CITY OF SACRAMENTO 1231 I Street, Sacramento, CA 95814

Site Address: 8240 CENTER PK SAC

CONTRACTOR ENERGY KING, INC 1717 KATHLEEN AV

SACRAMENTO, CA.

Parcel No: 117-0700-003

OWNER

PRADO 8240 CENTER PK

SACRAMENTO, CA 95823

Permit No: 0607772

Insp Area:

Thos Bros: Sub-Type:

RES Housing (Y/N): N

<u>ARCHITECT</u>

Nature of Work: COMPLETE THE WORK STARTED ON #0507131: CHANGE OUT HEAT PUMP
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 infull force and affect. License Class License Number 591548 Date 5/30 Contractor Signature
OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors I cense 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:
DateOwner 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 drawing that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This private mit 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 the gree the composition with all city and county ordinances and state laws relating to building construction and herby authorize representative(s) of this city to enterupon the above mentioned property for inspection purposes.
Date 5/35/66 Applicant/Agent Signature CITY HALL
WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty 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 COMBINED SPECIALTY INSURANCE Policy Number 005-00024573 Exp Date 03/13/2007
(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, Ishall 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, Ishall forthwith comply with those provisions.
Date 5/30/C Applicant Signature
WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS INTOWFUL 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.

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 1 of 8) CF-4R							
D. C. A. A. J.J.		Builder of Histariet Name					
8240 CENTER PARK		Energy King					
Builder or Installer Contact Debbie Schmidt	Telephone (916) 925-7611	Plan/Permit (Additions or Alterations) Number 0607772					
HERS Rater Dalle Thompson CC2004227	Telephone	Sample Group Number					
HERS Rater Debbie Thompson - CC2004227	916-682-8730	5 OF 7					
Compliance Method (Prescriptive)		Climate Zone 12					
Certifying Signature Aus Shape	10/6/06 Date	Sample House Number 5					
Firm Capitol Energy Consultants		HERS Provider CalCerts					
Street Address: 1709 Adonis Way		City/State/Zip: Sacramento CA 95864					
	DIC DEDARTMENT						

Copies to: BUILDER, HERS PROVIER 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 buildings.

The installer has provided a copy of CF-6R (Installation Certificate).

New ducts are fully ducted (i.e., does not use building cavities as plenums or platform returns in lieu of ducts).

New ducts with 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

	NEV	V CONSTRUCTION:		3.0	
			Measured		
	1	Duct Pressurization Test Results (CFM @ 25 Pa)	Values	er e	1
	1	Enter Tested Leakage Flow in CFM:	<u></u>		
r		Fan Flow: Calculated (Nominal: ✓ ☐ Cooling ✓ ☐ Heating) or ✓ ☐ Measured		✓	\checkmark
	4 1	Enter Total Fan Flow in CFM:		☐ Pass I	□ Fail
	3	Pass if Leakage Percentage < 6% [100 x [(Line # 1) /(Line # 2)]]		LI Fass I	
l	ALI	FERATIONS: Duct System and/or HVAC Equipment Change-Out			
ŀ		Enter Tested Leakage Flow in CFM from CF-6R: Pre-Test of Existing Duct System Prior to		1 4	
ļ	4	Duct System Alteration and/or Equipment Change-Out.		, J	ja,
ŀ	\dashv	Enter Tested Leakage Flow in CFM: Final Test of New Duct System or Altered Duct System		4	27
	5	c. D. A. Courtern Alteration and/or Equipment Change-Out.			vi e
r	1	Enter Reduction in Leakage for Altered Duct System [(Line # 4) Minus(Line # 3)]		拉	1
l	6	(Only if Applicable)			
	7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)			
ŀ		Entire New Duct System - Pass if Leakage Percentage < 6%		☐ Pass	□ Fail
	- X I	$r_{100} = r_{100} + r_{1$	Change-Out		
	TES	ST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment of the Compliance:	опапас-опс	V	·
1	Use	one of the following four Test or Verification Standards for compliance: (Line # 2)]]	1.	☐ Pass	☐ Fail
	9	Pass if Leakage Percentage < 15% [100 x [(Line # 5) /(Line # 2)]]			
	10	Pass if Leakage to Outside Percentage < 10% [100 x [(Line # 7) /(Line # 2)]]		☐ Pass	Li ran
	10	Pass if Leakage Reduction Percentage > 60% [100 x [(Line # 6) /(Line # 4)]]		□ Pass	☐ Fail
i	11		ar.	D Door	□ Fail
		Pass if Sealing of all Accessible Leaks and Verification by Smoke Test and Visual Inspection	12 12 13	☐ Pass ☑ Pass	
		Pass if One of Lines # 9 through # 12 pass	9	i≜i Pass	L Fall

