CERTIFICATE OF COMPLIANCE

Project Name: AA Example 4 Calculation Date/Time:

Calculation Description: Input File Name:

GENERA	AL INFORMATION				
01	Project Name	AA Example 4			
02	Run Title	Addition 500 ft2			
03	Project Location	1401 N 5th St			
04	City	Burbank, CA	05	Standards Version	2019
06	Zip code	91504	07	Software Version	CBECC-Res 2019.0.11 Alpha (1068)
08	Climate Zone	9	09	Front Orientation (deg/ Cardinal)	90
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionAlone	13	Number of Bedrooms	3
14	New Cond. Floor Area (ft <sup>2</sup> )	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft <sup>2</sup> )	1515	17	Fenestration Average U-factor	0.308
18	Total Cond. Floor Area (ft <sup>2</sup> )	500	19	Glazing Percentage (%)	0.176

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15155002015303

COMPLIANCE RE	SULTS
01	Building Does Not Comply
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.

## REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

BUILDING - FEATURES INFORMA	TION					
01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
AA Example 4	500	1	3	1	0	1

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ZONE INFORMATION						
01	02	03	04	05	06	07
Zone NameZone Name	Zone TypeZone Type	HVAC System Name	Zone Floor Area (ft <sup>2</sup> )	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
Addition	Conditioned	Ex HVAC System	500	9	DHW System	This field or section is not applicable

OPAQUE SURFACES									
01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	AzimuthAzim uth	OrientationOr ientation	Gross Area (ft <sup>2</sup> )	Window and Door Area (ft <sup>2</sup> )Window and Door Area (ft <sup>2</sup> )	Tilt (deg)Tilt (deg)	Status	Verified Existing Condition
Addition Wall Left	Addition	2x6 R-19 w/R5	90	Left	190	36	90		
Add Back Wall	Addition	2x6 R-19 w/R5	180	Back	190	40.02	90		
Add Wall Right	Addition	2x6 R-19 w/R5	270	Right	190	12	90		
Addition Ceiling	Addition	R-38 Ceiling	This field or section is not applicable	This field or section is not applicable	500	This field or section is not applicable	This field or section is not applicable		
·		,	•	3		•	•		

ATTIC			4						
01	02	03	04	05	06	07	08	09	10
Name	Construction	Туре	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic	Asphalt High performance	Ventilated	5	0.1	0.85	No	No		

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Project Name: AA Example 4

**Calculation Date/Time:** Input File Name:

**Calculation Description:** 

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Туре	Surface (Orientation- Azimuth)	tion-	Surface (Orienta tion- Azimuth	Width (ft)	Heigth (ft)	Multiplier	Area (ft <sup>2</sup> )	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
L-4040	Window	Addition Wall Left	Left	180	4	4	1	16	0.32	NFRC	0.22	NFRC	Insect Screen (default)		
L-4050	Window	Addition Wall Left	Left	180	4	5	1	20	0.32	NFRC	0.22	NFRC	Insect Screen (default)		
B-6068	Window	Add Back Wall	Back	270	6	6.67	1	40.02	0.3	NFRC	0.18	NFRC	Insect Screen (default)		
R-3020 x2	Window	Add Wall Right	Right	0	3	2	2	12	0.3	NFRC	0.2	NFRC	Insect Screen (default)		

OVERHANG	OVERHANGS AND FINS														
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Window	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Тор Uр	Dist L	Bot Up	Depth	Тор Uр	Dist R	Bot Up	Status	Verified Existing Condition
B-6068	6	1	10	10	0	0	0	0	0	0	0	0	0		

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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Project Name: AA Example 4 Calculation Date/Time:

**Calculation Description:** 

OPAQUE SURFA	CE CONSTRUCTION	ONS									
01	02	03	04	05	06	07	08	09	10	11	12
Construction Name	Surface Type	Is construction above grade?	Constructio n Type	Constructio n NameSurfa ce Typels constructio n above grade?Cons truction TypeTotal Cavity R- valueTotal Cavity R-valueTotal Cavity R-value decimalInt erior/ Exterior Continuous R- valueInteri or/ Exterior Continuous R-valueU- factorAsse mbly LayersUser Defined Fields	Total Cavity R-value	Total Cavity R-value	Total Cavity R-value decimal	Interior/ Exterior Continuous R-value	Interior/ Exterior Continuous R-value	<b>U-factor</b>	Assembly Layers
2x6 R-19 w/R5	Exterior Walls	Above Grade	Wood Framed Wall		Other	R 19 in 5-1/2 in. cavity (R-18)	18			0.051	Inside Finish: Gypsum BoardCavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6Sheathing / Insulation: R5

