DOCKETED	
Docket Number:	24-BSTD-03
Project Title:	2025 Energy Code Compliance Software, Manuals and Forms
TN #:	263787
Document Title:	2025 Nonresidential Certificates of Acceptance (NRCA)
Description: This draft Nonresidential Certificates of Acceptance (NRC be subject for vote during an Energy Commission Busines Meeting. 2025 Energy Code compliance documents to recompliance with the 2025 Energy Code.	
Filer:	Haile Bucaneg
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	6/3/2025 11:09:15 AM
Docketed Date:	6/3/2025



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply Does not comply

Date Submitted to AHJ: Date

Intent:	Compressor System: 3 or more compressors and greater than 100hp.
	Per Section 120.6(e)2, this acceptance test applies to compressed air systems with
	three or more compressors and with a combined horsepower greater than 100,
	excluding medical gas compressed air systems serving healthcare facilities.
	Complete a separate form for each compressor system. For compressor systems
	with two or fewer compressors, review acceptance test NRCA-PRC-01b-F.
	Reference Section 120.6(e)2, 120.6(e)3, NA7.13.1, and NA7.13.2.

Table A-1: Compressor System Data (System must include at least three compressors) For compressor systems with two or fewer compressors, review acceptance test NRCA-PRC-01b-F. Control types typically include Load/Unload, Modulating, Variable Displacement, Variable Speed, Start/Stop, Dual/Auto Dual, or Other. See the Quick Reference Guide for further details. Prior to functional testing, verify and document all of the following:

		Rated Capacity		Designated as
Unit	Rated Size (hp)	(acfm)	Control Type	Trim
Number	NA7.13.1.1(a)	NA7.13.1.1(a)	NA7.13.1.1(a)	NA7.13.1.1(d)
1	Enter Value	Enter Value	Enter Type	True False
2	Enter Value	Enter Value	Enter Type	True False
3	Enter Value	Enter Value	Enter Type	True False
4	Enter Value	Enter Value	Enter Type	True False
5	Enter Value	Enter Value	Enter Type	True False
6	Enter Value	Enter Value	Enter Type	True False
7	Enter Value	Enter Value	Enter Type	True False
8	Enter Value	Enter Value	Enter Type	True False
9	Enter Value	Enter Value	Enter Type	True False
Total Syst System O	tem Capacity perating Pressure	Enter Value hp Enter Value psi	(NA7.13.1.1(b)) (NA7.13.1.1(c))	



Table A-2: Construction Inspection - Compressor system control capabilities

Prior to functional testing, verify and document all of the following:

Char	Entra	Thom	Code
Step	Entry		Kererence
1.0	Pass Fail	Verify that there is a means for observing and recording the state of each compressor in the system, including Off, Unloaded, Partially loaded, Fully loaded, Short cycling, Blow off	NA7.13.1.1(e)
2.0	Pass Fail	Verify that the monitoring system has the following measurement capabilities: header or compressor discharge pressure, amps or power of each compressor, airflow (cfm), maintained data storage, visual trending display of each recorded point, load, and specific efficiency.	NA7.13.2.1 (a)-(c), (e), and (f).
3.0	Pass Fail	Verify that the monitoring system is capable of data logging pressure, power, airflow, and calculated compressed air system specific efficiency (kW/100 cfm) at intervals of 5 minutes or less.	NA7.13.2.1(d)
Tabla A	2. Construction	Inspection Compliance	

Table A-3: Construction Inspection Compliance

Step	Entry	Item	Code Reference
1.0	Pass Fail	Table A-1 must include all compressors in the system and must be no fewer than three (3) and the Total System Capacity and System Operating Pressure must be entered.	N/A
2.0	Pass	All steps in Table A-3 must show as passed.	N/A
3.0	☐ Pass ☐ Fail	 PASS: If all steps in Table A-3 show as passed, then the compressor system passes the Construction Inspection requirements and must complete the functional testing requirements in Table B. FAIL: If any steps in Table A-3 show as failed, remediate the system until it passes. If it cannot be made to pass, then the compressor system fails and may not proceed to functional testing. Mark page 1 as 'Does not comply.' 	N/A



