

CERTIFICATE OF COMPLIANCE
Project Name: HOUSE
Calculation Date/Time: 2022-11-27T22:11:48-08:00
Calculation Description: Title 24 Analysis
Input File Name: NAVARRO Residence (11.12.22).rbd19x
GENERAL INFORMATION
01 Project Name: HOUSE
02 Run Title: Title 24 Analysis
03 Project Location: 11371 ENCINAS CT
04 City: RIVERSIDE
05 Standards Version: 2019
06 Zip code: 92505
07 Software Version: EnergyPro 8.3
08 Climate Zone: 10
09 Front Orientation (deg/ Cardinal): 180
10 Building Type: Single family
11 Number of Dwelling Units: 1
12 Project Scope: NewConstruction
13 Number of Bedrooms: 1
14 Addition Cond. Floor Area (ft²): 0
15 Number of Stories: 1
16 Existing Cond. Floor Area (ft²): 500
17 Fenestration Average U-factor: 0.3
18 Total Cond. Floor Area (ft²): 500
19 Glazing Percentage (%): 12.00%
20 ADU Bedroom Count: n/a
21 ADU Conditioned Floor Area: n/a
22 Is Natural Gas Available?: Yes
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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SLAB FLOORS
01 Name: Zone: Area (ft²): Perimeter (ft): Edge Insul. R-value and Depth: Edge Insul. R-value and Depth: Carpeted Fraction: Heated
02 ADU: 600: 100: none: 0: 80%: No
OPAQUE SURFACE CONSTRUCTIONS
01 Construction Name: Surface Type: Construction Type: Framing: Total Cavity R-value: Interior / Exterior Continuous R-value: U-factor: Assembly Layers
02 R-15 Wall: Exterior Walls: Wood Framed Wall: 2x4 @ 16 in. O.C.: R-15: None / R-8: 0.05: Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Sheathing / Insulation: R-8 Sheathing Exterior Finish: 3 Coat Stucco
03 Attic Roof/ADU: Attic Roofs: Wood Framed Ceiling: 2x4 @ 24 in. O.C.: R-0: None / None: 0.644: Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/Sheathing/Decking Cavity / Frame: no insul. / 2x4
04 R-30 Roof Attic: Ceilings (below attic): Wood Framed Ceiling: 2x8 @ 16 in. O.C.: R-30: None / None: 0.033: Over Ceiling Joists: R-11.2 Insul. Cavity / Frame: R-18.9 / 2x8 Inside Finish: Gypsum Board
BUILDING ENVELOPE - HERS VERIFICATION
01 Quality Insulation Installation (QII): High R-value Spray Foam Insulation: Building Envelope Air Leakage: CFM50
02 Required: Not Required: Not Required: n/a

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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: Benito Corona
Company: Corona Design, LLC
Address: 1100 E Orangetherpe Ave, Ste-200U
City/State/Zip: Anaheim, CA 92801
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: Benito Corona
Company: Corona Design, LLC
Address: 1100 E Orangetherpe Ave, Ste-200U
City/State/Zip: Anaheim, CA 92801

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ENERGY DESIGN RATING
Energy Design Ratings
Efficiency (EDR) Total (EDR) Efficiency (EDR) Total (EDR)
Standard Design: 51.1 25.2
Proposed Design: 48.4 13.6
Compliance Margins: 2.7 11.6
RESULT: 3 COMPLIES
1. Efficiency EDR includes improvements to the building envelope and more efficient equipment.
2. Total EDR includes efficiency and demand response measures such as photovoltaic (PV) systems and batteries.
3. Building complies when efficiency and total compliance margins are greater than or equal to zero.
ENERGY USE SUMMARY
Energy Use (kWh/ft²-yr) Standard Design Proposed Design Compliance Margin Percent Improvement
Space Heating: 9.25 13.77 -4.52 -48.9
Space Cooling: 40.22 35.81 4.41 11
IAQ Ventilation: 4.63 4.63 0 0
Water Heating: 31.86 31.86 0 0
Self Utilization/Flexibility Credit: n/a -11.17 11.17 n/a
Compliance Energy Total: 85.96 74.9 11.06 12.9
REQUIRED PV SYSTEMS - SIMPLIFIED
DC System Size (kWdc) Exception Module Type Array Type Power Electronics CFI Azimuth (deg) Tilt Input Array Angle (deg) Tilt: (x in 12) Inverter Eff. (%) Annual Solar Access (%)
1.72 NA Standard Fixed none false 180 Degree 22 4.85 96 100

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WATER HEATING SYSTEMS
Name System Type Distribution Type Water Heater Name (H) Solar Heating System Compact Distribution HERS Verification
DHW Sys 1 Domestic Hot Water (DHW) Standard Distribution System DHW Heater 1 (H) n/a None n/a
WATER HEATERS
Name Heating Element Type Tank Type # of Units Tank Vol. (gal) Energy Factor or Efficiency Input Rating or Pilot Tank Insulation R-value (Ins/Eqt) Standby Loss or Recovery Eff 1st Hr. Rating or Flow Rate NEEA Heat Pump Brand or Model Tank Location or Ambient Condition
DHW Heater 1 Gas Consumer Instantaneous 1 0 0.81-UEF <= 200 kWh/yr 0 n/a n/a n/a n/a
WATER HEATING - HERS VERIFICATION
Name Pipe Insulation Parallel Piping Compact Distribution Type Recirculation Control Central DHW Distribution Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1 Not Required Not Required Not Required None Not Required Not Required Not Required
SPACE CONDITIONING SYSTEMS
Name System Type Heating Unit Name Cooling Unit Name Fan Name Distribution Name Required Thermostat Type Status Verified Existing Condition Heating Equipment Count Cooling Equipment Count
HVAC System1 Heat pump heating cooling Heat Pump System 1 Heat Pump System 1 HVAC Fan 1 Air Distribution System 1 Setback New NA 1 1

