

**TOWN OF TRUCKEE
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING AND SAFETY DIVISION**

DATE:

BUILDING PERMIT:

ADDRESS:

APN:

SNOWLOAD: _____

SNOWLOAD/25: _____

(REQUIRED VENT HEIGHT FOR DIRECT VENT APPLIANCE)

Effective for all permits applied for on or after January 1, 2023, all work shall comply with the 2022 editions of the California Building Code (C.B.C.), California Residential Code (C.R.C.), California Mechanical Code (C.M.C.), California Plumbing Code (C.P.C.), California Electrical Code (C.E.C.), California Energy Code (based upon the 2022 California Energy Efficiency Standards (Effective 01/01/23), California Green Building Standards Code (CALGreen) and Title 15 of the Town Municipal Code (T.M.C.), the 2021 Editions of the Uniform Swimming Pool and Spa Code and Solar Energy Code; the 1997 Editions of the Uniform Housing Code and Uniform Code for the Abatement of Dangerous Buildings.

The required energy compliance forms as referenced in this document may be found at the following links:

Parent Directory for 2022 Residential Compliance Forms

<https://www.energy.ca.gov/publications/2022/2022-single-family-residential-compliance-manual-2022-building-energy-efficiency>

CF1R Forms (Certificate of Compliance)

CF2R Forms (Certificate of Installation)

CF3R Forms (Certificate of Verification)

These comments shall become part of the plans and shall be on the job site along with the approved plans, engineering, and energy calculations for all inspections. All items noted in this list shall be on the plans and are the responsibility of the architect, engineer, and contractor to see that they are complied with during the construction process.

I do hereby certify that this structure will not be occupied without a Certificate of Occupancy and that I have read these documents and will comply with them and all codes, Town Ordinances and State Laws adopted by the Town of Truckee.

Signature (Owner, Contractor, Agent)

Date

Applicant responsible to read and understand the attached code requirements. Inspector to verify in field. Please ask for additional clarification if requirements are not understood.

Compliance with these requirements is the responsibility of the owner/contractor during the construction process. This list is only a partial list of the codes, ordinances, and state laws used and/or adopted by the Town. Please be aware that the Building Inspectors will be using this list and all codes, ordinances, and state laws to perform their inspections.

- 1 When the value of additions, alterations or repairs exceeds \$1000, existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm. (In existing dwelling units a carbon monoxide alarm is permitted to be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space.). Carbon monoxide alarms shall be installed outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements. Single and multiple station carbon monoxide alarms shall be listed as complying with the requirements of UL 2034. Carbon monoxide detectors shall be listed as complying with the requirements of UL 2075. Carbon monoxide alarms and carbon monoxide detectors shall be installed in accordance with this code, the current edition of NFPA 720 and manufacturer's specifications. Other carbon monoxide alarm and detection devices as recognized in NFPA 720 are also acceptable. CRC R315.
- 2 When additions, alterations or repairs to a Group R occupancy exceed \$1000 and a permit is required, or when one or more sleeping rooms are added or created in existing Group R occupancies, smoke detectors shall be installed in accordance with CRC R314.3.1 (one in every sleeping room; outside each separate sleeping area in the immediate vicinity of the bedroom(s); on each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. (To the extent practicable, alarms shall be hardwired and interconnected with existing). CRC314.4, exc. 3.
- 3 Carbon monoxide alarms combined with smoke alarms shall comply with CRC R315, all applicable standards, and requirements for listing and approval by the Office of the State Fire Marshall, for smoke alarms.
- 4 Address signs and porta-potti shall be on the job site at the time of first inspection L.U.D.C. (*Permanent identification of site address shall be placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4" high with a minimum stroke width of 1/2". Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. CRC R319. Illuminated address signs shall consume no more than 5 watts of power. 2013 Energy Standards150.0(k)10*)
- 5 Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum N0. 26 gage (0.019-inch; 0.48 mm) sheet steel and shall have no openings into the garage. CRC 302.5.2; CBC 406.1.4 item 2.
- 6 Appliances designed to be fixed in position shall be securely fastened in place. Supports for appliances shall be designed and constructed to sustain vertical and horizontal loads within the stress limitations specified in the building code. Anchor straps for water heaters shall be located within the upper and lower 1/3 of its vertical dimension, lower anchor/strap location to maintain a minimum distance of 4" above the controls. (This criteria will be enforced) CPC 507.2. (Steel braces required, not plumber's tape.) A water heater supported from the ground shall rest on level concrete or other approved base extending not less than 3" above the adjoining ground level. CBC 507.3
- 7 Gas utilization appliances in a residential garage and in adjacent spaces that open to the garage and are not part of the living space of a dwelling unit shall be installed so that burners and burner-ignition devices are located not less than 18" above the floor unless listed as flammable vapor ignition resistant. CPC 507.14.
- 8 HVAC appliance/water heater space shall be provided with an opening or doorway sufficient in size for its removal. (Appliances must be readily accessible for inspection, repair and placement. A 30" x 30" working space must be provided at the front or service side of the appliance. CMC 305. The space in which any floor furnace is installed shall be accessible by an opening in the foundation not less than 24" x 18", or by a trapdoor not less than 24"x 24" and a passageway not less than 24" x 18".CMC 912.8.
- 9 Appliances installed in attics shall be accessible through an opening and passageway at least as large as the largest component of the appliance and not less than 22" x 30". The appliance shall be located within 20' of the passageway access when the attic has less than 6' headroom. The passageway shall be unobstructed and shall have solid flooring not less than 24 inches wide from the

