

B

Type

Plans

BLD13-5594

Permit Number

1509

Street Number

FUNSTON DR

Street Name

BEL

Community Code

125-600-004

APN

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print Your Name: Angel Bravo Date Applied: 11-21-13

INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY

Site Address: 1509 Funston DR City: Santa Rosa CA ZIP: 95407
 Cross-Street: DUTTON AVE Project Phone #: 565-600-0044 Project Fax #: ()
 Directions: _____ Email address: _____ Unit #: _____ Lot #: _____
 Describe Project: furnace like for like SFD Living Area: _____ Garage: _____ Decks: _____ Contract Price: 2,494.00

OWNER NAME AND ADDRESS Name: Darla Kirch Mailing Address: 1509 Funston DR City: Santa Rosa State: CA ZIP: 95407 Day Ph: (707) 483-0467 Fax: ()

APPLICANT NAME AND ADDRESS Name: Angel Bravo Mailing Address: 6056 E. Baseline RD City: MESO State: AZ ZIP: 85204 Day Ph: 888-828-0707 Fax: ()

CONTRACTOR INFORMATION Company Name: California Delta Mechanical Address: 6056 E. Baseline RD City: MESO State: AZ ZIP: 85204 Day Ph: (888) 828-0707 Fax: ()

OTHER PERSONS (ARCHITECT, ENGINEER, ETC.) Name: _____ Address: _____ City: _____ State: _____ ZIP: _____ Day Ph: () Fax: () License No: _____ Exp. Date: _____

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 worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
 I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:
 Carrier: state fund
 Policy No: 1697823
 (This section need not be completed if the permit is for one hundred dollars (\$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 worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.
 Exp. Date: 7-1-14 Applicant: [Signature]

CONSTRUCTION LENDING DECLARATION
 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.)
 Lenders Name: _____
 Lenders Address: _____

OWNER-BUILDER DECLARATION
 I hereby affirm under penalty of perjury that I am exempt from the Contractor's 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 Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 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).):
 I, as 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 Professions Code: The Contractor's 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 or 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 or 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 Contractor's 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 Contractor's License Law.)
 I am exempt under Sec. _____, B & P.C. for this reason _____
 By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request, when this application is submitted or at the following website: <http://www.leginfo.ca.gov/calaw.html>.
 Date: 11-21-13 Signature of Property Owner or Authorized Agent: [Signature]

FOR DEPARTMENT USE
 Zoning _____ File No. _____ Acres _____
 Existing Use/Structures _____
 Proposed Use/Structures _____
 Zoning Min. Yard Requirements: Front _____ Left _____ Right _____ Back _____
 NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated. Mitigation Required Address subject to change
 Approval for Permit Issuance: _____ Approval for Occupancy: _____
 By: _____ Date: _____
 Conditions: _____

LICENSED CONTRACTOR'S 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.
 Lic. Class: C-20 Lic. No: 81114
 Exp. Date: 8-1-14 Contractor: [Signature]

Sewer Connection: Available Fees Paid
 Approved by: _____ Date: _____
Road Encroachment: Fees Paid
 Approved by: _____ Date: _____
Septic System Permit/Clearance #
 Approved by: _____ Date: _____
Flood Zone: Yes No 100 Year Flood Elevation: _____
Site Review
Drainage Review:
 Approved by: _____ Date: _____
Fire:
 Approved by: _____ Date: _____
Code Enforcement Violation Yes No Violation # _____
 This permit is limited to _____ days.

ASBESTOS DECLARATION
 Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that () does () does not contain asbestos, or that () no demolition is authorized by this permit.
 I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation Law, this permit shall be deemed revoked.
 PERMITTEE SIGNATURE: [Signature]
 ADDRESS: 6056 E. Baseline RD CITY: MESO STATE: AZ ZIP: 85204
 Contractor Owner Other Licensed Professional

Work Authorized: SFD - replace Furnace.

