

DOCKETED

Docket Number:	18-BSTD-02
Project Title:	2019 ENERGY CODE COMPLIANCE MANUALS
TN #:	232778-9
Document Title:	2019-CF2R-MCH-30-VentilationCoolingpdf
Description:	N/A
Filer:	Corrine Fishman
Organization:	California Energy Commission
Submitter Role:	Public Agency
Submission Date:	4/20/2020 8:45:49 AM
Docketed Date:	4/20/2020

Central Fan Ventilation Cooling Systems (VCS)

CEC-CF2R-MCH-30-E (Revised 01/20)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF INSTALLATION		CF2R-MCH-30-E
Central Fan Ventilation Cooling Systems (VCS)		(Page 1 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

NOTE: When the Certificate of Compliance indicates a Central Fan Ventilation Cooling system is installed, the following items must be verified.

A. Central Fan Ventilation Cooling System (VCS) Equipment Information	
01	Space Conditioning System Identification or Name
02	Space Conditioning System Location or Area Served
03	Central Fan VCS Equipment - Manufacturer Name
04	Central Fan VCS Equipment - Manufacturer Model #
05	Central Fan VCS Equipment - Fan Type Required
06	Central Fan VCS Equipment - Fan Type Installed
07	Central Fan VCS Equipment - Manufacturer Documentation Status
08	Duct Leakage Verification Status
09	Airflow Rate Verification Status
10	Fan Efficacy Verification Status
11	Compliance Statement:

B. Additional Requirements	
01	When the Central Fan Ventilation Cooling system directs its relief airflow into the dwelling's attic, the attic vent free area shall be equal to or greater than 1 ft ² per 750 CFM of the system's rated Ventilation Cooling airflow.
02	Variable speed motor systems shall be capable of varying system airflow rate in a continuous range between full airflow rate (100%) and a minimum airflow rate of no more than 25% of the full airflow rate.
03	Central fan ventilation cooling system controls shall include proper installation of an indoor thermostat.
04	Central fan ventilation cooling system controls shall include installation of an outdoor temperature sensor to initiate or terminate ventilation cooling operation automatically in response to user preference or availability of ventilation cooling capacity of outside air.
05	Central fan ventilation cooling system controls shall include proper installation of an air handler temperature sensor, or damper end switches, or other control device(s) that ensure correct outdoor air damper position.
06	The central fan ventilation cooling system manufacturer shall provide detailed system operation documentation to the building owner that describes how to configure the system controls and operate the system to obtain the maximum energy savings benefit. The manufacturer's system operation documentation shall also describe how the system's control strategy is implemented; how the fan speed is controlled during ventilation cooling mode; and how ventilation cooling rates are determined. System target ventilation cooling rate calculations (if applicable) shall occur at time intervals of 24 hours or less to ensure the system responds correctly to changes in weather patterns.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

Central Fan Ventilation Cooling Systems (VCS)

CEC-CF2R-MCH-30-E (Revised 01/20)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF INSTALLATION		CF2R-MCH-30-E
Central Fan Ventilation Cooling Systems (VCS)		(Page 2 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Installation is true and correct.
- I am either: a) a responsible person eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation, and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf.
- The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
- I will ensure that a registered copy of this Certificate of Installation 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 registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:
Third Party Quality Control Program (TPQCP) Status:	Name of TPQCP (if applicable):	

CF2R-MCH-30-E User Instructions**Section A. Central Fan Ventilation Cooling System (VCS) Equipment Information**

1. Enter the Central Fan Ventilation Cooling System (VCS) Name or identification tag to help identify this system from other systems in the house. This field is automatically filled in as referenced from the MCH-01 description for this system.
2. Enter the Location or Area Served by the Central Fan VCS. This is a tag to distinguish this system from other systems in the house. This field is automatically filled in as referenced from the MCH-01 description for this system.
3. Enter the Central Fan VCS Manufacturer Name.
4. Enter the Central Fan VCS Manufacturer Model Number.
5. The Central Fan VCS Fan Type Required is specified by the performance approach software. This field is filled in automatically as referenced from the CF1R.
6. Enter the Central Fan VCS Fan Type Installed. The choices are “Fixed Flow” or “Variable Flow”. Variable fans receive more compliance credit. The installed fan type should match the fan type specified on the CF1R.
7. Installer must verify/confirm that the Central Fan VCS Equipment is included in the Energy Commission listing of approved VCS devices and that the fan type, “Fixed” or “Variable”, matches what is shown on the list.
8. Compliance Credit for Central Fan VCS also requires that the system conforms to the maximum Duct Leakage verification requirements. This row automatically queries the project data to confirm that a MCH-20 has been registered indicating that the system passed the duct leakage criterion.
9. Compliance Credit for Central Fan VCS also requires that the system pass the Airflow Rate requirements. This row automatically queries the project data to confirm that the applicable MCH-23 Airflow Rate verification has been registered indicating that the system passed.
10. Compliance Credit for Central Fan VCS also requires that the system pass the Fan Efficacy requirements. This row automatically queries the project data to confirm that a MCH-22 Fan Efficacy verification has been registered indicating that the system passed.
11. Compliance Statement. The system must comply with all verification requirements in Section A in order to pass.

Section B. Additional Requirements

The System must comply with all of the additional requirements that are applicable in order to be in compliance with the Central Fan Ventilation Cooling System compliance credit requirements.

1. This field must be a true statement for the system to comply.
2. This field must be a true statement (or not applicable) for the system to comply.
3. This field must be a true statement for the system to comply.
4. This field must be a true statement (or not applicable) for the system to comply.
5. This field must be a true statement (or not applicable) for the system to comply.
6. This field must be a true statement for the system to comply.