

**DOCKETED**

<b>Docket Number:</b>	15-BSTD-02
<b>Project Title:</b>	Residential Compliance Manual and Documents
<b>TN #:</b>	232820-21
<b>Document Title:</b>	2016-CF3R-ENV-24-HERS-QII-FramingStage-SIP,ICFpdf
<b>Description:</b>	N/A
<b>Filer:</b>	Corrine Fishman
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Public Agency
<b>Submission Date:</b>	4/22/2020 9:54:01 AM
<b>Docketed Date:</b>	4/22/2020



CERTIFICATE OF VERIFICATION		CF3R-ENV-24-H
Quality Insulation Installation (QII) – Air Infiltration Sealing - Framing Stage for SIP and ICF		(Page 1 of 4)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

**NOTE:** If there are any traditional stick built exterior walls use the CF3R-ENV-21. For traditional stick built roof/ceiling use the CF3R-ENV-22 and 23.

<b>A. Installation</b>	
01	The R-value of all SIP/ICF products is the same or better than listed on the CF1R.
02	If modeled on the CF1R, the density of the installed product is the same as installed.
03	SIP/ICF products have been installed per manufacturer installation instructions.
04	Verification Status: <ul style="list-style-type: none"> <li><input type="checkbox"/> <u>Pass</u> - all applicable requirements are met; or</li> <li><input type="checkbox"/> <u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or</li> <li><input type="checkbox"/> <u>All N/A</u> - 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>	

<b>B. Raised Floor</b>	
01	All gaps in the raised floor are sealed.
02	All chases sealed at floor level using a hard cover, and the hard covers are sealed.
03	All Plumbing and electrical wires that penetrate the floor must be sealed.
04	Subfloor sheathing is glued or sealed at all exterior panel edges, to create a continuous air tight subfloor.
05	Verification Status: <ul style="list-style-type: none"> <li><input type="checkbox"/> <u>Pass</u> - all applicable requirements are met; or</li> <li><input type="checkbox"/> <u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or</li> <li><input type="checkbox"/> <u>All N/A</u> - This entire table is not applicable.</li> </ul>
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<b>C. Walls/Knee Walls</b>	
01	Exterior walls are sealed to every floor on every story.
02	All gaps around windows and doors are sealed. Proper sealant used was as specified by window manufacturer.
03	All gaps around windows and doors are filled with insulation. Batt insulation is not allowed to be stuffed into gap.
04	All plumbing and wiring penetrations through the top and bottom of panels, and electrical boxes that penetrate the wall are sealed.
05	All SIP panel joints sealed at the interior of the wall and the exterior of each panel.
06	Fan exhaust ducts that run between conditioned floors to exterior walls must include a damper at the exterior wall.
07	Header sealed to wall with continues foam, or caulk per manufacturer directions.
08	Knee walls have solid and sealed blocking at the bottom, top, left side and right side of the knee wall.
09	Verification Status: <ul style="list-style-type: none"> <li><input type="checkbox"/> <u>Pass</u> - all applicable requirements are met; or</li> <li><input type="checkbox"/> <u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or</li> <li><input type="checkbox"/> <u>All N/A</u> - This entire table is not applicable.</li> </ul>
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<b>D. SIP Ceiling</b>	
01	For vented attics use the CF3R-ENV-22.
02	For non-vented attics ensure all penetrations through the roof deck and gable ends are sealed and air tight.
03	Verification Status: <ul style="list-style-type: none"> <li><input type="checkbox"/> <u>Pass</u> - all applicable requirements are met; or</li> <li><input type="checkbox"/> <u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or</li> <li><input type="checkbox"/> <u>All N/A</u> - This entire table is not applicable.</li> </ul>
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### E. Conditioned Space Above or Adjacent to Garage Air Barrier

