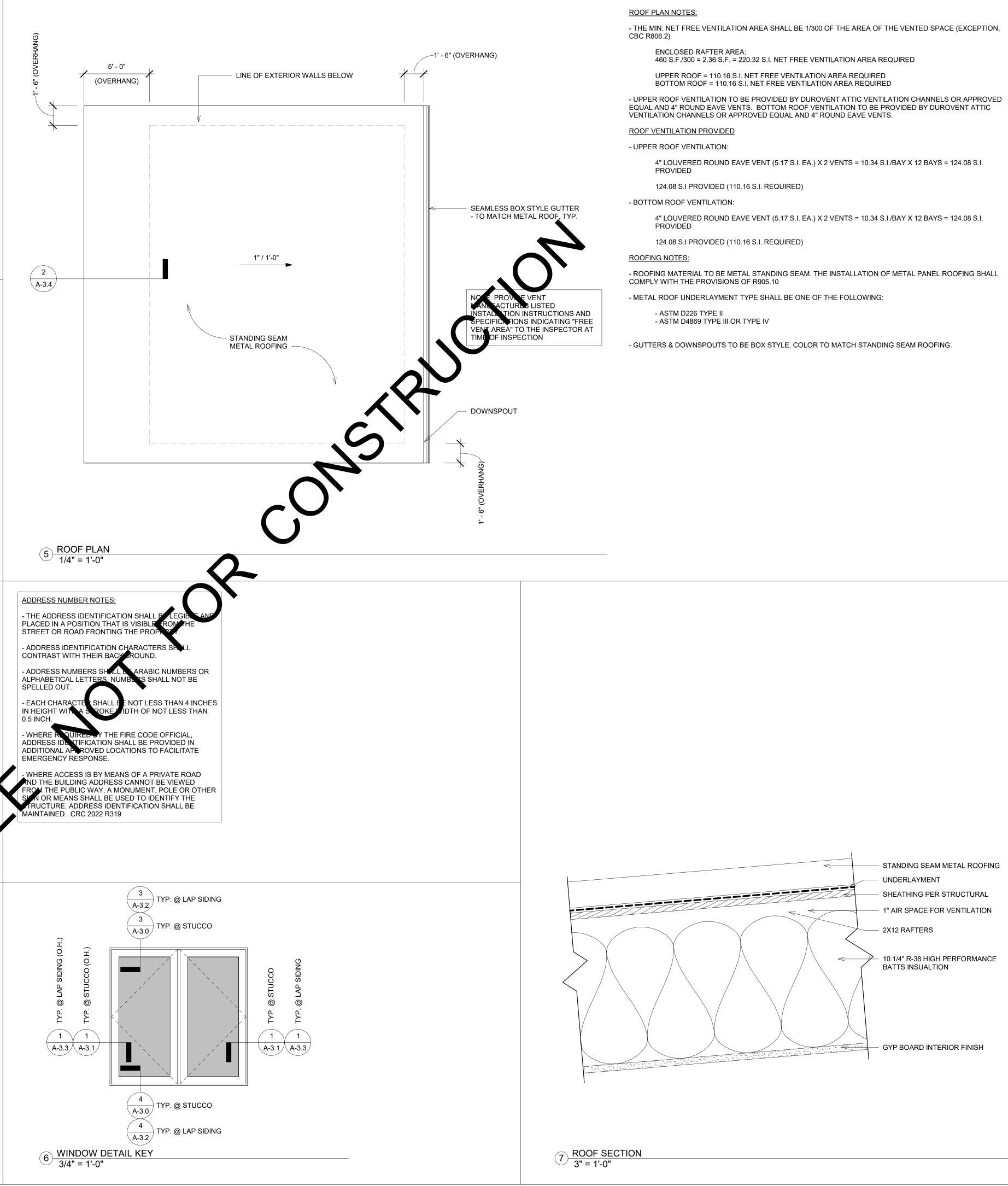
HEN, NODK PANTRIES, DINING ROOMS AND SIMILAR AREAS SHALL BE SPACED SUCH THAT ANY POINT ALONG THE WALL AT THE COUNTER LEVEL IS NOT MORE ACE MORE THAN 12"" WIDE SHALL BE PROVIDED WITH A RECEPTACLE. PENINSULA OR ISLAND COUNTERS ARE TO BE PROVIDED WITH AT LEAST ONE ED COOKING UNIT, OR SINK IS INSTALLED IN THE ISLAND WITH LESS THAN 12" OF COUNTER SPACE BEHIND THE FIXTURES, THE ISLAND OR PENINSULAR IS SE RECEPTACLES ARE TO BE LOCATED NO MORE THAN 12" BELOW THE COUNTERTOP WHERE THE COUNTERTOP DOES NOT EXTEND MORE THAN 6" BEYOND ITS BY RANGES, SINKS, OR OTHER APPLIANCES SHALL BE CONSIDERED SEPARATE COUNTERS.

1. ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH CODE SECTION R314 AND THE HOUSEHOULD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72.

LAURA MILLER DESIGN Actilitative + interes 889 Embarcadero Drive, Suite 102 El Dorado Hills, Co 95762 Isura@lauramiller-design.com Jauramiller-design.com 916.607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No. Date Description
Scale: 1/4" = 1'-0" Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-1.1







(M)LAURA MILLER DESIGN architecture + interiors 889 Embarcadero Drive, Suite 102 El Dorado Hills, Ca 95762 laura@lauramiller-design.com lauramiller-design.com 916.607.3321 SED ARCH LAURA A. MILLER No. C-35317 REN. 4/30/25 OFCALIF Zmiler S AN \_ Δ  $\frown$ H ND C OUNT úγ 0 NO SESS( N Z S Ш  $\overline{}$ SACRAM ADU (ACCI ADY RE, PERMIT

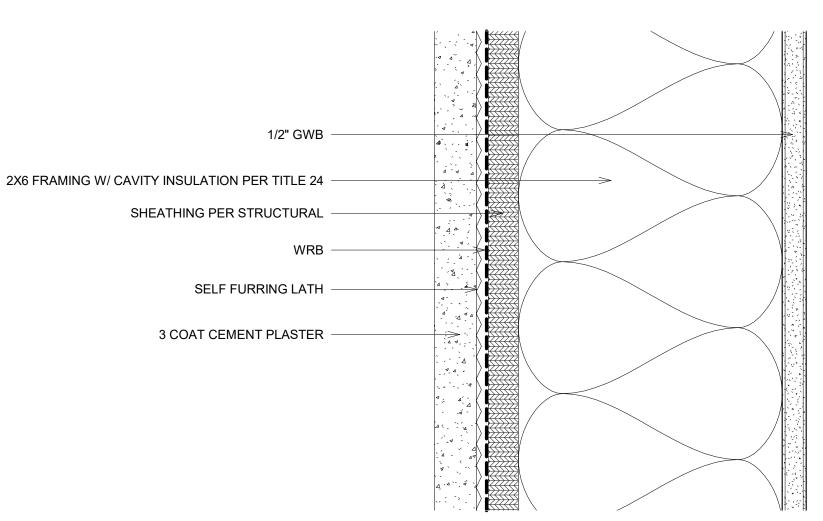
No. Date Description			
ROOF PLAN AND EXTERIOR	No.	Date	Description
ROOF PLAN AND EXTERIOR			
ROOF PLAN AND EXTERIOR			
ROOF PLAN AND EXTERIOR			
	RO( AN[	OF PLA D EXTE	RIOR

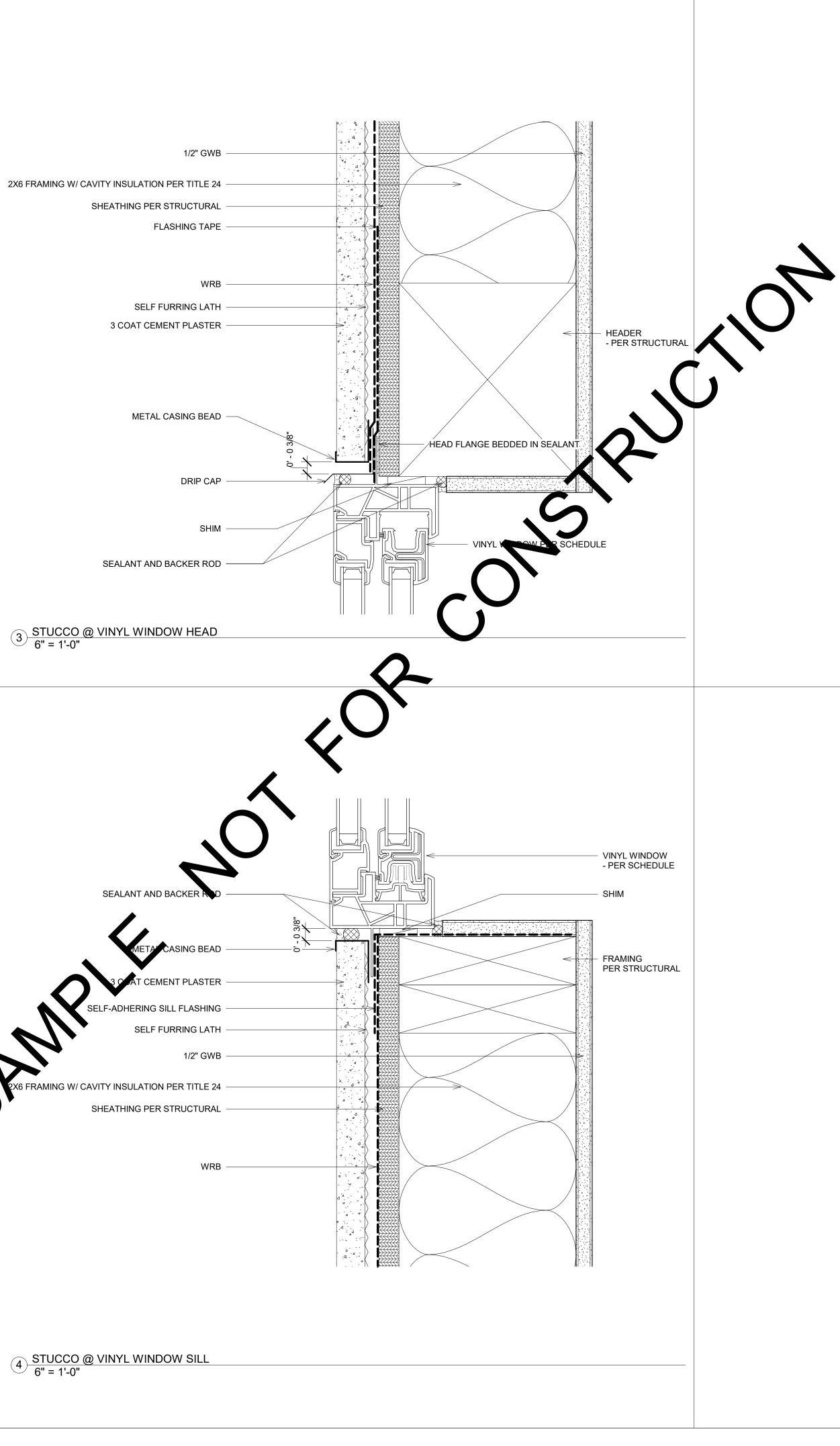
Scale As indicated Date MAR 2024 Drawn By: LM Approved By:

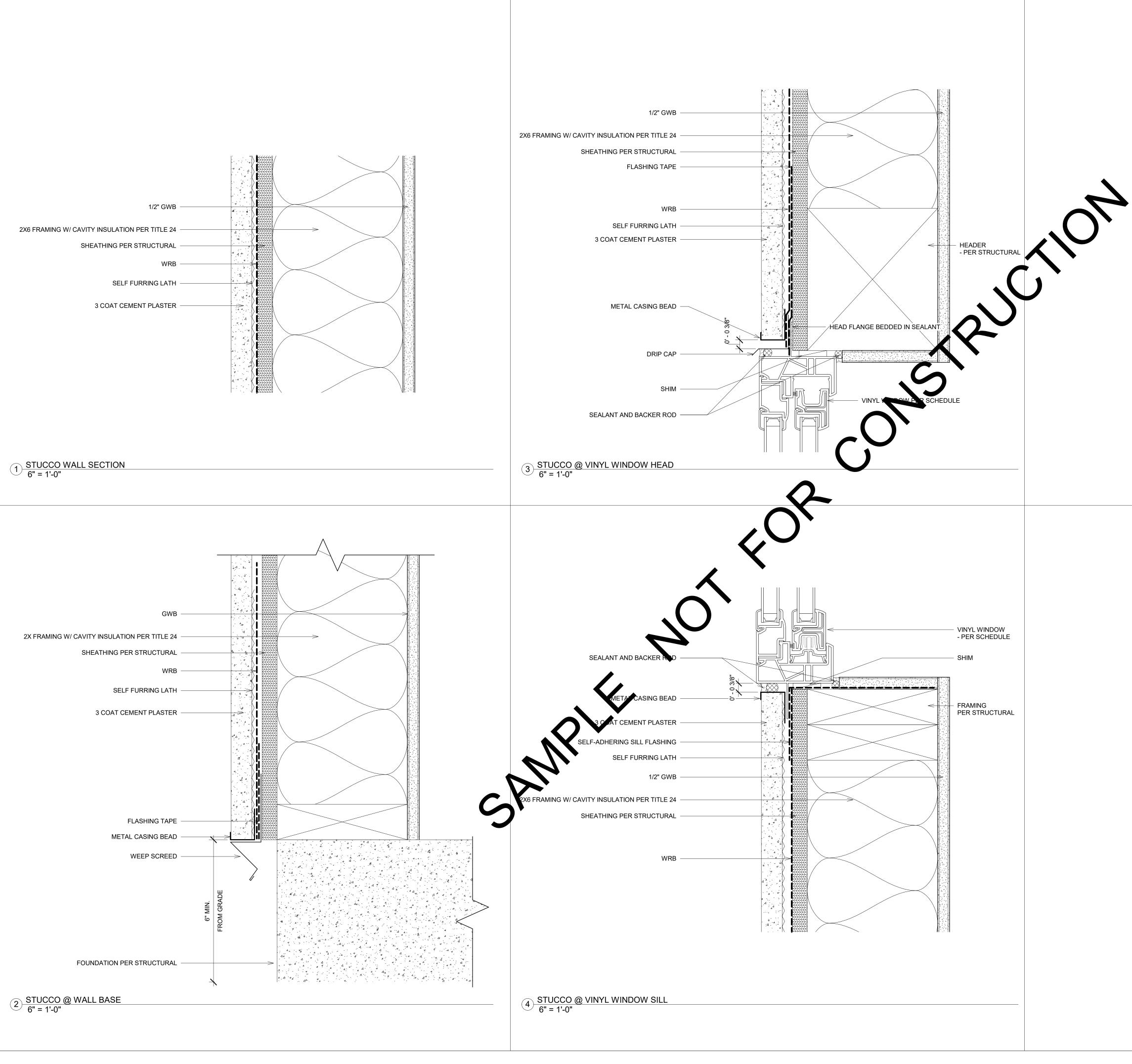
Sheet Number:

A-2.0

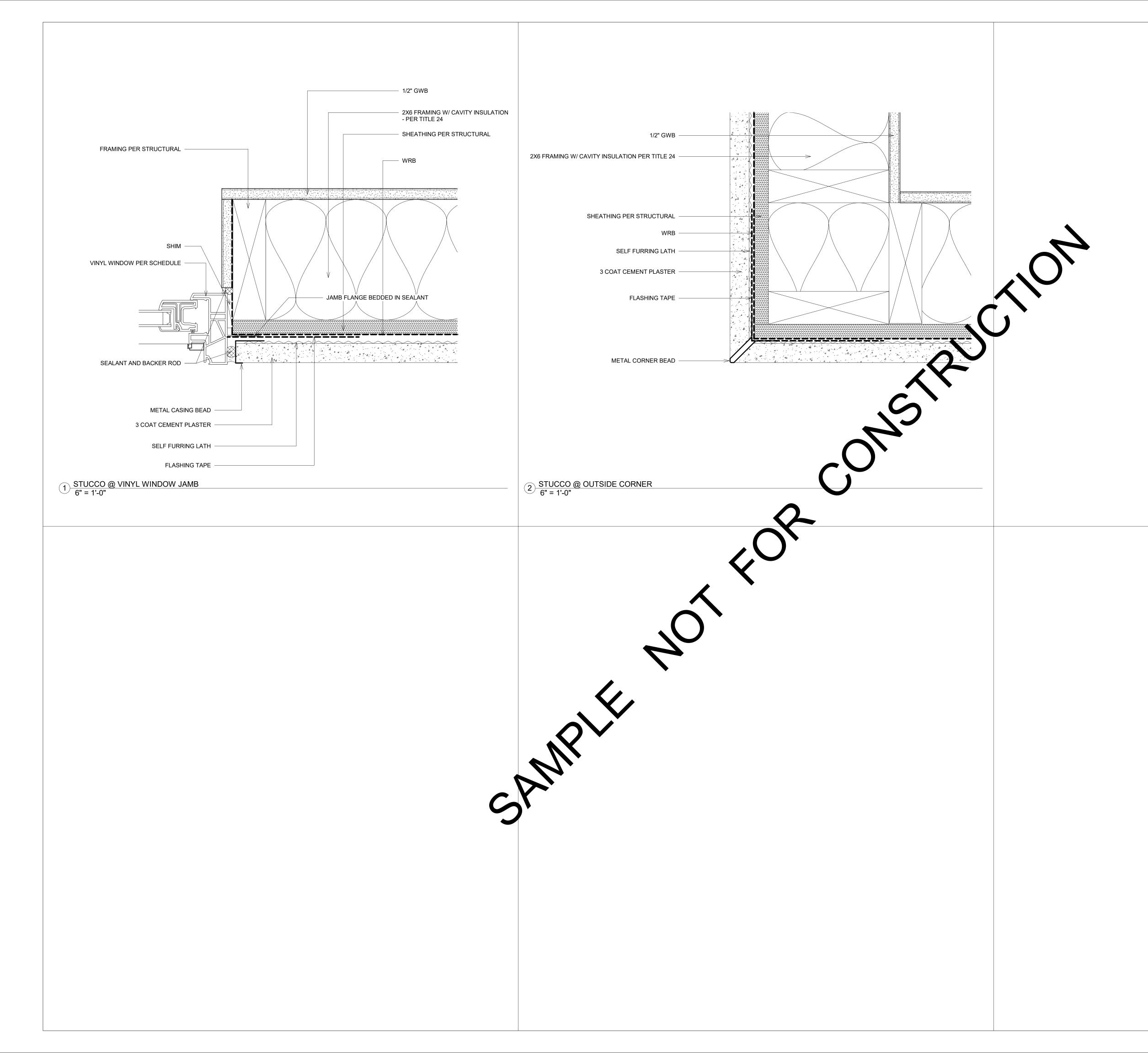




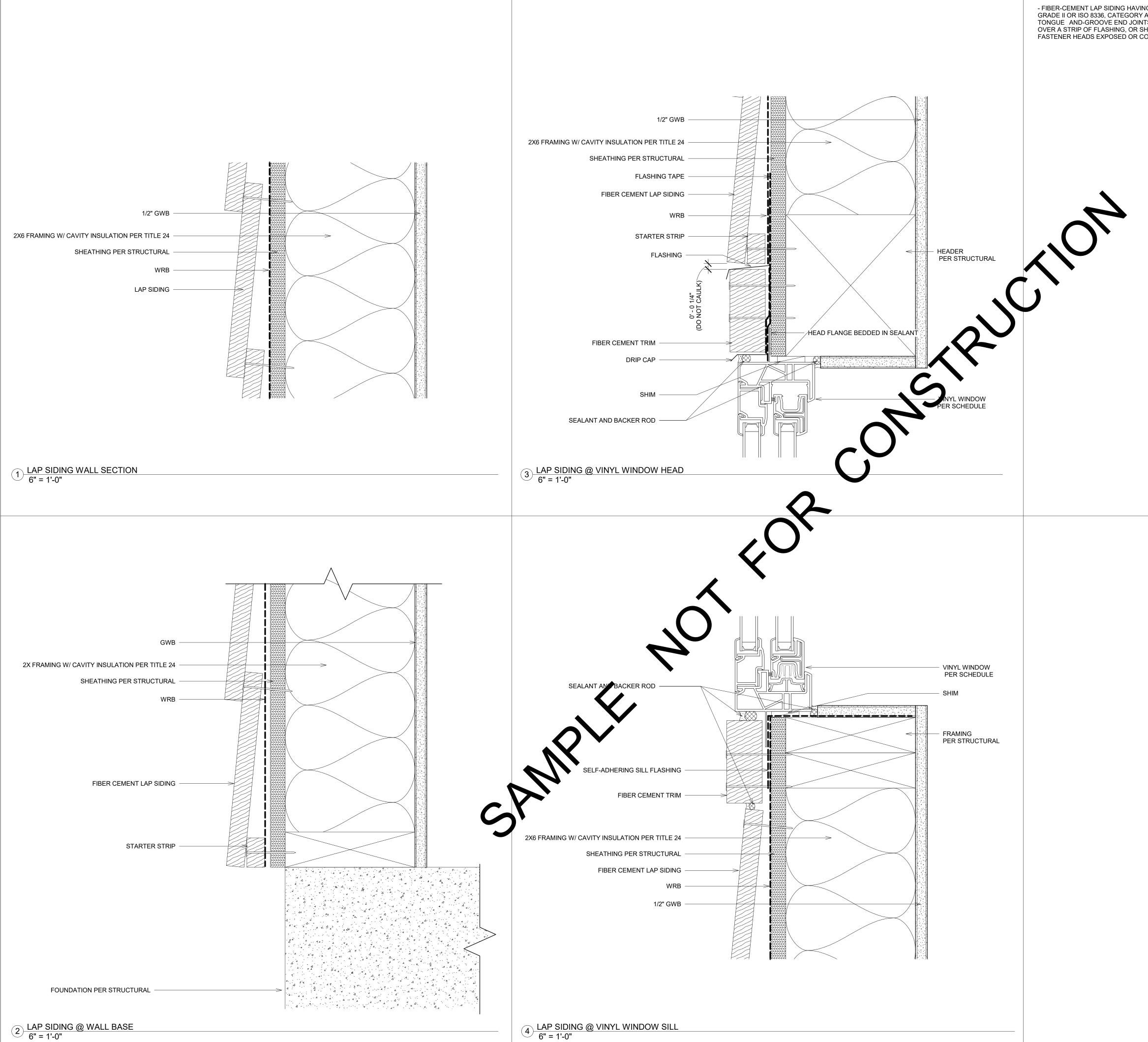




L M LAURA MILLER DESIGN #ACHITUTAR + INTERNA 889 Embarcadero Drive, Suite 102 EI Dorado Hills, Ca 95762 Iaura@Iauramiller-design.com Jauramiller-design.com Jauramiller-design.com JB.607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No.     Date     Description       Sheet Name:     STUCCO       SECTION     DETAILS
Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-3.0

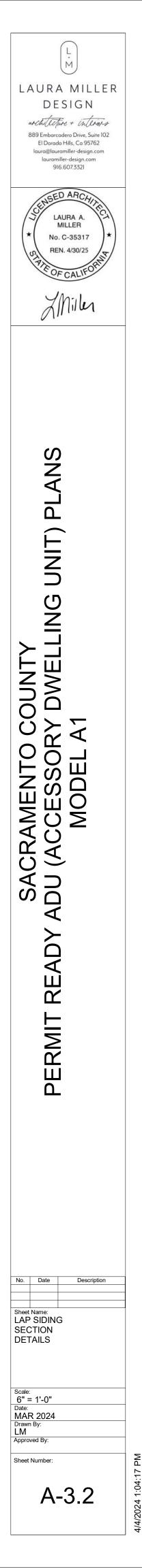


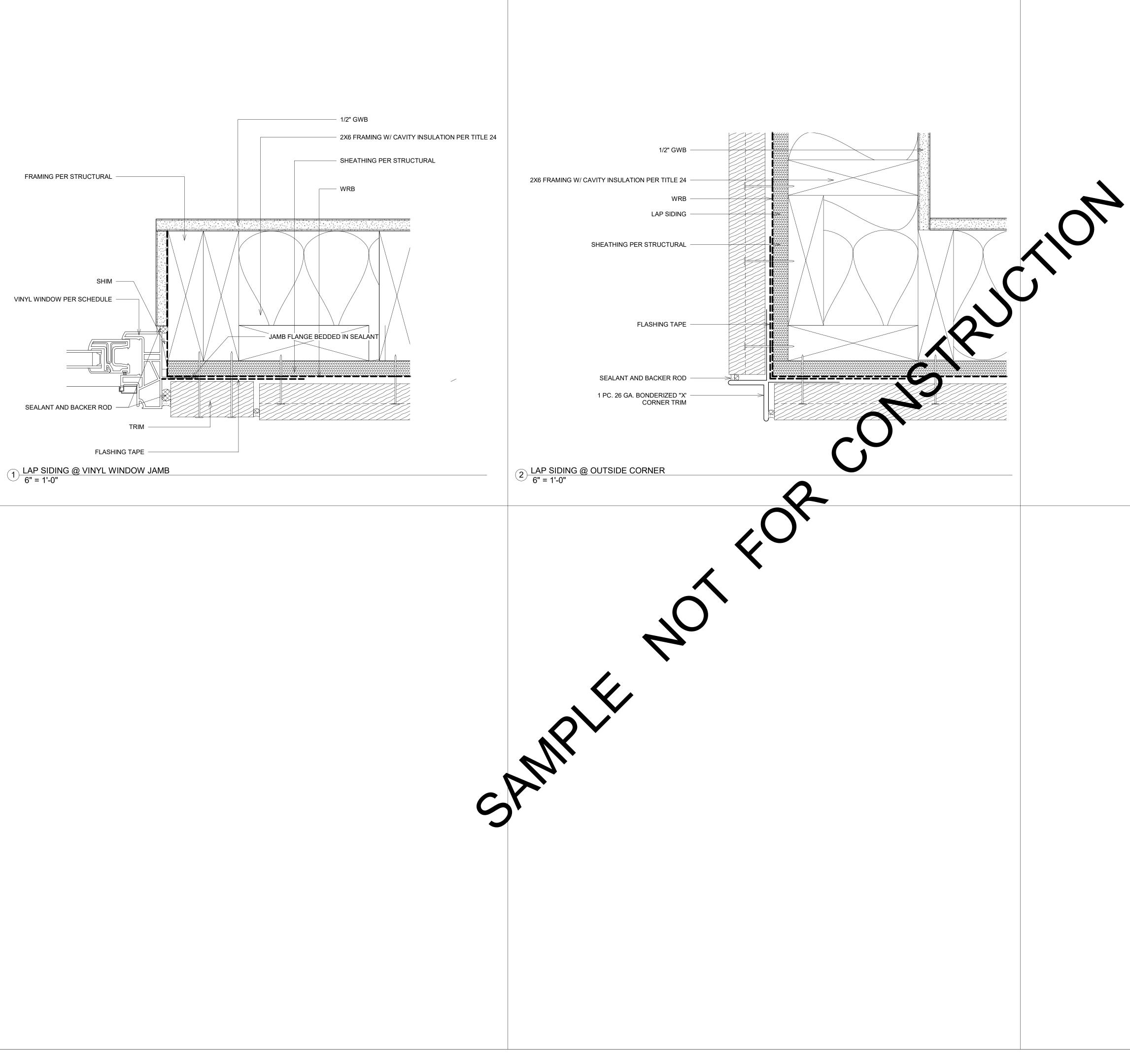
L H LAURA MILLER DESIGN MACHITCHER + INTERNA 889 Embarcadero Drive, Suite 102 El Dorado Hills, Ca 95762 Iaura@Iauramiller-design.com Jauramiller-design.com 916.607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No.     Date     Description       Sheet Name:     STUCCO PLAN       DETAILS
6" = 1'-0" Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-3.1



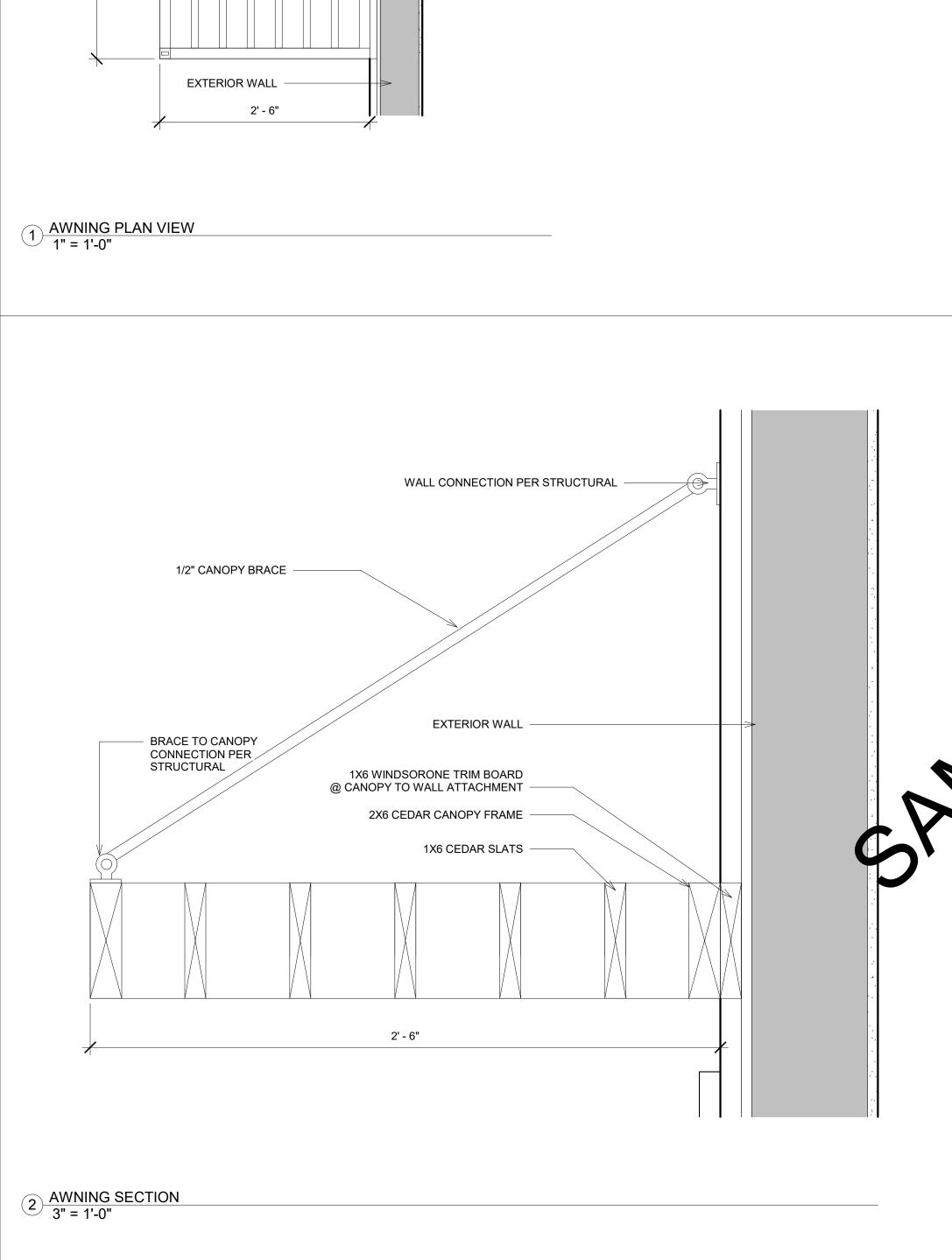
ING A MAXIMUM WIDTH	OF 12 INCHES SHALL COMPL	Y WITH THE REQUIREMENTS	OF ASTM C1186, TYPE A, MINIMUM
A, MINIMUM CLASS 2.	LAP SIDING SHALL BE LAPPE	D A MINIMUM OF 11/4 INCHES	(32 MM) AND LAP SIDING NOT HAVING
NTS SHALL HAVE THE E	ENDS PROTECTED WITH CAU	LKING, COVERED WITH AN H-S	SECTION JOINT COVER, LOCATED
SHALL BE DESIGNED TO	O COMPLY WITH SECTION R7	03.1. LAP SIDING COURSES SH	ALL BE INSTALLED WITH THE
CONCEALED, IN ACCOF	RDANCE WITH TABLE R703.3(*	1) OR APPROVED MANUFACTL	IRER'S INSTRUCTIONS.