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HVAC - HEAT PUMPS
Name System Type Number of Units Heating HSPF/COP Cap 47 Cap 17 SEER CEER/CEER Cooling Zonally Controlled Compressor Type HERS Verification
Heat Pump System 1 Central split HP 1 9.5 60000 50000 15 12.5 Not Zonal Single Speed Heat Pump System 1-hers-hpump
HVAC HEAT PUMPS - HERS VERIFICATION
Name Verified Airflow Airflow Target Verified EER Verified SEER Verified Refrigerant Charge Verified HSPF Verified Heating Cap 47 Verified Heating Cap 17
Heat Pump System 1-hers-hpump Required 350 Required Required No Yes Yes
HVAC - DISTRIBUTION SYSTEMS
Name Type Design Type Supply Return Supply Return Supply Return Bypass Duct Duct Leakage HERS Verification
Air Distribution System 1 Conditioned space-entirely Non-Verified R-8 R-8 Conditioned Zone Conditioned Zone n/a n/a No Bypass Duct Sealed and Tested Air Distribution System 1-hers-dist

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ENERGY DESIGN RATING BATTERY INPUTS
01 Control 02 Capacity (kWh) 03 Charging Efficiency 04 Rate (kW/Rate (kW) 05 Discharging Efficiency 06 Rate (kW/Rate (kW)
Basic 12 0.96 n/a n/a n/a
REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
Battery System: 12 kWh (Self Utilization Credit taken)
Non-standard duct location (any location other than attic)
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.
Building-level Verifications:
Quality Insulation Installation (QII)
Indoor air quality ventilation
Kitchen range hood
Cooling System Verifications:
Minimum Airflow
Verified EER
Verified SEER
Fan Efficiency (Watts)/CFM
Heating System Verifications:
Verified HSPF
Verified heat pump rated heating capacity
HVAC Distribution System Verifications:
Duct leakage testing
Ducts located entirely in conditioned space confirmed by duct leakage testing
Domestic Hot Water System Verifications:
None

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ZONE INFORMATION
01 Zone Name 02 Zone Type 03 HVAC System Name 04 Zone Floor Area (ft²) 05 Avg. Ceiling Height 06 Water Heating System 1 07 Water Heating System 2
ADU Conditioned HVAC System1 550 8 DHW Sys 1 N/A
OPAQUE SURFACES
01 Name 02 Zone 03 Construction 04 Azimuth 05 Orientation 06 Gross Area (ft²) 07 Window and Door Area (ft²) 08 TIR (deg)
Right Wall ADU R-15 Wall 0 Back 302 0 90
LEFT Wall ADU R-15 Wall 0 Back 302 30 90
FRONT Wall ADU R-15 Wall 0 Back 280 36 90
REAR Wall ADU R-15 Wall 0 Back 280 0 90
Roof ADU R-30 Roof Attic n/a n/a 600 n/a n/a
ATTIC
01 Name 02 Construction 03 Type 04 Roof Rise (x in 12) 05 Roof Reflectance 06 Roof Emittance 07 Radiant Barrier 08 Cool Roof
Attic ADU Attic Roof/ADU Ventilated 4 0.1 0.85 Yes No
FENESTRATION / GLAZING
01 Name 02 Type 03 Surface 04 Orientation 05 Azimuth 06 Width (ft) 07 Height (ft) 08 Mult. 09 Area (ft²) 10 U-factor 11 SHGC Source 12 SHGC Source 13 Exterior Shading
Window Window LEFT Wall Back 0 1 30 0.3 NFR 0.23 NFR Bug Screen
Window2 Window FRONT Wall Back 0 1 36 0.3 NFR 0.23 NFR Bug Screen

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HVAC DISTRIBUTION - HERS VERIFICATION
Name Duct Leakage Verification Duct Leakage Target (%) Verified Duct Location Verified Duct Design Buried Ducts Deeply Buried Ducts Low-leakage Air Handler Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist Yes 5.0 Required Not Required Not Required Credit not taken Not Required No
HVAC - FAN SYSTEMS
01 Name 02 Type 03 Fan Power (Watts/CFM) 04 Name
HVAC Fan 1 HVAC Fan 1 0.45 HVAC Fan 1-hers-fan
HVAC FAN SYSTEMS - HERS VERIFICATION
Name Verified Fan Watt Draw Required Fan Efficiency (Watts/CFM)
HVAC Fan 1-hers-fan Required 0.45
IAQ (INDOOR AIR QUALITY) FANS
01 Dwelling Unit 02 IAQ CFM 03 IAQ Watts/CFM 04 IAQ Fan Type 05 IAQ Recovery Effectiveness - SRE 06 IAQ Recovery Effectiveness - ASRE 07 HERS Verification
Sfam IAQVentprt 31 0.35 Exhaust n/a n/a Yes

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CORONA DESIGN, LLC
DESIGN & ENGINEERING SERVICES
5500 E LA PALMA AVE STE 203
ANAHEIM, CA 92801
PHONE: (714) 866-0905
EMAIL: BDC@CORONA-DESIGN.COM
PROPOSED CONVERTING 2-CAR GARAGE INTO JADU FOR NAVARRO RESIDENCE 11375 ENCINAS DR RIVERSIDE, CA 92505
TITLE 24 COMPLIANCE FORMS
DATE: 11.23.22
JOB NO.: 22.3301N
DRAWN: YA
CHECKED: BC
SHEET 10 OF 07
T24 - 1