

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD
CF1R-PRF-01-E
Project Name: Addition Only

Calculation Date/Time: 2025-03-06T10:11:49-08:00

(Page 1 of 10)
Calculation Description: Title 24 Analysis

Input File Name: ADU@13116 Rincon Rd. Apple Valey 92308.ribd22x

GENERAL INFORMATION					
01	Project Name	Addition Only			
02	Run Title	Title 24 Analysis			
03	Project Location	13116 Rincon Road			
04	City	Apple Valley	05	Standards Version	2022
06	Zip code	92308	07	Software Version	EnergyPro 9.2
08	Climate Zone	14	09	Front Orientation (deg/ Cardinal)	90
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed Addition	13	Number of Bedrooms	6
14	Addition Cond. Floor Area (ft ²)	714	15	Number of Stories	1
16	Existing Cond. Floor Area (ft ²)	2900	17	Fenestration Average U-factor	0.31
18	Total Cond. Floor Area (ft ²)	3614	19	Glazing Percentage (%)	12.86%
20	ADU Bedroom Count	2	21	ADU Conditioned Floor Area	714
22	Fuel Type	Natural gas	23	No Dwelling Unit:	No

ADDITION ALONE - Project Analysis Parameters					
01	02	03	04	05	06
Existing Area (excl. new addition) (ft ²)	Addition Area (excl. existing) (ft ²)	Total Area (ft ²)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
2900	714	3614	4	2	6

ADDITION ALONE - ACCESSORY DWELLING UNIT (ADU) PROJECT ANALYSIS PARAMETERS							
01	02	03	04	05	06	07	08
Zone Name	Existing Area (excl. new addition) (ft ²)	ADU Area (excl. existing) (ft ²)	Total Area (ft ²)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms	Attached vs. Detached
First Floor Zone	2900	714	3614	4	2	6	Attached

Registration Number: 425-P010070941A-000-000-00000000-0000

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CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Date/Time: 03/06/2025 14:48

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COMPLIANCE RESULTS	
01	Building Complies with Computer Performance
02	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.
03	This building incorporates one or more Special Features shown below



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(Page 3 of 10)
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ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	20.11	0	21.42	0	-1.31
Space Cooling	0	30.04	0	37.22	0	-7.18
IAQ Ventilation	0	4.98	0	4.98	0	0
Water Heating	0	48.23	0	37.13	0	11.1
Self Utilization/Flexibility Credit						
Efficiency Compliance Total	0	103.36	0	100.75	0	2.61
Photovoltaics		0		0		
Battery				0		
Flexibility						
Indoor Lighting	0	5.98	0	5.98		
Appl. & Cooking	0	33.21	0	33.29		
Plug Loads	0	64.14	0	64.14		
Outdoor Lighting	0	8.03	0	8.03		
TOTAL COMPLIANCE	0	214.72	0	212.19		

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Calculation Date/Time: 2025-03-06T10:11:49-08:00

(Page 4 of 10)
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ENERGY USE INTENSITY				
	Standard Design (kBtu/ft ² - yr)	Proposed Design (kBtu/ft ² - yr)	Compliance Margin (kBtu/ft ² - yr)	Margin Percentage
Gross EUI ¹	32.1	29.6	2.5	7.79
Net EUI ²	32.1	29.6	2.5	7.79
Notes 1. Gross EUI is Energy Use Total (not including PV) / Total Building Area. 2. Net EUI is Energy Use Total (including PV) / Total Building Area.				

REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
- Insulation below roof deck - Point of use

HERS FEATURE SUMMARY
The following is a summary of the 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 detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry
- Indoor air quality ventilation - Verified heat pump rated heating capacity

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft ²)	Avg. Ceiling Height	Water Heating System 1	Status
First Floor Zone	Conditioned	HVAC System1	714	8	DHW Sys 1	New

OPAQUE SURFACES									
01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft ²)	Window and Door Area (ft ²)	Tilt (deg)	Wall Exceptions	Status
North Wall	First Floor Zone	R-15 Wall	0	Right	88	0	90	Extension	New

