

CITY OF SACRAMENTO

Permit No: 0604475

1231 I Street, Sacramento, CA 95814

Insp Area: 2

Site Address: 121 CLEAR SKY CR SAC

Parcel No: LIBERTY LANE LOT #42 Housing (Y/N):

Thos Bros:

Sub-Type: NSFR

PAID CITY OF SACRAMENTO

APR 24 2006

N

CONTRACTOR

RYLAND HOMES  
1755 CREEKSIDE OAKS DR. #240  
SACRAMENTO CA. 95835

OWNER

ARCHITECT

NEIGHBORHOODS PLANNING AND DEVELOPMENT SERVICES

Nature of Work: MP1723 2 STORY 7 ROOMS SFR

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class B License Number 054648 Date 4-24-06 Contractor Signature [Signature]

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_

Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 4-24-06 Applicant/Agent Signature [Signature]

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

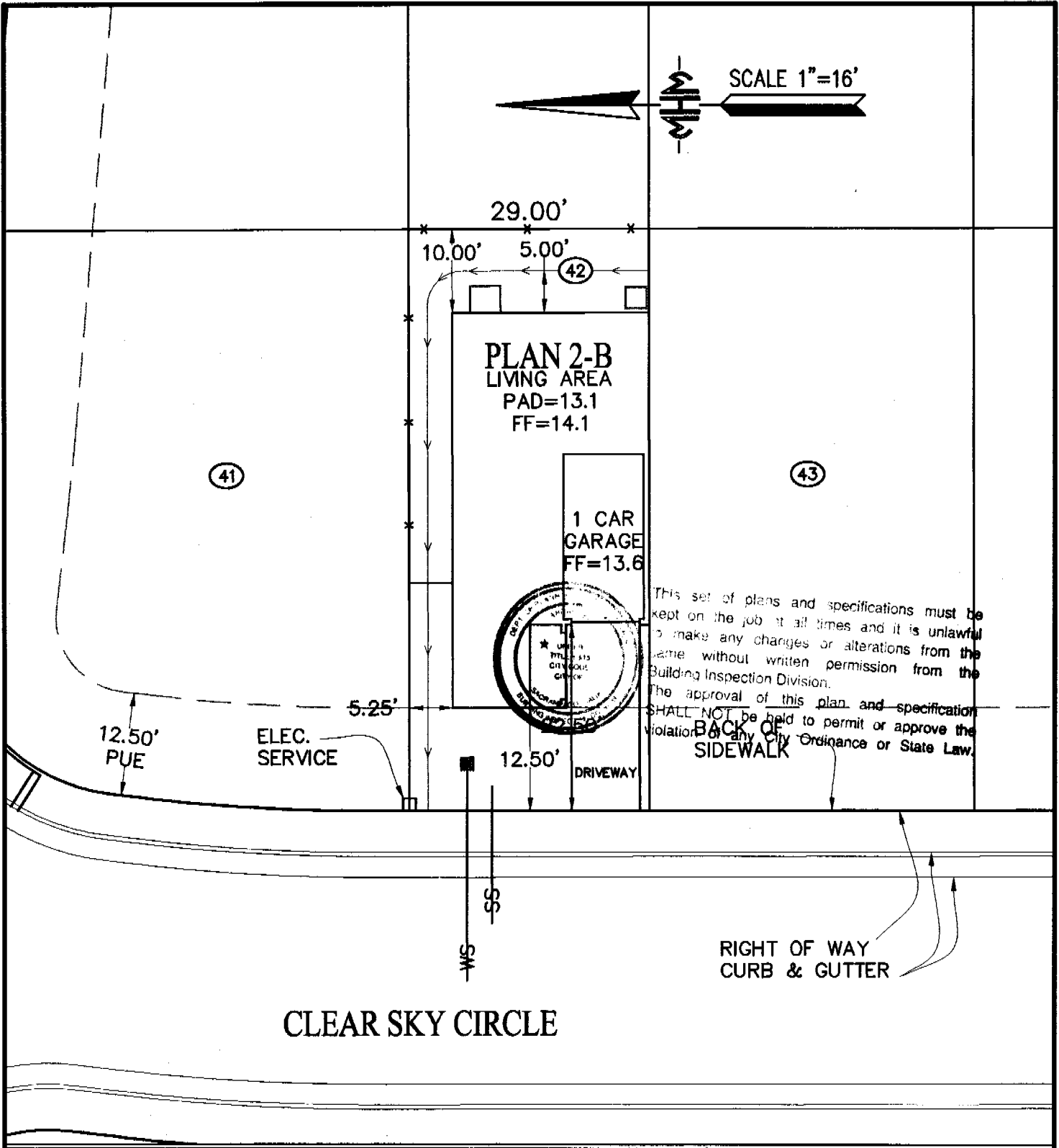
Carrier AMERICAN HOME ASSURANCE Policy Number WC118-2338(CA) Exp Date 06/01/2006

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 4-24-06 Applicant Signature [Signature]

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.