Input File Name:

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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Project Name: AA Example 4 Calculation Date/Time: (Page 5 of 13)

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Calculation Description: Input File Name:

Calculation De						IIIput riie iva					
OPAQUE SURFA	CE CONSTRUCTION	ONS									
01	02	03	04	05	06	07	08	09	10	11	12
Construction Name	Surface Type	Is construction above grade?	Constructio n Type	Constructio n NameSurfa ce TypeIs constructio n above grade?Cons truction TypeTotal Cavity R- valueTotal Cavity R-valueTotal Cavity R-value decimalInt erior/ Exterior Continuous R- valueInteri or/ Exterior Continuous R-valueU- factorAsse mbly LayersUser Defined Fields	Total Cavity R-value	Total Cavity R-value	Total Cavity R-value decimal	Interior/ Exterior Continuous R-value	Interior/ Exterior Continuous R-value	<b>U-factor</b>	Assembly Layers
											SheathingExte ior Finish: Synthetic Stucco

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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Calculation Description: Input File Name:

ODA OLUE CUREA		ONIC				input inc itu				1	
	CE CONSTRUCTION		1	l				T			
Construction Name	O2 Surface Type	ls construction above grade?	Construction Type	O5 Construction n NameSurfa ce Typels construction n above grade?Cons truction TypeTotal Cavity R- valueTotal Cavity R-valueTotal Cavity R-value decimalInt erior/ Exterior Continuous R- valueInteri or/ Exterior Continuous R-valueU- factorAsse mbly LayersUser Defined Fields	Total Cavity R-value	Total Cavity R-value	Total Cavity R-value decimal	Interior/ Exterior Continuous R-value	Interior/ Exterior Continuous R-value	U-factor	Assembly Layers
Interior RO	Interior Walls	Above Grade	Wood Framed Wall		Other	none	0			0.277	Inside Finish: Gypsum BoardCavity / Frame: no insul. / 2x4Other Side Finish: Gypsum Board

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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Project Name: AA Example 4

Calculation Description:

Input File Name:

carcaration be						input inc itu				_	
OPAQUE SURFA	CE CONSTRUCTION	ONS									
01	02	03	04	05	06	07	08	09	10	11	12
Construction Name	Surface Type	Is construction above grade?	Constructio n Type	Constructio n NameSurfa ce TypeIs constructio n above grade?Cons truction TypeTotal Cavity R- valueTotal Cavity R-valueTotal Cavity Laterior Continuous R-valueU- factorAsse mbly LayersUser Defined Fields	Total Cavity R-value	Total Cavity R-value	Total Cavity R-value decimal	Interior/ Exterior Continuous R-value	Interior/ Exterior Continuous R-value	<b>U-factor</b>	Assembly Layers
Asphalt High performance	Attic Roofs	Above Grade	Wood Framed Ceiling		R 13	R 13	13			0.082	Around Root Joists: R-0.0 insul.Cavity, Frame: R-13. / 2x4Roof Deck: Wood Siding/sheath ng/deckingRo

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

CA Building Energy Efficiency Standards - 2019 Residential Compliance

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Calculation Description: Input File Name:

OPAQUE SURFA	CE CONSTRUCTION	ONS									
01	02	03	04	05	06	07	08	09	10	11	12
Construction Name	Surface Type	Is construction above grade?	Constructio n Type	Constructio n NameSurfa ce Typels constructio n above grade?Cons truction TypeTotal Cavity R- valueTotal Cavity R-valueTotal C	Total Cavity R-value	Total Cavity R-value	Total Cavity R-value decimal	Interior/ Exterior Continuous R-value	Interior/ Exterior Continuous R-value	<b>U-factor</b>	Assembly Layers
											fing: Light Roo (Asphalt Shingle)

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Project Name: AA Example 4 Calculation Date/Time: (Page 9 of 13)

Calculation Description: Input File Name:

Calculation De	scription.					iliput riie iva					
OPAQUE SURFA	CE CONSTRUCTION	ONS									
01	02	03	04	05	06	07	08	09	10	11	12
Construction Name	Surface Type	Is construction above grade?	Constructio n Type	Constructio n NameSurfa ce TypeIs constructio n above grade?Cons truction TypeTotal Cavity R- valueTotal Cavity Laterior Continuous R- valueInteri or/ Exterior Continuous R- valueU- factorAsse mbly LayersUser Defined Fields	Total Cavity R-value	Total Cavity R-value	Total Cavity R-value decimal	Interior/ Exterior Continuous R-value	Interior/ Exterior Continuous R-value	<b>U-factor</b>	Assembly Layers
R-38 Ceiling	Ceilings (below attic)	Above Grade	Wood Framed Ceiling		R 38	R 38	38			0.025	Inside Finish: Gypsum BoardCavity / Frame: R-9.1 / 2x4Over Ceiling Joists: R-28.9 insul.

