

**DOCKETED**

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<b>Project Title:</b>	Residential Compliance Manual and Documents
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<b>Document Title:</b>	2016-CF3R-ENV-22-CeilingAirBarrierpdf
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<b>Submitter Role:</b>	Public Agency
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**AIR INFILTRATION SEALING – CEILING/ROOF DECK**

CEC-CF3R-ENV-22-H (Revised 09/18)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF VERIFICATION		CF3R-ENV-22-H
Quality Insulation Installation (QII) - Air Infiltration Sealing - Ceiling/Roof Deck		(Page 1 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

For typical vented attics where the insulation is at the roof deck/ceiling the air barrier must be verified after the ceiling drywall is installed and before attic insulation is installed. If spray polyurethane foam (SPF) will be used in the attic this can be considered the air barrier. Soffits and chases must be covered, and chimneys and flues require metal flashing. For buildings with an unvented attic, all air sealing requirements appropriate for the roof must be verified.

A. Ceiling Inspection – Vented Attics	
01	There is a continuous air barrier at the ceiling level. All openings into walls, drops, chasses, or double walls are sealed. Examples are below.
02	Chimneys and flues require sheet metal flashing. The flashing shall be sealed to the chimney/flue with fire rated caulk. The flashing shall be sealed to the surrounding framing.
03	All penetrations through the top plate of interior and exterior walls are sealed.
04	All penetrations shall be sealed to the surrounding drywall or have a secondary air barrier created around the fixture; with the exception of fire sprinklers.
05	All installed recessed light fixtures that penetrate the ceiling to unconditioned space, or where insulation is present, are rated to be Insulation Contact and Airtight (IC and AT) which allows direct contact with insulation. The housing is sealed to the drywall.
06	Exhaust fan housing is sealed to the surrounding drywall and all holes and seams in the housing are sealed.
07	All soffits and chases are covered with a hard cover that is sealed to the framing with caulk or foam.
08	Double walls that open to the attic are covered and the cover is sealed to the framing.
09	Attic access forms an airtight seal between conditioned space and unconditioned space. Vertical attic access requires mechanical compression using screws or latches.
10	Knee walls require solid and sealed blocking at the bottom, top, left, and right sides. When the knee wall is placed on top of a subfloor the open cavity between the subfloor and the ceiling below is sealed.
11	Where HVAC ducts travel down a chase, the chase is sealed at the ceiling level.
12	HVAC boots that penetrate the ceiling are sealed to the surrounding drywall.
13	All top plates of interior and exterior walls are sealed to drywall.
14	Attic access must be surrounded with a dam at least the same depth as the insulation to prevent loss of ceiling insulation.
15	There must be a dam placed at the exterior edge of all knee walls and at all edges of insulation to stop air movement through the insulation.
16	Verification Status: <ul style="list-style-type: none"> <li><input type="checkbox"/> Pass - all applicable requirements are met; or</li> <li><input type="checkbox"/> Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or</li> <li><input type="checkbox"/> All N/A - This entire table is not applicable.</li> </ul>
17	Correction Notes:
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Corrections Notes in this table.</b>	

B. Roof Inspection – Unvented attics	
01	There is a continuous air barrier at the roof deck and gable ends.
02	Chimneys and flues require sheet metal flashing at the roof deck. The flashing is sealed to the chimney/flue with fire rated caulk. The flashing is sealed to the surrounding framing.
03	All penetrations for plumbing, electrical, etc. in the roof deck and gable ends are sealed.
04	Verification Status: <ul style="list-style-type: none"> <li><input type="checkbox"/> Pass - all applicable requirements are met; or</li> <li><input type="checkbox"/> Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or</li> <li><input type="checkbox"/> All N/A - This entire table is not applicable.</li> </ul>
05	Correction Notes:
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Corrections Notes in this table.</b>	

C. 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	

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Project Name:	Enforcement Agency:	Permit Number:
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<b>DOCUMENTATION AUTHOR'S DECLARATION STATEMENT</b>	
1. I certify that this Certificate of Verification documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Company:	Date Signed:
Address:	CEA/HERS Certification Information (if applicable):
City/State/Zip:	Phone:
<b>RESPONSIBLE PERSON'S DECLARATION STATEMENT</b>	
I certify the following under penalty of perjury, under the laws of the State of California:	
<ol style="list-style-type: none"> <li>The information provided on this Certificate of Verification is true and correct.</li> <li>I am the certified HERS Rater who performed the verification identified and reported on this Certificate of Verification (responsible rater).</li> <li>The installed features, materials, components, manufactured devices, or system performance diagnostic results that require HERS verification identified on this Certificate of Verification comply with the applicable requirements in Reference Appendices RA2, RA3, and the requirements specified on the Certificate of Compliance for the building approved by the enforcement agency.</li> <li>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) approved by the enforcement agency.</li> <li>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.</li> </ol>	
<b>BUILDER OR INSTALLER INFORMATION AS SHOWN ON THE CERTIFICATE OF INSTALLATION</b>	
Company Name (Installing Subcontractor, General Contractor, or Builder/Owner):	
Responsible Builder or Installer Name:	CSLB License:
<b>HERS PROVIDER DATA REGISTRY INFORMATION</b>	
Sample Group Number (if applicable):	Dwelling Test Status in Sample Group (if applicable):
<b>HERS RATER INFORMATION</b>	
HERS Rater Company Name:	
Responsible Rater Name:	Responsible Rater Signature:
Responsible Rater Certification Number w/ this HERS Provider:	Date Signed:

**CF3R-ENV22-H User Instructions****A. Ceiling Inspection – Vented Attics**

16. HERS Rater to select from list:

- a. Pass - all applicable requirements are met.
- b. Fail - one or more applicable requirements are not met. Rater must enter reason for failure in corrections notes field below.
- c. All N/A - This entire table is not applicable.

17. Correction Notes, Rater must enter reason for failure.

**B. Roof Inspection – Unvented attics**

4. HERS Rater to select from list:

- a. Pass - all applicable requirements are met.
- b. Fail - one or more applicable requirements are not met. Rater must enter reason for failure in corrections notes field below.
- c. All N/A - This entire table is not applicable.

5. Correction Notes, Rater must enter reason for failure.