LOT AREA: 2030 S.F.	ACTUAL LOT COVERAGE: 1030 S.F. = 50.5%	NUMBER OF BEDROOMS: 4	BUILDING HEIGHT: 27' 10"
Reviewed by Home Owner with Sales Representative:		Approved By:	
Home Owner _____ Date _____	Sales Rep. _____ Date _____	Ryland Homes _____ Date _____	
It is understood that the drainage areas, slopes and grades shall not be altered, changed, blocked, modified or in any way be reconstructed by Owner contrary to what is depicted on this Plot Plan. THESE CONDITIONS RUN WITH THE LAND AND ARE BINDING ON ALL SUBSEQUENT OWNERS. All setback dimensions and elevations as shown may be adjusted to fit field conditions.			
<b>M.H.M.</b> ENGINEERING-SURVEYING 523 "J" STREET MARYSVILLE, CALIF. 95901-1674 Ph: (530)742-6485	Plot plan for Liberty Lane Sacramento	121 Clear Sky Circle Sacramento California	MHM Job# 04162 Lot 42 A.P.N.

**INSTALLATION CERTIFICATE**

(Page 2 of 13)

**CF-6R**

**RYLAND HOMES**

Site Address **LIBERTY LANE - LOT 42**

Permit Number **060475**

**FENESTRATION/GLAZING: PLAN 2 ELEV. B**

**121 CLEAR SKY CIR**

Manufacturer/Brand Name (GROUP LIKE PRODUCTS)	Product U-Factor <sup>1</sup> (≤ CF-1R value) <sup>2</sup>	Product SHGC <sup>1</sup> (≤ CF-1R value) <sup>2</sup>	# of Pans	Total Quantity of Like Product (Optional)	Square Feet	Exterior Shading Device or Overhang	Comments/Location/Special Features
1. PHILIPS WHITE							
2. VINYL WINDOWS							
3. W/ LOWE2 GLASS							
4.							
5. XO	35			5	109		
6. SH	35			7	90		
7. PW	32			3	24		
8. SGD	33			1	48		
9.							
10.							
11.							
12.							
13.							
14.							
15.							

<sup>1</sup> Manufactured fenestration products use the values from the product label. Field fabricated fenestration products use the default values from Section 116 of the Energy Efficiency Standards.

<sup>2</sup> Installed U-Factor must be less than or equal to values from CF-1R. Installed SHGC must be less than or equal to values from CF-1R, or a shading device (exterior or overhang) is installed as specified on the CF-1R. Alternatively, installed weighted average U-Factors for the total fenestration area are less than or equal to values from CF-1R.

I, the undersigned, verify that the fenestration/glazing listed above my signature: 1) is the actual fenestration product installed; 2) is equivalent to or has a lower U-Factor and lower SHGC than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the *Energy Efficiency Standards* for residential buildings; and 3) the product meets or exceeds the appropriate requirements for manufactured devices (from Part 6), where applicable.

Item #s (if applicable)	Signature, Date <u>[Signature]</u> 1/6/2006	Sacramento Building Products Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature, Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature, Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor

COPY TO: Building Department  
HERS Provider (if applicable)  
Building Owner at Occupancy

LOT **42** PLAN **2B**

Ryland Homes Liberty lane

Site Address **121 CLEAR SKY CIR**

Permit Number

**0604475**

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required; however, use of this form to provide the information is optional.) After completion of final inspection a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(b).

**HVAC SYSTEMS:**

**Heating Equipment**

Equip. Type (pkg. Heat pump)	CEC Certified Mfr name and Model #	# of Identical Systems	(1) Efficiency (AFUE, etc.) > CF-1 R value	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)	
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	R-6	30,256	70,000	Plan 1
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	R-6	30,704	70,000	Plan 2
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	R-6	32,246	70,000	Plan 3
FURNACE	Carrier 58STX070-12	1	80%	ATTIC	R-6	24,627	70,000	Plan 4


**Cooling Equipment**

Equip. Type (pkg. Heat pump)	CEC Certified Compressor Unit Mfr Name and Model #	# of Identical Systems	(1) Efficiency (SEER, etc.) > CF-1 R value	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)	
A/C	Carrier 38ETG030-3*	1	13.0	ATTIC	R-6	15,755	25,900	Plan 1
A/C	Carrier 38ETG030-3*	1	13.0	ATTIC	R-6	18,690	25,900	Plan 2
A/C	Carrier 38ETG030-3*	1	13.0	ATTIC	R-6	19,068	25,900	Plan 3
A/C	Carrier 38ETG030-3*	1	13.0	ATTIC	R-6	13,496	25,900	Plan 4

\* = TXV valve installed as part of coil

(1) > reads greater than or equal to.