entrance opening to the appliance. A permanent 120volt receptacle outlet and a lighting fixture shall be installed near the appliance. The switch controlling the lighting fixture shall be located at the entrance to the passageway. CMC 904.11; CPC 509.4.

- 10 Furnaces or boilers may be installed in a closet located in a bedroom or bathroom, provided the closet is equipped with a listed, gasketed door assembly and a listed, self-closing device and in compliance with CMC 904.1.1. The door assembly shall be installed with a threshold and bottom door seal and shall meet the requirements of CMC 904.1.2. All combustion air for such installations shall be obtained from the outdoors. The closet shall be for the exclusive use of the central heating furnace or low-pressure boiler. Or the unit shall be a direct vent sealed combustion unit. CMC 904.1. Self-closing doors shall swing easily and freely and shall be equipped with a self-closing device to cause the door to close and latch each time it is opened. The closing mechanism shall not have a hold-open feature. CMC 904.1.1. Gasketing on gasket doors or frames shall be furnished in accordance with the published listings of the door, frame, or gasketing material manufacturer. CMC 904.1.2.
- 11 An LPG appliance shall not be installed in an above-grade underfloor space unless such location is provided with a minimum 3" drain for removal of unburned gas. An LPG appliance shall not be installed in a pit or basement. CMC 303.8.1.
- 12 Central-heating furnaces and low pressure boilers installed in rooms that are NOT large (such as alcoves and closets) in comparison with the size of the equipment shall be listed for such installation Listed clearances shall not be reduced, regardless of whether the enclosure is of combustible or noncombustible material. CMC 904.2
- 13 If the volume of the room or space in which fuel-burning appliances are installed is equal to or greater than 50 cubic feet per 1,000 Btu/hr of aggregate input rating of appliances, infiltration may be regarded as adequate to provide combustion air. If not, provide combustion air for appliances. CMC 205, 223 and 701.2.1.
Makeup air requirements for the operation of exhaust fans, kitchen ventilation systems, clothes dryers, and fireplaces shall be considered in determining the adequacy of space to provide combustion-air requirements. CMC 701.1.4.
- 14 Combustion air opening locations shall be provided in compliance with CMC 701.4: Two Permanent openings Method (701.4.1) or One Permanent Opening Method (701.4.2). Or provide calculations to comply with allowed interior and exterior air provisions as allowed by CMC 701.5.
- 15 Combustion air ducts : shall be provided with a galvanized sleeve of not less than 26 gauge steel or other approved material; shall have a minimum cross-sectional dimension of 3"; shall terminate in an unobstructed space, extending from the floor to the ceiling of the appliance compartment, at least 3" in depth open to the front or firebox side of the appliance; shall serve a single appliance compartment; shall serve only upper or lower combustion-air openings, the separation between ducts serving upper and lower combustion-air openings shall be maintained to the source of combustion air. Neither end of ducts, which terminate in an attic shall be screened. CMC 701.10.
- 16 Type B or BW gas vents with listed vent caps 12" in size or smaller shall be permitted to be terminated in accordance with Figure 8-2, provided they are located at least 8' from a vertical wall or similar obstruction. All other gas vents shall terminate not less than 2' above the highest point where they pass through the roof and at least 2' higher than any portion of a building within 10'. CMC 802.6.2.
- 17 All gas vents extending through the roof shall extend through the roof flashing, roof jack, or roof thimble and terminate with a listed cap or listed roof assembly CMC 802.6.2.5. A gas vent shall terminate at least 3 feet above a forced air inlet located within 10 feet. CMC 802.6.2.6; CMC 802.8.1.
- 18 Horizontal or side wall venting systems shall terminate not less than 4' below or 4' horizontally from, and not less than 1' above a door, an openable window or a gravity air inlet into a building. CMC 802.8.2. (See exception for vent terminals of direct vent appliances.) Direct vent appliances shall be installed per manufacturer's specifications. The vent height shall be above the anticipated snow depth TMC Code 15.05.020 (CMC 802.8.6) Divide the ground snowload ("Pg" value as shown on sheet 2 of this correction list) by 25 to obtain the required height. Suggest verification or approval of height/location of vent be made with an inspector prior to installation of appliance. Consider these requirements when determining the location of a direct vent appliance and its vent termination.) **See snowload information on cover sheet of document.**

