|  |  |  |  |
| --- | --- | --- | --- |
| **A. General Information**  Note: Submit one Installation Certificate for each duct system that is taking credit for duct location. | | | |
| 01 | SC System Identification or Name | |  |
| 02 | SC System Location or Area Served | |  |
| 03 | Status – Less than 12 ft Ducts in Conditioned Space Performance Credit | |  |
| 04 | Status – Ducts Located In Conditioned Space Performance Credit | |  |
| 05 | Status – All Ducts Entirely in Directly Conditioned Space R-value Exception | |  |
| 06 | Status – Ducts Located in Wall Cavities R-Value Exception | |  |
| 07 | Status – Portions of Exposed Ducts in Directly Conditioned Space R-Value Exception | |  |

|  |  |
| --- | --- |
| **B. 12 Linear Feet or Less of Duct Located Outside of Conditioned Space** **- RA3.1.4.1.2** | |
| 01 | A visual inspection shall confirm space conditioning systems with air handlers located outside the conditioned space have 12 linear feet or less of duct located outside the conditioned space including air handler and plenum. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

|  |  |
| --- | --- |
| **C. Ducts Located In Conditioned Space - RA3.1.4.1.3** | |
| 01 | A visual inspection shall confirm the space conditioning system is located entirely in conditioned space. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

|  |  |  |
| --- | --- | --- |
| **D. All Ducts Located Entirely in Directly Conditioned Space R-Value Exception - RA3.1.4.3.8** | | |
| 01 | A Visual Inspection Shall Confirm the Space Conditioning Distribution System Location |  |
| 02 | Actual System Duct Leakage Rate (cfm) Measured Using RA3.1.4.3.4 Duct Leakage to Outside from Fan Pressurization of Ducts |  |
| 03 | Compliance Statement: |  |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | | |

|  |  |
| --- | --- |
| **E. Exceptions to Minimum Duct R-Value Requirement**  *The following shall be confirmed by visual inspection when applicable.* | |
| 01 | Portions of the duct system with less than minimum R-value insulation located in wall cavities are entirely inside the building’s thermal envelope. |
| 02 | Portions of the duct system with less than minimum R-value insulation located in directly conditioned space are completely exposed and surrounded by directly conditioned space. |
| 03 | Duct transitions to unconditioned space are air-sealed and insulated to a minimum of R-6. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

|  |  |  |  |
| --- | --- | --- | --- |
| **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.  1. 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. 2. I understand that a HERS rater will check the installation to verify compliance and if such checking determines the installation fails to comply, I am required to offer any necessary corrective action at no charge to the building owner. 3. 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-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 automatically filled.

**Section C. Ducts Located in Conditioned Space**

1. This field is automatically filled.

**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 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.

|  |  |  |
| --- | --- | --- |
| **A. General Information**  Note: Submit one Installation Certificate for each duct system that is taking credit for duct location. | | |
| 01 | SC System Identification or Name | <<Text referenced from MCH-01>> |
| 02 | SC System Location or Area Served | <<Text referenced from MCH-01>> |
| 03 | Status – Less than 12 ft Ducts in Conditioned Space Performance Credit | <<calculated field: if Less than 12ft Ducts Outside of Conditioned Space Flagged on CF1R = true , then display message “true” and display Table B below; else display message "not applicable” >> |
| 04 | Status – Ducts Located In Conditioned Space Performance Credit | <<calculated field: if Ducts Located In Conditioned Space Compliance Credit Claimed on CF1R = true , then display message “true” and display Table C below; else display message "not applicable” >> |
| 05 | Status – All Ducts Entirely in Directly Conditioned Space R-value Exception | <<calulated Field: if Exemption from Minimum R-Value for Ducts In Conditioned Space reported on MCH-01 = yes, then display message “true” and display Table D below; else display message "not applicable” >> |
| 06 | Status – Ducts Located in Wall Cavities R-Value Exception | <<calculated Field: if Exemption from Minimum R-Value for Duct Portions Located in Wall Cavities reported on MCH-01 = yes, then display message “true” and display Table E below; else display message "not applicable” >> |
| 07 | Status – Portions of Exposed Ducts in Directly Conditioned Space R-Value Exception | <<calculated Field: if Exemption from Minimum R-Value for Duct Portions Located in Directly Conditioned Space reported on MCH-01 = yes, then display message “true” and display Table E below; else display message "not applicable” >> |

|  |  |
| --- | --- |
| **B. 12 Linear Feet or Less of Duct Located Outside of Conditioned Space** **- RA3.1.4.1.2**  *<<This table only shown if A03 indicates the table is applicable, else display the "section does not apply" message >>* | |
| 01 | A visual inspection shall confirm space conditioning systems with air handlers located outside the conditioned space have 12 linear feet or less of duct located outside the conditioned space including air handler and plenum. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

|  |  |
| --- | --- |
| **C. Ducts Located In Conditioned Space - RA3.1.4.1.3**  *<<This table only shown if A04 indicates the table is applicable, else display the "section does not apply" message >>* | |
| 01 | A visual inspection shall confirm the space conditioning system is located entirely in conditioned space. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

|  |  |  |
| --- | --- | --- |
| **D. All Ducts Located Entirely in Directly Conditioned Space R-Value Exception - RA3.1.4.3.8**  *<<This table only shown if A05 indicates the table is applicable, else display the "section does not apply" message >>* | | |
| 01 | A Visual Inspection Shall Confirm the Space Conditioning Distribution System Location | <<user pick from list:  \*\*\*Entirely in conditioned space; or  \*\*\*Not entirely in conditioned space - does not comply>> |
| 02 | Actual System Duct Leakage Rate (cfm) Measured Using RA3.1.4.3.4 Duct Leakage to Outside from Fan Pressurization of Ducts | <<user input, numeric xxx.x>> |
| 03 | Compliance Statement: <<if measured duct leakage in D02 is less than or equal to 25 cfm, and visual inspection result in D01 = Entirely in conditioned space; then display text: "the space conditioning system is considered to be entirely in conditioned space and Duct R-Value less than minimum is allowable", else the system does not meet the criteria for ducts entirely in conditioned space.>> | |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | | |

|  |  |
| --- | --- |
| **E. Exceptions to Minimum Duct R-Value Requirement**  *<<This table only shown if A06 indicates the table is applicable, else display the "section does not apply" message >>* | |
| 01 | Portions of the duct system with less than minimum R-value insulation located in wall cavities are entirely inside the building’s thermal envelope. |
| 02 | Portions of the duct system with less than minimum R-value insulation located in directly conditioned space are completely exposed and surrounded by directly conditioned space. |
| 03 | Duct transitions to unconditioned space are air-sealed and insulated to a minimum of R-6. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |