INSTALLATION CERTIFICATE **CF-6R-MECH-21-HERS**

Site Address:	Enforcement Agency:	Permit Number:
1234 Anywhere Street	City of Ripon	2011-Test

Enter the Duct System Name or Identification/Tag: 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

☑ 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.

Select one compliance method from the following four choices.

○ Option 1. Measured leakage less than 15% of Fan Airflow.	◉ Option 2. Measured leakage to outside less than 10% of Fan Airflow.	○ Option 3. Reduce leakage by 60% or more, and conduct smoke test to seal all accessible leaks.	○ Option 4. Fix all accessible leaks using smoke test, and HERS rater must verify.

Note: (Option 1 must be attempted before utilizing Option 4)

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

◉ 1 Cooling system method: Size of condenser in Tons 3 x 400 = 1200 CFM

○ 2 Heating system method: 21.7 x _____ Heating Output Capacity (kBtuh) = _____ CFM

○ 3 Measured system airflow using RA3.3 airflow test procedures: _____ CFM

XML - C161

2 **Option 2** used then:

Allowed leakage = Fan Airflow 1200 XML - C158 x 0.10 = 120 XML - C159 CFM

Actual leakage to outside = _____ XML - C160 CFM

Pass if Actual leakage to outside is less than Allowed leakage

○ Pass ○ Fail

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).