# DUCT SURFACE AREA REDUCTION; R-VALUE; BURIED DUCTS COMPLIANCE CREDIT



| CERTIFICATE OF VERIFICATION | | CF3R-MCH-29-H |
|---|---|---|
| Duct Surface Area Reduction; R-Value; Buried Ducts Compliance Credit | | (Page 1 of 3) |
| Project Name: | Enforcement Agency: | Permit Number: |
| Dwelling Address: | City: | Zip Code: |

*Note: Submit one Certificate of installation for each duct system that must demonstrate compliance in the dwelling.*

| **A. Duct System Information** | | |
|---|---|---|
| 01. | Duct System Name or Identification/Tag | |
| 02. | Duct System Location or Area Served | |
| 03 | Status - Duct Surface Area Reduction And R-Value Compliance Credit | |
| 04 | Status - Buried Ducts Compliance Credit | |
| 05 | Status - Deeply Buried Ducts Compliance Credit | |

| **B. Duct Surface Area Reduction and R-value Compliance Credit**<br>Credit is available for supply duct systems with reduced surface area in unconditioned space with varying combinations of higher performance insulation if the system complies with the following requirements: | | |
|---|---|---|
| 01 | The duct system design shall be detailed in the special features section of the CF1R-PRF-01-E approved by the enforcement agency. | |
| 02 | A duct design layout that conforms to the duct system design details in the special features section of the CF1R-PRF-01-E shall be documented on the building design plans approved by the enforcement agency. | |
| 03 | The duct system installation, including duct sizes and locations of supply & return registers shall conform to the duct system design layout approved by the enforcement agency. | |
| 04 | The duct system installation shall be verified by a HERS rater according to the requirements in RA3.1.4.1.4. | |
| 05 | The duct system installation shall not have severely twisted or compressed sections that would restrict required operating airflow. | |
| 06 | Verification Status: | ☐ Pass - all applicable requirements are met; or<br>☐ Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below |
| 07 | Correction Notes: | |
| **The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.** | | |

| **C. Buried Ducts Compliance Credit**<br>Ducts partly or completely buried in blown attic insulation in dwelling units meeting the requirements for verified quality insulation installation may take credit for increased effective duct insulation if the system complies with the following requirements: | | |
|---|---|---|
| 01 | The duct system design shall be detailed in the special features section of the CF1R-PRF-01-E approved by the enforcement agency. | |
| 02 | A duct design layout that conforms to the duct system design details in the special features section of the CF1R-PRF-01-E shall be documented on the building design plans approved by the enforcement agency. | |
| 03 | The duct system installation, including duct sizes and locations of supply & return registers shall conform to the duct system design layout approved by the enforcement agency. | |
| 04 | The duct system installation shall be verified by a HERS rater according to the requirements in RA3.1.4.1.5. | |
| 05 | The duct system installation shall not have severely twisted or compressed sections that would restrict required operating airflow. | |
| 06 | The dwelling shall comply with all Quality Insulation Installation requirements as documented on the applicable CF2R and CF3R. | |
| 07 | Verification Status: | ☐ Pass - all applicable requirements are met; or<br>☐ Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below |
| 08 | Correction Notes: | |
| **The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.** | | |

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| CERTIFICATE OF VERIFICATION | | CF3R-MCH-29-H |
|---|---|---|
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| Project Name: | Enforcement Agency: | Permit Number: |
| Dwelling Address: | City: | Zip Code: |

| **D. Deeply Buried Ducts Compliance Credit** | | |
|---|---|---|
| Duct segments deeply buried in lowered areas of ceiling and covered by at least 3.5 inches of insulation above the top of the duct insulation jacket may claim effective insulation of R-25 for fiberglass insulation and R-31 for cellulose insulation if the system complies with the following requirements: | | |
| 01 | The duct system design shall be detailed in the special features section of the CF1R-PRF-01-E approved by the enforcement agency. | |
| 02 | A duct design layout that conforms to the duct system design details in the special features section of the CF1R-PRF-01-E shall be documented on the building design plans approved by the enforcement agency. | |
| 03 | The duct system installation, including duct sizes and locations of supply & return registers shall conform to the duct system design layout approved by the enforcement agency. | |
| 04 | The duct system installation shall be verified by a HERS rater according to the requirements in RA3.1.4.1.6. | |
| 05 | The duct system installation shall not have severely twisted or compressed sections that would restrict required operating airflow. | |
| 06 | The dwelling shall comply with all Quality Insulation Installation requirements as documented on the applicable CF2R and CF3R. | |
| 07 | Verification Status: | ☐ Pass - all applicable requirements are met; or<br>☐ Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below |
| 08 | Correction Notes: | |
| **The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.** | | |

| **E. 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: |
| Dwelling Address: | City: | Zip Code: |

| 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:

1. The information provided on this Certificate of Verification is true and correct.
2. I am the certified HERS Rater who performed the verification identified and reported on this Certificate of Verification (responsible rater).
3. 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.
4. 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.
5. 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): |

| HERS RATER INFORMATION | |
|---|---|
| HERS Rater Company Name: | |
| Responsible Rater Name: | Responsible Rater Signature: |
| Responsible Rater Certification Number w/ this HERS Provider: | Date Signed: |

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**CF3R-MCH-29-H User Instructions**

**Section A. Duct System Information**

1. *System Identification or Name:* This field is filled out automatically. It is referenced from the CF2R-MCH-23, which must be completed prior to this document.
2. *System Location or Area Served:* This field is filled out automatically. It is referenced from the CF2R-MCH-23, which must be completed prior to this document.
3. Status – Duct Surface Area Reduction and R-Value Compliance Credit: This field is auto filled from the CF1R indicating if the credit is being used. If not, then N/A will be displayed.
4. Status – Buried Ducts Compliance Credit: This filed is auto filled from the CF1R indicating if the credit is being used. If not, then "N/A" will be displayed.
5. Status – Deeply Buried Ducts Compliance Credit: This field is auto filled from the CF1R indicating if the credit is being used. If not, then "N/A" will be displayed.

**Section B. Supply Duct Surface Area Reduction and R-value Compliance Credit**

1. This field must be a true statement (or not applicable) 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 (or not applicable) 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. *Verification Status:* If the system meets the criteria for *Supply Duct Surface Area Reduction and R-value Compliance 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.
7. *Correction Notes:* If one or more applicable requirements are not met "Fail" will appear in the row above. When this occurs the rater is required to enter detailed notes here that describe what failed and why.

**Section C. Buried Ducts Compliance Credit**

1. This field must be a true statement (or not applicable) 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 (or not applicable) 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 (or not applicable) for the system to comply.
7. *Verification Status:* If the system meets the criteria for *Buried Ducts Compliance 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.
8. *Correction Notes:* If one or more applicable requirements are not met "Fail" will appear in the row above. When this occurs the rater is required to enter detailed notes here that describe what failed and why.

**Section D. Deeply Buried Ducts Compliance Credit**

1. This field must be a true statement (or not applicable) 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 (or not applicable) 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 (or not applicable) for the system to comply.
7. *Verification Status:* If the system meets the criteria for *Deeply Buried Ducts Compliance 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.
8. *Correction Notes:* If one or more applicable requirements are not met "Fail" will appear in the row above. When this occurs the rater is required to enter detailed notes here that describe what failed and why.

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