PERMIT 0603310 Nottingham

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 1 of 8) CF-4R

Project Address 3609 Natrurita Way Sacramento CA. 9834	Builder Name Beazer
Builder Contact Lot 97 Telephone	Plan Number 1317
HERS Rater Robert Viruet Telephone (916) 847-1514	Sample Group Number 300 1020119
Compliance Method (Prescriptive)	Climate Zone
Certifying Signature Date 7-13-06	Sample House Number
Firm Amaro Construction	HERS Provider Cheers
Street Address: 9524 mosquito Rd.	City/State/Zip: Placerville CA.

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 tape 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 ducts).
- ☐ 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	
	Duct Pressurization Test Results (CFM @ 25 Pa)		
1	Enter Tested Leakage Flow in CFM:	600	
2	Fan Flow: Calculated (Nominal: ✓ ☑ Cooling ✓ ☐ Heating) or ✓ ☐ Measured Enter Total Fan Flow in CFM:	1000	✓ ✓
3	Pass if Leakage Percentage ≤ 6% [100 x [600 (Line # 1) / 1000 (Line # 2)]]	6.0%	☑ Pass ☐ Fail
	ALTERATIONS: Duct System and/or HVAC Equipment Change-Out		
4	Enter Tested Leakage Flow in CFM from CF-6R: **Pre-Test** of Existing Duct System Prior to Duct System Alteration and/or Equipment Change-Out.		
5	Enter Tested Leakage Flow in CFM: **Final Test** of New Duct System or Altered Duct System for Duct System Alteration and/or Equipment Change-Out.		
6	Enter Reduction in Leakage for Altered Duct System [_____(Line # 4) Minus _____(Line # 5)] (Only if Applicable)		
7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)		✓ ✓
8	Entire New Duct System - Pass if Leakage Percentage ≤ 6% [100 x [_____(Line # 5) / _____Line # 2)]]		☐ Pass ☐ Fail
	TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out Use one of the following four Test or Verification Standards for compliance:		✓ ✓
9	Pass if Leakage Percentage ≤ 15% [100 x [_____(Line # 5) / _____ (Line # 2)]]		☐ Pass ☐ Fail
10	Pass if Leakage to Outside Percentage ≤ 10% [100 x [_____(Line # 7) / _____ (Line # 2)]]		☐ Pass ☐ Fail
11	Pass if Leakage Reduction Percentage ≥ 60% [100 x [_____(Line # 6) / _____ (Line # 4)]] and Verification by Smoke Test and Visual Inspection		☐ Pass ☐ Fail
12	Pass if Sealing of all Accessible Leaks and Verification by Smoke Test and Visual Inspection		☐ Pass ☐ Fail
	Pass if One of Lines # 9 through # 12 pass		☐ Pass ☐ Fail

CF-6R

BEUTLER Job 1000119

Installation Certificate

4700 Lang Avenue • McClellan, CA 95652
916.646.2222 • Contractor Lic. #162634

3609 Natrurita Way / Sacramento, Ca. 95834 Lot 77 Plan 1317
Site Address Beazer/Nottingham **Permit Number**

INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

Copies to: Builder, HERS Rater, Building Owner at Occupancy and Building Department

INSTALLER COMPLIANCE STATEMENT

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

INSTALLER VISUAL INSPECTION 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

✓ ☐ **DUCT LEAKAGE REDUCTION**

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

NEW CONSTRUCTION:			
	Duct Pressurization Test Results (CFM @ 25 Pa)	Measured Values	
1	Enter Tested Leakage Flow in CFM:	60	
2	Fan Flow: Calculated (Nominal: ✓ ☐ Cooling ✓ ☐ Heating) or ✓ ☐ Measured If Fan Flow is Calculated as 400 cfm/ton x number of tons or as 21.7 cfm/(kBtu/hr) x Heating Capacity in Thousands of Btu/hr, enter total calculated or measured fan flow in CFM here:	1000	✓ ✓
3	Pass if Leakage Percentage≤ 6% for Final or ≤ 4% at Rough-in: [100 x [60 (Line # 1) / 1000 (Line # 2)]]	6%	☑ Pass ☐ Fail
ALTERATIONS: Duct System and/or HVAC Equipment Change-Out			
4	Enter Tested Leakage Flow in CFM from **Pre-Test** of Existing Duct System Prior to Duct System Alteration and/or Equipment Change-Out.		
5	Enter Tested Leakage Flow in CFM from **Final Test** of New Duct System or Altered Duct System for Duct System Alteration and/or Equipment Change-Out.		
6	Enter Reduction in Leakage for Altered Duct System [_____(Line # 4) Minus _____(Line # 5)] – (Only if Applicable)		
7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)		✓ ✓
8	Entire New Duct System - Pass if Leakage Percentage ≤ 6% for Final or ≤ 4% at Rough-in [100 x [_____(Line # 5) / _____Line # 2)]]		☐ Pass ☐ Fail
TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out Use one of the following four Test or Verification Standards for compliance:			✓ ✓
9	Pass if Leakage Percentage ≤ 15% [100 x [_____(Line # 5) / _____ (Line #		☐ Pass ☐ Fail
10	Pass if Leakage to Outside Percentage ≤ 10% [100 x [_____(Line #7) / _____(Line #2)		☐ Pass ☐ Fail
11	Pass if Leakage Reduction Percentage ≥ 60% [100 x [_____(Line # 6) / _____ (Line # 4)]] and Verification by Smoke Test and Visual Inspection		☐ Pass ☐ Fail
12	Pass if Sealing of all Accessible Leaks and Verification by Smoke Test and Visual Inspection		☐ Pass ☐ Fail
	Pass if One of Lines # 9 through # 12 pass		☐ Pass ☐ Fail