- 19 Exit terminals and combustion air intakes shall not be located under decks which could be sealed off around the perimeter with snow accumulation. TMC 15.05.010 (CMC 802.3.3.5)
- 20 Electrical plans shall show all lighting in utility rooms to be in compliance with Mandatory Measures of 2013 Energy Efficiency Standards Section 150.0(k)6. **All fixtures shall be high efficacy AND shall be controlled by a vacancy sensor.**
- 21 At least one lighting outlet controlled by a light switch located at the point of entry to the attic, underfloor space, utility room and basement shall be installed where these spaces are used for storage or contain equipment-requiring servicing. CEC Article 210-70(A).
- 22 Every dwelling unit shall be provided with heating facilities capable of maintaining a minimum room temperature of 68 degrees F at point 3 feet above the floor and 2 feet from exterior wall in all habitable rooms. CRC R303.9.



ALTERATIONS - HVAC

CEC-CF1R-ALT-03-E (Revised 06/14)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	CF1R-ALT-03-E
Alterations - HVAC CZ 1, 3 to 7 and 16 (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)
Ⓒ Packaged System	Ⓒ Evaporator Coil	_____ AFUE	_____ COP	Ⓒ R-6 (CZ 1,3-7) Ducts	Served by system _____ sq ft
Ⓒ Split System	Ⓒ Condensing Unit	_____ SEER	_____ HSPF	Ⓒ R-8 ¹ (CZ 16) Ducts	
Ⓒ Furnace	Ⓒ Lineset	_____ EER		Ⓒ R-6 (all CZ's) Plenums Ⓒ R-5 or R7.5 Lineset ³	

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 Can include new ducting	Required Compliance Documents to be left on site for Final:
All Equipment, Condenser Unit, Evaporator Coil, Air Handler/Furnace	CF1R-ALT-02-E CF2R: MECH-01, MECH-20-HERS CF3R: MECH-20-HERS

Installer Requirement: Duct leakage ($\leq 15\%$ or, $\leq 10\%$ to outside, or seal all accessible leaks)

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 ²	CF1R-ALT-02-E CF2R-MECH-01, MECH-20-HERS, MECH-22-HERS, MECH-(23 or 24)-HERS CF3R-MECH-20-HERS, MECH-22-HERS, MECH-(23 or 24)-HERS ²