I, the undersigned, verify that equipment listed above is: 1) is the actual equipment installed, 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the Energy Efficiency Standards for residential buildings, and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the Appliance Efficiency Regulations or Part 6), where applicable.

 11/1/05  
Signature, Date

**BEUTLER CORPORATION**

Installing Subcontractor (Co. Name)

OR General Contractor ( Co. Name) OR Owner

lot 42 PLAN 2B  
**INSTALLATION CERTIFICATE**

(Page 1 of 12) **CF-6R**

Site Address **121 CLEAR SKY CIR**

Permit Number **0604475**

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(a).

**WATER HEATING SYSTEMS:**

Heater Type	CEC Certified Mfr Name & Model Number	Distribution Type (Std, Point-of-Use, etc)	If Recirculation, Control Type	# of Identical Systems	Rated Input (KW or Btu/hr) <sup>1</sup>	Tank Volume (gallons)	Efficiency (EF, RE) <sup>2</sup>	Standby Loss (%) <sup>2</sup>	External Insulation R-value <sup>2</sup>
GAS	A.O. SMITH GVR 50	STD	N/A	1	45,000	50	.62	N/A	N/A

- For small gas storage (rated input of less than or equal to 75,000 Btu/hr), electric resistance and heat pump water heaters, list Energy Factor (EF). For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery (RE), Thermal Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Thermal Efficiency and Rated Input.
- R-12 external insulation is mandatory for storage water heaters with an energy factor of less than 0.58.


**Kitchen Piping:**  
 If indicated on the CF-1R, all hot water piping  $\geq$  3/4 inches in diameter that runs from the hot water source to the kitchen fixtures is insulated.

**Faucets & Shower Heads:**  
 All faucets and showerheads installed are certified to the Energy Commission, pursuant to Title 24, Part 6, Section 111.

**Central Water Heating in Buildings with Multiple Dwelling Units** (required for prescriptive)

- All hot water piping in main circulating loop is insulated to requirements of §150(j)
- Central hot water systems serving six or fewer dwelling units which have (1) less than 25' of distribution piping outdoors; (2) zero distribution piping underground; (3) no recirculation pump; and (4) insulation on distribution piping that meets the requirements of Section 150(j)
- Central hot water systems serving more than 6 dwelling units - presence of either a time control or a time/temperature control

I, the undersigned, verify that equipment listed above my signature is: 1) the actual equipment installed; 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the *Energy Efficiency Standards* for residential buildings; and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the *Appliance Efficiency Regulations* or Part 6), where applicable.

 1/10/06  
 Signature, Date

Law-Ann Plumbing  
 Installing Subcontractor (Co. Name) OR  
 General Contractor (Co. Name) OR Owner

COPY TO: Building Department  
 HERS Rater (if applicable)  
 Building Owner at Occupancy

THIS FORM IS TYPICAL FOR PLANS 1-4  
 Residential Compliance Forms

CERTIFICATE OF FIELD VERIFICATION DIAGNOSTIC TESTING		CF-4R
Project Address <b>121 Clear Sky, 42 @ Liberty Lane</b>	Builder Name <b>Ryland Homes - San Ramon</b>	
Builder Contact <b>Travis</b>	Telephone <b>(209) 538-2879</b>	Plan Number <b>2/1732</b>
HERS Rater <i>Eduardo Reyes</i>	Telephone <b>(209) 538-2879</b>	Sample Group Number <b>2</b>
Compliance Method (Prescriptive)		Climate Zone
Certifying Signature <i>[Signature]</i>	Date <b>9-13-07</b>	Sample House Number
Firm <b>California Living and Energy</b>	HERS Provider <b>CalCERTS</b>	
Street Address: <b>3015 Dale CT.</b>	City/State/Zip: <b>Ceres, CA 95307</b>	

Copies to BUILDER, HERS PROVIDER AND BUILDING DEPARTMENT

### HERS RATER COMPLIANCE STATEMENT

The house was:  Tested  Approved as part of sample testing, but was not tested

As the HERS rater providing diagnostic testing and field verification, I certify that the house identified on this form complies with the diagnostic tested compliance requirements as checked on this form. The HERS rater must check and verify that the new distribution system is fully ducted and correct taped is used before a CF-4R may be released on every tested building. The HERS rater must not release the CF-4R until a properly completed and signed CF-6R has been received for the sample and tested buildings.

