

PERFORMANCE CERTIFICATE: Residential (Part 1 of 5) CF-1R
Project Name: Mr. & Mrs. André Blakey
Building Type: Single Family
Date: 6/12/2013
Project Address: 8364 Lake Ashwood Ave, San Diego
California Energy Climate Zone: CA Climate Zone 07
Total Cond. Floor Area: 3,263
Addition: 1,377
of Stories: 2

FIELD INSPECTION ENERGY CHECKLIST
Yes No HERS Measures -- If Yes, A CF-4R must be provided per Part 2 of 5 of this form.
Yes No Special Features -- If Yes, see Part 2 of 5 of this form for details.

INSULATION Table with columns: Construction, Type, Cavity, Area (ft²), Special Features, Status. Rows include Wall, Roof, Slab, Wall/IG, Floor, Roof, Floor, Wall.

FENESTRATION Table with columns: Orientation, Area (ft²), U-Factor, SHGC, Overhang, Sidesfins, Exterior Shades, Status. Rows include Left (NW), Right (SE), Rear (NE), Skylight, Front (SW), Right (SE), Left (NW), Front (W), Skylight.

HVAC SYSTEMS Table with columns: Qty, Heating, Min. Eff, Cooling, Min. Eff, Thermostat, Status. Row: 2 Central Furnace, 78% AFUE, Split Air Conditioner, 11.0 SEER, Setback, Existing.

HVAC DISTRIBUTION Table with columns: Location, Heating, Cooling, Duct Location, Duct R-Value, Status. Row: Existing HVAC System, Ducted, Ducted, Attic, Ceiling Ins. vented, 4.2, Existing.

WATER HEATING Table with columns: Qty, Type, Gallons, Min. Eff, Distribution, Status.

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Yes No Special Features -- If Yes, see Part 2 of 5 of this form for details.

INSULATION Table with columns: Construction, Type, Cavity, Area (ft²), Special Features, Status. Rows include Door, Roof.

FENESTRATION Table with columns: Orientation, Area (ft²), U-Factor, SHGC, Overhang, Sidesfins, Exterior Shades, Status.

HVAC SYSTEMS Table with columns: Qty, Heating, Min. Eff, Cooling, Min. Eff, Thermostat, Status.

HVAC DISTRIBUTION Table with columns: Location, Heating, Cooling, Duct Location, Duct R-Value, Status.

WATER HEATING Table with columns: Qty, Type, Gallons, Min. Eff, Distribution, Status.

PERFORMANCE CERTIFICATE: Residential (Part 2 of 5) CF-1R
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SPECIAL FEATURES INSPECTION CHECKLIST
The enforcement agency should pay special attention to the items specified in this checklist. These items require special written justification and documentation, and special verification to be used with the performance approach.

Table for SPECIAL FEATURES INSPECTION CHECKLIST with columns for various items and their status.

HERS REQUIRED VERIFICATION
Items in this section require field testing and/or verification by a certified HERS Rater. The inspector must receive a completed CF-4R form for each of the measures listed below for final to be given.

PERFORMANCE CERTIFICATE: Residential (Part 3 of 5) CF-1R
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ANNUAL ENERGY USE SUMMARY Table with columns: Standard, Proposed, Margin. Rows include TDV, Space Heating, Space Cooling, Fans, Domestic Hot Water, Pumps, Totals.

BUILDING COMPLIES - NO HERS VERIFICATION REQUIRED Table with columns: Building Front Orientation, Number of Dwelling Units, Fuel Available at Site, Raised Floor Area, Slab on Grade Area, Average Ceiling Height, Fenestration Average U-Factor, Average SHGC.

REMARKS section for the performance certificate.

STATEMENT OF COMPLIANCE
This certificate of compliance lists the building features and specifications needed to comply with Title 24, Part 1 of the Administrative Regulations and Part 6 of the Efficiency Standards of the California Code of Regulations.