Code **Functional Test** Reference Step Entry Verify that the methods from the Construction Inspection table A-2 and have been employed to verify that the compressor states can be Pass NA7.13.1.2 1.0 observed and recorded for every compressor and Fail Step 1 that the current air demand can be measured or inferred. Run the compressed air supply system steadily at a load within (or close to) the expected operational load range as can be practically NA7.13.1.2 Pass 2.0 implemented for a duration of at least 10 Fail Step 2 minutes. Select 'pass' if it perform this test run, 'fail' if unable. During the test (Step 2.0), observe that data is being recorded to a log file that can be opened Pass and viewed to see the trends of airflow, power, 2.1 NA7.13.2.2(a) Fail and specific efficiency in at least 5 minute intervals. During the test (Step 2.0), observe that airflow and compressor power data vary with loading and unloading of the compressor within typical Pass performance expectations. Measurements should 2.2 NA7.13.2.2(d) Fail be observed across various loading, whether manually varied in response to actual operational loads. Confirm that the combinations of compressors NA7.13.1.2 3.0 No entry states meet the following criteria. Step 4 No compressor exhibits short-cycling (loading and Pass NA7.13.1.2 3.1 unloading more often than once per minute). Fail Step 4a No compressor exhibits blowoff (venting NA7.13.1.2 Pass 3.2 compressed air at the compressor itself). Fail Step 4b For new systems only: The trim compressors Pass are the only compressors partially loaded, while NA7.13.1.2 3.3 Fail the base compressors will either be fully loaded or Step 4c N/A off by the end of the test. Pass 4.0 Return system to initial operating conditions. N/A Fail Check pass if all Functional Test Compliance Pass Results comply. Check fail if any Functional Test 5.0 N/A Fail Compliance Results **does not** comply.



Table C: Compressor Status (NA7.13.1.2, Step 3)During the test (Table B, Step 2.0), observe and record the state and air demand for each compressor.

Unit		Compressor State	Current Air Demand
Number	Compressor State (Passing)	(Failing)	(acfm)
1	Off Part Loaded	Blowoff	Entor Value
T	Unloaded 🗌 Fully Loaded	Short Cycling	Enter Value
2	Off Part Loaded	Blowoff	Entor Value
2	Unloaded 🗌 Fully Loaded	Short Cycling	Enter value
2	Off Part Loaded	Blowoff	Enter Value
5	Unloaded 🗌 Fully Loaded	Short Cycling	Enter value
4	Off Part Loaded	Blowoff	Entor Value
4	Unloaded 🗌 Fully Loaded	Short Cycling	Enter value
F	Off Part Loaded	Blowoff	Entor Value
5	Unloaded 🗌 Fully Loaded	Short Cycling	Enter Value
6	Off Part Loaded	Blowoff	Entor Value
0	Unloaded 🗌 Fully Loaded	Short Cycling	Enter Value
7	Off Part Loaded	Blowoff	Entor Value
/	Unloaded 🗌 Fully Loaded	Short Cycling	Enter Value
o	Off Part Loaded	Blowoff	Entor Value
0	Unloaded 🗌 Fully Loaded	Short Cycling	Enter Value
9	Off Part Loaded	Blowoff	Entor Value
	Unloaded Fully Loaded	Short Cycling	
10	Off Part Loaded	Blowoff	Entor Value
	Unloaded 🗌 Fully Loaded	Short Cycling	



Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



COMPRESSED AIR SYSTEMS 2025-CEC-NRCA-PRC-01b-F

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Duilding Coton Malue	Eleens Enter Malue	Deemer Fisher Melus	Combuol/boox Maluso
Building. Enter value	Eloor. Enter value	Room. Enter value	Control/tag: value
Dunungi Enter Value			control/tagi value

Construction inspection and functional testing comply Does not comply
Date Submitted to AHJ: Date

Intent: Compressor System: 2 or fewer compressors and 100hp or greater. Per Section 120.6(e)3, this acceptance test applies to compressed air systems with two or fewer compressors and with a combined horsepower equal to or greater than 100 hp. Complete a separate form for each compressor system. For compressor systems with three or more compressors, review acceptance test NRCA-PRC-01a-F. Reference Section 120.6(e)2, 120.6(e)3, and NA7.13.2.