<input type="checkbox"/> Plans Approved	<input type="checkbox"/> Post FIRM	<input type="checkbox"/> Alquist Priolo Report Available
<input checked="" type="checkbox"/> No Plans Subject to Field Inspection	<input type="checkbox"/> Pre FIRM	<input type="checkbox"/> Geotechnical report Available
Plancheck Cleared By: _____ Date: _____	Type of Construction: <u>R3</u>	Occupancy: _____ No. of Stories: _____ No. of Bedrooms: _____
Permit Cleared for Issuance By: <u>[Signature]</u> Date: <u>11-21-13</u>	Auto. Fire Sprinklers Req'd: _____	No. of Units: _____ Certificate of Occupancy: _____

PAYMENT RECEIVED
 \$ 5.00 Machine Space for Permit Fee
 NOV 21 2013
 PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
 COUNTY OF SONOMA

JOB ADDRESS: 1509 Funston Dr BEL PERMIT NUMBER: B1813-5594 INSPECTION AREA: 5

131) SPECIAL INSPECTION REQUIRED		<input type="checkbox"/> YES	<input type="checkbox"/> NO	IF YES, SEE ADDITIONAL SHEET
INSPECTION RECORD	DATE	NAME	REMARKS	
101) ROUGH GRADING				
103) FOUNDATION				
FORMS/SETBACK				
FOOTING				
WALLS				
106) UFER GROUND #				
104) CAISSONS/PIERS				
105) SLAB				
107) UNDERGROUND UTILITIES				
110) MASONRY				
109) RETAINING WALLS				
113) FIREPLACE				
FOOTING				
HEARTH/PROTECTION				
THROAT				
114) CHIMNEY				
120) UNDERFLOOR/UNDERSLAB				
115) HYDRONICS				
116) U/F ELECTRICAL				
117) U/F MECHANICAL				
118) U/F PLUMBING				
119) U/F FRAMING				
139) U/F INSULATION				
126) SHEAR WALLS				
<input type="checkbox"/> INTERIOR	<input type="checkbox"/> EXTERIOR			
127) DIAPHRAGMS				
<input type="checkbox"/> ROOF	<input type="checkbox"/> FLOOR			
134) SIDING/SHEATHING				
125) HOLD DOWNS				
132) CLOSE-IN				
122) ROUGH ELECTRICAL				
123) ROUGH MECHANICAL				
124) ROUGH PLUMBING				
128) ROUGH FRAME				
160) SMOKE DETECTORS	3-21-14	AM		
139) INSULATION				
142) WALLBOARD				
143) FIREWALLS				
135) STUCCO/PLASTER				
<input type="checkbox"/> LATH	<input type="checkbox"/> SCRATCH			
137) ROOFING				
130) TUB/SHOWER PAN				
162) FIRE DAMPERS/DOORS				
164) SUSPENDED CEILING				
<input type="checkbox"/> ROUGH ELEC.	<input type="checkbox"/> ROUGH MECH.			
165) EXITING - RAMPS/STAIRS				
163) HANDRAILS/GUARDRAILS				
CORRIDORS/DOORS				
166) ACCESSIBILITY COMPLIANCE			650) SUSMP INSPECTION	
144) WATER TANKS			651) NPDES EROSION COMPLIANCE	
<input type="checkbox"/> SLAB	<input type="checkbox"/> WALLS		652) NPDES SEDIMENT COMPLIANCE	
170) TEMPORARY OCCUPANCY			653) NPDES DOCS/SWPPP	
171) TEMPORARY ELECTRICAL			FIRE INSPECTION REQUIRED	DATE NAME
172) TEMPORARY GAS			<input type="checkbox"/> Yes <input type="checkbox"/> No	
174) ELECTRIC METER AUTHORIZATION			759) KNOX BOX	
152) PANEL BOARDS/SERVICE			760) PROPANE TANK HOLD DOWNS	
189) SEPTIC ELECTRIC FINAL			770) SPRINKLER FINAL	
175) GAS METER AUTHORIZATION			771) ABOVEGROUND HYDROSTATIC	
153) GAS PRESSURE TEST			772) UNDERGROUND HYDROSTATIC	
HOUSE	YARD		773) UNDERGROUND FLUSH	
190) MANUF. HOME FOUNDATION			774) THRUST BLOCKS	
191) MANUF. HOME INSTALLATION			775) PIPE WELD	
CONTINUITY			776) HYDRANTS/APPLIANCES	
STAIRS/SKIRTS			777) PUMP ACCEPTANCE	
RIDGE BOLTING			778) WATER SUPPLY/TANK	
193) MANUF. HOME COND. FINAL			779) ALARM SYSTEM	
SWIMMING POOLS			780) HOOD & DUCT SYSTEM	
194) PRE-GUNITE			781) ABOVEGROUND TANK/DISPENSER	
195) PRE-DECK			198) FIRE FINAL	
196) PRE-PLASTER/FENCE			CLEARANCES:	
197) VINYL/FIBERGLASS POOL EXCAVATION			FIRE <input type="checkbox"/> Local <input type="checkbox"/> County	
102) GRADING FINAL			HEALTH DEPARTMENT	
176) ELECTRICAL FINAL			ZONING	
177) MECHANICAL FINAL			SANITATION	
178) PLUMBING FINAL				
199) FINAL				
OCCUPANCY (OK TO OCCUPY)			PLAN RETENTION REQUIRED?	<input type="checkbox"/> Yes <input type="checkbox"/> No