✓ ☐ 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

Signature 7/13/06 Date Beutler Installing Subcontractor (Co. Name) or General Contractor (Co. Name)

INSTALLATION CERTIFICATE (page 1 of 4) CF-6R

BEAZER HOMES Lot 77 NOTTINGHAM
Site Address Permit Number

3609 NATORTA WAY 06033310

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).

Plans - 4 and 5

HVAC SYSTEMS:

Heating Equipment

Equip. Type (pkg. heat pump)	CEC Certified Mfr Name and Model Number	# of Identical Systems	Efficiency (AFUE, etc.)[1] [≥CF-1R value]	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)

Cooling Equipment

Equip. Type (pkg. heat pump)	CEC Certified Compressor Unit Mfr Name and Model Number	# of Identical Systems	Efficiency (SEER, etc.)[1] [≥CF-1R value]	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)

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.

Signature, Date

Installing Subcontractor (Co. Name)
OR General Contractor (Co. Name) OR Owner

WATER HEATING SYSTEMS:

Heater Type	CEC Certified Mfr Name & Model Number	Distribution Type[2] (Std. Point-of-Use)	If Recirculation, Control Type	# of Identical Systems	Rated[1] Input (kW or Btu/hr)	Tank Volume (gallons)	Efficiency[1] (EF, P.E)	Standby[1] Loss (%)	External Insulation R-value
GAS	A.O. Smith GDYS-40	Direct Vent	N/A	1	36,000	40	.59	N/A	R-16

2 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. For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Recovery Efficiency and Rated Input.

Faucets & Shower Heads:
All faucets and showerheads installed are certified to the Commission, pursuant to Title 24, Part 6, Subchapter 2, Section 111.

I, the undersigned, verify that equipment listed above my signature: 1) is the actual equipment installed; 2) is 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) the equipment meets or exceeds the appropriate requirements for manufactured devices (from the *Appliance Efficiency Regulations* or Part 6), where applicable.

Ivan Clavel 6/20/06
Signature, Date

J.P. Pierce Plumbing Co.
Installing Subcontractor (Co. Name) OR ✓
General Contractor (Co. Name) OR Owner

COPY TO: Building Department
Building Owner at Occupancy

INSTALLATION CERTIFICATE Lot 77

CF-6R

Beazer Homes - Nottingham

Site Address 3609 NATURTA WAY

Permit Number 0603310

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-1R value	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)	
FURNACE	YORK #LY8S040A12	1	80%	ATTIC	4.2	23,409	40,000	PLAN 816
FURNACE	YORK #LY8S060A12	1	80%	ATTIC	6.0	27,902	60,000	PLAN 1194
FURNACE	YORK #LY8S060A12	1	80%	ATTIC	6.0	26,552	60,000	PLAN 1195
FURNACE	YORK #LY8S060A12	1	80%	ATTIC	4.2	27,647	60,000	PLAN 1360
FURNACE	YORK #LY8S060A12	1	80%	ATTIC	6.0	29,182	60,000	PLAN 1473
FURNACE	YORK #LY8S060A12	1	80%	ATTIC	6.0	30,126	60,000	PLAN 1473 + SF

Cooling Equipment

Equip. Type (pkg. Heat pump)	CEC Certified Compressor Unit Mfr Name and Model #	# of Identical Systems	(1) Efficiency (SEER, etc.) > CF-1R Value	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)	
A/C	YORK # H* RD024 *	1	13.0	ATTIC	4.2	14,865	20,800	PLAN 816
A/C	YORK # H* RD030 *	1	13.0	ATTIC	6.0	17,720	26,900	PLAN 1194
A/C	YORK # H* RD030 *	1	13.0	ATTIC	6.0	17,286	26,900	PLAN 1195
A/C	YORK # H* RD030 *	1	13.0	ATTIC	4.2	17,019	26,900	PLAN 1360
A/C	YORK # H* RD030 *	1	13.0	ATTIC	6.0	18,470	26,900	PLAN 1473
A/C	YORK # H* RD030 *	1	13.0	ATTIC	6.0	19,506	26,900	PLAN 1473 + SF

*** = TXV valve installed as part of the 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.

9-6-05

Signature, Date

BEUTLER CORPORATION

Installing Subcontractor (Co. Name)

OR General Contractor (Co. Name) OR Owner

WATER HEATING SYSTEMS:

Heater Type	CEC Certified Mfr Name & Model #	Distribution Type (Std, point of use)	If Recirculation Control Type	# of Identical Systems	(2) Rated Input (kW or Btu/hr)	Tank Volume (gallons)	(2) Efficiency (EF,RE)	(2) Standby Loss (%)	External Insulation R-value

(2) 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. For **large gas storage water heaters** (rated input of greater than 75,000 Btu/hr), list Recovery Efficiency, Standby Loss and Rated Input. For **instantaneous gas water heaters**, list Recovery efficiency and Rated Input.

