STATE OF CALIFORNIA

ALTERATIONS - HVAC

CEC-CF1R-ALT-04-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	CF1R-ALT-04-E
Alterations - HVAC CZ 2, and 8-15 (formerly CF-1R-ALT-HVAC)	(Page 1 of 1)

Site Address:				**Enforcement Agency:**	**Date Prepared:**	**Permit#:**
Equipment Type		Equipment Efficiency		New Ducting, *Plenums, Lineset:* Required R-value	Conditioned Floor Area (sq ft)	Thermostat
☐ Packaged System ☐ Split System ☐ Mini Split ☐ Furnace	☐ Evaporator Coil ☐ Condensing Unit ☐ Compressor ☐ Lineset ☐ TXV	_____AFUE _____SEER _____EER	_____COP _____HSPF	☐ R-6 *(CZ 2, 8-13)* Ducting ☐ R-8[1] *(CZ 11, 14, 15)* Ducting ☐ R-6 (*all CZ's*) Plenums ☐ R-5 or R7.5) Lineset[4]	Served by system _____sqft	☐ Setback *(If not already present, must be installed)*

HERS VERIFICATION SUMMARY Installer determines work to be completed and matches to one of the options below. At permit application this form is allowed to be filled out by hand. For final inspection all forms are to be registered (no hand filled forms allowed) and a copy left on site.

☐ **1. HVAC Changeout/Repair**	**Required Compliance Documents to be left on site for Final**:
All Equipment, Condenser Unit, Evaporator Coil, Compressor, TXV, Lineset, Air Handler/Furnace[2] **(Can include new ducting)**	CF1R-ALT-02-E CF2R: MECH-01, MECH-20-HERS, MECH-(23 or 24)[2]-HERS, MECH-25-HERS[2] CF3R: MECH-20-HERS, MECH-(23 or 24)-HERS[2], MECH-25-HERS[2]

Installer Requirement: Duct leakage (≤ 15%, or ≤ 10% to outside, or seal all accessible leaks), Air Flow ≥ 300 CFM/ton, Refrigerant Charge.
Exempted from duct leakage testing if:
☐ 1. Duct system registered with HERS provider as previously sealed, or ☐ 2. There is less than 40 linear feet of duct in unconditioned space, or
☐ 3. Existing duct systems are constructed, insulated or sealed with asbestos (list manufacture date of building _____)

☐ 2. **New HVAC System**	**Required Compliance Documents to be left on site for Final**:
All new equipment and All New Ducts[3] including Mini Split	CF1R-ALT-02-E CF2R: MECH-01, MECH-20-HERS, MECH-22-HERS, MECH-(23 or 24)-HERS[2], MECH-25-HERS[2] CF3R: MECH-20-HERS, MECH-22-HERS, MECH-(23 or 24)-HERS[2], MECH-25-HERS[2] Mini Splits require CF1R-ALT-02-E, CF2R-MECH-01, and (CF2R-CF3R) MECH-25-HERS

Installer Requirement: Duct leakage ≤ 6%, Fan Efficacy (.58W/CFM), Air Flow ≥ 350 CFM/ton (or alternative), Refrigerant Charge

☐ 3. **All New Ducts with Replacement**	**Required Compliance Documents to be left on site for Final**:
All New Ducts[3] and one or more of the following replaced: Condenser Unit, Evaporator Coil, Compressor, TXV, Lineset, Furnace[2]	CF1R-ALT-02-E CF2R: MECH-01, MECH-20-HERS, MECH-(23 or 24)-HERS, MECH-25-HERS CF3R: MECH-20-HERS, MECH-(23 or 24)-HERS, MECH-25-HERS

Installer Requirement: Duct leakage ≤ 6%, Air Flow ≥ 350 CFM/ton (or alternative), Refrigerant Charge
Exempted from duct leakage testing if: ☐ 1. Existing duct systems are constructed, insulated or sealed with asbestos

☐ 4. **New Ducting over 40 feet**	**Required Compliance Documents to be left on site for Final**:
New ducting but less than All New Ducts[3]	CF1R-ALT-02-E, CF2R: MECH-20-HERS, CF3R: MECH-20-HERS

Installer Required to: Duct leakage (≤ 15% or, ≤ 10% to outside or, or seal all accessible leaks)
☐ EXCEPTION: Existing duct systems constructed, insulated or sealed with asbestos.

[1] All **new** ducting R-8 required when more than 40 ft installed and R-6 when less than 40 ft installed. This includes in walls, between floors etc.
[2] Heating only systems and Air Handler/Furnace changes do not require Air Flow MECH-(23 or 24), or Refrigerant Charge verification MECH-25
[3] All New Ducts is when at least 75 percent of the duct system is new duct material, and up to 25 percent may consist of reused parts from the dwelling unit's existing duct system (e.g., registers, grilles, boots, air handler, coil, plenums, duct material)
[4] R-5 (1" thick insulation) for linesets 1" and less. R-7.5 (1.5" thick insulation) for linesets over 1 inch. Most mfg will require Suction line Diameter with insulation as the following 1.5-2T-2⅝", 2.5-3T-2¾", 3.5 to 4T-2⅞", 5T-4⅛"

Contractor (Documentation Author's /Responsible Designer's Declaration Statement)

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the information on this document.
3. That the energy features and performance specifications for the design identified on this Certificate of Compliance conform to the requirements of Title 24, Parts 1 and 6 of the California Code of Regulations (CCR).
4. That the energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the CCR.
5. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name:	Responsible Designer Signature:	Date Signed:	License:

Company :	Address:	City/State/Zip:	Phone:

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300