Residential Compliance Forms

December 2005

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC	Builder Name
8240 CENTER PARK	Energy King
uilder Contact Debbie Schmidt Telephone (916) 925-7611	Plan Number
Debbie Thompson - CC2004227 Telephone	Sample Group Number 5 OF 7
Compliance Method (Prescriptive)	Climate Zone 12
Certifying Signature August 10/6/06 Date	Sample House Number 5
irm Capitol Energy Consultants	HERS Provider CalCerts
treet Address: 1709 Adonis Way	City/State/Zip: Sacramento CA 9586
pies to: BUILDER, HERS PROVIDER AND BUILDING DEPARTMENT	
The house was: Tested	the house identified on this form complies with
THERMOSTATIC EXPANSION VALVE (TXV) Procedures for field verification of thermostatic expansion valves are available in	✓ ✓
✓ ☐ Yes ☐ No Access is provided for inspection. The procedure st visual verification that the TXV is installed on the installation of the specific equipment shall be verification.	system and 🗵 📙
REFRIGERANT CHARGE MEASUREMENT Verification for Required Refrigerant Charge for Split System Space Cooling System	ems without Thermostatic Expansion Valves
Outdoor Unit Serial #	
Location	
Location	
Outdoor Unit Make	
Outdoor Unit Make Outdoor Unit Model	
Outdoor Unit Make Outdoor Unit Model	
Outdoor Unit Make Outdoor Unit Model Cooling Capacity Date of Verification	ed monthly)
Outdoor Unit Make Outdoor Unit Model Cooling Capacity Btu/hr Date of Verification	
Outdoor Unit Make Outdoor Unit Model Cooling Capacity Date of Verification Date of Refrigerant Gauge Calibration Date of Thermocouple Calibration Standard Charge Measurement (outdoor a livy-b of 55° (and a livy-b) of 55	

April 2005

INSTALLATION CERTIFICATE	(Page 3 of 12) CF-6R
Site Address	Permit Number 0607772
8240 CENTER PARK	

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).

HVAC SYSTEMS:

Heating Equipment

Equip Type (pkg. heat pump) FURNACE	CEC Certified Mfr. Name and Model Number	# of Identical Systems	ntical (AFUE, etc.) Location		Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)
	MBE1200AA						

Cooling Equipment

Equip Type (pkg. heat pump)	CEC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (SEER or EER) ¹ (≥CF-1R value)	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)
A/C	AMANA	1	14	attic	R4.2		2.5 ton
	P1248C022 (RHF30C)						
				,			

≥ symbol reads greater than or equal to what is indicated on the CF-1R value.
 Include both SEER and EER if compliance credit for high EER air conditioner is claimed.

✓ ☑I 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.

	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Energy King
ŀ	Signature: DO Source	Date: 9/27/06

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

(Page 4 of 12) CF-6R

Site Address 8240 CENTER PARK

Permit Number 0607772

INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

ING	TALLER COMPLIANCE STATEMENT		·				
	building was: ✓ ☑ Tested at Final ✓ ☐ Tested at Rough-in						
⊠ R W □ It	TALLER VISUAL INSPECTION AT FINAL CONSTRUCTION STAGE FOR NEV temove at least one supply and one return register, and verify that the spaces between the vall are properly sealed. If the house rough-in duct leakage test was conducted without an air handler installed, insign in handler and the supply and return plenums to verify that the connection points are properties at all joints to ensure that no cloth backed rubber adhesive duct tape is used on new description.	register b pect the co perly seale	oot and the				
√ [Proc	DUCT LEAKAGE REDUCTION peducts of the control of th	able in RA	1 <i>CM, Ap</i>	pendix RC4	3		
	W CONSTRUCTION:						
	Duct Pressurization Test Results (CFM @ 25 Pa)		Measure Values	100000000000000000000000000000000000000	and the second		
1	Enter Tested Leakage Flow in CFM:				'nť		
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 H Capacity in Thousands of Btu/hr, enter total calculated or measured fan flow in CFM he	leating ere:	1200	✓	✓		
3	Pass if Leakage Percentage < 6% for Final or < 4% at Rough-in without air handle: [100 x [(Line # 1) /(Line # 2)]]			☐ Pass	□ Fail		
AL I	FERATIONS: Duct System and/or HVAC Equipment Change-Out			11.4	gra-		
4	Enter Tested Leakage Flow in CFM from Pre-Test of Existing Duct System Prior to D System Alteration and/or Equipment Change-Out.	uct		har Mar	Series Series		
5	Enter Tested Leakage Flow in CFM from Final Test of New Duct System or Altered D System for Duct System Alteration and/or Equipment Change-Out.	ouct	50	1.00	Things		
6	Enter Reduction in Leakage for Altered Duct System [(Line # 4) Minus (Line # 5)] - (Only if Applicable)			1977 1978 1978			
7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)			✓	\checkmark		
8	Entire New Duct System - Pass if Leakage Percentage < 6% for Final. [100 x [(Line # 5) /Line # 2)]]			□ Pass	☐ Fail		
TES	T OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Ed	uipment	Change-	√	✓		
Out	Use one of the following four Test or Verification Standards for compliance:						
9	Pass if Leakage Percentage < 15% [100 x [50 (Line # 5) / 1200 (Line # 2)]		4.2%		□ Fail		
10	Pass if Leakage to Outside Percentage < 10% [100 x (Line # 7) / (Line	ie # 2)]]		☐ Pas	s 🗆 Fail		
11	, and it seems to the seems to	ne # 4)]]		☐ Pass	□ Fail		
12	and verification by binoke vest and vibration and the state of the sta						
14	Pass if One of Lines # 9 through #	12 pass			☐ Fail ☐ Fail		
cred	I, the undersigned, verify that the above diagnostic test results were performed in conformit. I, the undersigned, also certify that the newly installed or retrofit Air-Distribution Systadatory requirements specified in Section 150 (m) of the 2005 Building Energy Efficiency	mance wit	, Plenums	nirements for and Fans co	compliance comply with		
Inst	alling Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	ner	gy l	King			
Sign	nature: Cyr Date	9/27	/06				
Copi	ies to: BUILDING DEPARTMENT, HERS RATER (IF APPLICABLE) BUILDING OWNE	R AT OCC	CUPANC	Y			