- The installer has provided a copy of CF-6R (Installation Certificate).
- New Distribution system is fully ducted (i.e. does not use building cavities as plenums or platform returns in lieu of duct)
- New systems where cloth backed, rubber adhesive duct tape is installed, mastic and draw bands are used in combination with cloth backed, rubber adhesive duct tape to seal leaks at duct connections.

#### MINIMUM REQUIREMENTS FOR DUCT LEAKAGE REDUCTION COMPLIANCE CREDIT

Procedures for field verification and diagnostic testing of air distribution systems are available in RACM, Appendix RC4.3.

Duct Diagnostic Leakage Testing Results

NEW CONSTRUCTION:		Measured Values	
1	Duct Pressurization Test Results (CFM @ 25 Pa) Enter Tested Leakage Flow in CFM	0 /	
2	Fan Flow: Calculated (Nominal): <input checked="" type="checkbox"/> Cooling: <input type="checkbox"/> Heating) or <input type="checkbox"/> Measured Enter Total Fan Flow in CFM:	/	
3	Pass if Leakage Percentage <= 5.9%	0.0 /	

#### SUPPLY DUCTS LOCATED IN CONDITIONED SPACE COMPLIANCE CREDIT

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Ducts are located within the conditioned volume of building.	Yes to this compliance credit is a pass	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
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Duct system design verification is required for a compliance credit for the following:

1. Supply duct surface area reduction
2. Buried supply ducts on the ceiling
3. Deeply buried supply ducts

#### DUCT SYSTEM DESIGN VERIFICATION

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Adequate airflow verified		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	The duct system design plan meets the requirements specified in RACM, Appendix RE, Section RE.4.2		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	The duct system design plan exists on building plans		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct sizes, duct system layout and locations of supply and return registers match the duct system design plan	Yes to all is a pass	<input type="checkbox"/> Pass <input checked="" type="checkbox"/> Fail

#### THERMOSTATIC EXPANSION VALVE (TXV)

Procedures for field verification of thermostatic expansion valves are available in RACM, Appendix RI.

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Access is provided for inspection. The procedure shall consist of visual verification that the TXV is installed on the system and installation of the specific equipment shall be verified.	Yes is a pass	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
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**CERTIFICATE OF FIELD VERIFICATION DIAGNOSTIC TESTING**

**CF-4R**

Project Address  
**121 Clear Sky, 42**

Builder Name  
**Ryland Homes - San Ramon**

**ADEQUATE AIRFLOW VERIFICATION**

*Procedures for field verification and diagnostic testing of adequate airflow are available in RACM, Appendix RE4.1.*

Method For Airflow Measurement			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct design exists on plans	
<input type="checkbox"/>	<input type="checkbox"/>	RE 4.1.1 Diagnostic Fan Flow Using Flow Capture Hood	
<input type="checkbox"/>	<input type="checkbox"/>	RE 4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching	
<input type="checkbox"/>	<input type="checkbox"/>	RE 4.1.3 Diagnostic Fan Flow Using Grid Measurement	
		Measurement Airflow:	Total CFM
		Rated Tons:	cfm/ton
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Measured airflow is greater than the criteria in Table RE-2	
		Yes is a pass	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**MAXIMUM COOLING CAPACITY**

*Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3.*

1	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Adequate airflow verified (see adequate airflow credit)	
2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Refrigerant charge or TXV	
3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct leakage reduction credit verified	
4	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Cooling capacities of installed systems are < to maximum cooling capacity indicated on the Performance's CF-1R and RF-3.	
5	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the installed systems must be <= to electrical input in the CF-1R.	
Yes to 1, 2, and 3; and Yes to either 4 or 5 is a pass				<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**HIGH EER AIR CONDITIONER**

*Procedures for verification are available in RACM, Appendix RI.*

1	<input type="checkbox"/> Yes	<input type="checkbox"/> No	EER values of installed systems match the CF-1R	
2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	For split system, indoor coil is matched to outdoor coil	
3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Time Delay Relay Verified (If Required)	
Yes to 1 and 2; and 3 (If Required) is a pass				<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**MINIMUM REQUIREMENTS FOR INFILTRATION REDUCTION COMPLIANCE CREDIT**

*Procedures for field verification and diagnostic testing of infiltration reduction are available in RACM Section 3.5*