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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Project Name: AA Example 4

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**Calculation Description:** 

Input File Name:

SLAB FLOORS										
Name	Zone	Area (ft <sup>2</sup> )	Perimeter (ft)	Edge Insul. R-value & Depth	Edge Insul. R-value & Depth	Edge Insul. R-value & Depth	Carpeted Fraction	Heated	Status	Verified Existing Condition
Slab On Grade	Addition	500	65	none	0.00	0	0.8	No		

BUILDING ENVELOPE - HERS VERIFICATION								
01	02	03	04					
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope Air Leakage	CFM50					
Not Required	Not Required	Not Required						

DHW SystemStandardMulti-family: No loops or recirc pumpMulti-family: No loops or recirc pump40 Gal1NotCompactExisting

WATER HEATERS											
Name	Heating Element Type	Tank Type	Number of Units	Tank Volume (gal)	Uniform Energy Factor / Energy Factor / Efficiency	Input Rating/ Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss / Recovery Eff	First Hour Rating / Flow Rate	Simulated Equipment Make and Model	Tank Location or Ambient Condition
40 Gal	Gas	Small Storage	1	40	0.53	75000	0				

DHW System - 1/1

SPACE CONDITIONIN	G SYSTEMS							
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition
Ex HVAC System	Heating and cooling system other	Ex Furnace	Ex Cooling	HVAC Fan	Attic Default			
			,				,	,

HVAC - HEATING UNIT TYPES	01		
01	02	03	04
Name	System Type	Number of Units	Efficiency
Ex Furnace	Central gas furnace	1	78

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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Project Name: AA Example 4 Calculation Date/Time:

Calculation Description: Input File Name:

HVAC - COOL	HVAC - COOLING UNIT TYPES										
01	L	02	03	04	05	06	07	08			
Nam	ne	System Type	Number of Units	Efficiency EER	Efficiency SEER	Zonally Controlled	Mulit-speed Compressor	HERS VerificationHERS Verification			
Fx Coo	nling	Central solit AC	1	10.42	12	Not Zonal	Single Sneed	Fy Cooling-hers-cool			

HVAC COOLING - HERS VERIFICATION									
01	02	03	04	05	06				
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge				
Ex Cooling-hers-cool	Not Required	0	Not Required	Not Required	Not Required				

HVAC - DISTRIBUTIO	IVAC - DISTRIBUTION SYSTEMS										
01	02	03	04	05	06	07					
NameName	ТуреТуре	Duct LeakageDuct Leakage	Insulation R-valueInsulation R-value	Duct LocationSupply Duct Location	Bypass Duct	HERS VerificationHERS Verification					
Attic Default	DuctsAttic		8								
		·									

HVAC FAN SYSTEMS - HERS VERIFICATION	HVAC FAN SYSTEMS - HERS VERIFICATION									
01	02	03								
Name	Verified Fan Watt Draw	Required Fan Efficiency (Watts/CFM)								
HVAC Fan-hers-fan	Not Required	0								

IAQ (INDOOR AIR QUALITY) FAN	NS				
01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness (%)	HERS Verification
SFam IAQVentRpt	0	0.25	Default	0	No

COOLING VENTILATION					
01	02	03	04	05	06

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

CERTIFICATE OF COMPLIANCE CF1R-PRF-01E

Project Name: AA Example 4 Calculation Date/Time: (Page 12 of 13)

Calculation Description: Input File Name:

	Name	Airflow Rate (CFM/ft <sup>2</sup> )	Cooling Vent CFM	Cooling Vent Watts/CFM	Total Watts	Number of Fans
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Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

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CERTIFICATE OF COMPLIANCE CF1R-PRF-01E

Project Name: AA Example 4 Calculation Date/Time: (Page 13 of 13)

Calculation Description: Input File Name:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT						
1. I certify that this Certificate of Compliance documentation is accurate and complete.						
Documentation Author Name:	Documentation Author Signature:					
Company:	Signature Date:					
Address:	CEA/ HERS Certification Identification (If applicable):					
City/State/Zip:	Phone:					
RESPONSIBLE PERSON'S DECLARATION STATEMENT						
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:	Responsible Designer Signature:					
Company:	Date Signed:					
Address:	License:					
City/State/Zip:	Phone:					

Registration Number: Registration Date/Time: HERS Provider: CBECC-Res 2019

ompliance Report Version: 2019.1.000 Schema Version: rev 20190401