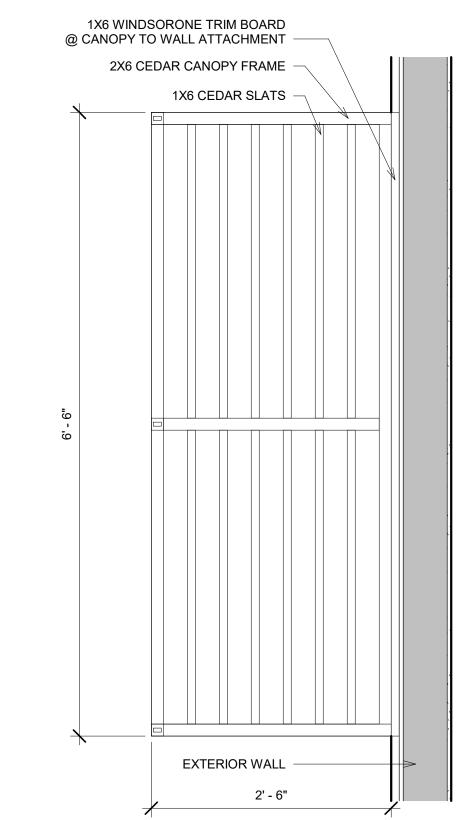
LAP SIDING NOTES:





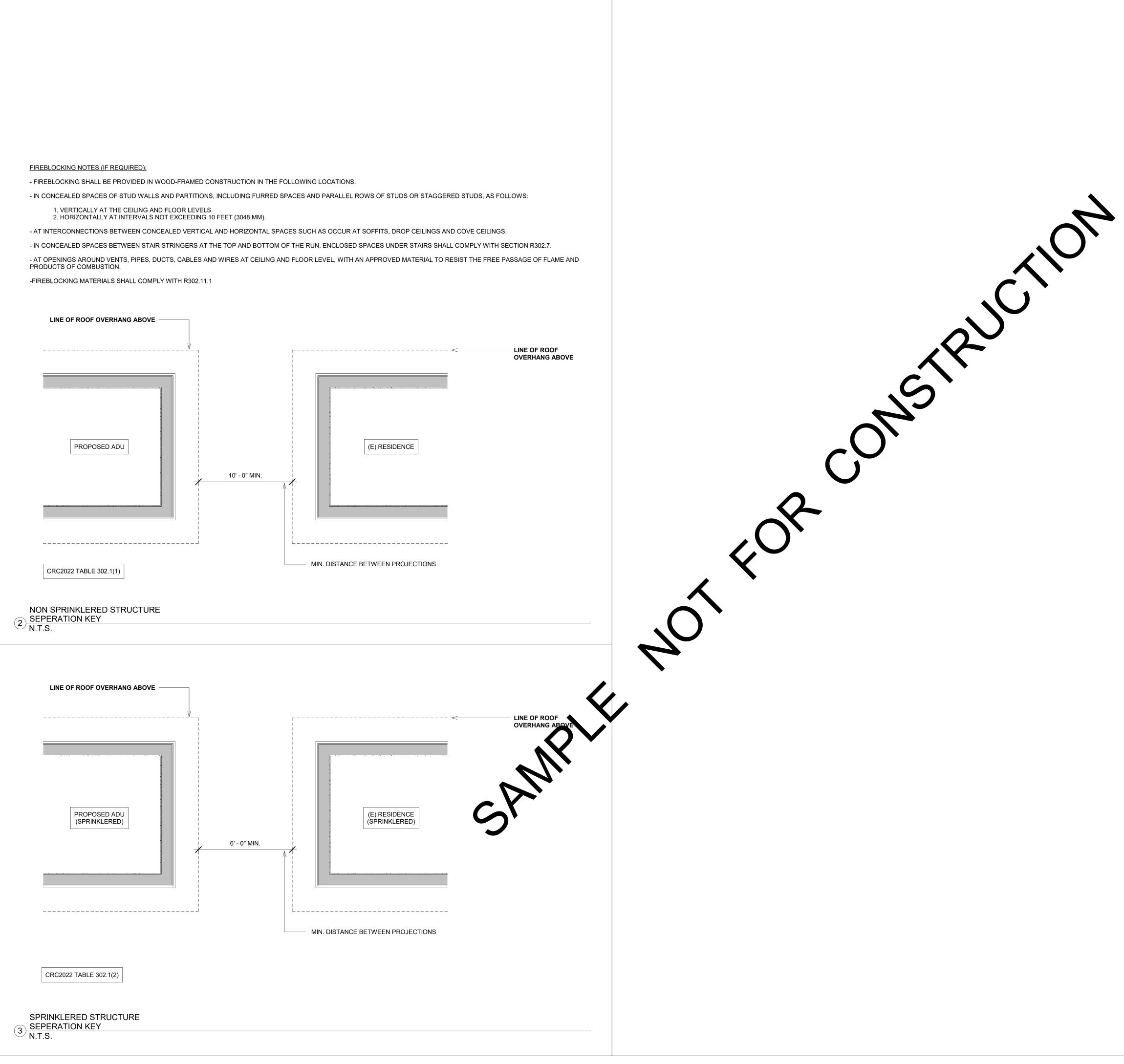
LAURA MILLER DESIGN MACHETURE + INTERNA 889 Embarcadero Drive, Suite 102 El Dorado Hills, Ca 95762 Iaura@lauramiller-design.com Joanniller-design.com 916.607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No.     Date     Description       Sheet Name:
Scale: 6" = 1'-0" Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-3.3





CONSTRUCTION 

LAURA MILLER DESIGN Architeture + interne 889 Embarcadero Drive, Suite 102 El Dorado Hills, Co 95762 Iaura@lauramiller-design.com Joira@liller-design.com 916.607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No. Date Description
Scale: As indicated Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-3.4



LAURA MILLER DESIGN Architeture + interna 889 Emborcadero Drive, Suite 102 El Dorado Hills, Ca 95762 Iaura@lauramiller-design.com Jole 607.3321
SACRAMENTO COUNTY PERMIT READY ADU (ACCESSORY DWELLING UNIT) PLANS MODEL A1
No. Date Description
Scale: N.T.S. Date: MAR 2024 Drawn By: LM Approved By: Sheet Number: A-3.5

	10	9	8			7
A B C		9		<ol> <li>WATER TO CEM</li> <li>MOIST CURE SL</li> <li>CONCRETE MIX OF CONCRETE MIX OF CONCRETE AGO SHALL CONFOR</li> <li>CEMENT SHALL</li> <li>CONCRETE AGO SHALL CONFOR</li> <li>REINFORCING D AND DENOTE C AGAINST GROU SLABS (ON GROU SLAB</li></ol>	ITINUOUS REINFORCE ERE LESS THAN 12" O I ADJACENT BARS SHA TERS. SPLICE CONTINU PAN; BOTTOM BARS A BE 1.5 MESHES WIDE DOWELS, BOLTS, ANC IN POSITION BEFORE N JOINTS SHALL BE MA D BY SAND BLASTING S. EBRIS FROM FORMS E THE MAXIMUM ALLO CONCRETE PLACED IN ING, RODDING OR TA IN ACCORDANCE WITH D PROJECT CONDITION EADERS ALLOWED. NO ING SHALL BE DONE A ED, BUT BEFORE INITH H STEEL COLUMNS, BI EINFORCING IN PRECA TE CONTRACTOR. 5X4'-0" DIAGONAL RE SAL'-0" DIAGONAL RE ALL FOUNDATIONS SHA ALL BE MADE ACCORD GRADE BEAMS, TIE BI PPROVED BY THE ENG IONS PROVIDED WRIT N WIDTH. USE 2X12 F	DT EXCEED 0.5 A OF 3 DAYS. EPARED BY A HALL BE PER T C-150 TYPE I IFORM TO AS FOR LOCATION NCRETE COVE 3". CONCRETE M TOP U.N.O REINFORCING CONTINUOU IE LABORATO CATED ACCOM ION". CI 318-3.5.1, M TO ASTM A ALLER, EXCEP EMENT FOR A F CONCRETE ALL BE NOT LE JOUS BARS IN A T CENTERLIN CONCRETE ALL BE NOT LE JOUS BARS IN A T CENTERLIN CONCRETE ALL BE NOT LE JOUS BARS IN A T CENTERLIN CONCRETE ALL BE NOT LE I FORMS BY N MPING. USE I FORMS BY N MANDING. USE I FORMS BY N MPING. USE I FORMS BY N MANDING. USE I FORMS BY N MODOD STA MODOD STA MINICAL BE LEVEL DING TO STEP EAMS & OTHE GINEER OF RE I FORMS BY N MODOD STA MINICAL BE LEVEL DING TO STEP I FORMS BY N MINICAL BE DIN MINICAL BE DIN M
E 				<ol> <li>TABLE VALUES</li> <li>ALL ANCHOR BO WASHERS. ONE MUDSILL ON TH WASHER IS PER LARGER THAN T PROVIDED A ST</li> <li>SOLE PLATE NA THE SOLID RIM</li> </ol>	NG MEMBERS OR BLO ARE BASED ON 16" O OLTS IN WALLS INCLU E EDGE OF THE STEEL HE SIDE(S) WITH APA RMITTED TO BE DIAGO THE BOLT DIAMETER ANDARD CUT WASHE ILING LESS THAN 6" O	C STUD SPAC DING SHEAR PLATE WASH RATED WOOL ONALLY SLOT AND A SLOT L R IS PLACED OC SHALL BE S
F				<ol> <li>3X and 4X MEW</li> <li>FOR SHEAR WA CLIPS AT THE 22</li> <li>SOLE PLATE TO</li> <li>WHEN A SHEAF OC MAX REGAF SAME AS SPECI</li> <li>DRYWALL SCRE</li> </ol>	DLIS MINIMUM PERS ABERS AT ADJOINING ALLS ON RAISED WOOL x SOLE PLATE, A MINI RIM, OR SOLE PLATE RWALL IS LOCATED IN RDLESS OF THE SHEAR FIED ON THE PLAM. WS ARE PERMITTED T ING SHALL BE @	PANEL EDGE D, FOC 16 11 MUM ON 11 TO 15 AM/L2 AFVE PROT R WALL SPECIE

6



5

4

#### **ABBREVIATIONS** AB ..... ANCHOR BOLT MI ..... MALLEABLE IRON BTWN ..... BETWEEN (N) ..... NEW **CENTER TO CENTER** PRESSURE TREATED DOUGLAS FIR PTDF ..... CC ..... CONSTRUCTION JOINT CJ ..... PARALLEL STRAND LUMBER PSL ..... CJT ..... CONTROL JOINT 2900Fb, 290Fv, 2.0E CLR ..... NTS ..... CLEAR NOT TO SCALE CONC ..... ОН ..... CONCRETE OPPOSITE HAND CONT ..... CONTINUOUS PC ..... PIECE СР ..... COMPLETE PENETRATION PP ..... PARTIAL PENETRATION DF ..... DOUGLAS FIR PW ..... PANEL WALL DEAD LOAD RDWD ..... REDWOOD DL ..... (E) ..... SHEAR CONNECTOR EXISTING SC ..... **EXPANSION JOINT** SDSTS ..... SELF DRILLING SLF TAPPING SCRW EJ ..... SP ..... EN ..... STRUCTURAL PLY FB ..... FACE OF BLOCK SPEN ...... STRUCTURAL PLY EN STFNR ..... STIFFENER FC ..... FACE OF CONCRETE FF ..... STGGRD ... STAGGERED FINISH FLOOR FLR ..... Т&В ..... TOP & BOTTOM FLOOR FACE OF STUD T&G ..... FS ..... TONGUE & GROOVE FTG ..... FOOTING TN ..... TOE NAIL TOF ..... GA ..... GAUGE TOP OF FRAMING TOS ..... GLB ..... GLUED-LAMINATED BEAM TOP OF STEEL UNO ...... UNLESS NOTED OTHERWISE HDR HEADER W/ ..... HSB HIGH STRENGTH BOLT (A-325) WITH WITHOUT HT HEIGHT W/O ..... JOIST HANGER (SIMPSON) WORK POINT WP LIVE LOAD WS ..... WOOD SCREW LL ...... LAG SCREW WWF ...... WELDED WIRE FABRIC LS ..... LAMINATED STRAND LUMBER LSL ..... CENTERLINE 2325 Fb, 310 Fv, 1.55E PLATE LT WT ...... LIGHT WEIGHT NUMBER OF POUNDS LAMINATED VENEER LUMBER LVL ..... SQUARE ROUND OR DIAMETER 2600Fb, 285Fv, 1.8E MFR ..... MANUFACTURER CONTINUOUS WOOD IN SECTION ≤..... WOOD BLOCKING IN SECTION END OF WOOD PIECE

# **GENERAL CONSTRUCTION NOTES**

- 1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL WORK AND CONSTRUCTION MEETS ALL CURRENT FEDERAL, STATE, COUNTY, AND LOCAL CODES, ORDINANCES, REGULATIONS, ETC. THESE CODES ARE TO BE CONSIDERED PART OF THE SPECIFICATIONS FOR THIS BUILDING AND SHOULD BE ADHERED TO EVEN IF THEY ARE IN VARIANCE OF THE PLAN.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DRAWING (DO NOT SCALE DRAWING.) THE ENGINEER HAS NOT BEEN ENGAGED FOR CONSTANT CONSTRUCTION SUPERVISION AND ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION COORDINATING WITH THESE PLANS, NOR RESPONSIBILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THERE ARE NO WARRANTIES FOR A SPECIFIC USE EXPRESSED OR IMPLIED IN THE USE OF THESE PLANS.
- REFER TO ARCHITECTURAL SHEETS FOR FLOOR PLANS, EXTERIOR ELEVATIONS, AND WINDOW AND DOOR SIZES AND TYPES.

# **DESIGN CRITERIA**

SEISMIC CRITERIA		_	GRAVITY LOADING	
SDC		D	ROOF LIVE	20psf
SITE CLASS		D	ROOF DEAD	12psf
RISK CATEGORY		II	WALL DEAD	17psf
SEISMIC IMPORTANCE FACTOR	R	1.00		
<b>RESPONSE MODIFICATION FAC</b>	CTOR	6.5		
SEISMIC FORCE RESISTING SYS	TEM:			
LIGHT FRAME WOOD SHEAR V			WIND CRITERIA	
			ULTIMATE WIND, Vult	93mph
Ss	1.322g		BASIC WIND, Vasd	76mph
S <sub>1</sub>	0.458g		WIND EXPOSURE	D
5 <u>1</u> c	1.058g		INTERNAL PRESSURE COEFF	+1-0.18
S <sub>DS</sub> S <sub>D1</sub>	•			
S <sub>D1</sub>	0.763g		lw	1.0
Cs	0.163g			
Ωο	3.0		SOIL BEARING	1500psf
C <sub>D</sub>	3.5			
ANALYSIS PROCESS	EQUIVALEN	IT LATERAL FORCE	CODES	
			ASCE 7-16, CBC 2022, ACI318-	-19, 2018 NDS

## STRUCTURAL INDEX

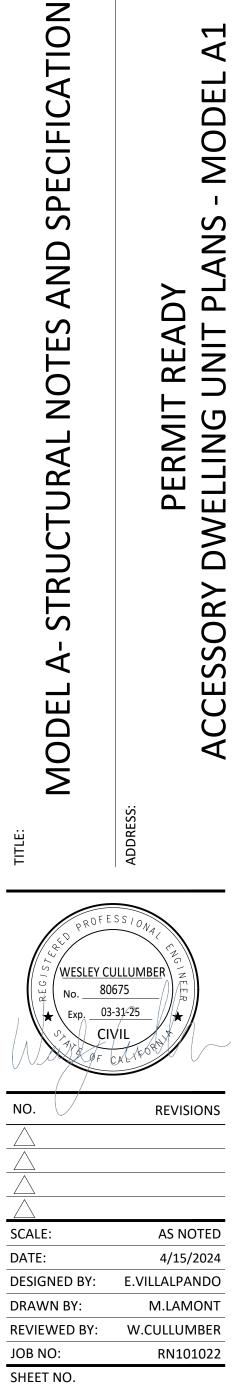
MODEL A- STRUCTURAL NOTES AND SPECIFICATIONS	
MODEL A- FOUNDATION, SHEARWALL, AND ROOF FRAMING PLANS	
MODEL A- STRUCTURAL DETAILS	
MODEL A- STRUCTURAL DETAILS	
	MODEL A- FOUNDATION, SHEARWALL, AND ROOF FRAMING PLANS MODEL A- STRUCTURAL DETAILS

2



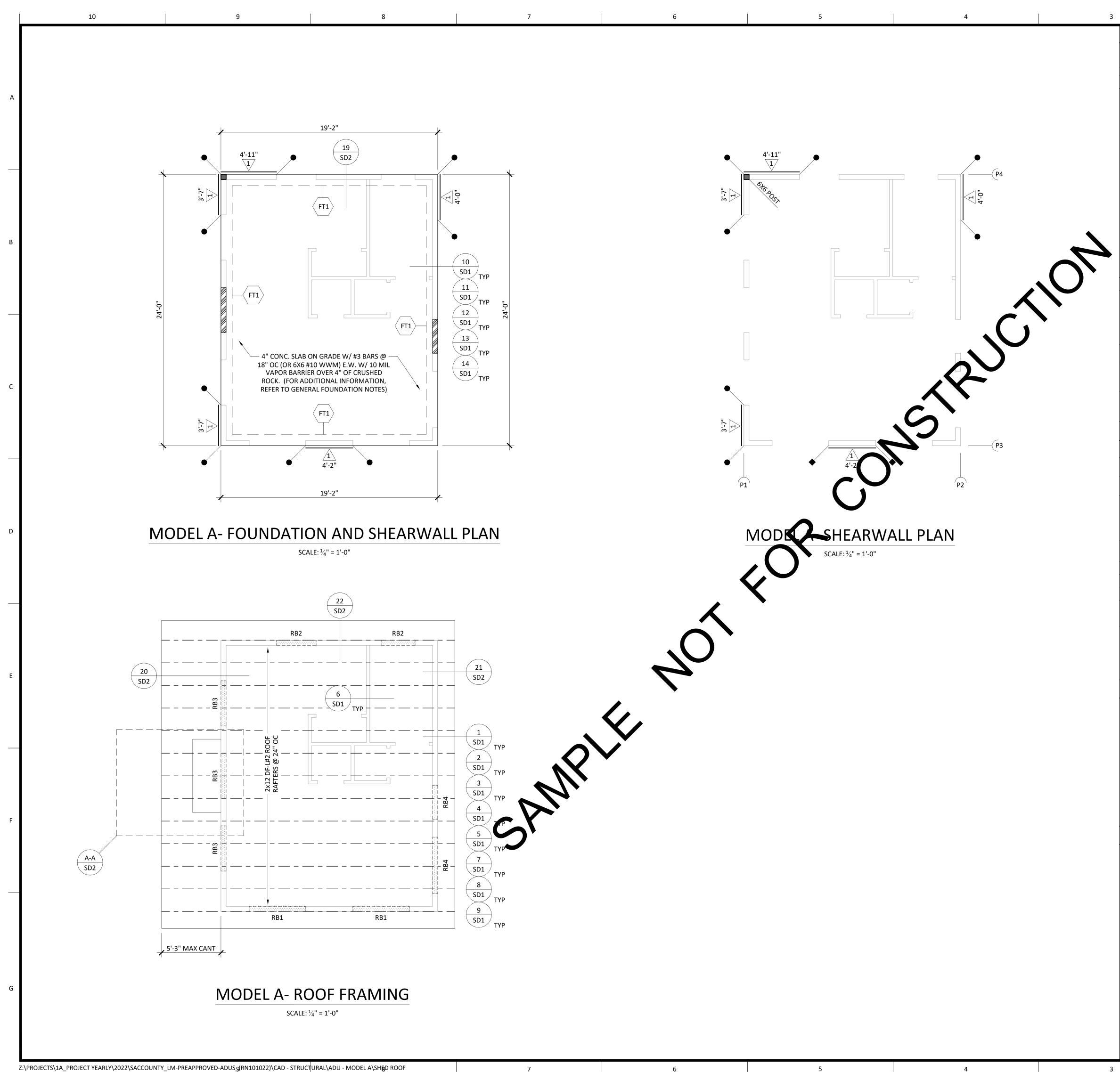
THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO WCD & ASSOCIATES. AND IS FURNISHED FOR THE PURPOSES OF REVIEW, BIDDING OR CONSTRUCTION OF THE PROJECT LISTED IN THE JOB TITLE BOX BELOW. AND SHALL NOT BE USED FOR ANY OTHER PURPOSE OR RELEASED TO ANY OTHER PARTY WITHOUT THE WRITTEN CONSENT OF WCD INFORMATION CONTAINED HEREIN IS AN INSTRUMENT OF PROFESSIONAL SERVICES AND SHALL REMAIN THE PROPERTY OF WCD. ALL RIGHTS RESERVED COPYRIGHT 2022.

S



1

SN1



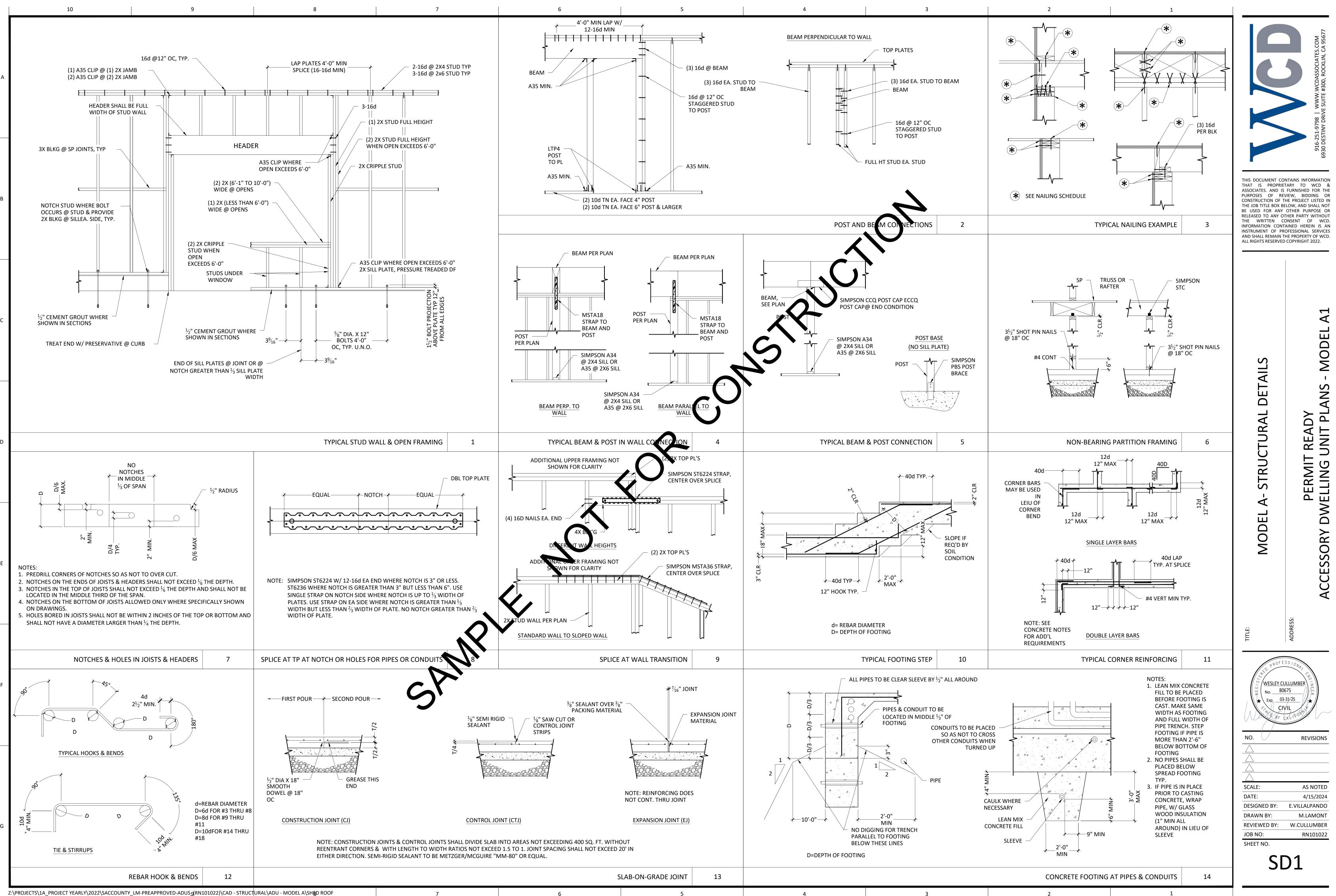
FOC			HEDULE	_						
TYPE		MENSI WIDT		PARALLE		ERPENDICULAR	MAX. CAPACITY	NOTES		S.COM CA 95677
FT1	$\Box$ FT1   CONT   12"   12"   2   $\#$ /   CONT   -   -   1 500 PLE   (1) TOP (1) BOT   I I I I I I I I I I I I I I I I I I									
1. 2. 3. 4. 5. 6. 7. 8.	THE CO STRUCT POSTS S WITH A TYPICAL BOTTOM PROVID EXTERIC STEEL W PROVID 6" PAST ALL FOC OF THE SLAB RE THIRD C PENETR CURREM RETARD SHALL B THAN 5 CONTRA SET. AN FORMIN	NTRACT URAL P HOWN HOLDC ONE S M (TOT. E 5/8"X1 DR NON VASHER E 2X PT DOOR DTINGS, CALIFO CAL	TOR IS RESPONSI LYWOOD SHEAT ON THE FOUND OWN OR POST BA TORY FOUNDAT 2). 0" ANCHOR BOL -SHEAR WALLS V S. DF SLEEPER EME CASING. (2) 20d FOUNDATIONS, RNIA BUILDING CEMENT SHALL E WHERE VAPOR AND SHALL COI ION OF ASTM E ED IN CONTACT ERLAIN WITH 4" ING THE NO. 4 S S RESPONSIBLE REPANCIES SHAL /OR POURING C	IBLE FOR ATION P ASE CONI ION, U.N TS @ 4'-( N/ 7" MI BEDDED I @ EA EN , EXCAVA CODE. BE PROVI BARRIEI NFORM 1 1745, "S' WITH SC DEEP <sup>3</sup> /4" IEVE. FOR VER L BE BRC ONCRETI D	REFERRING ECIFICATION LAN ARE THO NECTOR. .O 12" WIE O" OC AND 12 N. EMBEDMI N SLAB AT D ID & 24" OC TIONS, GRAI DED EACH W S IS REQUIRE O CLASS A V FANDARD SP IL OR GRANU CRUSHED RO FYING ALL M DUGHT TO THE	TO THE PLANS TO V S AND NAILING SCH DSE DIRECTLY CONN DE X 12" DEEP FOOT 2" FROM ALL EDGES ENT. FASTEN TO BO OORS LEADING TO DING, AND FILL SHA (AY, AS INDICATED ( D, VAPOR RETARDER IN ECIFICATIONS FOR JLAR FILL UNDER CO OCK WITH 100% PA HEASUREMENTS AG HE ATTENTION OF T	IEDULE. IECTED TO THE FO ING WITH (1) #4 R AT THE BEARING TTOM PLATE USIN EXTERIOR AND GA LL COMPLY TO TH ON THE PLANS, IN BARRIER SHALL BE ACCORDANCE WI PLASTIC WATER V/ ONCRETE SLABS". Y SSING THE <sup>3</sup> / <sub>4</sub> " SIEV AINST THE ARCHIT HE EOR AND DESIG	UNDATION EBAR TOP AND WALLS AND IG 3"X3"X <sup>1</sup> /4" RAGE. EXTEND E PROVISIONS THE MIDDLE SEALED AT ALL TH THE MOST APOR VAPOR BARRIER /E AND LESS	THAT IS PROPRIE ASSOCIATES. AND IS PURPOSES OF RE CONSTRUCTION OF T THE JOB TITLE BOX BI BE USED FOR ANY RELEASED TO ANY O THE WRITTEN C INFORMATION CONT INSTRUMENT OF PR	NTAINS INFORMATION TARY TO WCD & FURNISHED FOR THE VIEW, BIDDING OR HE PROJECT LISTED IN ELOW, AND SHALL NOT OTHER PURPOSE OR THER PARTY WITHOUT ONSENT OF WCD. AINED HEREIN IS AN OFESSIONAL SERVICES HE PROPERTY OF WCD.
	<u> </u>		DOOR SLEEPER P		IDATION NO	TF #5.				
									-	
			SCHEDU	MUD	ANCHOR BOLTS	VERT. MEMBER @ ADJ. PANEL EDGES	SOLE PLATE TO RIM	RIM TO SILL PLATE (A35 CLIPS)	-	A1
260 P	\ w	/8d COI	TED ONE FACE MMONS @ 6" & 12" OC FIELD	2x	<sup>5</sup> ⁄8" @ 48" OC	2x	SDWS22500DB @ 12" OC	@ 24" CC	_ب ا	DEL
1. HO			EARWALL NOTE:		EET SN1 FOF	R ADDITIONAL INFO	RMATION.		SHEARWALI PLANS	MODEI
	•		STHD10/10RJ HC	DLDOWN					EARV LANS	I V
	435 LBS		NSTALL PER DET STHD14/14RJ HC	DLDOWN						Z
2,6	585 LBS	I	NSTALL PER DET	AIL 17/S	D2 & 18/SD2				SH	
ROC NAME RB1 RB2 RB3 RB4 <u>BE</u>	DF BE	AM Y 	SCHEDUI SI 62 62 62 62			DOW OR DOOR OP TYPE DF-L#2 DF-L#2 DF-L#2 DF-L#2		OCATION HEADER HEADER HEADER HEADER	MODEL A- FOUNDATION AND ROOF FRAMIN	PERMIT READY ACCESSORY DWELLING UNIT PLANS
•	LSL 2300	)Fb, 28	5Fv, 1.55E 5Fv, 1.9E							SSC
ROC	DF FR	AM	ING NOTI	ES					Σ	E S
2. 3. 4. 5. 6. 7. 8. 9.	SEE "WC ALL BEA ROOF SH 6" EDGE NO EDG TOP PLA (16) 16d FOR BUI EXTERIC MATCH BEAMS I ACCOM	DOD NC M SUPI HEATHII & & 6" F E BLOC TE SPLI NAILS. LT-UP ( DR STUE THE AR MAY BE MODAT OD EXP	NG SHALL BE <sup>15</sup> / <sub>3</sub> ; IELD AT EAVE EN KING REQUIRED, ICE AT INTERIOR OLUMNS, PROV OWALLS SHALL B CHITECTURAL PI E SUBSTITUTED F FE WALL FRAMIN OSED TO WATEI	SN1. ARE TO E 2" STRUC ID & OVE , U.N.O. AND EX /IDE (2) 1 BE 2X6 DE LAN SET. OR LARG NG. POST	BE AT LEAST T GRADE I W RHANGS. <sup>32/</sup> FERIOR WALI Od NAILS @ F-L#2 @16" C ER WIDTHS / S SHALL BE E	DETAILS. THE WIDTH OF THE 'ITH 8d @ 6" OC EN 16 SPAN RATING. LS SHALL BE 48" MII 8" OC TO PROVIDE 3 OC U.N.O WALL SIZ AND/OR DEPTH OF QUAL OR LARGE SIZ LOWING RAIN, SNO	& 6" OC FIELD NA N. LENGTH AND NA SOLID CONNECTIO ES SHALL BE VERIF EQUAL SPECIFICAT ZE THAN BEAM WI	ILING, U.N.O. AILED WITH IN. FIED TO FIONS TO DTH.	HILL HILL HILL HILL HILL HILL HILL HILL	ADDRESS: ADDRESS:
ROC	DF LE								- (No. 80	675 -31-25
			BEAM PER I	BEAM SC	HEDUJI F					
			INTERIOR N						V VJV VOF	
*NC	OTE: ALL	EXTERI	OR WALLS SHALI	- BE BEAI	RING WALLS				NO.         ✓           △         △           △         △	REVISIONS
									SCALE: DATE: DESIGNED BY: DRAWN BY: REVIEWED BY: JOB NO:	AS NOTED 4/15/2024 E.VILLALPANDO M.LAMONT W.CULLUMBER RN101022