**Diagnostic Testing Results**

		Building Envelope Leakage (CFM @ 50 Pa) as measured by Rater:		0
1	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Is measured envelope leakage less than or equal to the required level from CF-6R?	
2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Is Mechanical ventilation shown as required on the CF-1R?	
2a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If Mechanical ventilation is required on the CF-1R (Yes in line 2,) has it been installed?	
2b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Check this box yes if mechanical ventilation is required (Yes in line 2) and ventilation fan watts are no greater than shown on CF-1R.	
3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Check this box yes if measured building infiltration (CFM @ 50 Pa) is greater than the CFM @ 50 values shown for an SLA on 1.5 on CF-1R (If box is checked no, mechanical ventilation is required.)	
4	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Check this box yes if measured building infiltration (CFM @ 50 Pa) is less than the CFM @ 50 values shown for an SLA of 1.5 on CF-1R, mechanical ventilation is installed and house pressure is greater than minus 5 Pascal with all exhaust fans operating.	
Pass if: a) Yes in line 1 and line 3, or b) Yes in line 1 and 2, 2a, and 2b, or c) Yes in line 1 and line 4, Otherwise Fail.				<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**CERTIFICATE OF FIELD VERIFICATION DIAGNOSTIC TESTING** **CF-4R**

Project Address <b>121 Clear Sky, 42</b>	Builder Name <b>Ryland Homes - San Ramon</b>
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**REQUIREMENTS FOR "HIGH QUALITY INSTALLATION OF INSULATION" COMPLIANCE CREDIT**

- The building is wood frame construction with wall stud cavities, ceilings, and roof assemblies mineral fiber or cellulose insulation in low-rise residential buildings
- Description of insulation, (CF-6R, formerly IC-1) signed by the installer stating: insulation manufacturer's name, material identification, installed R-values, and for loose-fill insulation: minimum weight per square foot and minimum inches.
- Installation Certificate, (CF-6R) signed by the installer certifying that the installation meets all applicable requirements as specified in the High Quality Insulation Installation Procedures (ACM, Appendix RH).

<b>FLOOR</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All floor joist cavity insulation installed to uniformly fit the cavity side-to-side and end-to-end
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation in contact with the subfloor or rim joists insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation properly supported to avoid gaps, voids, and compression
<b>WALLS</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Wall stud cavity insulation uniformly fills the cavity side-to-side, top-to-bottom, and front-to-back
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No gaps
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No voids over 3/4" deep or more than 10% of the batt surface area.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Hard to access wall stud cavities such as; corner channels, wall intersections, and behind tub/shower enclosures insulated to proper R-Value
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Small spaces filled
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Rim-joists insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Wall stud cavities caulked or foamed to provide an air tight envelope
<b>ROOF/CEILING PREPARATION</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All draft stops in place to form a continuous ceiling and wall air barrier
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All drops covered with hard covers
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All draft stops and hard covers caulked or foamed to provide an air tight envelope
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All recessed light fixtures IC and air tight (AT) rated and sealed with gasket or caulk between the housing and the ceiling.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Floor cavities on multiple-story buildings have air tight draft stops to all adjoining attics
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Eave vents prepared for blown insulation- maintain net free-ventilation area
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Knee walls insulated or prepared for blown insulation
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Area under equipment platforms and cat-walks insulated or accessible for blown insulation
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Attic rulers installed
<b>ROOF/CEILING BATTS</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No gaps
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No voids over 3/4 in. deep or more than 10% of the batt surface area
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation in contact with the air-barrier
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Recessed light fixtures covered
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Net free-ventilation area maintained at eave vents
<b>ROOF/CEILING LOOSE-FILL</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation uniformly covers the entire ceiling (or roof) area from the outside of all exterior walls
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Baffles installed at eave vents or soffit vents- maintain net free-ventilation area of eave vent
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Attic access insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Recessed light fixtures covered
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation at proper depth- insulation rulers visible and indicating proper depth and R-value
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Loose-fill mineral fiber insulation meets or exceeds manufacturer's minimum weight and thickness requirement for the target R-value. Target R-value _____ Manufacturer's minimum required weight for the target R-value _____ (pounds-per-square foot). Sample weight _____ (pounds per square foot)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Manufacturer's minimum required thickness at time of installation _____ (inches) Manufacturer's minimum required settled thickness _____ (inches). Number of days since loose-fill insulation was installed _____ (days). At the time of installation, the insulation shall be greater than or equal to the manufacturer's minimum initial insulation thickness. If the HERS rater does not verify the insulation at the time of installation, and if the loose-fill insulation has been in place less than seven days the thickness shall be greater than the manufacturer's minimum required thickness at the time of installation less 1/2 inch to account for settling. If the insulation has been in place for seven days or longer the insulation thickness shall be greater than or equal to the manufacturer's minimum required settled thickness. Minimum thickness measured _____ (inches).

<input type="checkbox"/>	<input type="checkbox"/>
Pass	Fail



<b>CERTIFICATE OF FIELD VERIFICATION DIAGNOSTIC TESTING</b>		<b>CF- 6R</b>
Project Address <b>121 Clear Sky, 42</b>	Permit Number	

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(a).

**INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE**

The building was:  Tested at Final  Tested at Rough-in

**INSTALLER VISUAL AT FINAL CONSTRUCTION STAGE:**

- Remove at least one supply and one return register, and verify that the spaces between the register boot and the interior finishing wall are properly sealed.
- If the house rough-in duct leakage test was conducted without an air handler installed, inspect the connection points between the air handler and the supply and return plenums to verify that the connection points are properly sealed.
- Inspect all joints to ensure that no cloth backed rubber adhesive duct tape is used

**MINIMUM REQUIREMENTS FOR DUCT LEAKAGE REDUCTION COMPLIANCE CREDIT**

*Procedures for field verification and diagnostic testing of air distribution systems are available in RACM, Appendix RC4,3.*

**Duct Diagnostic Leakage Testing Results**

NEW CONSTRUCTION:		Measured Values	
Duct Pressurization Test Results (CFM @ 25 Pa)			
1	Enter Tested Leakage Flow in CFM	0 /	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
2	Fan Flow: Calculated (Nominal: <input checked="" type="checkbox"/> Cooling: <input type="checkbox"/> Heating) or <input type="checkbox"/> Measured Enter Total Fan Flow in CFM:	/	
3	Pass if Leakage Percentage $\leq$ 5.9	0.0 /	

**SUPPLY DUCTS LOCATED IN CONDITIONED SPACE COMPLIANCE CREDIT**

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Ducts are located within the conditioned volume of building.		
Yes to this compliance credit is a pass			<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

Duct system design verification is required for a compliance credit for the following:

1. Supply duct surface area reduction
2. Buried supply ducts on the ceiling
3. Deeply buried supply ducts

**DUCT SYSTEM DESIGN VERIFICATION**

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Adequate airflow verified		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	The duct system design plan meets the requirements specified in RACM, Appendix RE, Section RE.4.2		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	The duct system design plan exists on building plans		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct sizes, duct system layout and locations of supply and return registers match the duct system design plan		
Yes to all is a pass			<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail

**THERMOSTATIC EXPANSION VALVE (TXV)**

*Procedures for field verification of thermostatic expansion valves are available in RACM, Appendix F1.*

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Access is provided for inspection. The procedure shall consist of visual verification that the TXV is installed on the system and installation of the specific equipment shall be verified.		
Yes is a pass			<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail

I, the undersigned, verify that the all information and diagnostic test results were performed in conformance with the requirements for compliance credit. I, the undersigned, also certify that the newly installed or retrofit Air-Distribution System Ducts, Plenums and Fans comply with Mandatory requirements specified in Section 150 (m) of the 2005 Building Energy Efficiency standards

I, the undersigned, verify that equipment listed above my signature is: 1) the actual equipment installed; 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-IR) submitted for compliance with the Energy Efficiency Standards for residential buildings; and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the Appliance Efficiency Regulations or Part 6), where applicable

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	
Signature:	Date:

**ADEQUATE AIRFLOW VERIFICATION**

*Procedures for field verification and diagnostic testing of adequate airflow are available in RACM, Appendix RE4.1.*

Method For Airflow Measurement			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct design exists on plans	
<input type="checkbox"/>	<input type="checkbox"/>	RE 4.1.1 Diagnostic Fan Flow Using Flow Capture Hood	
<input type="checkbox"/>	<input type="checkbox"/>	RE 4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching	
<input type="checkbox"/>	<input type="checkbox"/>	RE 4.1.3 Diagnostic Fan Flow Using Grid Measurement	
		<b>Measurement Airflow:</b>	Total CFM
		<b>Rated Tons:</b>	cfm/ton
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Measured airflow is greater than the criteria in Table RE-2	
		Yes is a pass	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**MAXIMUM COOLING CAPACITY**

*Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3.*

1	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Adequate airflow verified (see adequate airflow credit)	
2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Refrigerant charge or TXV	
3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct leakage reduction credit verified	
4	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance, CF-1R and RF-3.	
5	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the installed systems must be <= to electrical input in the CF-1R.	
Yes to 1, 2, and 3; and Yes to either 4 or 5 is a pass				<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**HIGH EER AIR CONDITIONER**

*Procedures for verification are available in RACM, Appendix RI.*

1	<input type="checkbox"/> Yes	<input type="checkbox"/> No	EER values of installed systems match the CF-1R	
2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	For split system, indoor coil is matched to outdoor coil	
3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Time Delay Relay Verified (if Required)	
Yes to 1 and 2; and 3 (if Required) is a pass				<input type="checkbox"/> Pass <input type="checkbox"/> Fail