01	All penetrations in the subfloor above the garage into conditioned space must follow the raised floor air barrier requirements above.	
02	Infiltration between the space above the garage and subfloor is prevented by one of the two following methods: <ul style="list-style-type: none"> <li>Seal all edges of garage ceiling (typical drywall) at the perimeter of the garage to create a continuous air tight surface between the garage and adjacent conditioned envelope. Seal all plumbing, electric and mechanical penetrations between the garage and the adjacent conditioned space on. For an open-web truss, airtight blocking must be added on four sides of the garage perimeter. Insulation can be placed on the garage ceiling.</li> <li>Seal band joist above the wall at the garage to conditioned space transition. Seal all subfloor seams and penetrations between the conditioned space and the garage. Insulation must be placed in contact of subfloor below conditioned space.</li> </ul>	
03	Verification Status:	<input type="checkbox"/> Pass - all applicable requirements are met; or <input type="checkbox"/> Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or <input type="checkbox"/> All N/A - This entire table is not applicable.
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### F. Cantilevered Floor Air Barrier

01	Airtight blocking shall be installed between joists where the wall rim joist would have been located in the absence of a cantilever.	
02	Exterior sheathing shall be installed to the bottom of the cantilever so that there is a continuous air and weather barrier for the cantilever. The cantilevered joist must be insulated to the same R-value as for the subfloor.	
03	Any gaps, cracks or penetrations in the air barrier of the cantilever shall be sealed. Recessed down lights in the cantilever is IC and AT rated and properly sealed to sheathing.	
04	Verification Status:	<input type="checkbox"/> Pass - all applicable requirements are met; or <input type="checkbox"/> Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or <input type="checkbox"/> All N/A - This entire table is not applicable.
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### G. Multifamily Air Barrier

01	Multifamily buildings require all the above plus each unit must control air movement across envelope components separating each dwelling.	
02	Floor AND Ceiling of each Dwelling Unit – All penetrations through the floor and ceiling of each unit must be sealed including, electric and gas utilities, water pipes, drain pipes, fire protection service pipes, communication wiring etc.	
03	Elevator penthouse, mechanical penthouse, stairwell doors, roof access hatch, plumbing stacks, etc. sealed to reduce air transfer from attached spaces.	
04	Common Walls – Bottom plate between units must be sealed to the subfloor. All penetration in the common walls is sealed. Interior walls that open into the common walls must be sealed.	
05	Vertical Chases – All vertical chases are sealed at the floor and ceiling of each unit so air cannot transfer from first floor to second floor around chase.	
06	Vertical Chases –The chases such as garbage chutes, elevator shafts, and HVAC ducting are sealed to stop air movement through the chase to surrounding spaces.	
07	Common Hallways – Penetrations between dwelling unit and common hallways are sealed, including doors to the dwelling unit, are gasketed or made substantially airtight.	
08	Verification Status:	<input type="checkbox"/> Pass - all applicable requirements are met; or <input type="checkbox"/> Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or <input type="checkbox"/> All N/A - This entire table is not applicable.
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<b>H. Determination of HERS Verification Compliance</b>	
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	

For information and data collection only. Not valid until registered with a HERS provider



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**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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:

**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 Verification is true and correct.
- I am the certified HERS Rater who performed the verification identified and reported on this Certificate of Verification (responsible rater).
- 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.
- 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.
- 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 CERTIFICATE OF INSTALLATION**

Company Name (Installing Subcontractor, General Contractor, or Builder/Owner):	
Responsible Builder or Installer Name:	CSLB License:

**HERS PROVIDER DATA REGISTRY INFORMATION**

Sample Group Number (if applicable):	Dwelling Test Status in Sample Group (if applicable):
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**HERS RATER INFORMATION**

HERS Rater Company Name:	
Responsible Rater Name:	Responsible Rater Signature:
Responsible Rater Certification Number w/ this HERS Provider:	Date Signed:

**CF3R-ENV-24-H User Instructions****A. Installation**

4. HERS Rater to select from list:
  - a. Pass - all applicable requirements are met.
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  - c. All N/A - This entire table is not applicable.
5. Correction Notes, Rater must enter reason for failure.

**B. Raised Floor**

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**C. Walls**

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  - c. All N/A - This entire table is not applicable.
9. Correction Notes, Rater must enter reason for failure.

**D. SIP Ceiling**

3. HERS Rater to select from list:
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**E. Conditioned Space Above or Adjacent to Garage Air Barrier**

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**F. Cantilevered Floor Air Barrier**

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**G. Multifamily Air Barrier**

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