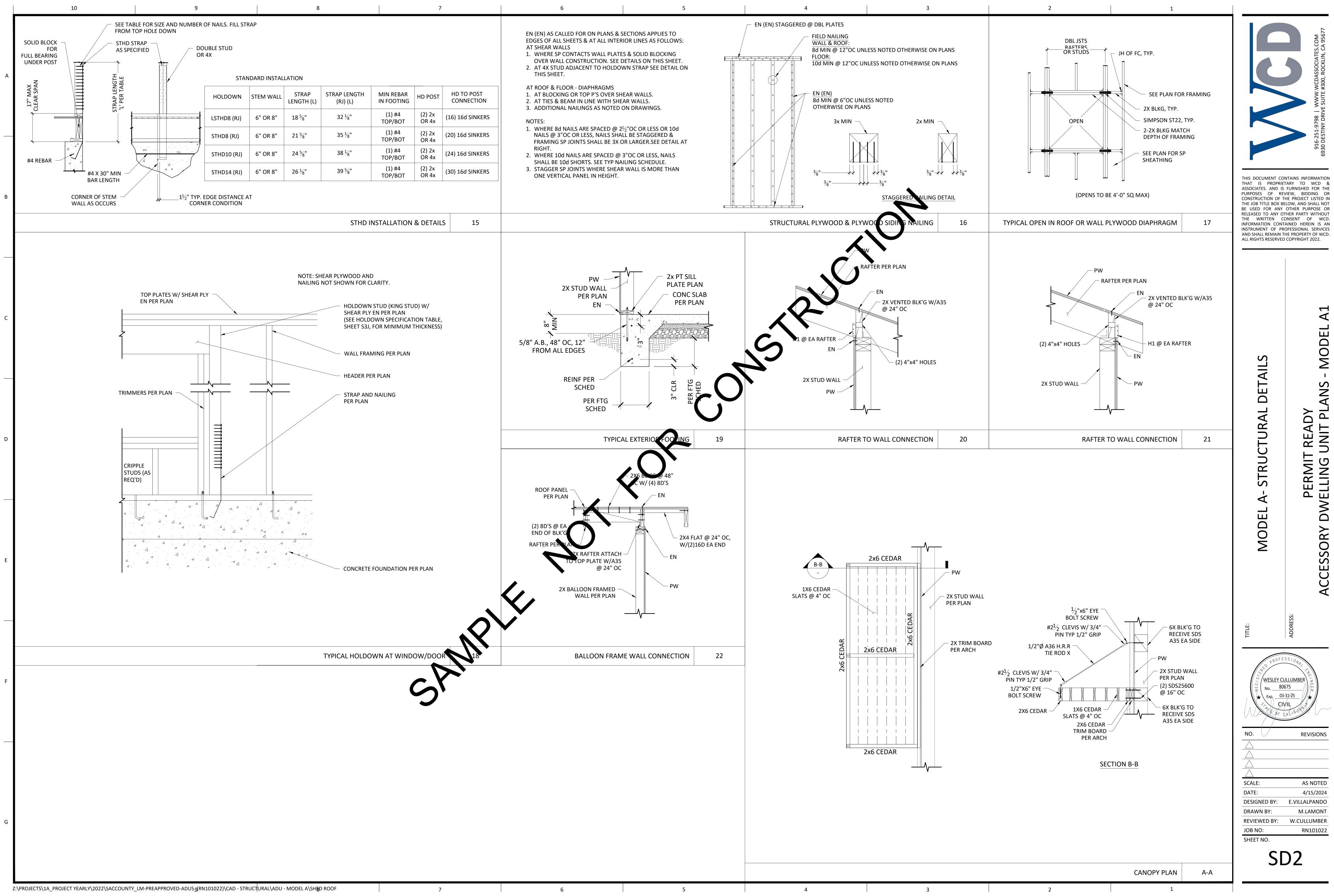
SHEET NO.

1

2

S1.0





#### CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Location

Climate Zone 12

Run Title Title 24 Analysis

City Sacramento

Zip code 95820

Building Type Single family

Project Scope Newly Constructed

Fuel Type All electric

This building incorporates one or more Special Features shown below

Project Name Model A ADU with Shed Roof Sacramento Project

05

07

09

11

13

17

19

21

This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.

23

Project Name: Model A ADU with Shed Roof Sacramento Project Calculation Description: Title 24 Analysis

Addition Cond. Floor Area (ft<sup>2</sup>) 0

Existing Cond. Floor Area (ft<sup>2</sup>) <sup>n/a</sup>

Total Cond. Floor Area (ft<sup>2</sup>) 460

ADU Bedroom Count n/a

Building Complies with Computer Performance

GENERAL INFORMATION

01

02

03

04

06

08

10

12

14

16

18

20

22

COMPLIANCE RESULTS

01

02

03

Calculation Date/Time: 2023-12-21T11:03:17-08:00 Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

Standards Version 2022

Front Orientation (deg/ Cardinal) All orientations

Number of Dwelling Units

Number of Bedrooms

Fenestration Average U-factor 0.29

ADU Conditioned Floor Area n/a

No Dwelling Unit: No

Number of Stories

Glazing Percentage (%) 29.92%

Software Version EnergyPro 9.2

CF1R-PRF-01E

(Page 1 of 11)

100 000	ENERG
10	
0	

<sup>1</sup>Efficiency EDR includes improvements like a better building envelope and more efficient equipment <sup>2</sup>Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries <sup>3</sup>Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded Standard Design PV Capacity: 0.00 kWdc

Registration Number: 223-P010054648B-000-000-0000000-0000 CA Building Energy Efficiency Standards - 2022 Residential Compliance Registration Date/Time: 2023-12-21 11:51:06 Report Version: 2022.0.000

Schema Version: rev 20220901

HERS Provider: CalCERTS inc.

Report Generated: 2023-12-21 11:04:10

North Facing

East Facing

South Facing

West Facing

Gross EUI<sup>1</sup>

CERTIFICATE OF COMP	LIANCE - RESIDENTIAL PERFO	RMANCE COMPLIANCE METHO	D	CF1R-PRF-01					
Project Name: Model A	A ADU with Shed Roof Sacrame	ento Project	Calculation Date/Time	Calculation Date/Time: 2023-12-21T11:03:17-08:00 (Page 4 of					
<b>Calculation Description</b>	n: Title 24 Analysis		Input File Name: Mode	I A ADU with Shed Roof Sacrame	ento Project.ribd22x				
ENERGY USE SUMMARY									
			1						

Energy Use Standard Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)		Standard Design TDV Energy (EDR2) (kTDV/ft <sup>2</sup> -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft <sup>2</sup> -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)	
Space Heating	4.46	30.37	4.78	36.51	-0.32	-6.14	
Space Cooling	1.47	38.95	1.29	39.53	0.18	-0.58	
IAQ Ventilation	0.48	5.12	0.48	5.12	0	0	
Water Heating	4.87	51.17	2.61	30.21	2.26	20.96	
Self Utilization/Flexibility Credit	Å			0		0	
South Facing Efficiency Compliance Total	11.28	125.61	9.16	111.37	2.12	14.24	
Space Heating	4.46	30.37	4.9	37.96	-0.44	-7.59	
Space Cooling	1.47	38.95	P R 1.61 V 1	49.08	-0.14	-10.13	
IAQ Ventilation	0.48	5.12	0.48	5.12	0	0	
Water Heating	4.87	51.17	2.61	30.2	2.26	20.97	
Self Utilization/Flexibility Credit				0		0	
West Facing Efficiency Compliance Total	11.28	125.61	9.6	122.36	1.68	3.25	



Registration Number: 223-P010054648B-000-000-0000000-0000

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Date/Time: 2023-12-21 11:51:06 Report Version: 2022.0.000

Schema Version: rev 20220901

HERS Provider: CalCERTS inc.

Report Generated: 2023-12-21 11:04:10

#### CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

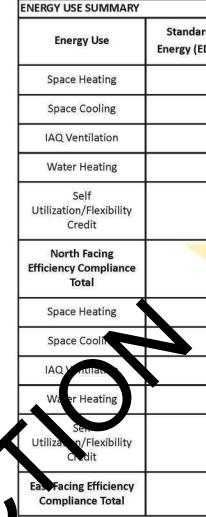
Project Name: Model A ADU with Shed Roof Sacramento Project Calculation Description: Title 24 Analysis

Calculation Date/Time: 2023-12-21T11:03:17-08:00 Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

CF1R-PRF-01E

		Energy Design Ratings		Compliance Margins				
	Source Energy (EDR1)	Efficiency <sup>1</sup> EDR (EDR2efficiency)	Total <sup>2</sup> EDR (EDR2total)	Source Energy (EDR1)	Efficiency <sup>1</sup> EDR (EDR2efficiency)	Total <sup>2</sup> EDR (EDR2total)		
Standard Design	36.7	32.1	44.9		•			
	·	Proposed	Design	•				
North Facing	33.9	29.2	42.9	2.8	2.9	2		
East Facing	34.2	30	43.5	2.5	2.1	1.4		
South Facing	33.6	28.5	42.4	3.1	3.6	2.5		
West Facing	34.3	31.3	44.3	2.4	0.8	0.6		

Proposed PV Capacity Scaling: North (0.00 kWdc) East (0.00 kWdc) South (0.00 kWdc) West (0.00 kWdc)



Registration Number: 223-P010054648B-000-000-0000000-0000

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Date/Time: 2023-12-21 11:51:06

Report Version: 2022.0.000 Schema Version: rev 20220901

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHO	DD
Project Name: Model A ADU with Shed Roof Sacramento Project	Calculation Date,

A ADU with Shed Roof Sacramento Project.ribd22x Calculation Description: Title 24 Analysis ENERGY USE INTENSITY Standard Design (kBtu/ft<sup>2</sup> - yr ) Proposed Design Btu/ft<sup>2</sup> - yr Compliance Margin (kBtu/ft<sup>2</sup> - yr ) Margin Percentage 31.89 2.76 8.65 Gross EUI<sup>1</sup> Net EUI<sup>2</sup> 31.89 2.76 8.65 31.89 29.49 2.4 7.53 Gross EUI<sup>1</sup> 29.49 7.53 Net EUI<sup>2</sup> 2.4 28.91 9.34 Gross EUI<sup>1</sup> 2.98 2.98 28.91 9.34 Net EUI<sup>2</sup> HERS PROVIDER

29.69

29.69

CF1R-PRF-01E (Page 5 of 11)

**HERS** Provide

me: 2023-12-21T11:03:17-08:00

2.2

2.2

Project Name: Model A ADU with Shed Roof Sacramento Project Calculation Description: Title 24 Analysis

	01	02					
DC	DC System Size (kWdc) Excepti						
	0						
REQ	UIRED SPECIAL	FEATURES					
The	following are f	eatures that r	nust				
•	PV exception	n 2: No PV rec	quired				
•	Northwest E	nergy Efficien	icy Al				
HER	S FEATURE SUM	MMARY	-				
	following is a s ail is provided in	20					
•	Indoor air qu	uality ventilat	ion				
	Kitchen rang	ge hood					
•							
•	Verified Refr	Contract of the second s	28 mm				
•	Verified Refr	igerant Charg t pump rated	28 mm				
• • BUI	Verified Refr	t pump rated	heat				
• • BUI	Verified Refr Verified hea	t pump rated	heat				
• • BUI	Verified Refr Verified hea LDING - FEATU	t pump rated	heat				
	Verified Refi Verified hea LDING - FEATU	t pump rated	heat				

ZONE INFORMATION 01 Zone Name ADU

Registration Number: 223-P010054648B-000-000-0000000-0000

Registration Number: 223-P010054648B-000-000-000000-0000 CA Building Energy Efficiency Standards - 2022 Residential Compliance

31.89

31.89

not including PV) / Total Building Area.