Documentation Author
Company: NRQ Compliance, Inc.
Address: PO Box 3777, Santa Rosa, California 95402
Name: Rick Rochlewitz
Phone: 707-237-6987
Signed: [Signature] Date: 6/12/2013

Designer or Owner (per Business & Professions Code)
Company: Marco A. Laureano
Address: 560 Lynhite Cir, Vista, CA 92084
Name: Marco A. Laureano
Phone: 760-805-2358
Signed: [Signature] License #: [Blank] Date: [Blank]

CERTIFICATE OF COMPLIANCE: Residential (Part 4 of 5) CF-1R
Project Name: Mr. & Mrs. André Blakey
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OPAQUE SURFACE DETAILS Table with columns: Surface Type, Area, U-Factor, Insulation, Status, Location/Comments. Rows include Wall, Roof, Slab, Wall/IG, Floor, Wall, Floor, Wall, Door, Wall, Wall, Door, Wall.

FENESTRATION SURFACE DETAILS Table with columns: ID, Type, Area, U-Factor, SHGC, Azim, Status, Glazing Type, Location/Comments. Rows include Window, Window, Window, Window, Skylight, Window, Window, Window, Window, Window, Skylight.

EXTERIOR SHADING DETAILS Table with columns: ID, Exterior Shade Type, SHGC, Window Hgt, Wd, Len, Hgt, LEX, REX, Dist, Len, Hgt, Dist, Len, Hgt. Rows include Bug Screen, Bug Screen, Bug Screen, Bug Screen, None, Bug Screen, Bug Screen, Bug Screen, Bug Screen, Bug Screen, None.

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OPAQUE SURFACE DETAILS Table with columns: Surface Type, Area, U-Factor, Insulation, Status, Location/Comments. Rows include Wall, Roof.

FENESTRATION SURFACE DETAILS Table with columns: ID, Type, Area, U-Factor, SHGC, Azim, Status, Glazing Type, Location/Comments. Rows include Window, Window, Window, Window, Skylight, Window, Window, Window, Window, Window, Skylight.

EXTERIOR SHADING DETAILS Table with columns: ID, Exterior Shade Type, SHGC, Window Hgt, Wd, Len, Hgt, LEX, REX, Dist, Len, Hgt, Dist, Len, Hgt. Rows include Bug Screen, Bug Screen, Bug Screen, Bug Screen, None, Bug Screen, Bug Screen, Bug Screen, Bug Screen, Bug Screen, None.

CERTIFICATE OF COMPLIANCE: Residential (Part 5 of 5) CF-1R
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BUILDING ZONE INFORMATION Table with columns: System Name, Zone Name, Floor Area (ft²), Volume, Year Built. Rows include Existing HVAC System, Addition, Addition, Existing.

HVAC SYSTEMS Table with columns: System Name, Qty, Heating, Min. Eff, Cooling, Min. Eff, Thermostat, Status. Row: Existing HVAC System, 2 Central Furnace, 78% AFUE, Split Air Conditioner, 11.0 SEER, Setback, Existing.

HVAC DISTRIBUTION Table with columns: System Name, Heating, Cooling, Duct Location, Duct R-Value, Ducts Tested?, Status. Row: Existing HVAC System, Ducted, Ducted, Attic, Ceiling Ins. vented, 4.2, Existing.

WATER HEATING SYSTEMS Table with columns: System Name, Qty, Type, Distribution, Rated Input (Btu/h), Tank Cap. (gal), Energy Factor or RE, Standby Loss or Pilot, Ext. Tank Insul. R-Value, Status. Row: Standard Gas 50 gal or Less, Small Gas, No Pipe Insulation, 40,000, 80, 0.88, n/a, n/a, Existing.

MULTI-FAMILY WATER HEATING DETAILS and HYDRONIC HEATING SYSTEM PIPING Table with columns: Control, City, HP, Plenum, Outside, Buried, System Name, Pipe Length, Pipe Diameter, Insul. Thick.

MANDATORY MEASURES SUMMARY: Residential (Page 1 of 3) MF-1R
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NOTE: Low-rise residential buildings subject to the Standards must comply with all applicable mandatory measures listed, regardless of the compliance approach used. More stringent energy measures listed on the Certificate of Compliance (CF-1R, CF-1R-ADD) or CF-1R-AL (Form) shall supersede the items marked with an asterisk (*) below. This Mandatory Measures Summary shall be incorporated into the permit documents, and the applicable features shall be considered by all parties as minimum component performance specifications whether they are shown elsewhere in the documents or in this summary. Submit all applicable sections of the MF-1R Form with plans.