Installer Requirement: Duct leakage $\leq 6\%$, Fan Efficacy (.58W/CFM), Air Flow ≥ 350 CFM/ton (or Standards Table 150.0-C / D alternative)

Ⓒ 3. All New Ducts with Replacement	Required Compliance Documents to be left on site for Final:
Includes replacing or installing All New Ducts ² and one or more of the following: Condenser Unit, Evaporator Coil, Furnace	CF1R-ALT-02-E CF2R-MECH-01, MECH-20-HERS, MECH-(23 or 24)-HERS CF3R-MECH-20-HERS, MECH-(23 or 24)-HERS

Installer Requirement: Duct leakage $\leq 6\%$, Air Flow ≥ 350 CFM/ton (or Standards Table 150.0-C / D alternative)

Ⓒ Exempted from duct leakage testing | 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:
Adding or replacing ducts in unconditioned space but less than All New Ducts ²	CF1R-ALT-02-E CF2R: MECH-20-HERS CF3R: MECH-20-HERS

Installer Required to: Duct leakage ($\leq 15\%$ or, $\leq 10\%$ to outside, or seal all accessible leaks)

Ⓒ Exempted from duct leakage testing | existing duct systems are 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 A New Duct system is when the duct system is constructed of at least 75 percent 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, plenums, duct material).
³ 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-2 $\frac{3}{8}$ ", 2.5-3T-2 $\frac{3}{8}$ ", 3.5 to 4T-2 $\frac{3}{8}$ ", 5T-4 $\frac{1}{2}$ "

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

Split Systems and Packaged Systems	Mandatory Measures					Prescriptive Requirements	
	Setback Thermostat	Cooling Load Calcs	Heating Load Calcs	HERS: Duct Seal and Test	HERS: Cooling Coil Airflow and Fan Watt Draw	Duct Insulation	HERS: Refrigerant Charge
Change this (and nothing else)	§110.2(c) §150.2(b)F	§150.0(h), §150.2(b)1C	§150.0(h), §150.2(b)1C	§150.0 (m)1-3 & 11 §150.2(b)1C,D, & E	§150.0(m)12, 13 & 15 §150.2 (b)1C, D	§150.1(c)9 §150.2(b)1D	§150.1(c)7 A §150.2(b)1 F
Whole split or packaged system (no ducts added or replaced)	YES	no	no A	YES B	no	no	YES C, D
Evaporator coil (cooling coil), condenser coil , or outdoor condensing unit	YES	no	no A	YES B	no	no	YES C, D
Furnace (air handler)	YES	no	no A	YES B	no	no	YES C, D
Compressor, refrigerant metering device	YES	no	no A	no	no	no	YES C, D
Some ducts	no	maybe E	maybe A, E	YES B	no	YES F	no
"All new" ducts G	no	maybe E	maybe A, E	YES H	YES I	YES F	no
Whole split or packaged system and all new ducts	YES	YES E	YES A, E	YES H	YES I	YES F	YES C, D

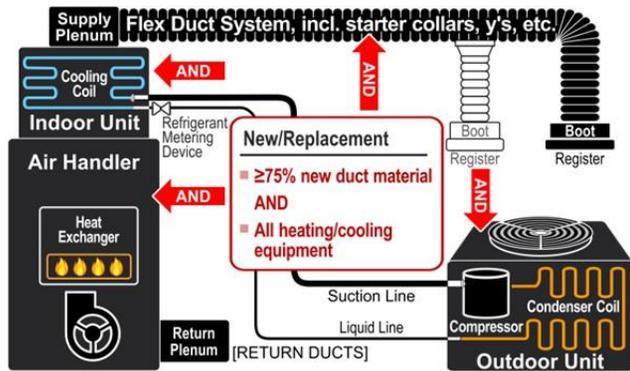
NOTE:

- ✦ Replacing the blower wheel fan is considered a repair and does NOT trigger the Standards.
- ✦ All new HVAC equipment must meet minimum federal efficiency requirements
- ✦ Cooling line insulation is triggered if the line set (cooling system, suction line) is replaced or repaired. Line sets ≤1.5" in diameter must have 0.5" thick insulation.