Table A: Construction Inspection

	_		Code
Step	Entry	Item	Reference
1.0	Pass Fail	Verify that the monitoring system has the following measurement capabilities: header or compressor discharge pressure, amps or power of each compressor, airflow (cfm), maintained data storage, visual trending display of each recorded point, load, and specific efficiency.	NA7.13.2.1 (a)-(c), (e), and (f).
2.0	Pass Fail	Verify that the monitoring system is capable of data logging pressure, power, airflow, and calculated compressed air system specific efficiency (kW/100 cfm) at intervals of 5 minutes or less.	NA7.13.2.1(d)
3.0	Pass Fail	Check pass if construction inspection complies with all requirements. Check fail if any inspection does not pass.	N/A



Step	Entry	Functional Test	Code Reference
1.0	No entry	Put the compressor system into normal operation.	NA
2.0	Pass Fail	During operation, observe that data is being recorded to a log file that can be opened and viewed to see the trends of airflow, power, and specific efficiency in at least 5 minute intervals.	NA7.13.2.2(a)
3.0	Pass Fail	During operation, observe that airflow and compressor power data vary with loading and unloading of the compressor within typical performance expectations. Measurements should be observed across various loading, whether manually varied in response to actual operational loads.	NA7.13.2.2(d)
4.0	Pass	Return system to initial operating conditions.	N/A
5.0	Pass Fail	Check pass if all Functional Test Compliance Results comply. Check fail if any Functional Test Compliance Results does not comply.	N/A



Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply	Data Submitted to AH1: Data
Does not comply	Date Submitted to AnJ. Date

Intent: The following acceptance tests apply to newly constructed and additions or alterations to existing commercial kitchen exhaust systems with Type I and Type II kitchen hoods with a total exhaust rate greater than 5,000 cfm. Reference NRCC-MCH-E for nonresidential building permits (including nonresidential spaces in highrise multifamily or LMCC-MCH-E for nonresidential spaces in low-rise multifamily) building permits. Submit one Certificate of Acceptance for each system that must demonstrate compliance. Reference Section 140.9(b)3 and NA7.11.

Table A: Construction Inspection

			Code
Step	Entry	Item	Reference
1.0	Pass	Exhaust and replacement air systems, and power,	NA7.11.1.1
1.0	🗌 Fail	are installed.	Step 1
2.0	Pass	Control systems (such as demand control ventilation)	NA7.11.1.1
2.0	🗌 Fail	are calibrated.	Step 1
		For kitchen/dining facilities having total Type 1 and	NA7.11.1.1
	Enter Value	Type II kitchen hood exhaust airflow rates greater	Step 2
3.0		than 5,000 cfm, calculate the maximum allowable	
		exhaust rate for each Type I hood as specified by	
		Table 140.9-C (CFM).	
		Check "Pass" if construction inspection complies	N/A
1.0	Pass	with all requirements.	
4.0		Check "Fail" if construction inspection does not	
		comply with all requirements.	



Table B-1: Functional Testing at Full Load

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.

Ston	Entry	Eunctional Test	Code
1.0	No Entry	Operate all sources of outdoor air providing replacement air for the hoods.	NA7.11.1.2 Step 1
2.0	No Entry	Operate all sources of recirculated air providing conditioning for the space in which the hoods are located.	NA7.11.1.2 Step 2
3.0	No Entry	Operate all appliances under the hoods at operating temperatures.	NA7.11.1.2 Step 3
4.0	☐ Pass ☐ Fail	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.	NA7.11.1.2 Step 4
5.0	Pass Fail	Verify that space pressurization is appropriate (e.g. kitchen is slightly negative relative to adjacent spaces and all doors open/close properly).	NA7.11.1.2 Step 5
6.0	P, F, N/A	Verify that each Type I hood has an exhaust rate that is at or below the maximum allowed. (Pass, Fail, or N/A if only Type II hoods are present)	NA7.11.1.2 Step 6
7.0	No Entry	Adjust 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.	NA7.11.1.2 Step 7
8.0	P, F, N/A	Measure and record the final airflow for each Type I hood. (Pass, Fail, or N/A if only Type II hoods are present)	NA7.11.1.2 Step 8

Step	Entry	Functional Test	Code Reference
0.0	Pass	Check if Functional Test complies with all	N/A
9.0	🔄 Fail	requirements.	

Table B-2: Functional Testing for Exhaust Systems with Demand ControlThe following acceptance test shall be performed on all exhaust hoods with demand control ventilation exhaust systems.