- §116(a): Doors and windows between conditioned and unconditioned spaces are manufactured to limit air leakage.
§116(b): Fenestration products (except fixed louvered windows) have a label listing the certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration that meets the requirements of §10-111(a).
§117: Exterior doors and windows are weather-stripped, all joints and penetrations are caulked and sealed.
§118(a): Insulation specified or installed meets Standards for Insulating Material. Indicate type and include on CF-8R Form.
§118(b): The thermal emittance and solar reflectance values of the cool roofing material meets the requirements of §118(i) when the installation of a Cool Roof is specified on the CF-1R Form.
§150(a): Minimum R-19 insulation in wood-frame ceiling or equivalent U-factor.
§150(b): Loose fill insulation shall conform with manufacturer's installed design labeled R-Value.
§150(c): Minimum R-13 insulation in wood-frame wall or equivalent U-factor.
§150(d): Minimum R-13 insulation in raised wood-frame floor or equivalent U-factor.
§150(f): Air retarding wrap is tested, labeled, and installed according to ASTM E1677-95(2000) when specified on the CF-1R Form.
§150(g): Mandatory Vapor barrier installed in Climate Zones 14 or 16.
§150(i): Water absorption rate for slab edge insulation material alone without facings is no greater than 0.3%; water vapor permeance rate is no greater than 2.0 perm-inch and shall be protected from physical damage and UV light deterioration.

- Fireplaces, Decorative Gas Appliances and Gas Log Measures:
§150(e)(1A): Masonry or factory-built fireplaces have a closable metal or glass door covering the entire opening of the firebox.
§150(e)(1B): Masonry or factory-built fireplaces have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and light-tight damper and/or a combustion air control device.
§150(e)(2): Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.

- Space Conditioning, Water Heating and Plumbing System Measures:
§110-§113: HVAC equipment, water heaters, showerheads, faucets and all other regulated appliances are certified by the Energy Commission.
§113(c)(5): Water heating recirculation loops serving multiple dwelling units and high-rise residential occupancies meet the air release valve, backflow prevention, pump isolation valve, and recirculation loop connection requirements of §113(c)(5).
§115: Continuously burning pilot lights are prohibited for natural gas; fan-type central furnaces, household cooking appliances (appliances with an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt), and pool and spa heaters.
§150(n): Heating and/or cooling loads are calculated in accordance with ASHRAE, SMACNA or ACCA.

- §150(i): Heating systems are equipped with thermostats that meet the setback requirements of Section 112(c).
§150(j)(1A): Storage gas water heaters rated with an Energy Factor no greater than the federal minimal standard are externally wrapped with insulation having an installed thermal resistance of R-2 or greater.
§150(j)(1B): Unvented storage tanks, such as storage tanks or backup tanks for solar water-heating system, or other indirect hot water tanks have R-12 exterior insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§150(j)(2): First 5 feet of hot and cold water pipes closest to water heater tank, non-recirculating systems, and entire length of recirculating sections of hot water pipes are insulated per Standards Table 150-B.

- §150(j)(2): Cooling system piping (suction, chilled water, or brine lines) and piping insulated between heating source and indirect hot water tank shall be insulated to Table 150-B and Equation 150-A.
§150(j)(2): Pipe insulation for steam hydronic heating systems or hot water systems >15 psi, meets the requirements of Standards Table 123-A.
§150(j)(3A): Insulation is protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.
§150(j)(3A): Insulation for chilled water piping and refrigerant suction lines includes a vapor retardant or is enclosed entirely in conditioned space.
§150(j)(4): Solar water heating systems and/or collectors are certified by the Solar Rating and Certification Corporation.

MARCO A. LAUREANO
HOUSE PLANS & DESIGNS
PLANS-DRAWING-DESIGN-BUILDING PERMITS
WWW.MARCOA.LAUREANO.COM
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OWNERS NAME & ADDRESS:
MR. & MRS. ANDRÉ BLAKEY
XXXX LAKE ASHWOOD AVE. SAN DIEGO, CA. 92119

PROJECT NAME & ADDRESS:
BLAKEYS HOUSE REMODEL
XXXX LAKE ASHWOOD AVE. SAN DIEGO, CA. 92119

CONSULTANT:
MARCO A. LAUREANO

REVISIONS:
07/24/2013
08/01/2013
DATE: 06/17/2013
SCALE:
AS SPECIFIED BY: MARCO A. LAUREANO
SHEET: T-24
OF: 14