

COMMERCIAL KITCHEN EXHAUST SYSTEM ACCEPTANCE

CEC-NRCA-PRC-02-F (Revised 01/19)

CALIFORNIA ENERGY COMMISSION



| | | |
|--|---------------------|----------------|
| CERTIFICATE OF ACCEPTANCE | | NRCA-PRC-02-F |
| Commercial Kitchen Exhaust System Acceptance | | (Page 1 of 3) |
| Project Name: | Enforcement Agency: | Permit Number: |
| Project Address: | City: | Zip Code: |

| | |
|---|---|
| Compliance Results: [COMPLIES or DOES NOT COMPLY] | Enforcement Agency Use: Checked by/Date |
|---|---|

| | |
|----------------|--|
| Intent: | <i>Verify that airside economizers function properly</i> |
|----------------|--|

| | |
|--|--|
| A. Construction Inspection (NA7.11.1.1) | |
| <input type="checkbox"/> | a. Exhaust and replacement air systems are installed |
| <input type="checkbox"/> | b. Control systems (such as demand control ventilation) are calibrated |
| <input type="checkbox"/> | c. For kitchen/dining facilities having total Type 1 and Type II kitchen hood exhaust airflow rates greater than 5,000 cfm, calculate the maximum allowable exhaust rate for each Type 1 hood as specified by Table 140.9-A. |
| Construction Inspection Compliance: <input type="radio"/> Complies <input type="radio"/> Does Not Comply | |

| | |
|--|--|
| B. Functional Testing (NA7.11.1.2) | |
| The following acceptance test applies to systems with and without demand control ventilation exhaust systems. These tests shall be conducted at full load conditions for each hood. | |
| Step 1: Setup: | |
| a. | Operate all sources of outdoor air providing replacement air for the hoods. P / F |
| b. | Operate all sources of recirculated air providing conditioning for the space in which the hoods are located. P / F |
| c. | Operate all appliances under the hoods at operating temperatures. P / F |
| Step 2: Verify the following: | |
| a. | Verify that the thermal plume and smoke is completely captured and contained within each hood at full load conditions by observing smoke or steam produced by actual cooking operation and/or by visually seeding the thermal plume using devices such as smoke candles or smoke puffers. Smoke bombs shall not be used (note: smoke bombs typically create a large volume of effluent from a point source and do not necessarily confirm whether the cooking effluent is being captured). For some appliances (e.g., broilers, griddles, fryers), actual cooking at the normal production rate is a reliable method of generating smoke). Other appliances that typically generate hot moist air without smoke (e.g., ovens, steamers) need seeding of the thermal plume with artificial smoke to verify capture and containment. P / F |
| b. | Verify that space pressurization is appropriate (e.g. kitchen is slightly negative relative to adjacent spaces and all doors open/close properly). P / F |
| c. | Verify that each Type 1 hood has an exhaust rate that is at or below the maximum allowed. P / F / NA |
| Step 3: Make adjustments as necessary until full capture and containment and adequate space pressurization are achieved and maximum allowable exhaust rates are not exceeded. Adjustments may include: adjust exhaust hood airflow rates; Add hood side panels; Add rear seal (back plate); Increase hood overhang by pushing hood back; and Relocate supply outlets to improve the capture and containment performance | |
| Step 4: Measure and record the final airflow for each Type I hood. P / F / NA | |
| The following additional acceptance test shall be performed on all exhaust hoods with demand control ventilation exhaust systems. | |
| Step 5: Turn off all kitchen hoods, makeup air and transfer systems | |
| Step 6: Turn on one of the appliances on the line and bring to operating temperature. Confirm that: | |
| a. | DCV system automatically switches from off to the minimum flow setpoint. P / F |
| b. | The minimum flow setpoint does not exceed the larger of: 50% of the design flow; or, the ventilation rate required per Section 120.1. P / F |
| c. | The makeup air and transfer air system flow rates modulate as appropriate to match the exhaust rate. P / F |
| d. | Appropriate space pressurization is maintained. P / F |
| Step 7: Press the timed override button. Confirm that system ramps to full speed and back to minimum speed after override times out. P / F | |
| Step 8: Operate all appliances at typical conditions. Apply sample cooking products and/or utilize smoke puffers as appropriate to simulate full load conditions. Confirm that: | |
| a. | DCV system automatically ramps to full speed. P / F |

COMMERCIAL KITCHEN EXHAUST SYSTEM ACCEPTANCE

CEC-NRCA-PRC-02-F (Revised 01/19)

CALIFORNIA ENERGY COMMISSION



| | | |
|--|---------------------|----------------|
| CERTIFICATE OF ACCEPTANCE | | NRCA-PRC-02-F |
| Commercial Kitchen Exhaust System Acceptance | | (Page 2 of 3) |
| Project Name: | Enforcement Agency: | Permit Number: |
| Project Address: | City: | Zip Code: |

| | | |
|---|--|-------|
| b. | Hood maintains full capture and containment during ramping to and at full-speed. | P / F |
| c. | Appropriate space pressurization is maintained. | P / F |
| Functional Testing Compliance: <input type="radio"/> Complies <input type="radio"/> Does Not Comply | | |

COMMERCIAL KITCHEN EXHAUST SYSTEM ACCEPTANCE

CEC-NRCA-PRC-02-F (Revised 01/19)

CALIFORNIA ENERGY COMMISSION



| | | |
|--|---------------------|----------------|
| CERTIFICATE OF ACCEPTANCE | | NRCA-PRC-02-F |
| Commercial Kitchen Exhaust System Acceptance | | (Page 3 of 3) |
| Project Name: | Enforcement Agency: | Permit Number: |
| Project Address: | City: | Zip Code: |

| | | |
|--|--|--------------|
| DOCUMENTATION AUTHOR'S DECLARATION STATEMENT | | |
| 1. I certify that this Certificate of Acceptance documentation is accurate and complete. | | |
| Documentation Author Name: | Documentation Author Signature: | |
| Documentation Author Company Name: | Date Signed: | |
| Address: | CEA/HERS/ATT Certification Identification (If applicable): | |
| City/State/Zip: | Phone: | |
| FIELD TECHNICIAN'S DECLARATION STATEMENT | | |
| I certify the following under penalty of perjury, under the laws of the State of California: | | |
| <ol style="list-style-type: none"> The information provided on this Certificate of Acceptance is true and correct. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building. | | |
| Field Technician Name: | Field Technician Signature: | |
| Field Technician Company Name: | Position with Company (Title): | |
| Address: | CEA/HERS/ATT Certification Identification (If applicable): | |
| City/State/Zip: | Phone: | Date Signed: |
| RESPONSIBLE PERSON'S DECLARATION STATEMENT | | |
| I certify the following under penalty of perjury, under the laws of the State of California: | | |
| <ol style="list-style-type: none"> I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance. I am 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 Acceptance and attest to the declarations in this statement (responsible acceptance person). The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building. I will ensure that a completed, signed copy of this Certificate of Acceptance 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 signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy. | | |
| Responsible Acceptance Person Name: | Responsible Acceptance Person Signature: | |
| Responsible Acceptance Person Company Name: | Position with Company (Title): | |
| Address: | CSLB License: | |
| City/State/Zip: | Phone: | Date Signed: |