DOCKETED	
Docket Number:	18-BSTD-02
Project Title:	2019 ENERGY CODE COMPLIANCE MANUALS
TN #:	232779-23
Document Title:	2019-CF3R-MCH-21-DuctLocationpdf
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Filer:	Corrine Fishman
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Submitter Role:	Public Agency
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	T LOCATION 3R-MCH-21-H (Revised 01/19)			CALIFORNI	A ENERGY COMMISSION
	TIFICATE OF VERIFICATION			O/ILII OHH	CF3R-MCH-21-H
Duc	t Location				(Page 1 of 3)
Projec	t Name:		Enforcement	Agency:	Permit Number:
Dwelli	ng Address:		City:		Zip Code:
	ieneral Information e: Submit one Installation Certificate t	for each duct system that is tak	ing credit f	or duct location.	
01	SC System Identification or Name				
02	SC System Location or Area Served				
03	Status – Less than 12 ft Ducts in Cor	nditioned Space Performance C	redit		
04	Status – Ducts Located In Condition	ed Space Performance Credit			
05	Status – All Ducts Entirely in Directly	/ Conditioned Space R-value Exc	ception		. ^
06	Status – Ducts Located in Wall Cavit	ies R-Value Exception			
07	Status – Portions of Exposed Ducts i	n Directly Conditioned Space R	-Value	-	0
0,	Exception				.0.
D 1	2 Linear Feet or Less of Duct Loca	atad Outsida of Canditionad	Space F	2021412	- 11
Б. 1	A visual inspection shall confirm spa		•		nd space have 12 linear feet or
01	less of duct located outside the con				su space have 12 linear feet of
02	Pass - all applicable requirements are met; or Fail - one or more applicable requirements are not met. Enter reason for failure in				
03					
	responsible person's signature on the rwise noted in the Verification Statu	100			s table have been met unless
		.0.	10	101	
C. D	ucts Located In Conditioned Space	ce - RA3.1.4.1.3		. 76	
01	A visual inspection shall confirm the	space conditioning system is lo	cated enti	irely in conditioned space.	
02	Verification Status: Pass - all applicable requirements are met; or Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable				
03					
	responsible person's signature on th				s table have been met unless
otne	erwise noted in the Verification Statu	is and the Corrections Notes in	this table	•	
D	all Ducts Located Entirely in Direc	tly Conditioned Space P-Val	ue Evcen	tion - PA2 1 / 2 9	
01	A Visual Inspection Shall Confirm t				
O1	Actual System Duct Leakage Rate (-	1 Location	
02	Duct Leakage to Outside from Fan		,		
03	Compliance Statement:				
E. E	xceptions to Minimum Duct R-Va	-			
01	Portions of the duct system with les envelope.	s than minimum R-value insula	tion locate	d in wall cavities are entirely ir	side the building's thermal
02	Portions of the duct system with les surrounded by directly conditioned		tion locate	d in directly conditioned space	are completely exposed and

Duct transitions to unconditioned space are air-sealed and insulated to a minimum of R-6.

03

STATE OF CALIFORNIA

DUCT LOCATION

CEC-CF3R-MCH-21-H (Revised 01/19)

IFORNIA ENERGY COMMISSION	

		3R-MCH-21-H (Revised 01/19)			CALIFORNIA ENERGY COMMISSION
Project Name: Dwelling Address: City: City	CER	TIFICATE OF VERIFICATION			CF3R-MCH-
Dwelling Address: City: Zip Code: Pass - all applicable requirements are met; or Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable requirements in this table have been met ur otherwise noted in the Verification Status and the Corrections Notes in this table. F. Determination of HERS Verification Compliance All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. O1 O1 O1 O1 O1 O1 O1 O					(Page 2
Verification Status: Pass - all applicable requirements are met; or Fall - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable requirements in this table have been met ur otherwise noted in the Verification Status and the Corrections Notes in this table. F. Determination of HERS Verification Compliance All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. O1				Enforcement Agency:	Permit Number:
Verification Status: Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable State	Dwellin	ng Address:		City:	Zip Code:
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met ur otherwise noted in the Verification Status and the Corrections Notes in this table. F. Determination of HERS Verification Compliance All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. 01	04	Verification Status:	☐ <u>Fail</u> - one or more corrections notes	applicable requirements are r field below; or	ot met. Enter reason for failure in
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met ur otherwise noted in the Verification Status and the Corrections Notes in this table. F. Determination of HERS Verification Compliance All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. 01	ΩE	Correction Notes:	All N/A - This entire	e table is not applicable	
All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance. 01	The	responsible person's signature on t			ments in this table have been met ur
01				the specified verification prot	ocol requirements in order for this
and data colled with	Cert	ificate of Verification as a whole to b	be determined to be in compli	ance.	60, 0
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DUCT LOCATION

CEC-CF3R-MCH-21-H (Revised 01/19)

approved by the enforcement agency.

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IFORNIA ENERGY COMMISSION	THE PERSON NAMED IN

EC-CF3R-MCH-21-H (Revised 01/19)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF VERIFICATION CF3R-MCH-2			
Duct Location		(Page 3 of 3)	
Project Name:	Enforcement Agency:	Permit Number:	
Dwelling Address:	City:	Zip Code:	
DOCUMENTATION AUTHOR'S DECLARATION STATEMEN	Т		
1. I certify that this Certificate of Verification documenta	tion is accurate and complete.		
Documentation Author Name: Documentation Author Signature:			
Company: Date Signed:			
ddress: CEA/HERS Certification Information (if applicable):			
City/State/Zip:	Phone:	-0	
RESPONSIBLE PERSON'S DECLARATION STATEMENT	·		
 I certify the following under penalty of perjury, under the The information provided on this Certificate of Verification. I am the certified HERS Rater who performed the verification. The installed features, materials, components, manuverification identified on this Certificate of Verification. the requirements specified on the Certificate of Community. The information reported on applicable sections of the certificate. 	ication is true and correct. rification identified and reported on this Ce Ifactured devices, or system performance on on comply with the applicable requirement Inpliance for the building approved by the er	liagnostic results that require HERS s in Reference Appendices RA2, RA3, and oforcement agency.	
The information reported on applicable sections of the Certificate(s) of Installation (CF2R) signed and submitted by the person(s) responsible for the construction or installation conforms to the requirements specified on the Certificate(s) of Compliance (CF1R)			