- A Heating equipment must meet CBC minimum capacity requirements.
- B Unless exceptions apply, duct systems must be sealed and verified if >40 feet of ducts in unconditioned space. Duct system leakage must be ≤15% in total, or ≤10% to the outside. Or, if unable to meet the sealing requirements, all accessible leaks must be sealed and verified by a HERS rater.
- C HERS verification of refrigerant charge is required in **climate zones 2 and 8–15 only** when a refrigerant containing component of an air conditioner or heat pump is replaced or installed in an existing building.
- D Although there are no commercially available HVAC systems with approved Charge Indicator Display (CID) devices at the time of publication (July 2014) the Standards do allow use of a CEC-approved CID should such equipment become available during the 2013 code cycle.
- E Cooling and heating load calculations are required when ducts are added to **serve new conditioned space**, such as an addition.
- F When adding or replacing >40 feet of ducts in unconditioned space: CZ 1-10 and 12-13: R-6; CZ 11 and 14-16: R-8. HERS verification is required for insulated ducts in conditioned space. Mandatory duct insulation requirements (R-6) apply to all new or replacement ducts (not existing or unaltered ducts).
- G The system is considered to have "all new" ducts when 75% or more of the ducts are new material and up to 25% reused parts from the existing duct system (e.g., registers, grilles, boots, air handler, coil, plenums, duct material) if the reused parts are accessible and can be sealed to prevent leakage.

H In all climate zones, when new duct systems are installed in unconditioned space, leakage must be $\leq 6\%$ of the air handler airflow.

I When new duct systems are installed, cooling coil airflow must be >350 CFM per ton, and fan watt draw must be ≤ 0.58 W/CFM. Alternatively, the system can meet the requirements in Table 150.0-C or Table 150.0-D (Return Duct Sizing and Filter Sizing).



A space-conditioning system is considered entirely new or a complete replacement when all of the following are installed or replaced:

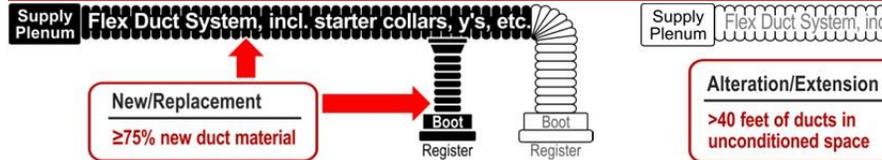
- ✦ All the system heating/cooling equipment
- ✦ $\geq 75\%$ new duct material ^G

- ✦ Cooling coil ✦ Refrigerant piping ✦ Condenser coil ✦ Refrigerant metering
- ✦ Compressor device

- ✦ Air handler
- ✦ Heat exchanger

Replacing other components is considered a repair — not an alteration. For example, replacing the blower wheel fan, but not the heat exchanger or air handler in the furnace, is a repair.

2013 Altered or Replaced Duct Systems (Duct Sealing)



Entirely New or Complete Replacement Ducts

Entirely new or complete replacement duct systems are those that contain at least 75% new duct material. Existing duct system components (up to 25%) may be reused if they are accessible and can be sealed.^G

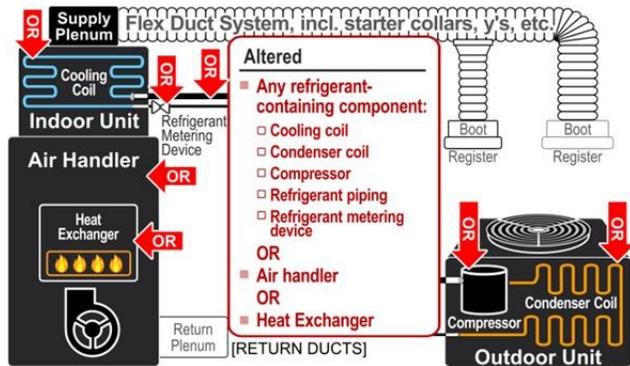
The Duct Sealing and Testing (HERS measure) must demonstrate

Alteration or Extension

In all climate zones with new or replacement ducts installed as an extension of an existing system, Duct Sealing (HERS measure) is required. Leakage shall be equal to or less than 6% of system air

handler air flow. a leakage rate less than or equal to 6% of the system air handler airflow. In addition, verification of Cooling Coil Airflow and Fan (There are alternatives to meeting the maximum 15% Watt Draw (HERS measure) is required. The system must have leakage. Consult your

Building Department or air handler fan efficiency ≤ 0.58 W/CFM. The system must have leakage. Consult your Building Department or air handler fan efficiency ≤ 0.58 W/CFM.