INST	'ALLAT	ION CE	RTIFICATE			(1	Page 5	of 12) CF-6F
Site A	e Address 8240 CENTER PARK					Permit Number 0607772		
∕ ⊠ Procea	THERM(hures for fie	DSTATIC eld verifica	EXPANSION tion of thermosto	VALVE (TXV) atic expansion valves are o	available in RACM	1, Appen	dix RI.	
~	⊠ Yes	□ No	consist of visu	vided for inspection. The pull verification that the TX dinstallation of the specified.	V is installed on	×		
					Yes is a pass	Pass	Fail	
Outo Outo Cool Date Date Date	of Thermo	Model ity ation erant Gauge occuple Ca	asurement Pi	(mu mu rocedure (outdoor air	/hr ist be checked mon ist be checked mon dry-bulb 55°F	ithly)	ove):	
Note: ' proced	The system lure.	should be	frigerant Charge installed and cha	e using the Standard Meth arged in accordance with t	od are available in the manufacturer's	a RACM, specific	Append ations b	dix RD2. Defore starting this
	Temperatu		g) air dry-bulb t	emperature (Tsupply, db)			°F	
				temperature (Treturn, db)			°F	
				temperature (Treturn, wb))		°F	
			pe <u>ra</u> ture (Tev <u>a</u> p				°F	
Suct	tion line ter	nperature (Time (on, db)				°F	
Con	denser (ent	ering) air c	lry uk emp	ature (cond ser, b)			°F	
Superl	neat Charge	Method C	Cal lations	Refi geran Charge				
				or, sa			°F	
Targ	get Superhe	at (from T	able RD-2)				°F	
Acti	ual Superhe	eat – Targe	t Superheat (Sy:	stem passes if between -5	and +5°F)		°F	
Temp Split	oerature Spl Method Ca	lit Method lculation is	Calculations for not necessary i	· Adequate Airflow if Adequate Airflow credit	is taken	_		
Actu	ual Temper	ature Split	= T return, db 7	Tsupply, db			°F	
Tars	et Temper	ature Split	(from Table RD	93)			°F	

°F

Actual Temperature Split Target Temperature Split (System passes if between - 3°F and +3°F or, upon remeasurement, if between -3°F and -100°F)

INSTALLATION CERTIFICATE	(Page 6 of 12) CF-6R				
Site Address 8240 CENTER PARK		Permit Number 0607772			
Standard Charge Measurement Summary: System shall pass both refrigerant charge measurements. If corrective actions were	e and adequate airflow calculation e taken, both criteria must be reme	criteria from the same asured and recalculated.			
✓ ☐ Yes ☐ No System Passes					
Alternate Charge Measurement Procedon Note: The system should be installed and charged verification shall be documented on CF-6R before shall use the Standard Charge Measure Procedure Procedures for Determining Refrigerant Charge Weigh-In Charging Method for Refrigerant Charge	I in accordance with the manufacture starting this procedure. If outdoor: c: using the Alternate Method are av	rer's specifications and installer or air dry-bulb is 55 ^o F or above, installe			
Actual liquid line length:		ft			
Manufacturer's Standard liquid line length:		ft			
Difference (Actual – Standard):		ft			
Manufacturer's correction (ounces foot) Measured Airflow Method for Adequate Airflo	x difference and length =	ounces Appendix RD2.6			
Calculated Airflow: Cooling Capacity (Btu/hr)	X v.033 (cfm/Btu-hr) =	CFM			
Measured Airflow isCFM (Measured		he calculated airflow).			
Alternate Charge Measurement Summary: System shall pass both refrigerant charge and corrective actions were taken, both criteria m ✓ □ Yes □ No System Passes	d adequate airflow calculation crite nust be remeasured and recalculate	eria from the same measurements. If ed.			
Installing Subcontractor (Co. Name) OR Gener Contractor (Co. Name) OR Owner	Energy King				
Signature: DOSQUEON	Date: 9/27/06				