PERMIT # B1813-5594

3-21-14 sheet
 MARTIN

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING

CF-4R-MECH-21

Duct Leakage Test – Existing Duct System

(Page 1 of 2)

Site Address: 1509 Funston Dr, Santa Rosa CA 95407 (System 1)	Enforcement Agency: County of Sonoma	Permit Number: BLD13-5594
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Enter the Duct System Name or Identification/Tag: **System 1**

Enter the Duct System Location or Area Served: **Whole House**

Note: Submit one Installation Certificate for each duct system that must demonstrate compliance in the dwelling.

This installation certificate is required for compliance for alterations and additions in existing dwellings to space conditioning systems and duct systems.

Note: For existing dwellings, a completely new or replacement duct system can also include existing parts of the original duct system (e.g., register boots, air handler, coil, plenums, etc.) if those parts are accessible and they can be sealed. For a completely new or replacement duct system installed in an existing dwelling, use the Installation Certificate titled "Duct Leakage Test - Completely New or Replacement Duct System."

Duct Leakage Diagnostic Test - existing duct system

- Select one compliance method from the following four choices.
- 1. Measured leakage less than 15% of fan flow
 - 2. Measured leakage to outside less than 10% of Fan Flow
 - 3. Reduce leakage by 60% and conduct smoke and fix all leaks
 - 4. Fix all accessible leaks using smoke and HERS rater verify

Note: (One of Options 1, 2, or 3 must be attempted before utilizing Option 4.)

Determine nominal Fan Flow using one of the following three calculation methods.

- Cooling system method: Size of condenser in Tons ___ x 400 = ___ CFM
- Heating system method: $21.7 \times \underline{50}$ Output Capacity in Thousands of Btu/hr = 1085 CFM
- Measured system airflow using RA3.3 airflow test procedures: ___ CFM