2013 Altered Space-Conditioning System

§150.2(b)1E, F

A space-conditioning system is considered altered when it is not a new or replacement system and any of the following components is installed or replaced: ✦ Any refrigerant-containing component, including:

2013 Entirely New or Complete Replacement Space-Conditioning System §150.2(b)1C

All HVAC alterations require:

- ✦ Permit — for all HVAC changeouts
- ✦ CF1R: Certificate of Compliance: Alteration to an HVAC System (CF1R-ALT-02*-E, or CF1R-ALT-03-E or CF1R-ALT-04-E)
Submitted to the building department by the contractor or the home owner
- ✦ CF2R-MCH-01-H: Certificate of Installation for Space Conditioning Systems, Ducts and Fans
Completed and signed by the installing contractor and made available for final inspection by building department

For HERS Measures

Projects with HERS measures require:

- ✦ Registration of the CF1R, via HERS Provider
- ✦ CF2R-MCH...H: Certificates of Installation for mechanical system with HERS measures
Completed and signed by the installing contractor; must be submitted to a HERS Provider Registry after the contractor has signed it, and made available for inspection by the building department
- ✦ CF3R-MCH...H: Certificates of Field Verification for mechanical system with HERS measures
Completed and registered by a HERS Rater for each CF2R-H; the HERS Rater or contractor ensures the relevant CF3Rs are available for final inspection by the building department.

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Required Documentation

For All HVAC Alterations

- ✦ HERS: Duct Leakage Diagnostic Test
 - ✦ CF2R-MCH-20*-H and CF3R-MCH-20*-H
 - ✦ HERS: Fan Efficacy (Fan Watt Draw) ✦ CF2R-MCH-22-H and CF3R-MCH-22-H *and*
HERS: Space Conditioning System Airflow Rate
 - ✦ CF2R-MCH-23*-H and CF3R-MCH-23*-H
 - ✦ HERS: Refrigerant Charge Verification ✦ CF2R-MCH-25*-H and CF3R-MCH-25*-H or
 - ✦ CF2R-MCH-25f-E (for packaged systems with refrigerant charge certified by manufacturer)
- * Correct version (e.g., "a" or "b" or "c") varies depending upon the project scope and approach used to demonstrate compliance*

For Projects with New or Replacement Duct Systems using Duct and Filter Sizing

Projects that use Duct and Filter Sizing instead of the Cooling Coil Airflow and Fan Watt Draw HERS Measure require:

- ✦ CF2R-MCH-28-H and CF3R-MCH-28-H

Choose one of the following descriptions of work (1-4) to determine the applicable energy forms which shall be completed, registered and provided for the project prior to or concurrently with the final inspection request.

HERS Raters are certified by California Energy Rater Providers. Currently the only HERS Provider approved by the Energy Commission for work performed for this alteration is CalCERTS. You can locate a HERS Rater at their website:

https://www.calcerts.com/Rater_Directory_new.cfm

1) HVAC Changeout/Repair (Can include new ducting)

Parent Directory for 2013 Residential Compliance Forms

http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/

CF1R Forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF1R/

CF2R forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/

CF3R forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/

CF-1R-ALT-03-E *(To be completed and provided at permit application. It may or may not be registered at permit application. If not registered, a copy of the registered form shall be provided to field inspector prior to or concurrently with final inspection) **The remainder of these forms shall be registered and provided to the field inspector prior to or concurrently with final inspection.***

CF-1R-ALT-02-E

CF2R: MCH-01-E (CF2R-MCH-01b) (for prescriptive alterations (Space Conditioning Systems Ducts and Fans)