/ Use Total (including PV) / Total Building Area.

Report Version: 2022.0.000 Schema Version: rev 20220901 HERS Provider: CalCERTS inc. Report Generated: 2023-12-21 11:04:10

Registration Date/Time: 2023-12-21 11:51:06

6.9

6.9

(Page 2 of 11)

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: Model A ADU with Shed Roof Sacramento Project Calculation Description: Title 24 Analysis

### Calculation Date/Time: 2023-12-21T11:03:17-08:00 Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

ard Design Source EDR1) (kBtu/ft <sup>2</sup> -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft <sup>2</sup> -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft <sup>2</sup> -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft <sup>2</sup> -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
4.46 30.37		5.01	38.93	-0.55	-8.56
1.47	38.95	1.26	39.78	0.21	-0.83
0.48	5.12	0.48	5.12	0	0
4.87	51.17	2.61	30.29	2.26	20.88
٨			0		0
11.28	125.61		114.12	1.92	11.49
4. <mark>46</mark>	30.37	5.01	38.53	-0.55	-8.16
1.47	H 38.95 R S	P R 1.45	DE P <sub>43.71</sub>	0.02	-4.76
0.48	5.12	0.48	5.12	0	0
4.87	51.17	2.61	30.19	2.26	20.98
			0		0
11.28	125.61	9.55	117.55	1.73	8.06

Registration Number: 223-P010054648B-000-000-0000000-0000

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Date/Time: 2023-12-21 11:51:06 Report Version: 2022.0.000 Schema Version: rev 20220901

HERS Provider: CalCERTS inc.

Report Generated: 2023-12-21 11:04:10

CF1R-PRF-01E

(Page 6 of 11)

CF1R-PRF-01E

(Page 3 of 11)

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Calculation Date/Time: 2023-12-21T11:03:17-08:00 Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

\_\_\_\_\_ 03 04 Annual Tilt Array Angle Tilt: (x in Inverter Eff. Azimuth Module Type Array Type **Power Electronics** CFI Solar Access (deg) Input (deg) 12) (%) (%) Standard (14-17%) Fixed none true n/a n/a n/a n/a n/a

nust be installed as condition for meeting the modeled energy performance for this computer analysis. uired when minimum PV size (Section 150.1(c)14) < 1.8 kWdc (0 kW) cy Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

e features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry CalCENIS, IIIC. HERS PROVIDER neating capacity TION 02 03 04 05 06 07 Number of Dwelling Number of Ventilation Number of Water

Conditioned Floor Area (ft<sup>2</sup> Number of Bedrooms Number of Zones Units Cooling Systems Heating Systems 460 0 1 02 03 07

02	05	04	05	00	07
Zone Type	HVAC System Name	Zone Floor Area (ft <sup>2</sup> )	Avg. Ceiling Height	Water Heating System 1	Status
Conditioned	Res HVAC1	460	8.75	DHW Sys 1	New

Registration Date/Time: 2023-12-21 11:51:06

HERS Provider: CalCERTS inc.

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2023-12-21 11:04:10

ucalc@utile24energyre title24energyreports.c (530) 268-8722 9 Ļ Par Code 4 N nergy Title  $\sim$ ш  $\sim$  $\mathbf{O}$  $\sim$ Sheet: T24-1

#### CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

03

Construction

R-21 Wall

R-21 Wall

R-21 Wall

R-21 Wall

04

Azimuth

180

04

Drientatio

Front

Front

Front

Front

Front

Back

Back

04

Azimuth

0

180

270

90

06

Area (ft<sup>2</sup>)

460

08

Mult.

1

1

1

Report Version: 2022.0.000

Schema Version: rev 20220901

07

Width Height (ft) (ft)

05

Orientation

Back

06

05

Azimuth

0

0

0

0

0

180

180

05

Orientation

Front

Back

Right

Left

07

Skylight Area

(ft<sup>2</sup>)

10

U-factor

0.29

0.29

0.3

0.29

0.29

0.3

0.29

0

09

Area (ft<sup>2</sup>)

16

6

26.8

16

6

20.1

10

Registration Date/Time: 2023-12-21 11:51:06

Project Name: Model A ADU with Shed Roof Sacramento Project

02

Zone

ADU

ADU

ADU

ADU

03

Construction

R-38 Roof No

Attic

03

Surface

Front Wall

Front Wall

Front Wall

Front Wall

Front Wall

Back Wall

Back Wall

Calculation Description: Title 24 Analysis OPAQUE SURFACES

OPAQUE SURFACES - CATHEDRAL CEILINGS

02

Zone

ADU

02

Type

Window

Window

Window

Window

Window

Window

Window

Registration Number: 223-P010054648B-000-000-0000000-0000

CA Building Energy Efficiency Standards - 2022 Residential Compliance

01

Name

Front Wall

Back Wall

**Right Wall** 

Left Wall

01

Name

Cathedral

01

Name

F1a 4040

F1b Abv 4016

F2 4068

F3a 4040

F3b Abv 4016

B1 3068

B2 5020

FENESTRATION / GLAZING

Calculation Date/Time: 2023-12-21T11:03:17-08:00 Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

07

Window and Door

Area (ft2)

70.8

30.1

20

16.75

10

**Roof Emittance** 

0.85

13

SHGC Source

NFRC

NFRC

NFRC

NFRC

NFRC

NFRC

NFRC

Report Generated: 2023-12-21 11:04:10

HERS Provider: CalCERTS inc.

09

Roof

Reflectance

0.1

12

SHGC

0.21

0.21

0.23

0.21

0.21

0.23

0.21

06

Gross Area (ft<sup>2</sup>)

180

192

170

170

08

Roof Rise (x in

12)

11

**U-factor** 

Source

NFRC

NFRC

NFRC

NFRC

NFRC

NFRC

NFRC

### CF1R-PRF-01E (Page 7 of 11)

08

Tilt (deg)

90

90

90

90

11

Cool Roof

No

14

**Exterior Shading** 

Bug Screen

Bug Screen

Bug Screen

**Bug Screen** 

Bug Screen

Bug Screen

Bug Screen

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Туре	Surface	Orientation	Azimuth	Width	Height	Mult.	Area	l-factor	U-factor	SHGO	C SHGC Source	Exterior Shading
R1 5020	Window	Right Wall	Right	270	(ft)	(ft)	1	(ft <sup>2</sup> )	0.29	Source NFRC	0.21	. NFRC	Bug Screen
R2 5020	Window	Right Wall	Right	270			1	10	0.29	NFRC	0.21	i i i i i i i i i i i i i i i i i i i	Bug Screen
L1 3636	Window	Left Wall	Left	90		<u>.</u>	1	12.25	0.29	NFRC	0.21		Bug Screen
L2 3016	Window	Left Wall	Left	90			1	4.5	0.29	NFRC	0.21	. NFRC	Bug Screen
AB FLOORS	-							11				I	21
01		02	03		04			05		06		07	08
Name		Zone	Area (ft <sup>2</sup>	)	Perimeter	r (ft)	1000 Contraction (1000 Contraction)	nsul. R-value nd Depth	2. 10.00 (100.000)	Insul. R-valu nd Depth	e Car	peted Fraction	Heated
Slab-on-Grade	2	ADU	460		86	E.	K	none	Tr	0		80%	No
PAQUE SURFACE				HE	RS	P	R	o v I	DI	ER			
01		02	03			04		05		06	07	08	3
Construction N	ame	Surface Type	Constructio	n Type	Fra	aming		Total Cavity R-value	- AND - STATE AND - AND	/ Exterior nuous	U-factor	Assembly	y Layers
								N-Value	R-v	alue			<b>5</b> 1
R-21 Wall		Exterior Walls	Wood Fram	ed Wall	2x6@:	16 in. O. (	c.	R-21	None	/ None	0.068	Inside Finish: G Cavity / Fram Exterior Finish: A	e: R-21 / 2x6
												Roofing: Light Ro	
			1								I		oof (Metal Tile)
		ath a dual Calilia as	Wood Fra	med	2-12 @	16 - 0		D 20	News	/ Nama	0.020	Tile Gap: Roof Decl	present
100	ber: 223-F	athedral Ceilings 2010054648B-000-00 itandards - 2022 Re	Ceilin,	g	2x12 @	Report \	tion Date	R-38 /Time: 20 2022.0.000 rev 20220901	23-12-21 11	/ None		Tile Gap: Roof Decl Siding/sheath Cavity / Frame Inside Finish: G	present k: Wood ing/decking : R-38 / 2012
Registration Num CA Building Energ	ber: 223-F y Efficiency S <b>COMPLIANC</b>	2010054648B-000-00 itandards - 2022 Re itandards - 2022 Re	Ceilin	g liance ICE COMPI		Registra Report \ Schema	tion Date	r/Time: 20 2022.0.000 rev 20220901	23-12-21 11	:51:06	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G	present c: Wood ing/decking c: R-38 / 2012 ypsuur Boar S inc. 2-21011:04:10 CF1R-PRF-01E
Registration Num CA Building Energ ERTIFICATE OF roject Name: N	ber: 223-F y Efficiency S complianc	2010054648B-000-00 itandards - 2022 Re CE - RESIDENTIAI	Ceilin	g liance ICE COMPI		Registra Report \ Schema	tion Date Version: 2 Version:	tion Dace	23-12-21 11 me: 2023	-12-21T11:(	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G	present c: Wood ing/decking : R-38 / 2:12 ypsuu Boan CF1R-PRF-01E (Page 11 of 11)
Registration Num CA Building Energ ERTIFICATE OF roject Name: IV alculation Desc	ber: 223-F y Efficiency S COMPLIANC lodel A ADU ription: Title	2010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAI I with Shed Roof e 24 Analysis DECLARATION STAT	Ceilin 0-0000000-0000 esidential Comp sidential Comp Sacramento P	g liance ICE COMPI 'roject	LIANCE ME	Registra Report \ Schema	tion Date Version: 2 Version:	tion Dace	23-12-21 11 me: 2023	-12-21T11:(	HERS Repo	Tile Gap: Roof Decl Siding/sheath Cavity / Frame Inside Finish: G	present c: Wood ing/decking : R-38 / 2:12 ypsuu Boan CF1R-PRF-01E (Page 11 of 11)
Registration Num CA Building Energ ERTIFICATE OF roject Name: N alculation Desc DOCUMENTATION	ber: 223-F y Efficiency S compliance lodel A ADU ription: Title	2010054648B-000-00 itandards - 2022 Re CE - RESIDENTIAI I with Shed Roof e 24 Analysis	Ceilin 0-0000000-0000 esidential Comp sidential Comp Sacramento P	g liance ICE COMPI 'roject	LIANCE ME	Registra Report \ Schema	tion Date Version: 2 Version: Calcula Input F	tion Date;	23-12-21 11 me: 2023 adel A AD	:51:06	HERS Repo	Tile Gap: Roof Decl Siding/sheath Cavity / Frame Inside Finish: G	present c: Wood ing/decking : R-38 / 2:12 ypsuu Boan CF1R-PRF-01E (Page 11 of 11)
Registration Num CA Building Energ ERTIFICATE OF roject Name: IV alculation Desc OCUMENTATION I certify that this ocumentation Auth Jeff Travis	ber: 223-F y Efficiency S compliance lodel A ADU ription: Title	2010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAI I with Shed Roof e 24 Analysis DECLARATION STAT	Ceilin 0-0000000-0000 esidential Comp sidential Comp Sacramento P	g liance ICE COMPI 'roject	LIANCE ME	Registra Report \ Schema	tion Date Version: 2 Version: Calcula Input F	tion Date; 20 tile: ame: 20	23-12-21 11 me: 2023 adel A AD	-12-21T11:(	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G	present c: Wood ing/decking : R-38 / 2:12 ypsuu Boan CF1R-PRF-01E (Page 11 of 11)
Registration Num CA Building Energ ERTIFICATE OF roject Name: N alculation Desc OCUMENTATION . I certify that this ocumentation Auth Jeff Travis ompany:	ber: 223-F y Efficiency S compliance lodel A ADU ription: Title	2010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAI I with Shed Roof e 24 Analysis DECLARATION STAT	Ceilin 0-0000000-0000 esidential Comp sidential Comp Sacramento P	g liance ICE COMPI 'roject	LIANCE ME	Registra Report \ Schema	Calcula Input F	tion Dice, 1 ilen ame: 1 itation Jithor S	23-12-21 11 me: 2023 adel A AD gnature:	:51:06	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G	present c: Wood ing/decking : R-38 / 2:12 ypsuu Boan CF1R-PRF-01E (Page 11 of 11)
Registration Num CA Building Energ ERTIFICATE OF roject Name: M alculation Desc DOCUMENTATION I certify that this ocumentation Auth Jeff Travis Dompany: CompuCalc ddress:	ber: 223-F y Efficiency S compliancy lodel A ADU ription: Title AUTHOR'S D certificate o or Name:	2010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAI I with Shed Roof e 24 Analysis DECLARATION STAT	Ceilin 0-0000000-0000 esidential Comp sidential Comp Sacramento P	g liance ICE COMPI 'roject	LIANCE ME	Registra Report \ Schema	tion Date Version: 2 Version: Calcula Input F Daumer Signature 2023- EA/ HER	tion Date:	23-12-21 11 me: 2023 adel A AD gnature:	:51:06	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G	present :: Wood ing/decking : R-38 / 2-12 ypsuu Boan S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x
Registration Num CA Building Energe ERTIFICATE OF roject Name: IV alculation Desc DOCUMENTATION . I certify that this ocumentation Auth Jeff Travis ompany: CompuCalc ddress: 5201 Coventry ity/State/Zip:	ber: 223-F y Efficiency S compliancy lodel A ADU ription: Title AUTHOR'S D certificate o or Name:	2010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAI I with Shed Roof e 24 Analysis DECLARATION STAT	Ceilin 0-0000000-0000 esidential Comp sidential Comp Sacramento P	g liance ICE COMPI 'roject	LIANCE ME	Registra Report \ Schema	Calcula Input F Signature 2023- EA/HEF R19-2 Phone:	tion Dice, 5 ilen ame: 12 itation Jithor S Date: 12-21 11:07 S Certification I 22-30127	23-12-21 11 me: 2023 adel A AD gnature:	:51:06	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G of Provider: Cave of art General 20023-1: Of cramento Project.ril	present :: Wood ing/decking : R-38 / 2-12 ypsuu Boan S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x
Registration Num CA Building Energ ERTIFICATE OF roject Name: N alculation Desc OCUMENTATION I certify that this ocumentation Auth Jeff Travis ompany: CompuCalc ddress: 5201 Coventry ty/State/Zip: Riverside, CA ESPONSIBLE PER:	ber: 223-F y Efficiency S compliancy S lodel A ADU ription: Title AUTHOR'S D certificate o or Name: y Dr., 92506 SON'S DECLA	P010054648B-000-00 itandards - 2022 Re CE - RESIDENTIAL J with Shed Roof e 24 Analysis DECLARATION STAT If Compliance docu	Ceilin D-0000000-0000 esidential Comp Sacramento P TEMENT mentation is ad	g Jiance ICE COMPI Troject	LIANCE ME	Registra Report \ Schema	Calcula Input F Signature 2023- EA/HEF R19-2 Phone:	tion Date; ilea ame; 2 bate: 12-21 11:01 S Certification I	23-12-21 11 me: 2023 adel A AD gnature:	:51:06	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G of Provider: Cave of art General 20023-1: Of cramento Project.ril	present :: Wood ing/decking : R-38 / 2-12 ypsuu Boan S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x
Registration Num CA Building Energy ERTIFICATE OF roject Name: IV alculation Desc OCUMENTATION I certify that this ocumentation Auth Jeff Travis organy: CompuCalc ddress: 5201 Coventry ty/State/Zip: Riverside, CA ESPONSIBLE PER State/Zip: Riverside, CA ESPONSIBLE PER CompuCalc ddress: 5201 Coventry ty/State/Zip: Riverside, CA	ber: 223-F y Efficiency S y Efficiency S COMPLIANC lodel A ADU ription: Title AUTHOR'S E Certificate o or Name: COMPLIANC lodel A ADU ription: Title Complete Solution: Title Complete Solution: Complete Solution: Complete S	2010054648B-000-00 Standards - 2022 Re CE - RESIDENTIAL V with Shed Roof e 24 Analysis DECLARATION STAT of Compliance docu	Ceilin D-0000000-0000 esidential Comp esidential Comp Sacramento P EMENT mentation is ad Tementation is ad add Prohesions mance specifications in a comparison mance specifications in a comparison mance specification in a comparison in a compa	g Jiance ICE COMPI Troject courate and consistentified on this Ce	LIANCE ME	Registra Report V Schema THOD	tion Date Version: 2 Version: Version: Calcula Input F Dumer Signature 2023- EA/HEF R19-2 Phone: 951-9	tion Date; ilea ame; 2 bate: 12-21 11:07 S Certification I 22-30127 02-2660	23-12-21 11 me: 2023 adel A AD ignature: 7:08 dentification on this Cert requirement ormation p in	:51:06 :51:06 -12-21T11:0 -12-21T11:0 -0 with She -12-21T11:0 -0 with She -12-21 -0 with S	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G of Provider: Cave of art General 20023-1: Of cramento Project.ril	present c: Wood ing/decking c: R-38 / 2012 ypsuur Boar S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x CF1R-SPRF-01E (Page 11 of 11) od22x
Registration Num CA Building Energy ERTIFICATE OF roject Name: N alculation Desc OCUMENTATION I certify that this ocumentation Auth Jeff Travis OCUMENTATION I certify that this ocumentation Auth Jeff Travis Dompany: CompuCalc ddress: 5201 Coventry Riverside, CA ESPONSIBLE PERS CompuCalc ddress: 5201 Coventry Riverside, CA ESPONSIBLE PERS 1. Lameligi 2. Locrtify the sponsible Designed aura miller	ber: 223-F y Efficiency S y Efficiency S COMPLIANC lodel A ADU ription: Title AUTHOR'S E Certificate o or Name: COMPLIANC lodel A ADU ription: Title Complete societations or Name: Complete Societations or Societations or Societations or Societations or Societations or Societations or Societations or Societations or Societations or Societations or Societations of Societations or Societa	P010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAL J with Shed Roof e 24 Analysis DECLARATION STAT of Compliance docu f Compliance docu	Ceilin D-0000000-0000 esidential Comp esidential Comp Sacramento P EMENT mentation is ad Tementation is ad add Prohesions mance specifications in a comparison mance specifications in a comparison mance specification in a comparison in a compa	g Jiance ICE COMPI Troject courate and consistentified on this Ce	LIANCE ME	Registra Report V Schema THOD	tion Date Version: 2 Version: Version: Calcula Input F Dumer Signature 2023- EA/HEF R19-2 Phone: 951-9 building do ompliance are consis poulding per	tion Date; ilename; 222.0.000 rev 20220901 tion Date; ilename; 2. Date: 12-21 11:07 S Certification I 22-30127 02-2660 esign identified conform to the tent with the ini- remit application ole Designer Sig	23-12-21 11 me: 2023 adel A AD ignature: 7:08 dentification on this Cert requirement ormation p in	ificate of Com	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G of Provider: Contract of General 20023-12 of General 20023-1	present c: Wood ing/decking c: R-38 / 2012 ypsuur Boar S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x CF1R-SPRF-01E (Page 11 of 11) od22x
Registration Num CA Building Energy ERTIFICATE OF roject Name: IV alculation Desc DOCUMENTATION I certify that this ocumentation Auth Jeff Travis DOCUMENTATION I certify the following 1. I am eligi 2. I certify the following 1. I am eligi 3. The build 1. I am	ber: 223-F y Efficiency S y Efficiency S COMPLIANC Iodel A ADU ription: Title I AUTHOR'S D Certificate o or Name: y Dr., 92506 SON'S DECLA y under penalty ble under Divis hat the energy ling design feat ons, plans and s Name:	P010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAL J with Shed Roof e 24 Analysis DECLARATION STAT of Compliance docu f Compliance docu	Ceilin D-0000000-0000 esidential Comp esidential Comp Sacramento P EMENT mentation is ad Tementation is ad add Prohesions mance specifications in a comparison mance specifications in a comparison mance specification in a comparison in a compa	g Jiance ICE COMPI Troject courate and consistentified on this Ce	LIANCE ME	Registra Report V Schema THOD	tion Date Version: 2 Version: 2 Version: Calcula Input F Dumer Signature 2023- EA/HEF R19-2 Phone: 951-9 building do ompliance are consis poulding per Responsi Date Sign 2023-	tion Date; ilename; 222.0.000 rev 20220901 tion Date; ilename; 2. Date: 12-21 11:07 S Certification I 22-30127 02-2660 esign identified conform to the tent with the ini- remit application ole Designer Sig	23-12-21 11 me: 2023 adel A AD gnature: 7:08 dentification formation p h. nature: 0	:51:06 :51:06 -12-21T11:0 -12-21T11:0 -0 with She -12-21T11:0 -0 with She -12-21 -0 with S	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G of Provider: Contract of General 20023-12 of General 20023-1	present c: Wood ing/decking c: R-38 / 2012 ypsuur Boar S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x CF1R-SPRF-01E (Page 11 of 11) od22x
Registration Num CA Building Energ CERTIFICATE OF Project Name: N Calculation Desc DOCUMENTATION . I certify that this pocumentation Auth Jeff Travis company: CompuCalc ddress: 5201 Coventry ity/State/Zip: Riverside, CA ESPONSIBLE PERS certify the following 1. I am eligi 2. I certify t	ber: 223-F y Efficiency S y Efficiency S COMPLIANC Iodel A ADU ription: Title AUTHOR'S D Certificate o or Name: y Dr., 92506 SON'S DECLA under penalty ble under Divis hat the energy ling design feat ons, plans and s Name: Studio	P010054648B-000-000 itandards - 2022 Re CE - RESIDENTIAL J with Shed Roof e 24 Analysis DECLARATION STAT of Compliance docu f Compliance docu	Ceilin D-0000000-0000 esidential Comp esidential Comp Sacramento P EMENT mentation is ad Tementation is ad add Prohesions mance specifications in a comparison mance specifications in a comparison mance specification in a comparison in a compa	g Jiance ICE COMPI Troject courate and consistentified on this Ce	LIANCE ME	Registra Report V Schema THOD	tion Date Version: 2 Version: 2 Version: Calcula Input F Dumer Signature 2023- EA/HER R19-2 Phone: 951-9 building do ompliance are consis building por Responsi	tion Date; ilen ame; 2 bate: 12-21 11:07 S Certification I 22-30127 02-2660 esign identified conform to the tent with the ini- ermit application ble Designer Sig ed:	23-12-21 11 me: 2023 adel A AD gnature: 7:08 dentification formation p h. nature: 0	:51:06 :51:06 -12-21T11:0 -12-21T11:0 -0 with She -12-21T11:0 -0 with She -12-21 -0 with S	HERS Repo	Tile Gap: Roof Deci Siding/sheath Cavity / Frame Inside Finish: G of Provider: Contract of General 20023-12 of General 20023-1	present c: Wood ing/decking c: R-38 / 2012 ypsuur Boar S inc. 2-21011:04:10 CF1R-PRF-01E (Page 11 of 11) od22x CF1R-SPRF-01E (Page 11 of 11) od22x