1	<p>Option 1 used then: Allowed leakage = Fan Flow <u>1085</u> x 0.15 = <u>162.75</u> CFM Actual Leakage = <u>189</u> CFM</p> <p style="text-align: right;">Pass if Leakage Actual is less than Allowed</p>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
2	<p>Option 2 used then: Allowed leakage = Fan Flow <u>1085</u> x 0.10 = <u>108.5</u> CFM Actual Leakage to outside = ___ CFM</p> <p style="text-align: right;">Pass if Leakage Actual is less than Allowed</p>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
3	<p>Option 3 used then: Initial leakage prior to start of work = ___ CFM Final leakage after sealing all accessible leaks using smoke test = ___ CFM Initial leakage ___ - Final leakage ___ = Leakage reduction ___ CFM ((Leakage reduction ___ / Initial leakage ___) x 100% = ___% Reduction</p> <p style="text-align: right;">Pass if % Reduction >= 60%</p>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
4	<p>Option 4 used then: All accessible leaks repaired using smoke test. HERS rater must verify (No sampling).</p> <p style="text-align: right;">Pass if all accessible leaks have been repaired using smoke</p>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

Duct Leakage Test – Existing Duct System

(Page 2 of 2)

Site Address: 1509 Funston Dr, Santa Rosa CA 95407 (System 1)	Enforcement Agency: County of Sonoma	Permit Number: BLD13-5594
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- Outside air (OA) ducts for Central Fan Integrated (CFI) ventilation systems, shall not be sealed/taped off during duct leakage testing. CFI OA ducts that utilize controlled motorized dampers, that open only when OA ventilation is required to meet ASHRAE Standard 62.2, and close when OA ventilation is not required, may be configured to the closed position during duct leakage testing.
- All supply and return register boots must be sealed to the drywall if smoke test is utilized for compliance – applies to duct leakage compliance option 3 (leakage reduction by 60%) and option 4 (fix all accessible leaks) described above.
- New duct installations cannot utilize building cavities as plenums or platform returns in lieu of ducts.
- Mastic and draw bands must be used in combination with cloth backed rubber adhesive duct tape to seal leaks at all new duct connections.

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am the certified HERS rater who performed the verification services identified and reported on this certificate (responsible rater).
- The installed feature, material, component, or manufactured device requiring HERS verification that is identified on this certificate (the installation) complies with the applicable requirements in Reference Residential Appendices RA2 and RA3 and the requirements specified on the Certificate(s) of Compliance (CF-1R) approved by the local enforcement agency.
- The information reported on applicable sections of the Installation Certificate(s) (CF-6R), signed and submitted by the person(s) responsible for the installation conforms to the requirements specified on the Certificate(s) of Compliance (CF-1R) approved by the enforcement agency.

Builder or Installer Information as shown on the Installation Certificate (CF-6R)	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	
CALIFORNIA DELTA MECHANICAL INC	
Responsible Person's Name: Brian Cannon	CSLB License: 811114
HERS Provider Data Registry Information	
Sample Group # (if applicable): N/A	<input checked="" type="checkbox"/> tested/verified dwelling <input type="checkbox"/> not-tested/verified dwelling in a HERS sample group
HERS Rater Information CalCERTS Certificate # CC1-1798820037	
HERS Rater Company Name:	
Mike Sumner	
Responsible Rater's Name: Matthew Fincher	Responsible Rater's Signature: Matthew Fincher
Responsible Rater's Certification Number w/ this HERS Provider: CC2006285	Date Signed: 1/8/2014

Site Address: 1509 Funston Dr, Santa Rosa CA 95407 (System 1)	Enforcement Agency: County of Sonoma	Permit Number: BLD13-5594
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Space Conditioning Systems

Heating Equipment

Equip Type (package-heat pump)	CEC Certified Mfr. Name and Model Number	ARI Reference Number ²	# of Identical Systems	Efficiency (AFUE, etc.) ^{1, 3} (\geq CF-1R value) ⁴	Duct Location (attic, crawl-space, etc.)	Duct R-value	Heating Load (kBtu/hr)	Heating Capacity (kBtu/hr)
Split Furnace	Rheem RGPS05NAUER		1	80 AFUE	Attic		50	50 kBtu