Step	Entry	Functional Test	Code Reference
1.0	No Entry	Turn off all kitchen hoods, makeup air and transfer <sup systems.<="" td=""><td>NA7.11.1.3 Step 1</td></sup>	NA7.11.1.3 Step 1
2.0	No Entry	Turn on one of the appliances on the line and bring to operating temperature. Verify that steps 2.1, 2.2, 2.3, and 2.4 all pass:	NA7.11.1.3 Step 2
2.1	Pass	DCV system automatically switches from off to the minimum flow setpoint.	NA7.11.1.3 Step 2(a)
2.2	Pass Fail	The minimum flow setpoint does not exceed the larger of: 50% of the design flow, or the ventilation rate required per Section 120.1.	NA7.11.1.3 Step 2(b)
2.3	Pass	The makeup air and transfer air system flow rates modulate as appropriate to match the exhaust rate.	NA7.11.1.3 Step 2(c)
2.4	Pass	Appropriate space pressurization is maintained.	NA7.11.1.3 Step 2(d)
3.0	Pass Fail	Press the timed override button. Confirm that system ramps to full speed and back to minimum speed after override times out.	NA7.11.1.3 Step 3
4.0	No Entry	Operate all appliances at typical conditions. Apply sample cooking products and/or utilize smoke puffers as appropriate to simulate full load conditions. Confirm that:	NA7.11.1.3 Step 4
4.1	Pass	DCV system automatically ramps to full speed.	NA7.11.1.3 Step 4(e)
4.2	Pass Fail	Hood maintains full capture and containment during ramping to and at full speed.	NA7.11.1.3 Step 4(f)
4.3	Pass Fail	Appropriate space pressurization is maintained.	NA7.11.1.3 Step 4(g)
5.0	Pass Fail	Check if Functional Test complies with all requirements.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I assert the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. 1	Signature
nave confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	5
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
included with the decurrent the builder provides to the building even of Acceptance is required to be	
included with the documentation the builder provides to the building owner at occupancy. I will take the	
necessary steps to ensure this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
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Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply
 Does not comply

Intent: Verify that the enclosed parking garage mechanical ventilation system functions properly. References Sections 120.6(c), 160.2(d) and NA7.12.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass Fail	Carbon monoxide (CO) control sensor is factory calibrated.	NA7.12.1(a)
2.0	Pass	The sensor is located in the highest expected concentration location in its zone.	NA7.12.1(b)
3.0	Pass	The sensor CO concentration control setpoint is at or below 25 ppm.	NA7.12.1(c)
4.0	Pass	Check pass if Construction Inspection complies with all requirements. Check fail if Construction Inspection does not comply with all requirements.	N/A

			Code
Step	Entry	Functional Test	Reference
1.0	No entry	Conduct the following tests with garage ventilation system operating in occupied mode and with actual garage CO concentration well below setpoint.	NA7.12.2
1.1	Pass	All sensors are active and readings are below 25 ppm.	NA7.12.2 Step 1
1.2	Pass Fail	Exhaust fans are running at minimum speed.	NA7.12.2 Step 1
1.3	Pass	Exhaust fans are drawing 30% or less of rated power.	NA7.12.2 Step 1
2.0	No entry	Apply CO span gas with a concentration of 30 ppm, and a concentration accuracy of +/- 2%, one by one to 50% of the sensors but no more than 10 sensors per garage and to at least one sensor per proximity zone. For each sensor tested observe:	NA7.12.2 Step 2
2.1	Pass Fail	CO reading is between 25 and 35 ppm.	NA7.12.2 Step 2(a)