(3) R-12 external insulation is mandatory for storage water heaters with an energy factor of less that 0.58.

Facets & Shower Heads:

All facets and showerheads installed are certified to the Commission, pursuant to Title 24, Part 6, Section 111.

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.

Signature, Date

Installing Subcontractor (Co. Name)

OR General Contractor (Co. Name) OR Owner

COPY TO: Building Department;HERS Provider (if appliacable);Building Owner at Occupa

LOT 77 MONA

INSTALLATION CERTIFICATE (Page 2 of 12) **CF-6R**

Site Address	Permit Number
3609 NATURA NOTTINGHAM VILLAGE SACRAMENTO CA 95827	06033310

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).

FENESTRATION/GLAZING:

Item	Manufacturer/Brand Name (GROUP LIKE RODUCTS)	Product U-factor[1] (≤ CF-1R value)[2]	Product SHGC[1] (≤CF-1R value)[2]	# of Panes	Total Quantity of Like Product (*Optional*)	Area Square Feet	Exterior Shading Device or Overhang	Comments/Location/ Special Features
1.	XO W/GRIDS	.35	.29					
2.	XO NO GRIDS	.35	.32					
3.	SLH W/GRIDS	.35	.29					
4.	SLH NO GRIDS	.35	.32					
5.	PW W/GRIDS	.34	.31					
6.	PW NO GRIDS	.34	.35					
7.	PATIO DOORS	.35	.34					
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

[1] Use values from a fenestration product's NFRC label. For fenestration products without an NFRC label, use the default values from Section 116 of the Energy Efficiency Standards.

[2] 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. If using default table SHGC values from §116 identify whether tinted or not.

✓ ☐ 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	~~Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner. OR~~ Window Distributor
1-7	Dennis M.	6/16/06	ALSIDE
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

Copies to: Building Department , HERS Rater (if applicable) Building Owner at Occupancy

3609 Naturita wy

Permit 0603310

OMEGA PRODUCTS INTERNATIONAL, INC.

DIAMOND WALL INSULATING STUCCO SYSTEM

ICBO Report # 4004

Builder: **BEAZER HOMES**
Project Name: **NOTTINGHAM @ MACHADO**

Lot Numbers: 77 Date of Job Completion: June 11, 2006

PLASTERING CONTRACTOR:

Name: **STUCCO WORKS, INC.**

Address: 5900 WAREHOUSE WAY - SACRAMENTO, CALIFORNIA 95826

Telephone No: (916) 383-6667

Contractor Number of Diamond Wall System: 2175

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 Inspections.

July 11, 2006
Date

Signature of authorized representative of Plastering Contractor

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

INSULATION CONTRACTORS ASSOCIATION OF AMERICA

3609 Naiwita Way
Permit # C603310

INSULATION CERTIFICATE

1321 DUKE STREET, SUITE 303 • ALEXANDRIA, VA 22314 • (703) 739-0356

THIS IS TO CERTIFY THAT THE FOLLOWING HAS BEEN INSTALLED IN CONFORMANCE WITH CURRENT ENERGY REGULATIONS OF THE CALIFORNIA ADMINISTRATIVE CODE, TITLE 24, STATE OF CALIFORNIA, IN THE

Lennar Homes LOT # 77 TRACT # Mt Higham

STREET 3609 Na-Iwita Way CITY Natomas

EXTERIOR WALLS:

MANUFACTURER FG THICKNESS/TYPE 3½ R-VALUE 13/11

CEILINGS:

BATTS:

MANUFACTURER FG THICKNESS/TYPE 10 R-VALUE 30

BLOWN IN:

MANUFACTURER CT MINIMUM THICKNESS 12 R-VALUE 30

SQUARE FOOTAGE COVERED 734 NUMBER OF BAGS USED 15

FLOORS:

MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

SLAB ON GRADE:

MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

WIDTH OF INSULATION _____ INCHES

FOUNDATION WALLS:

MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

GENERAL CONTRACTOR _____

CALIFORNIA CONTRACTOR'S LICENSE # _____ DATE _____

SIGNATURE TITLE

INSULATION CONTRACTOR ALCAL ARCADE CONTRACTING

CALIFORNIA CONTRACTOR'S LICENSE #616286

NEVADA CONTRACTOR'S LICENSE #0055201

DATE 6-19-06

L A Installer

SIGNATURE TITLE

AAC2000