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: Model A ADU with Shed Roof Sacramento Project Calculation Description: Title 24 Analysis

Calculation Date/Time: 2023-12-21T11:03:17-08:00 Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

CF1R-PRF-01E (Page 10 of 11)

01	02	03			04		05			06		07	08	09	
Name	System Type	Heating Unit	Name		ng Equipm Count	ent C	ooling Unit N	ame		g Equipmer Count	nt Fai	n Name	Distribution N	ame Required Thermostat Type	
Res HVAC1	Heat pump heating cooling	Heat Pump S 1	System		1	н	leat Pump Sys 1	tem		1		n/a	n/a	Setback	
VAC - HEAT PUMPS															
01	02	03	04		05	06	07	3	08	09	10	11	12	13	
					Heatin	g			1	Cooling					
Name	System Type	Number of Units	Heati Efficie Typ	ncy	HSPF/HS PF2/COP	Cap 47	7 Cap 17	Effi	ooling iciency Type	SEER/SE ER2	EER/EER 2/CEER	Zonally Controlled	Compressor Type	HERS Verification	
Heat Pump System 1	Ductless MiniSplit HP	1	HSPI	F2	7.5	10900	6700	EER	2SEER2	14.3	9	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump	
VAC HEAT PUMPS -	HERS VERIFICATION			H	ER	S	PR	C	v	TD	ER				
01	02	03		1	04		05			06		07	08	09	
Name	Verified Airflow	Airflow Ta	rget	Verifi	ed EER/EE	R2	Verified SEER/SEER	2	Verified Refrigerant Charge			erified F/HSPF2	Verified Heat Cap 47	ing Verified Heating Cap 17	
Heat Pump System 1-hers-htpump	Not Required	0	30	No	t Required		Not Require	d		Yes		No	Yes	Yes	
NDOOR AIR QUALIT	Y (IAQ) FANS			10 P											
	02	03			04		05			06		07	08	09	
01			-	9	04 IAQ Fan Type		Includes Heat/Energy Recovery?								
01 Dwelling Unit	Airflow (CFM)	Fan Effica (W/CFN	1.2	IAC	Q Fan Type			91	Effec	tiveness -		des Fault or Display?	HERS Verificat	tion Status	

Registration Number: 223-P010054648B-000-000-0000000-0000

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Date/Time: 2023-12-21 11:51:06

Report Version: 2022.0.000 Schema Version: rev 20220901 HERS Provider: CalCERTS inc.

Report Generated: 2023-12-21 11:04:10

Digitally igned by CalCERTS. This digital signature is provided in order to secure the content of this registered document, and in no way implies a stration Provider responsibility for the accuracy of the information.



CF1R-PRF-01E

Registration Number: 223-P010054648B-000-000-000000-0000 CA Building Energy Efficiency Standards - 2022 Residential Compliance Registration Date/Time: 2023-12-21 11:51:06 Report Version: 2022.0.000 Schema Version: rev 20220901

Report Generated: 2023-12-21 11:04:10

HERS Provider: CalCERTS inc.

#### CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

#### Project Name: Model A ADU with Shed Roof Sacramento Project iption: Title 24 Analysis

#### CF1R-PRF-01E Calculation Date/Time: 2023-12-21T11:03:17-08:00 (Page 9 of 11) Input File Name: Model A ADU with Shed Roof Sacramento Project.ribd22x

01	01 02			03		04		05		
on	Installation (QII) High R-value Spray Foam Insulati		m Insulation Build	ding Envelope Air Leak	age	CFM50	c	CFM50		
Required Not Required			d	N/A		n/a		n/a		
SYS	STEMS									
	02	03	04	05	06	07	08	09		
System Type		Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)		
	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1		

PUMP		Lon	_				
02	03	04	05	s Ir	06	07	08
# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat F Model	ian ian	k Location	Duct Inlet Air Source	Duct Outlet Air Source
1	40	Rheem	PROPH40 RH37515 (4 JA13)	Ogal, T	ankZone	ADU	ADU
FICATION							
02	03	0	4	05		06	07
	-				011020101000000		

Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	<b>Recirculation Control</b>	Shower Drain Water Heat Recovery
Not Required	Not Required	Not Required	None	Not Required	Not Required

Registration Date/Time: 2023-12-21 11:51:06

ber: 223-P010054648B-000-000-000000-0000

/ Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 HERS Provider: CalCERTS inc.

Report Generated: 2023-12-21 11:04:10

ucalc@title24energyreports title24energyreports.com (530) 268-8722 24 Part 6 Energy S Elizabeth Smithwi Certified Energy An R19-94-30006 9 Part Code 24 Energy Title 7 202

Sheet: T24-2

# 



NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach

used. Review the r	ily residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach espective section for more information.
(04/2022)	
Suilding Envelope	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from
§ 110.6(b):	Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	<b>Roof Deck, Ceiling and Rafter Roof Insulation.</b> Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102
	Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45.
replaces, Decora	ative Gas Appliances, and Gas Log:
§ 110.5(e)	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	<b>Combustion Intake.</b> Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. $^{\star}$
oace Conditionir	ng, Water Heating, and Plumbing System:
§ 110.0-§ 110.3:	Certification. Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	<b>HVAC Efficiency.</b> Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N.*
§ 110.2(b):	<b>Controls for Heat Pumps with Supplementary Electric Resistance Heaters.</b> Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a
S 110.∠(0).	setback thermostat.*
§ 110.3(c)3:	Insulation. Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

5/6/22



### 2022 Single-Family Residential Mandatory Requirements Summary





§ 110.5.	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour ); and pool and spa heaters. *
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0()) 1.	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code.*
§ 150.0()2:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment' maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1.	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' × 2.5' × 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2' higher than the base of the water heater
§ 150.0(n)3:	<b>Solar Water-heating Systems.</b> Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing, PMO R&T), or by a listing agency that is approved by the executive director.
Ducts and Fans:	
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Medical Core (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation medis this requirement.
§ 150.0(m) 1:	<b>CMC Compliance.</b> All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANS §MACNA-00-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and discusses and gravity (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be prochanically instened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements or aerosol scient that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than 1/4°, mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with mastices other than scieled sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in
:	these spaces must not be compressed.*
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must consider we applie the requirements for duct construction, connections, and closures; joints and seams of duct systems and their component must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and don values.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with an vicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air betwee the contributed space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating screems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside except of abustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be subacter or outdoor subice (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected in above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m) 10:	Porous Inner Core Flex Duct. Porcus inner cores of ex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m) 11.	Duct System Sealing and Leakage Tes. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts in store supply duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with References Rest, infal Appendix RA3.1.
§ 150.0(m) 12:	Air Filtration. Space condition of systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filter. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and backing must meet the requirements in §150.0(m) 12. Filters must be accessible for regular service. Filter racks or times must be accessible for regular service. Filter

2022 Single-Family Residential Mandatory Requirements Summary



# 2022 Single-Family Residential Mandatory Requirements Summary

ENERGY. THE			
150.0(k) 1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. $^{\star}$		
s 50.0(k) 1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.		
§ 150.0(k) 11:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not require to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet linen closet is closed.		
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.		
§ 150.0(k)2B:	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.*		
§ 150.0(k)2A:	Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *		
§ 150.0(k)2B:	Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installe to comply with § 150.0(k).		
§ 150.0(k)2C:	Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.		
§ 150.0(k)2D:	Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specifie in § 150.0(k)2A.		
§ 150.0(k)2E:	Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.		
§ 150.0(k)2F:	Dimmers. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall- mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED lig sources in these spaces must comply with NEMA SSL 7A.		
§ 150.0(k)2K:	Independent controls. Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.		
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, of other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and mee applicable requirements may be used to meet these requirements.		
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.		
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.		
olar Readiness:			
§ 110.10(a)1:	Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).		
§110.10(b) 1A:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet.		
§ 110.10(b)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.		
§ 110.10(b)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roo mounted equipment.		
§ 110.10(b)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*		
§ 110.10(b)4:	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads the roof dead load and roof live load must be clearly indicated on the construction documents.		
§ 110.10(c):	Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-famil residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.		
	Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must		
§ 110.10(d):	provided to the occupant.		
§ 110.10(d): § 110.10(e)1:	provided to the occupant. Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.		