Step	Entry	Functional Test	Code Reference
2.2	Pass	Exhaust fans ramp to maximum speed when span gas is applied.	NA7.12.2 Step 2(b)
2.3	Pass	Exhaust fans go back to minimum speed when span gas is removed.	NA7.12.2 Step 2(c)
3.0	No entry	Temporarily override the programmed sensor calibration/replacement period to 5 minutes.	NA7.12.2 Step 3
3.1	Pass	Wait 5 minutes and observe that fans ramp to full speed and an alarm is received by the facility operators. Restore calibration/replacement period.	NA7.12.2 Step 3(d)
4.0	No entry	Temporarily place the system in unoccupied mode and override the programmed unoccupied sensor alarm differential from 30% for 4 hours to 1% for 5 minutes.	NA7.12.2 Step 4
4.1	Pass Fail	Wait 5 minutes and observe that fans ramp to full speed and an alarm is received by the facility operators. Restore programming.	NA7.12.2 Step 4
5.0	No entry	Temporarily override the programmed occupied sensor proximity zone alarm differential from 30% for 4 hours to 1% for 5 minutes.	NA7.12.2 Step 5
5.1	Pass	Wait 5 minutes and observe that fans ramp to full speed and an alarm is received by the facility operators. Restore programming.	NA7.12.2 Step 5
6.0	Pass Fail	Check pass if all Functional Test steps comply with the requirements. Check fail if any Functional Tests do not comply with all requirements.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
The information provided on this Cortificate of Acceptance is true and correct. I are the person who	Nama
The information provided on this Certificate of Acceptance is true and correct. I am the person who	
performed the acceptance vernication reported on this Certificate of Acceptance (Field Technician). The	
construction or installation identified on this Certificate of Acceptance compiles with the applicable	Dhana
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature Data Cignad
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction of	Date Signed
Installation identified on this Certificate of Acceptance has been completed and signed by the responsible	
Dunder/Installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
I am the Field Technician, or the Field Technician is acting on my benall as my employee or my agent and I have reviewed the information provided on this Cartificate of Assertance. I am eligible under Division 2	
of the Rusiness and Professions Code in the applicable classification to accept responsibility for the system	
of the business and Professions Code in the applicable classification to accept responsibility for the system	
design, construction of installation of reactives, materials, components, of manufactured devices for the	Name
The information provided on this Certificate of Acceptance and attest to the decidiations in this statement.	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Lic. No.: License No.
indicated in the plane and energifications approved by the enforcement agency and conforms to the	Title
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
by a confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. Lunderstand that a completed signed conv of this Certificate of Acceptance shall	
be posted, or made available with the building permit(s) issued for the building and shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement I understand that a signed conv of this Certificate of Accentance is required to be	
included with the documentation the builder provides to the building owner at occupancy. I will take the	
necessary steps to ensure this requirement.	



2025-CEC-NRCA-PRC-04-F

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply Does not comply Does not comply

Intent: Refrigerated warehouse evaporators and fan control acceptance test. Verify that the evaporator fans are controlled to modulate their speed in response to space temperature or relative humidity changes. Submit one Certificate of Acceptance for each system that must demonstrate compliance. Reference Section 120.6(a)7B, NA7.10.2.

Table A: Construction Inspection

Stop	Entro	Thom	Code
Step	Entry	Item	Reference
1.0	Pass	Access to required document NRCC-PRC-E as	10-103(2)20
1.0	🔄 Fail	approved by the authority having jurisdiction.	10-105(a)2A
		All refrigerated space temperature and humidity	
2.0	Pass	sensors used for control are verified to read	NA7.10.2.1(a)
2.0	Fail	accurately (or provide an appropriate offset) using	NA7.10.2.1(b)
		a temperature and humidity standard.	
		All refrigerated space temperature and humidity	
3.0	Pass	sensors used for control are mounted in a location	NA7.10.2.1(c)
		away from direct evaporator discharge air draft.	
1.0	Pass	All fan motors are operational and rotating in the	
4.0	Fail	correct direction.	NA7.10.2.1(d)
F 0	Pass	Fan speed control is operational and connected to	
5.0	🗌 🗌 Fail	evaporator fan motors.	NA7.10.2.1(e)
6.0	Pass		
6.0	🔲 Fail	All speed controls are in "auto" mode.	NA7.10.2.1(f)
		Check "Pass" if construction inspection complies	
7.0	Pass	with all requirements.	NI / A
	Fail	Check "Fail" if construction inspection does not	IN/A
		comply with all requirements.	



Step	Entry Functional Test		Code Reference
1.0	Pass	Disable any conflicting controls (such as defrost override) if currently active.	N/A
2.0	 Pass Fail Measure current space temperature or humidity. Program this temperature or humidity as the test temperature or humidity setpoint into the control system for the functional test steps. Allow 5 minutes for system to normalize. 		NA7.10.2.2 (Step 1)
3.0	Pass Fail	 Using the control system, lower test temperature or humidity setpoint in 1 degree or 1% RH increments below any control dead band range and verify both of the following occur: The evaporator fan controls modulate to increase fan motor speed; and The evaporator fan motor speed increases in response to controls. 	NA7.10.2.2 (Step 2)
4.0	☐ Pass ☐ Fail	 Using the control system, raise the test temperature or humidity setpoint in 1 degree or 1% RH increments above any control dead band range and verify the following occur: Evaporator fan controls modulate to decrease fan motor speed; and Evaporator fan motor speed decreases in response to controls; and 	NA7.10.2.2 (Step 3)
4.1	Enter Value	Minimum fan motor control speed (rpm or percent of full speed).	NA7.10.2.2 (Step 3)
5.0	Pass	Restore control system to original zone space setpoint and restore controls disabled in Step 1.	NA7.10.2.2 (Step 4)
6.0	Pass	Verify that the Functional Test is completed and complies with all requirements.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I assert the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply Date Submitted to AHJ: Date