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(Page 5 of 10)
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OPAQUE SURFACES									
01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft ²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
Northwest Wall	First Floor Zone	R-13 Wall	0	Right	64	8	90	none	New
South Wall	First Floor Zone	R-15 Wall	180	Left	261.3	55.8	90	none	New
Southwest Wall	First Floor Zone	R-15 Wall	225	n/a	64	8	90	none	New
West Wall	First Floor Zone	R-15 Wall	270	Back	120	20	90	Extension	New
North Int Sur/Adj Unit	First Floor Zone	R-15 Wall1	n/a	n/a	177.3	0	n/a		New
East Int Sur/Adj Unit	First Floor Zone	R-15 Wall1	n/a	n/a	169.3	0	n/a		New
Roof/Attic	First Floor Zone	R-30 Roof Attic	n/a	n/a	714	n/a	n/a		New

ATTIC							
01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic First Floor Zone	Attic Roof First Floor Zone	Ventilated	4	0.1	0.85	No	No

FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window	Window	Northwest Wall	Right	0			1	8	0.3	NFRC	0.23	NFRC	Bug Screen
Window 2	Window	South Wall	Left	180			1	10	0.3	NFRC	0.23	NFRC	Bug Screen
Door	Window	South Wall	Left	180			1	17.8	0.34	NFRC	0.28	NFRC	Bug Screen
Window 3	Window	South Wall	Left	180			1	14	0.3	NFRC	0.23	NFRC	Bug Screen
Window 4	Window	South Wall	Left	180			1	14	0.3	NFRC	0.23	NFRC	Bug Screen

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(Page 6 of 10)
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FENESTRATION / GLAZING													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
Window 5	Window	Southwest Wall		225			1	8	0.3	NFRC	0.23	NFRC	Bug Screen
Window 6	Window	West Wall1	Back	270			1	20	0.3	NFRC	0.23	NFRC	Bug Screen

SLAB FLOORS							
01	02	03	04	05	06	07	08
Name	Zone	Area (ft ²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	First Floor Zone	714	75.5	none	0	100%	No

OPAQUE SURFACE CONSTRUCTIONS							
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.095	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: 3 Coat Stucco
R-13 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.101	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Exterior Finish: 3 Coat Stucco
R-15 Wall1	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.086	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Other Side Finish: Gypsum Board

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(Page 7 of 10)
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OPAQUE SURFACE CONSTRUCTIONS							
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Attic RoofFirst Floor Zone	Attic Roofs	Wood Framed Ceiling	2x6 @ 24 in. O. C.	R-19	None / 0	0.055	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x6 @ 16 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-15.7 insul. Cavity / Frame: R-14.3 / 2x6 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION				
01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS								
01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Point of Use	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)

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(Page 8 of 10)
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WATER HEATERS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location
DHW Heater 1	Gas	Consumer Instantaneous	1	0	UEF	0.97	Btu/Hr	200000	0	n/a	n/a	

WATER HEATING - HERS VERIFICATION						
01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS								
01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
HVAC System1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	n/a	n/a	Setback

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(Page 9 of 10)
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HVAC - HEAT PUMPS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating				Cooling			Zonally Controlled	Compressor Type	HERS Verification
			Heating Efficiency Type	HSPF/HS PF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SE ER2	EER/EER 2/CEER			
Heat Pump System 1	Ductless MiniSplit HP	1	HSPF2	10.5	8000	5500	EER2SEER2	21.1	14	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION								
01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Not Required	0	Not Required	Not Required	No	No	Yes	Yes

INDOOR AIR QUALITY (IAQ) FANS								
01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam ADU IAQVentRpt	44	0.35	Exhaust	No	n/a / n/a	No	Yes	

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Gilbert Arevalo	Documentation Author Signature: <i>Gilbert Arevalo</i>
Company: Beach Cities Contracting Services	Signature Date: 03/06/2025
Address: 2915 N. Main Street	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Los Angeles, CA 90031	Phone: 310-408-3773
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California: 1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name: Gilbert Arevalo	Responsible Designer Signature: <i>Gilbert Arevalo</i>
Company: Beach Cities Contracting Services	Date Signed: 03/06/2025
Address: 2915 N. Main Street	License:
City/State/Zip: Los Angeles, CA 90031	Phone: 310-408-3773

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

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