## 2022 Single-Family Residential Mandatory Requirements Summary

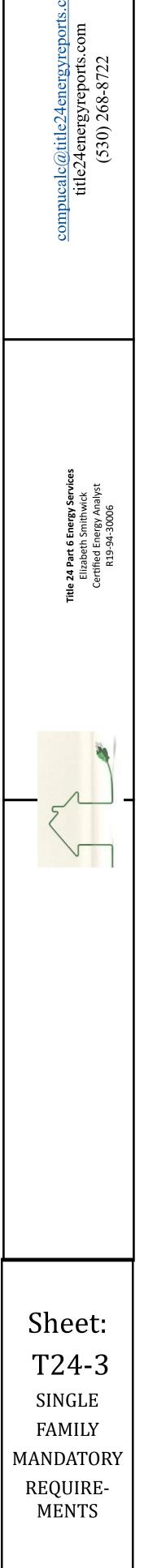
Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be  $\geq$  350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy  $\leq$  0.45 watts per CFM for gas furnace air handlers and  $\leq 0.58$  watts per CFM for all others. Small duct high velocity systems must provide an airflow  $\geq 250$  CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy  $\leq 0.62$  watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.\*

§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o) 1.*		
§ 150.0(o) 1B:	1B: Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the who dwelling unit ventilation airflow required per §150.0(o) 1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o) 1Biil& ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper compliance with §150.0(o) 1C.		
§ 150.0(o)1C:	Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses . Single-family detached dwelling unit		
§ 150.0(o)1G:	Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand- controlled exhaust system meeting requirements of §150.0(o)1Giii,enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *		
§ 150.0(o)1H&I:	I: Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(o) 1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than minimum airflow rate required by §150.0(o) 1C.		
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o) 1G		
ool and Spa Sys	tems and Equipment:		
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*		
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.		
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.		
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.		
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.		
§ 150.0(p)	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.		
ighting:			
	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable		
§ 110.9:	requirements of § 110.9.*		
§ 150.0(k) 1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.		
150.0(k)1B:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*		
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.		
§ 150.0(k) 1D:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.		
§ 150.0(k) 1E:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.		
§ 150.0(k) 1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).		

5/6/22

TENER COMPLEX	2022 Single-Family Residential Mandatory Requirements Summary
§ 150.0(s)	Energy Storage System (ESS) Ready. All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, <u>or</u> a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	Heat Pump Space Heater Ready. Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	Electric Cooktop Ready. Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

\*Exceptions may apply.



#### From Section 150.0(o) G. Local mechanical exhaust

Local mechanical exhaust. A local mechanical exhaust system shall be installed in each kitchen and bathroom. Systems shall be rated for airflow in accordance with ASHRAE 62.2 Section 7.1.

- Nonenclosed kitchens shall have a demand-controlled mechanical exhaust system meeting the requirements of Section 150.0(o)1Giii.
- Enclosed kitchens and all bathrooms shall have either one of the following alternatives a or b: ii. A demand-controlled mechanical exhaust system meeting the requirements of Section a. 150.0(o)1Giii.
- A continuous mechanical exhaust system meeting the requirements of Section
- 150.0(o)1Giv Demand-controlled mechanical exhaust. A local mechanical exhaust system shall be designed to be operated as needed.
  - Control and operation. Demand-controlled mechanical exhaust systems shall be provided with at least one of the following controls: A readily accessible occupant-controlled ON-OFF control.
  - An automatic control that does not impede occupant ON control. Ventilation rate and capture efficiency. The system shall meet or exceed either the minimum airflow in accordance with Table 150.0-E or the minimum capture efficiency in accordance with Table 150.0-E, and Table 150.0-G. Capture efficiency ratings shall be determined in accordance with ASTM E3087 and listed in a product directory approved by the Energy Commission.
- Continuous mechanical exhaust. A mechanical exhaust system shall be installed to operate
- continuously. The system may be part of a balanced mechanical ventilation system. Control and operation. A manual ON-OFF control shall be provided for each continuous mechanical exhaust system. The system shall be designed to operate during all occupiable hours.
- The ON-OFF control shall be accessible to the dwelling unit occupant. Ventilation rate. The minimum delivered ventilation shall be at least the amount indicated in Table 150.0-F during each hour of operation.

Airflow measurement of local mechanical exhaust by the system installer. The airflow required by Section 150.0(o)1G is the quantity of indoor air exhausted by the ventilation system as installed in the dwelling unit. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 150.0(o)1Giiib, the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be met by the installed system. The as-installed airflow shall be verified by the system installer to ensure compliance by use of either Subsection a or b below:

- The system installer shall measure the airflow by using a flow hood, flow grid or other airflow measuring device at the mechanical ventilation fanâtmes inlet terminals/grilles or outlet terminals/grilles in accordance with the procedures in Reference Residential Appendix RA3.7.
- As an alternative to performing an airflow measurement of the system as installed in the dwelling unit, compliance may be demonstrated by installing an exhaust fan and duct system that conforms to the specifications of Table 150.0-H. Visual inspection shall verify the installed system conforms to the requirements of Table 150.0-H.

When using Table 150.0-H for demonstrating compliance, the airflow rating shall be greater than or equal to the value required by Section 150.0(o)1G at a static pressure greater than or equal to 0.25 in. of water (62.5 Pa). When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 150.0(o)1Giiib, a static pressure greater than or equal to 0.25 in of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

Use of Table 150.0-H is limited to ventilation systems that conform to all of the following three specifications:

- Total duct length is less than or equal to 25 ft (8 m),
- Duct system has not more than three elbows, and Duct system has exterior termination fitting with a hydraulic diameter greater than or equal to the minimum duct diameter and not less than the hydraulic diameter of the fan

Table 150.0-G Kitchen Range Hood Airflow Rates (cfm) and ASTM E3087 Capture Efficiency (CE)Ratings According to Dwelling Unit Floor Area and Kitchen Range Fuel Type

Dwelling Unit Floor Area (ft <sup>2</sup> )	Hood Over Electric Range	Hood Over Natural Gas Range
>1500	50% CE or 110 CFM	70% CE or 180 CFM
>1000 to 1500	50% CE or 110 CFM	80% CE or 250 CFM
750 - 1000	55% CE or 110 CFM	85% CE or 280 CFM
<750	65% CE or 110 CFM	85% CE or 280 CFM

From Section 150.0 (n) (s)(t)(u)(v) – MANDATORY FEATURES AND DEVICES

#### Water heating system.

Systems using gas or propane water heaters to serve individual dwelling units shall designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall suitable for the future installation of a heat pump water heater (HPWH) by meeting either A or B below. All electrical components shall be installed in accordance with the California Electrical Code:

- If the designated space is within 3 feet from the water heater, then this space shall include A. the following: A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric
  - panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and accessible to the water heater with no obstructions; and Both ends of the unused conductor shall be labeled with the word "spare" and be
  - electrically isolated; and A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and
  - A condensate drain that is no more than 2 inches higher than the base of the iv. installed water heater, and allows natural draining without pump assistance. If the designated space is more than 3 feet from the water heater, then this space shall

#### B. include the following:

- A dedicated 240 volt branch circuit shall be installed within 3 feet from the designated space. The branch circuit shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready"; and
- The main electrical service panel shall have a reserved space to allow for ii. the installation of a double pole circuit breaker for a future HPWH installation. The reserved space shall be permanently marked as "For Future 240V use"; and
- Either a dedicated cold water supply, or the cold water supply shall pass through the designated HPWH location just before reaching the gas or propane water heater; and The hot water supply pipe coming out of the gas or propane water heater shall be routed
- first through the designated HPWH location before serving any fixtures; and The hot and cold water piping at the designated HPWH location shall be exposed and
- readily accessible for future installation of an HPWH; and A condensate drain that is no more than 2 inches higher than the base of the installed vi.
- water heater, and allows natural draining without pump assistance.

(s) Energy Storage Systems (ESS) ready. All single-family residences that include one or two dwelling units shall meet the following. All electrical components shall be installed in accordance with the California Electrical Code:

- 1. At least one of the following shall be provided: A. ESS ready interconnection equipment with a minimum backed-up capacity of 60 amps and a minimum of four ESS-supplied branch circuits, or
  - B. A dedicated raceway from the main service to a panelboard (subpanel) that supplies the branch circuits in Section 150.0(s)(2). All branch circuits are permitted to be supplied by the main service panel prior to the installation of an ESS. The trade size of the raceway shall be not less than one inch. The panelboard that supplies the branch circuits (subpanel) must be labeled Subpanel shall include all backed-up load circuits."
- A minimum of four branch circuits shall be identified and have their source of supply collocated 2 at a single panelboard suitable to be supplied by the ESS. At least one circuit shall supply the refrigerator, one lighting circuit shall be located near the primary egress, and at least one circuit shall supply a sleeping room receptacle outlet.
- 3. The main panelboard shall have a minimum busbar rating of 225 amps.
- Sufficient space shall be reserved to allow future installation of a system isolation equipment/transfer switch within 3 feet of the main panelboard. Raceways shall be installed between the panelboard and the system isolation equipment/transfer switch location to allow the connection of backup power source.

- Heat pump space heater ready. Systems using gas or propane furnace to serve individual dwelling units shall include the following:
  - A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
  - The main electrical service panel shall have a reserved space to allow for the 2. installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use."

Electric cooktop ready. Systems using gas or propane cooktop to serve individual dwelling units (u) shall include the following:

- 1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the cooktop and accessible to the cooktop with no obstructions. The branch circuit conductors shall be rated at 50 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
- The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric cooktop installation. The reserved space shall be permanently marked as "For Future 240V use."

#### $(\mathbf{v})$ Electric clothes dryer ready. Clothes dryer locations with gas or propane plumbing to serve

- individual dwelling units shall include the following: A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the clothes dryer location and accessible to the clothes dryer location with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
  - The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric clothes dryer installation. The reserved space shall be permanently marked as "For Future 240V use

110.10(e)

b. Solar zone.

# square feet each for buildings with roof areas greater than 10,000 square feet. Exception 1 to Section 110.10(b)1A: Single-fam ence Residential Appen Exception 2 to Section 110.10 zone total area. Exception 3 to Section ess than 150 square feet. solar zo Exception 4 to Section ns located on the roof or any other part of the building shall not be included in the determination of annual solar access. tion 6 to Section 110.10(b)1A: Single-family residences meeting the following conditions:

#### of an occupancy permit by the enforcing agency. Comply with one of the following measures:

- mum of 40 amperes; or
- ii.
- iii.
- the California Plumbing Code and any applicable local ordinances; or
- iv.
- at least 65 percent of the available roof area.

#### Shading.

- A.
  - the vertical plane.

4. Structural design loads on construction documents. For areas of the roof designated as solar zone, the structural design loads for roof dead load and roof live load shall be clearly indi cated on the construction documents. Note: Section 110.10(b)4 does not require the inclusion of any collateral loads for future solar energy systems.

#### (c) Interconnection pathways.

3.

1.	The construction documents shall indicate a loc
	point of interconnection with the electrical serv
2.	For single-family residences and central water-h
	heating system.

(e) Main electrical service panel.

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

The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space shall be permanently marked as "For Future Solar Electric"

Exception 2 to Section 150.1(c)14: No PV system is required when the minimum PV system size specified by section 150.1(c)14 is less than 1.8 kWdc.

Prescriptive Equation for PV Exemption:  $460 \times 0.613/1000 + 1 \times 1.4 = 1.68$ 

#### SECTION 110.10 – MANDATORY REQUIREMENTS FOR SOLAR READINESS (Fron Section 110.10 of the 2022 Building Energy Efficiency Standards)

a. Single-family residences. Single-family residences located in subdivisions with ten or more single-family residences and where the application for a tentative subdivision map for the residencees has been deemed complete or approved by the enforcement agency, which do not have a photovoltaic system installed, shall comply with the requirements of Sections 110.10(b) through

Minimum solar zone area. The solar zone shall have a minimum total area as described below. The solar zone shall comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area shall be comprised of are as that have no dimension less than five feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160

24energyreports.con (530) 268-8722

24e

Sheet:

T24-4

PV & ESS

**READY-**

NOTES

Single-family residences. The solar zone shall be located on the roof or overhang of the building and have a total area no less than 250 square feet.

sidences with a permanently installed domestic solar water-heating system meeting the installation criteria specified in the Refer with a minimum solar savings fraction of 0.50.

ly residences with three habitable stories or more and with a total floor area less than or equal to 2000 square feet and having a solar

e-family residences located in the Wildland-Urban Interface Fire Area as defined in Title 24, Part 2 and having a whole house fan and having a

10(b)1A: Buildings with a designated solar zone area that is no less than 50 percent of the potential solar zone area. The potential solar zone area is the total rea of any low-sloped roofs where the annual solar access is 70 percent or greater and any steep-sloped roofs oriented between 90 degrees and 300 degrees of true north nual solar access is 70 percent or greater. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstruct

to Section 110.10(b)1A: Single-family residences having a solar zone total area no less than 150 square feet and where all thermostats are demand responsive controls and comply with Section 110.12(a), and are capable of receiving and responding to Demand Response Signals prior to granting of an occupancy permit by the enforcing agency.

All thermostats are demand responsive controls that comply with Section 110.12(a), and are capable of receiving and responding to Demand Response Signals prior to granting

Install a dishwasher that meets or exceeds the ENERGY STAR® Program requirements with a refrigerator that meets or exceeds the ENERGY STAR Program require ments, a whole house fan driven by an electronically commutated motor, or an SAE J1772 Level 2 Electric Vehicle Supply Equipment (EVSE or EV charger) with a mini

Install a home automation system capable of, at a minimum, controlling the appliances and lighting of the dwelling and responding to demand response signals; or Install alternative plumbing piping to permit the discharge from the clothes washer and all showers and bathtubs to be used for an irrigation system in compliance with

Install a rainwater catchment system designed to comply with the California Plumbing Code and any applicable local ordinances, and that uses rainwater flowing from

Azimuth range. All sections of the solar zone located on steep-sloped roofs shall have an azimuth range between 90 degrees and 300 degrees of true north.

No obstructions, including but not limited to, vents, chimneys, architectural features and roof mounted equipment, shall be located in the solar zone. Any obstruction, located on the roof or any other part of the building that projects above a solar zone shall be located at least twice the distance, measured in the hori zontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in

Exception to Section 110.10(b)3: Any roof obstruction, located on the roof or any other part of the building, that is oriented north of all points on the solar zone.

cation reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the vice.

-heating systems, the construction documents shall indicate a pathway for routing of plumbing from the solar zone to the water-

(d) Documentation. A copy of the construction documents or a comparable document indicating the information from Sections 110.10(b) through 110.10(c) shall be provided to the occupant.