CF2-R-MCH-20H (MCH 20d – Complete Replacement or Altered Duct system)

CF2R-MCH-20-H (MCH 20e – Sealing All accessible Leaks using Smoke Test)

CF3R MCH-20-HERS (MCH-20d-Complete replacement or Altered Duct System) CF3R-MCH-20-H (MCH-20e- Sealing All Accessible Leaks using Smoke Test)

2) NEW DUCTING OVER 40 FEET

Parent Directory for 2013 Residential Compliance Forms

http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/

CF1R Forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF1R/

CF2R forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/

CF3R forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/

CF-1R-ALT-03-E *(To be completed and provided at permit application. It may or may not be registered at permit application. If not registered, a copy of the registered form shall be provided to field inspector prior to or concurrently with final inspection) **The remainder of these forms shall be registered and provided to the field inspector prior to or concurrently with final inspection.***

CF-1R-ALT-02-E

2-R-MCH-20H (MCH 20d – Complete Replacement or Altered Duct system)

CF2R-MCH-20-H (MCH 20e – Sealing All accessible Leaks using Smoke Test) CF3R

MCH-20-HERS (MCH-20d-Complete replacement or Altered Duct System)

CF3R-MCH-20-H (MCH-20e- Sealing All Accessible Leaks using Smoke Test)

3) NEW HVAC SYSTEM (All new equipment and all new ducts)

Parent Directory for 2013 Residential Compliance Forms

http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/

CF1R Forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF1R/

CF2R forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/

CF3R forms: http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/

CF-1R-ALT-03-E *(To be completed and provided at permit application. It may or may not be registered at permit application. If not registered, a copy of the registered form shall be provided to field inspector prior to or concurrently with final inspection)* **The remainder of these forms shall be registered and provided to the field inspector prior to or concurrently with final inspection.**

CF-1R-ALT-02-E

CF2R: MCH-01-E (CF2R-MCH-01b) (for prescriptive alterations (Space Conditioning Systems Ducts and Fans) CF2R-MCH-20-HERS (MCH-20a-Completely New Duct System)

CF2R-MCH-22-HERS (MCH-22a Forced Air System Fan Watt Measurement – Newly Installed Non-Zoned Systems or Zoned Multi-speed Compressor)

CF2R-MCH-22-HERS (MCH22b Forced Air System Fan Efficacy Measurement – Newly Installed Zoned Single-Speed Compressor Systems)

CF2R-MCH 23-HERS

(MCH-23a – Forced Air System Airflow Rate Measurement – Newly Installed Non-Zoned Systems or Zoned Multi-Speed Compressor)

(MCH-23b – Forced Air System Airflow Rate Measurement – Newly Installed Zoned Single-Speed Compressor Systems)

(MCH-23c – Forced Air System Airflow Rate Measurement – Alternative to Compliance with Minimum System Airflow Requirements for Altered Systems)

(MCH-23d – Forced Air System Airflow Rate Measurement – Newly Installed Heating Only Non-Zoned Systems Measurement Only – No Minimum Target Requirement)

CF2R-MCH-24 HERS

(MCH24a – Single Point Air Tightness Test with Manual Meter)

(MCH-24b – Single Point Air Tightness Test with Automatic Meter)

(MCH-24c – Multi-Point Air Tightness Test)

(MCH-24d – Repeated Single Point Air Tightness Test with Manual Meter)

(MCH-24e-Repeated Single Point Air Tightness Test with Automatic Meter)

CF3R-MCH-20H (MCH-20a – Completely New Duct System)

CF3R-MCH-22H (MCH-22a – Forced Air System Fan Watt Measurement – Newly Installed Non-zoned Systems or Zoned MultiSpeed Compressor)

CF3R-MCH-22H (MCH-22b – Forced Air System Fan Efficacy Measurement – Newly Installed Zoned Single-Speed Compressor Systems)

CF3R-MCH-23H (MCH-23a – Forced Air System Airflow Rate Measurement – Newly Installed Non-Zoned Systems or Zoned Multi-Speed Compressor)