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

INSTALLATION CERTIFICATE								8 of 12) CF-6R		
Si	Site Address 8240 CENTER PARK							Permi	t Numb	^{er} 0607772
	ocedur Metl	res fo	For F	an Wa .2.1	the a tt Dr Porta	aw Measurement able Watt Meter Measur		RE3.2.		
L			RE3	.2.2	Utili	ty Revenue Meter Meas	surement			
						ed Fan Flow (enter to all	Enter results of Watts/cfm	✓	✓	Watts cfm Watts/cfm
١ ،	✓ 🗆 Y	es		No		vatt/cfm aw documnt				
				-	1411 7	vato cim av doca	Yes is a pass	Pass	Fail	1
✓ □ ADEQUATE AIRFLOW VERIFICATION Procedures for measuring the airflow are available in RACM, Appendix RE3.1. ✓ Method For Airflow Measurement □ RE4.1.1 Diagnostic Fan Flow Using Flow Capture Hood □ RE4.1.2 Diagnostic Fan Flow Using Plenum Pressure Matching □ RE4.1.3 Diagnostic Fan Flow Using Flow Grid Measurement □ Yes □ No Duct design exists on plans						Flow Capture Hood Plenum Pressure Matching			Total cfm cfm/ton	
-		- 1					Rated Tons Cim/ton] ¢im/ton
_	ΓΩΥ	es	ΠN	0	Mea	sured airflow is greater	than the criteria in Table RE-2 Ves is a pass	✓ □ Pass	✓ □ Fail	
✓	□м	AXI	MUN	I COO	LIN	G CAPACITY				
Pr	ocedur	es fo	or dete	rminin	ıg ma		rity a available RACM, Ap		RF3.	
1	✓		Yes	ום ו	No	Adequate airflow verif	fied (see adequate airflow credit)			
2	✓		Yes	10	No	Refrigerant charge or	TXV			
3	1		Yes	1		Duct leakage reduction	n credit verified			
	+	-	1 68		10	-				
4	✓		Yes	ו 🗆 ו	٧o		installed systems are ≤ to maximu the Performance's CF-1R and RI		ling	
5	~		Yes	10	No	If the cooling capacitie cooling capacity in the installed systems must	es of installed systems are > than e CF-1R, then the electrical input to be \leq to electrical input in the CF to 1, 2, and 3; and Yes to either 4	maxim for the -1R.		✓ ✓ □ □ Pass Fail
	'									
✓	X HI	GH:	EER.	AIR C	OND	ITIONER				
Pr	ocedur	es fo	r veri	ficatio	n are	available in RACM, App				
I	1		Yes	l 🗆 i			d systems match the CF-1R			
2	✓	×	Yes	ום	No	For split system, indoo	or coil is matched to outdoor coil			✓ ✓
3	✓	×	Yes	□ No	э	Time Delay Relay Ver	rified (If Required)			
							Yes to 1 and 2; and 3 (If Require	d) is a p	ass F	Pass Fail
				ntracto Name)		. Name) OR General Owner	Energy King			
Signature: TOSOUTON						5k.)	Date: 9/27/06			

BUILDING DEPARTMENT

MECHANICAL VENTILATION AIR BALANCE REPORT

SUPUR SURPLORS	#0611456		
Project Name	Building Permit Number		
7485 RUSH RIVER DR.	11-1-06		
Project Address	Date		
SUM DANCE	+643016		
Testing Company Name	Testing Company License Number		
BISS ALPINE DUE	452-7118		
Testing Company Address	Testing Company Phone Number		
Tector's Name	Tester & Signature		

Unit Number	41-1		
Manufacturer	BRYDUT	100	
Model Number	500726	2-16-17-0	
Total CFM	1790		
Outside Air CFM	400	. 7.2	
Design OSA CFM	375		
Smoke Detector	Yes (13)	Yes / No	Yes / No
Tested?	Yes / 😥	Yes / No	Yes / No
Interlock w/Exhaust	Yes (N)	Yes / No	Yes / No