Intent:Verify that the evaporative condenser has ambient wet-bulb following control and
fan motor variable speed control. Reference NRCC-PRC-E. Submit one Certificate
of Acceptance for each system that must demonstrate compliance. Reference
Sections 120.6(a)7C, 140.4(h), 170.2(c)4F and NA7.10.3.1.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1.0	Pass Fail	Verify that the minimum condensing temperature control setpoint is at or below 70°F.	NA7.10.3.1.1(a)
2.0	Pass Fail	Verify that the master system controller saturated condensing temperature input is the temperature equivalent reading of the condenser pressure sensor.	NA7.10.3.1.1(b)
3.0	Pass Fail N/A	Verify that all drain leg pressure regulator valves (if used) are set below the minimum condensing temperature/pressure setpoint.	NA7.10.3.1.1(c)
4.0	Pass Fail N/A	Verify that all the receiver pressurization valves, such as the outlet pressure regulator (OPR), (if used) are set lower than the drain leg pressure regulator valve setting.	NA7.10.3.1.1(d)
5.0	Pass	Verify that all condenser pressure, temperature, and humidity sensors read accurately.	NA7.10.3.1.1 (e, f, g)
6.0	☐ Pass ☐ Fail	Verify that all temperature sensors used by the controller are mounted in a location that is not exposed to direct sunlight.	NA7.10.3.1.1(h)
7.0	Pass	Verify that all sensor readings used by the condenser controller convert or calculate to the correct conversion units at the controller.	NA7.10.3.1.1(i)
8.0	Pass	Verify that all condenser fan motors are operational and rotating in the correct direction.	NA7.10.3.1.1(j)
9.0	Pass	Verify that all condenser fan speed controls are operational and connected to condenser fan motors to operate the fans serving a common condenser loop in unison.	NA7.10.3.1.1(k)
10.0	Pass	Verify that all speed controls are in "auto" mode.	NA7.10.3.1.1(l)



Step	Entry	Item	Code Reference
11.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

The system cooling load must be sufficiently high to run the test, i.e. with a condensing temperature above the minimum SCT set point. The loads can often be increased somewhat as required to perform the Functional Testing.

			Code
Step	Entry	Functional Test	Reference
1.0	No Entry	Override any conflicting controls before performing functional tests.	NA7.10.3.1.2 Step 1
2.0	No Entry	Document the current operating conditions and the current set points in Steps 2.1, 2.2, 2.3, 2.4, 2.5, and 2.6:	NA7.10.3.1.2 Step 2
2.1	Enter Value °F	Current outdoor ambient air dry bulb temperature.	NA7.10.3.1.2 Step2(a)
2.2	Enter Value °F	Current outdoor ambient air wet bulb temperature.	NA7.10.3.1.2 Step2(a)
2.3	Enter Value	Current ambient relative humidity (RH). (% RH)	NA7.10.3.1.2 Step 2(a)
2.4	Enter Value	Current saturated condensing temperature (SCT) or condensing pressure.	NA7.10.3.1.2 Step 2(a)
2.4	Enter Value	Calculate the condenser temperature difference (TD) = [SCT – WBT]. (°F) The SCT can be found in step 2.4 and the WBT can be found in step 2.2.	NA7.10.3.1.2 Step 2(b)
2.5	Enter Value	Current pressure control set point.	NA7.10.3.1.2 Step 2(c)
2.6	Enter Value	Current condenser control temperature difference (Control TD). (°F)	NA7.10.3.1.2 Step 2(c)
3.0	No Entry	Depending on the control strategy used, program a setpoint equal to the calculation obtained in Step 2.4 or the value in step 2.5 This will be referred to as the "test set point." Allow 5 minutes for condenser fan speed to normalize.	NA7.10.3.1.2 Step 3
4.0	No Entry	Raise the test setpoint in 1°F (or 3 psi) increments until the condenser fan control modulates to minimum fan motor speed.	NA7.10.3.1.2 Step 4
4.1	Pass Fail	Verify that the fan motor speed decreases.	NA7.10.3.1.2 Step 4(d)