**MINIMUM REQUIREMENTS FOR INFILTRATION REDUCTION COMPLIANCE CREDIT**

*Procedures for field verification and diagnostic testing of infiltration reduction are available in RACM Appendix RC*

**Diagnostic Testing Results**

		Building Envelope Leakage (CFM @ 50 Pa) as measured by Rater:	0
1	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is measured envelope leakage less than or equal to the required level from CF-1R?
2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Is Mechanical ventilation shown as required on the CF-1R?
2a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If Mechanical ventilation is required on the CF-1R (Yes in line 2,) has it been installed?
2b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Check this box yes if mechanical ventilation is required (Yes in line 2) and ventilation fan watts are no greater than shown on CF-1R. Measured Watts:
3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Check this box yes if measured building infiltration (CFM @ 50 Pa) is greater than the CFM @ 50 values shown for an SLA on 1.5 on CF-1R (if this box is checked no, mechanical ventilation is required.)
4	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Check this box yes if measured building infiltration (CFM @ 50 Pa) is less than the CFM @ 50 values shown for an SLA of 1.5 on CF-1R, mechanical ventilation is installed and house pressure is greater than minus 5 Pascal with all exhaust fans operating.
Pass if: a) Yes in line 1 and line 3, or b) Yes in line 1 and 2, 2a, and 2b, or c) Yes in line 1 and line 4, Otherwise Fail.			
			<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	
Signature:	Date:

<b>CERTIFICATE OF FIELD VERIFICATION DIAGNOSTIC TESTING</b>		<b>CF- 6R</b>
Project Address <b>121 Clear Sky, 42</b>	Permit Number	

- REQUIREMENTS FOR "HIGH QUALITY INSTALLATION OF INSULATION" COMPLIANCE CREDIT**
- Description of insulation. (CF-6R, formerly IC-1) signed by the installer stating: insulation manufacturer's name, material identification, installed R-values, and for loose-fill insulation: minimum weight per square foot and minimum inches.
  - Installation Certificate, (CF-6R) signed by the installer certifying that the installation meets all applicable requirements as specified in the High Quality Insulation Installation Procedures (ACM, Appendix RH).

<b>FLOOR</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All floor joist cavity insulation installed to uniformly fit the cavity side-to-side and end-to-end
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation in contact with the subfloor or rim joists insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation properly supported to avoid gaps, voids, and compression
<b>WALLS</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Wall stud cavity insulation uniformly fills the cavity side-to-side, top-to-bottom, and front-to-back
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No gaps
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No voids over 3/4" deep or more than 10% of the batt surface area
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Hard to access wall stud cavities such as; corner channels, wall intersections, and behind tub/shower enclosures insulated to proper R-Value
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Small spaces filled
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Rim-joists insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Wall stud cavities caulked or foamed to provide an air tight envelope
<b>ROOF/CEILING PREPARATION</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All draft stops in place to form a continuous ceiling and wall air barrier
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All drops covered with hard covers
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All draft stops and hard covers caulked or foamed to provide an air tight envelope
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All recessed light fixtures IC and air tight (AT) rated and sealed with gasket or caulk between the housing and the ceiling.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Floor cavities on multiple-story buildings have air tight draft stops to all adjoining attics
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Eave vents prepared for blown insulation- maintain net free-ventilation area
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Knee walls insulated or prepared for blown insulation
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Area under equipment platforms and cat-walks insulated or accessible for blown insulation
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Attic rulers installed
<b>ROOF/CEILING BATTS</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No gaps
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No voids over 3/4 in. deep or more than 10% of the batt surface area
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation in contact with the air-barrier
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Recessed light fixtures covered
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Net free-ventilation area maintained at eave vents
<b>ROOF/CEILING LOOSE-FILL</b>			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation uniformly covers the entire ceiling (or roof) area from the outside of all exterior walls
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Baffles installed at eave vents or soffit vents- maintain net free-ventilation area of eave vent
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Attic access insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Recessed light fixtures covered
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation at proper depth- insulation rulers visible and indicating proper depth and R-value
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Loose-fill mineral fiber insulation meets or exceeds manufacturer's minimum weight and thickness requirements for the target R-value. Target R-value _____ Manufacturer's minimum required weight for the target _____ R-value) _____ 0 (pounds per square foot). Sample weight _____ 0 (pounds per square foot)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Manufacturer's minimum required thickness at time of installation _____ 0 (inches) Manufacturer's minimum required settled thickness _____ (inches). Number of days since loose-fill insulation was installed _____ (days) At the time of installation, the insulation shall be greater than or equal to the manufacturer's minimum initial insulation thickness. If the HERS rater does not verify the insulation at the time of installation, and if the loose-fill insulation has been in place less than seven days the thickness shall be greater than the manufacturer's minimum required thickness at the time of installation less 1/2 inch to account for settling. If the insulation has been in place for seven days or longer the insulation thickness shall be greater than or equal to the manufacturer's minimum required settled thickness. Minimum thickness measured _____ (inches). _____ 0