I will ensure that a registered copy of this Certificate of Verification 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 Verification is required to be included with the documentation the builder provides to the building owner at occupancy.			
BUILDER OR INSTALLER INFORMATION AS SHOWN ON THE CERTIFICAT	TE OF INSTALLATION		
Company Name (Installing Subcontractor, General Contractor, or Builder/Owner):	100		
Responsible Builder or Installer Name:	CSLB License:		
HERS PROVIDER DATA REGISTRY INFORMATION	1/0"		
Sample Group Number (if applicable):	Dwelling Test Status in Sample Group (if applicable):		
HERS RATER INFORMATION			
HERS Rater Company Name:	6.		
Responsible Rater Name:	Responsible Rater Signature:		
Responsible Rater Certification Number w/ this HERS Provider:	Date Signed:		

Registration Number: Registration Date/Time: **HERS Provider:**

CERTIFICATE OF VERIFICATION - USER INSTRUCTIONS	CF2R-MCH-21-H
Duct Location - MCH21	(Page 2 of 2)

CF2R-MCH-21-H User Instructions

Section A. General Information

- 1. HVAC System Identification or Name: This field is filled out automatically. It is referenced from the CF2R-MCH-01, which must be completed prior to this document.
- 2. HVAC System Location or Area Served: This field is filled out automatically. It is referenced from the CF2R-MCH-01, which must be completed prior to this document.
- 3. Status Less than 12 ft Ducts in Conditioned Space Performance Credit: This field is automatically filled based on the information given on the CF1R. If "True" appears here, it means that this credit was taken in the performance calculations, is required for compliance and must be field verified.
- 4. Status Ducts Located in Conditioned Space Performance Credit: This field is automatically filled based on the information given on the CF1R. If "True" appears here, it means that this credit was taken in the performance calculations, is required for compliance and must be field verified.
- 5. Status All Ducts Located Entirely in Directly Conditioned Space R-Value Exception: This field is automatically filled based on the information given on the CF1R. If "True" appears here, it means that this credit was taken in the performance calculations, is required for compliance and must be field verified.
- 6. Status Ducts Located in Wall Cavities R-Value Exception This field is automatically filled based on the information given on the CF1R. If "True" appears here, it means that portions of the duct system are located in wall cavities and are allowed to be installed with insulation less than the minimum R-Value.
- 7. Status Portions of Exposed Ducts in Directly Conditioned Space R-Value Exception This field is automatically filled based on the information given on the CF1R. If "True" appears here, it means that portions of the duct system are located in directly conditioned space and are allowed to be installed with insulation less than the minimum R-Value.

Section B. 12 Linear Feet or Less of Duct Located Outside of Conditioned Space

- 1 This field is informational and pertains to the following fields.
- 2 Verification Status: If this Section does not apply, then select "All N/A". If the system meets the criteria for 12 Linear Feet or Less of Supply Duct Located Outside of Conditioned Space credit then select "Pass", otherwise select "Fail". The latter selection means that the system does not meet the requirements and the CF1R will have to be revised, or the system will need to be modified to meet the requirements.
- 3 This field is used by the Rater to notify the contractor what needs to be corrected if this verification status is marked as fail.

Section C. Ducts Located in Conditioned Space

- 1 This field is informational and pertains to the following fields.
- 2 Verification Status: If this Section does not apply, then select "All N/A". If the system meets the criteria for Ducts Located in Conditioned Space credit then select "Pass", otherwise select "Fail". The latter selection means that the system does not meet the requirements and the CF1R will have to be revised, or the system will need to be modified to meet the requirements.
- 3 This field is used by the Rater to notify the contractor what needs to be corrected if this verification status is marked as fail.

Section D. All Ducts Located Entirely in Directly Conditioned Space R-Value Exception

- 1. A Visual Inspection Shall Confirm the Distribution System is in Conditioned Space: If a visual inspection confirms that the ducts appear to be entirely within conditioned space, then select "entirely in conditioned space", otherwise select "not entirely in conditioned space". The latter selection means that the system does not meet the requirements and the CF1R will have to be revised or the system will need to be modified such that the ducts are located entirely within conditioned space.
- 2. Actual System Duct Leakage Rate (cfm) Measured using RA3.1.4.3.4 Duct Leakage to Outside from Fan Pressurization of Ducts: Enter the measured duct leakage rate (cfm) using the procedures found in RA3.1.4.3.4.
- 3. *Compliance Statement:* This field is automatically filled.

Section E. Exceptions to Minimum Duct R-Value Requirement

- 1 This field is informational and pertains to the following fields.
- 2 This field is informational and pertains to the following fields.
- 3 This field is informational and pertains to the following fields.

CERTIFICATE OF VERIFICATION - USER INSTRUCTIONS	CF2R-MCH-21-H
Duct Location - MCH21	(Page 2 of 2)

- 4 *Verification Status:* If this Section does not apply, then select "All N/A". If the system meets the criteria for Exceptions to Minimum Duct R-Value Requirement then select "Pass", otherwise select "Fail".
- 5 This field is used by the Rater to notify the contractor what needs to be corrected if this verification status is marked as fail.

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