CF3R-MCH-23H (MCH-23b – Forced Air System Airflow Rate Measurement – Newly Installed Zoned Single-Speed Compressor Systems)

CF3R-MCH-23H (MCH-23c – Forced Air System Airflow Rate Measurement – Alternative to Compliance with Minimum System Airflow Requirements for Altered Systems)

CF3R-MCH-23H (MCH-23d – Forced Air System Airflow Rate Measurement – Newly Installed Heating Only Non-Zoned Systems Measurement Only – No Minimum Target Requirement)

CF3R-MCH-24H (MCH-24a – Single Point Air Tightness Test With Manual Meter)

CF3R-MCH-24H (MCH-24b – Single Point Air Tightness Test With Automatic Meter)

CF3R-MCH-24H (MCH-24c – Multi-Point Air Tightness Test)

CF3R-MCH-24H (MCH-24d – Repeated Single Point Air Tightness Test with Manual Meter) CF3R-MCH-24H

(MCH-24e – Repeated Single Point Air Tightness Test With Automatic Meter)

4) ALL NEW DUCTS WITH REPLACEMENT (Includes replacing or installed all new ducts and one or more of the following: Condenser Unit, evaporator Coil, Furnace)

CF-1R-ALT-03-E *(To be completed and provided at permit application. It may or may not be registered at permit application. If not registered, a copy of the registered form shall be provided to field inspector prior to or concurrently with final inspection)*

The remainder of these forms shall be registered and provided to the field inspector prior to or concurrently with final inspection.

CF-1R-ALT-02-E

CF2R: MCH-01-E (CF2R-MCH-01b) (for prescriptive alterations (Space Conditioning Systems Ducts and Fans)

CF2R-MCH-20-HERS (MCH-20a-Completely New Duct System)

CF2R-MCH 23-HERS

(MCH-23a – Forced Air System Airflow Rate Measurement – Newly Installed Non-Zoned Systems or Zoned Multi-Speed Compressor)

(MCH-23b – Forced Air System Airflow Rate Measurement – Newly Installed Zoned Single-Speed Compressor Systems)

(MCH-23c – Forced Air System Airflow Rate Measurement – Alternative to Compliance with Minimum System Airflow Requirements for Altered Systems)

(MCH-23d – Forced Air System Airflow Rate Measurement – Newly Installed Heating Only Non-Zoned Systems Measurement Only – No Minimum Target Requirement)

CF2R-MCH-24 HERS

(MCH24a – Single Point Air Tightness Test with Manual Meter)

(MCH-24b – Single Point Air Tightness Test with Automatic Meter)

(MCH-24c – Multi-Point Air Tightness Test)

(MCH-24d – Repeated Single Point Air Tightness Test with Manual Meter)

(MCH-24e-Repeated Single Point Air Tightness Test with Automatic Meter)

CF3R-MCH-20H (MCH-20a – Completely New Duct System)

CF3R-MCH-23H (MCH-23a – Forced Air System Airflow Rate Measurement – Newly Installed Non-Zoned Systems or Zoned Multi-Speed Compressor)

CF3R-MCH-23H (MCH-23b – Forced Air System Airflow Rate Measurement – Newly Installed Zoned Single-Speed Compressor Systems)

CF3R-MCH-23H (MCH-23c – Forced Air System Airflow Rate Measurement – Alternative to Compliance with Minimum System Airflow Requirements for Altered Systems)

CF3R-MCH-23H (MCH-23d – Forced Air System Airflow Rate Measurement – Newly Installed Heating Only Non-Zoned Systems Measurement Only – No Minimum Target Requirement)

CF3R-MCH-24H (MCH-24a – Single Point Air Tightness Test With Manual Meter)

CF3R-MCH-24H (MCH-24b – Single Point Air Tightness Test With Automatic Meter)

CF3R-MCH-24H (MCH-24c – Multi-Point Air Tightness Test)

CF3R-MCH-24H (MCH-24d – Repeated Single Point Air Tightness Test with Manual Meter)

CF3R-MCH-24H (MCH-24e – Repeated Single Point Air Tightness Test With Automatic Meter)