I hereby certify that the installation meets all applicable requirements as specified in the insulation installation procedure

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	
Signature:	Date:

RIVLAND/LIBERTY LANE

INSTALLATION CERTIFICATE JOB # 100-1322 (Page 4 of 12) CF-6R

Site Address 121 CLEAR SKY CIR SAC, CA 95823 Permit Number Lot # 42

INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

INSTALLER COMPLIANCE STATEMENT

The building was: [X] Tested at Final [ ] Tested at Rough-in

INSTALLER VISUAL INSPECTION AT FINAL CONSTRUCTION STAGE FOR NEW DUCTS:

- [X] Remove at least one supply and one return register, and verify that the spaces between the register boot and the interior finishing wall are properly sealed.
[ ] If the house rough-in duct leakage test was conducted without an air handler installed, inspect the connection points between the air handler and the supply and return plenums to verify that the connection points are properly sealed.
[X] Inspect all joints to ensure that no cloth backed rubber adhesive duct tape is used on new ducts.

[X] DUCT LEAKAGE REDUCTION

Procedures for field verification and diagnostic testing of air distribution systems are available in RACM, Appendix RC4.3

Table with columns for test results, measured values, and pass/fail status. Includes sections for NEW CONSTRUCTION, ALTERATIONS, and TEST OR VERIFICATION STANDARDS.

I, the undersigned, verify that the above diagnostic test results were performed in conformance with the requirements for compliance credit. I, the undersigned, also certify that the newly installed or retrofit Air-Distribution System Ducts, Plenums and Fans comply with Mandatory requirements specified in Section 150 (m) of the 2005 Building Energy Efficiency standards.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner Signature: [Signature] Date: 9/13/07 BEUTLER

Copies to BUILDING DEPARTMENT, HERS RATER (IF APPLICABLE) BUILDING OWNER AT OCCUPANCY

**INSULATION CERTIFICATE**

THIS IS TO CERTIFY THAT INSULATION HAS BEEN INSTALLED IN CONFORMANCE WITH THE CURRENT ENERGY REGULATIONS, CALIFORNIA ADMINISTRATION CODE, TITLE 24, STATE OF CALIFORNIA, IN THE BUILDING LOCATED AT:

SITE ADDRESS LOT 42 LIBERTY LANE SACRAMENTO CA  
 NUMBER CITY STATE

**CEILINGS:**

BLOW: MANUFACTURER GREEN FIBER THICKNESS 10.3" R/VALUE 38  
 MANUFACTURER GREEN FIBER THICKNESS R/VALUE  
 BATTS: MANUFACTURER KNAUF THICKNESS 12" R/VALUE 38  
KNAUF

**EXTERIOR WALLS:**

MANUFACTURER KNAUF THICKNESS 3.5" R/VALUE 13  
KNAUF 6.25" 19

**FLOOR INSULATION**

MANUFACTURER KNAUF THICKNESS 6.25" R/VALUE 19  
KNAUF

**AIR INFILTRATION: (TITLE 24)**

YES XXX NO

OTHER: \_\_\_\_\_

GENERAL CONTRACTOR: RYLAND HOMES LICENSE # \_\_\_\_\_

BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

INSULATION CONTRACTOR: WESTERN INSULATION LP LICENSE # 784484

BY: Becky Gutherz TITLE AUTH. AGENT DATE 8/24/2007  
 BECKY GUTHERZ

**INSTALLATION CARD**  
**Diamond Wall One Coat System**  
**Omega Products International, Inc.**

ICBO Evaluation Service, Inc.  
Evaluation Report ER-4004  
Date of Job Completion \_\_\_\_\_


Job Address  
121 CLEAR SKY CIR

**Plastering Contractor**

Name: Energetic Lath & Plaster, Inc.  
Address: 3030 Orange Grove Avenue North Highlands, CA 95660  
Telephone No.: (916) 480-8455

Approved contractor number as issued by coating manufacturer: \_\_\_\_\_ Applicator # 318

This is to certify that the exterior coating system on the building exterior at the above address has been installed in accordance with the evaluation report specified above and the manufacturer's instructions.

  
Signature of authorized representative \_\_\_\_\_ Date \_\_\_\_\_  
or plastering contractor

This installation card must be presented to the building inspector after completion of work and before final inspection.

FIGURE 3