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| **A. Whole House Fan Measurement Procedures** | | |
| 01 | Whole House Fan Airflow/Watts Measurement Procedure: |  |

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| **MCH-31d Whole House Fan Airflow and Fan Efficacy – Airflow and Watts measured as a total values** |

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| |  | | --- | | **B. Required Whole House Fan Specifications** | | | |
| 01 | 02 | 03 |
| Fan Name | WHF Modeled Airflow (CFM) | WHF Modeled Fan Power (Watts) |
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| --- | --- | --- | --- | --- | --- | --- |
| **C. Tested Whole House Fan Equipment Information**   |  | | --- | | Requirements for Whole House Fans are given in Sections 150.1(b)3.B.vi. and 150.1(c)12 | | | | | | |
| 01 | 02 | 03 | 04 | 05 | 06 |
| Fan Name | Fan Location | WHF Manufacturer Name | WHF Model Number | WHF Tested Airflow (CFM) Per RA3.9.4.1 | WHF Tested Watts Per RA3.9.4.2 |
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| **D. Whole House Fan Compliance Calculations** | | |
| 01 | Required CFM |  |
| 02 | Installed CFM |  |
| 03 | Required Fan Efficacy (Watts/CFM) |  |
| 04 | Installed Fan Efficacy (Watts/CFM) |  |

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| **E. Compliance Statement** |
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| **F. Additional Requirements** | |
| 01 | The installed fan shall be listed on the CEC’s Modernized Appliance Efficiency Database as an approved model. |
| 02 | The homeowner shall be provided with user instructions documentation that describes the proper use of the whole house fan necessary to obtain the full energy savings benefit. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

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| **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.  1. 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. 2. 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. 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: |

**CF2R-MCH-31d-H User Instructions**

**Section A. Whole House Fan Measurement Procedures**

1. Select the procedure used to measure whole house fan Airflow.
2. Select the procedure used to measure whole house fan Watts.

**Section B. Required Whole House Fan Specifications**

1. Fan name will be auto populated from CF1R.
2. Whole House Fan (WHF) airflow in CFM will be auto populated from CF1R.
3. Whole House Fan (WHF) power in Watts will be auto populated from CF1R.

**Section C. Whole House Fan (WHF) Equipment Information**

1. Fan name will be auto populated from CF1R.
2. Enter the location where each whole house fan is installed in the house.
3. Enter the name of the manufacturer for each whole house fan installed in the house.
4. Enter the model number for each whole house fan installed in the house.
5. Enter the total tested airflow in CFM per RA3.9.4.1 for all whole house fans installed in the house.
6. Enter the total tested Watts per RA3.9.4.2 for all whole house fans installed in the house.

**Section D. Whole House Fan Compliance Calculations**

1. This field is automatically populated from the Section B.
2. This field is automatically populated from Section C.
3. This field is automatically populated from the Section B.
4. This field is automatically calculated from section C.

**E. Compliance Statement**

To comply, the total installed whole house fan airflow must equal to or greater than the required airflow and the installed fan efficacy must be less than or equal to the required fan efficacy.

**F. Additional Requirements**

1. To qualify, for the whole house fan compliance credit, the installed whole house fan must be certified to the Energy Commission and be listed in the Energy Commission’s Modernized Appliance Efficiency Database as an approved model, link located here [Modernized Appliance Efficiency Database System (MAEDBS)](https://cacertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx).
2. The homeowner shall be provided with user instructions documentation that describes the proper use of the whole house fan necessary to obtain the full energy savings benefit.
3. This must be a true statement to comply.

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| **A. Whole House Fan Measurement Procedures** | | |
| 01 | Whole House Fan Airflow Measurement Procedure Used: | <<user selection: ”Capture Hood and Portable Watt Meter” , “Capture Hood and Revenue Meter” , “Blower Door and Portable Watt Meter” , “Blower Door and Revenue Meter”>> |
| 02 | determine compliance method for this document; display applicable tables below;  (this row not visible to user) | <<Calculated Result:  if A1= Capture Hood and Portable Watt Meter; then display method:“MCH-31a”;  elseif A1= “Capture Hood and Revenue Meter”; then display method: “MCH-31b”;  elseif A1= “Blower Door and Portable Watt Meter; then display method:  ”MCH-31c”;  elseif A1= “Blower Door and Revenue Meter”, then display method:  ”MCH-31d”>> |

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| **MCH-31d Whole House Fan Air Flow and Fan Efficacy – Airflow and watts measured as a total values** |

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| |  | | --- | | **B. Required Whole House Fan Specifications** | | | |
| 01 | 02 | 03 |
| Fan Name | WHF Modeled Airflow (CFM) | WHF Modeled Fan Power (Watts) |
| <<Auto populate from CF1R>> | <<Auto populate from CF1R>> | <<Auto populate from CF1R>> |
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| --- | --- | --- | --- | --- | --- | --- |
| **C. Tested Whole House Fan Equipment Information**   |  | | --- | | Requirements for Whole House Fans are given in Sections 150.1(b)3.B.vi. and 150.1(c)12 | | | | | | |
| 01 | 02 | 03 | 04 | 05 | 06 |
| Fan Name | Fan Location | WHF Manufacturer Name | WHF Model Number | WHF Tested Airflow (CFM) Per RA3.9.4.1 | WHF Tested Watts Per RA3.9.4.2 |
| <<Auto populate from CF1R>> | <<user input, Fan Location, string>> | <<user input, WHF Manufacturer Name, string>> | <<user input, WHF Model Number, string>> | <<user input, WHF Measured Airflow, numeric>> | <<user input, WHF Measured Watts, numeric>> |
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| **D. Whole House Fan Compliance Calculations** | | |
| 01 | Required CFM | <<calculated field: sum of all *WHF Modeled Airflow (CFM)* values from Table B >> |
| 02 | Installed CFM | <<calculated field: *WHF Tested Airflow (CFM)* value from Table C >> |
| 03 | Required Fan Efficacy (Watts/CFM) | <<calculated field: sum of all *WHF Modeled Fan Power (Watts)* / sum of all *WHF Modeled Airflow (CFM)* values from Table B >> |
| 04 | Installed Fan Efficacy (Watts/CFM) | <<calculated field: *WHF Tested Watts* value from Table C/*Installed CFM* from Table D>> |

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| **E. Compliance Statement** |
| << calculated field: if *Installed CFM* ≥ *Required CFM* and *Required Fan Efficacy (Watts/CFM)* ≥ *Installed Fan Efficacy (Watts/CFM)*; then display result: “System passes whole house fan verification requirement.”; else display result: ”System fails whole house fan verification requirement.”>> |

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| **F. Additional Requirements** | |
| 01 | The installed fan shall be listed on the CEC’s Modernized Appliance Efficiency Database as an approved model. |
| 02 | The homeowner shall be provided with user instructions documentation that describes the proper use of the whole house fan necessary to obtain the full energy savings benefit. |
| **The responsible person’s signature on this compliance document affirms that all applicable requirements in this table have been met.** | |

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| **Documentation Author's Declaration Statement** | | | |
| 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/CEPE/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.  1. 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. 2. 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. 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: |