Cooling Equipment

Equip Type (package heat pump)	CEC Certified Mfr. Name and Model Number	ARI Reference Number ²	# of Identical Systems	Efficiency (SEER and EER) ^{1, 3} (\geq CF-1R value) ⁴	Duct Location (attic, crawl-space, etc.)	Duct R-value	Cooling Load (kBtu/hr)	Cooling Capacity (kBtu/hr)

1. If project is new construction, see Footnotes to Standards Table 151-B and Table 151-C for duct ceiling alternative compliance.
2. ARI Reference Number can be found by entering the equipment model number at <http://www.aridirectory.org/ari/ac.php#>
3. Listed efficiency on this page must be greater than or equal (\geq) to the value shown on the CF-1R form.
4. When CF-1R is reference it is also applicable to the CF-1R, CF-1R-AA or CF-1R-ALT

ALL BOXES MUST BE CHECKED TO BE A VALID FORM

- §110-§113: HVAC equipment is certified by the California Energy Commission.
- §150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA, or ACCA.
- §150(i): Setback Thermostat on all applicable heating and/or cooling systems meet the requirements of §112(c).
- §150(j)2: Pipe insulation for cooling system refrigerant suction, chilled water and brine lines meets minimum requirements of Table 150-B and includes a vapor retardant or is enclosed entirely in conditioned space.

Site Address: 1509 Funston Dr, Santa Rosa CA 95407 (System 1)	Enforcement Agency: County of Sonoma	Permit Number: BLD13-S594
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Ducts and Fans

§150(m): Duct and Fans

- 1. All air-distribution system ducts and plenums installed, sealed and insulated to meet the requirements of CMC Sections 601, 602, 603, 604, 605 and Standard 6-5; supply-air and return-air ducts and plenums are insulated to a minimum installed level of R-4.2 or enclosed entirely in conditioned space. Openings shall be sealed with mastic, tape or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape shall be used; and
- 1. Building cavities, support platforms for air handlers, and plenums defined or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.
- 2D. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
- 7. Exhaust fan systems have back draft or automatic dampers.
- 8. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.
- Protection of Insulation. Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.
- 10. Flexible ducts cannot have porous inner cores.

CalCERTS, Inc.

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or an authorized representative of the person responsible for construction (responsible person).
- I certify that the installed features, materials, components, or manufactured devices identified on this certificate (the installation) conforms to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the enforcement agency.
- I reviewed a copy of the Certificate of Compliance (CF-1R) form approved by the enforcement agency that identifies the specific requirements for the installation. I certify that the requirements detailed on the CF-1R that apply to the installation have been met.
- **I will ensure that a completed, signed copy of this Installation Certificate shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Installation Certificate is required to be included with the documentation the builder provides to the building owner at occupancy.**

Company Name: (Installing Subcontractor or General Contractor or Builder/Owner) CALIFORNIA DELTA MECHANICAL INC		
Responsible Person's Name: Brian Cannon		Responsible Person's Signature: Brian Cannon
CSLB License: 811114	Date Signed: 1/8/2014	Position With Company (Title):

INSTALLATION CERTIFICATE

CF-6R-MECH-21-HERS

Duct Leakage Test - Existing Duct System

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Enter the Duct System Name or Identification/Tag: **System 1**

Enter the Duct System Location or Area Served: **Whole House**

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Note: For existing dwellings, a completely new or replacement duct system can also include existing parts of the original duct system (e.g., register boots, air handler, coil, plenums, etc.) if those parts are accessible and they can be sealed. For a completely new or replacement duct system installed in an existing dwelling, use the Installation Certificate titled "Duct Leakage Test - Completely New or Replacement Duct System."

Duct Leakage Diagnostic Test - existing duct system

- Select one compliance method from the following four choices.
- 1. Measured leakage less than 15% of fan flow
 - 2. Measured leakage to outside less than 10% of Fan Flow
 - 3. Reduce leakage by 60% and conduct smoke and fix all leaks
 - 4. Fix all accessible leaks using smoke and HERS rater verify

Note: (One of Options 1, 2 or 3 must be attempted before utilizing Option 4.)

Determine nominal Fan Flow using one of the following three calculation methods.

- Cooling system method: Size of condenser in Tons x 400 = CFM
- Heating system method: 21.7 x 50 Output Capacity in Thousands of Btu/hr = 1085 CFM
- Measured system airflow using RA3.3 airflow test procedures: CFM

1	<p>Option 1 used then: Allowed leakage = Fan Airflow <u>1085</u> x 0.15 = <u>162.75</u> CFM Actual Leakage = <u>189</u> CFM Pass if Actual Leakage is less than Allowed leakage</p>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
2	<p>Option 2 used then: Allowed leakage = Fan Airflow <u>1085</u> x 0.10 = <u>108.5</u> CFM Actual Leakage to outside = <u> </u> CFM Pass if Actual leakage to outside is less than Allowed leakage</p>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
3	<p>Option 3 used then: Initial leakage prior to start of work = <u> </u> CFM Final leakage after sealing all accessible leaks using smoke test = <u> </u> CFM Initial leakage <u> </u> - Final leakage <u> </u> = Leakage reduction <u> </u> CFM ((Leakage reduction <u> </u> / Initial leakage <u> </u>) x 100% = <u> </u> % Reduction Pass if % Reduction >= 60%</p>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
4	<p>Option 4 used then: All accessible leaks repaired using smoke test. HERS rater must verify (No Sampling). Pass if all accessible leaks have been repaired using smoke</p>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

Duct Leakage Test - Existing Duct System

(Page 2 of 2)

Site Address: 1509 Funston Dr, Santa Rosa CA 95407 (System 1)	Enforcement Agency: County of Sonoma	Permit Number: BLD13-5594
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- Outside air (OA) ducts for Central Fan Integrated (CFI) ventilation systems, shall not be sealed/taped off during duct leakage testing. CFI OA ducts that utilize controlled motorized dampers, that open only when OA ventilation is required to meet ASHRAE Standard 62.2, and close when OA ventilation is not required, may be configured to the closed position during duct leakage testing.
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- New duct installations cannot utilize building cavities as plenums or platform returns in lieu of ducts.
- Mastic and draw bands must be used in combination with cloth backed rubber adhesive duct tape to seal leaks at all new duct connections

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or an authorized representative of the person responsible for construction (responsible person).
- I certify that the installed features, materials, components, or manufactured devices identified on this certificate (the installation) conforms to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the enforcement agency.
- I understand that a HERS rater will check the installation to verify compliance, and that that if such checking identifies defects, I am required to take corrective action at my expense. I understand that Energy Commission and HERS provider representatives will also perform quality assurance checking of installations, including those approved as part of a sample group but not checked by a HERS rater, and if those installations fail to meet the requirements of such quality assurance checking, the required corrective action and additional checking/testing of other installations in that HERS sample group will be performed at my expense.
- I reviewed a copy of the Certificate of Compliance (CF-1R) form approved by the enforcement agency that identifies the specific requirements for the installation. I certify that the requirements detailed on the CF-1R that apply to the installation have been met.
- **I will ensure that a completed, signed copy of this Installation Certificate shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Installation Certificate is required to be included with the documentation the builder provides to the building owner at occupancy.** I will ensure that all Installation Certificates will come from a HERS provider data registry for multiple orientation alternatives, and beginning October 1, 2010, for all low-rise residential buildings.

Company Name: (Installing Subcontractor or General Contractor or Builder/Owner) CALIFORNIA DELTA MECHANICAL INC		
Responsible Person's Name: Brian Cannon		Responsible Person's Signature: Brian Cannon
CSLB License: 811114	Date Signed: 1/8/2014	Position With Company (Title):
Is this installation monitored by a Third Party Quality Control Program (TPQCP)? <input type="checkbox"/> Yes <input type="checkbox"/> No		Name of TPQCP (if applicable):