Step	Entry	Functional Test	Code Reference
4.2	Pass Fail	Verify that all condenser fan motors serving common condenser loop decrease speed in unison in response to controller output; observed at the control system and at the condenser(s).	NA7.10.3.1.2 Step 4(e)
4.3	Enter Value	Record the minimum fan speed. Enter with units as rpm, or percent of full speed (%).	NA7.10.3.1.2 Step 4(f)
4.4	No Entry	If system is already operating at minimum saturated condensing temperature/head pressure, reverse Steps 4 and 5.	NA7.10.3.1.2 Step 4(g)
5.0	No Entry	Lower the test setpoint in 1°F (or 3 psi)increments until the condenser fan control modulates to increase fan motor speed.	NA7.10.3.1.2 Step 5
5.1	Pass	Verify that the fan motor speed increases.	NA7.10.3.1.2 Step 5(h)
5.2	Pass Fail	Verify that all condenser fan motors serving common condenser loop increase speed in unison in response to controller output; observed at the control system and at the condenser(s).	NA7.10.3.1.2 Step 5(i)
6.0	Enter Value	Document the current minimum SCT setpoint. (°F)	NA7.10.3.1.2 Step 6
6.1	No Entry	Using the control system, change the minimum condensing temperature setpoint to a value greater than the current operating condensing temperature.	NA7.10.3.1.2 Step 6
6.2	Pass Fail	Verify that the condenser fan controls modulate to decrease capacity.	NA7.10.3.1.2 Step 6(j)
6.3	Pass Fail	Verify that all condenser fans serving common condenser loop modulate in unison.	NA7.10.3.1.2 Step 6(k)
6.4	Pass	Verify that the condenser fan controls stabilize within a 5 minute period.	NA7.10.3.1.2 Step 6(I)
7.0	No Entry	Restore the Control TD and the minimum SCT setpoint to the values recorded in Step 2.5 and 6.1.	NA7.10.3.1.2 Step 7
8.0	No Entry	Restore any controls disabled in Step 1.	NA7.10.3.1.2 Step 8
9.0	Pass Fail	Check pass if Functional Test complies with all requirements. Check fail if any Functional Test does not comply.	N/A

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Field Technician I assert the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply Date Submitted to AHJ: Date

Intent:Verify that the air-cooled condenser has ambient dry-bulb following control and fan
motor variable speed control. Reference NRCC-PRC-E. Submit one Certificate of
Acceptance for each system that must demonstrate compliance. Reference Sections
120.6(a)4, 120.6(a)7D, 140.4(h), 170.2(c)4F, and NA7.10.3.2.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1.0	Pass	The minimum condensing temperature control setpoint is at or below 70°F.	NA7.10.3.2.1(a)
2.0	Pass Fail	The master system controller saturated condensing temperature input is the temperature equivalent reading of the condenser pressure sensor.	NA7.10.3.2.1(b)
3.0	Pass	All drain leg pressure regulator valves are set below the minimum condensing temperature/pressure setpoint.	NA7.10.3.2.1(c)
4.0	Pass Fail	Receiver pressurization valves, such as the outlet pressure regulator (OPR), (if used) are set lower than the drain leg pressure regulator valve setting.	NA7.10.3.2.1(d)
5.0	Pass Fail	All condenser inlet and outlet pressure sensors read accurately (or provide an appropriate offset) using a pressure standard.	NA7.10.3.2.1(e)
6.0	Pass Fail	All ambient dry bulb temperature sensors read accurately (or provide an appropriate offset) using a temperature standard.	NA7.10.3.2.1(f)
7.0	Pass	Temperature sensor used by the controller is mounted in a location that is not exposed to direct sunlight.	NA7.10.3.2.1(g)
8.0	Pass Fail	All sensor readings used by the condenser controller convert or calculate to the correct conversion units at the controller.	NA7.10.3.2.1(h)
9.0	Pass	All condenser fan motors are operational and rotating in the correct direction.	NA7.10.3.2.1(i)
10.0	Pass Fail	All condenser fan speed controls are operational and connected to condenser fan motors to operate in unison the fans serving a common condenser loop.	NA7.10.3.2.1(j)



Step	Entry	Item	Code Reference
11.0	Pass	All speed controls are in "auto" mode.	NA7.10.3.2.1(k)
12.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

The system cooling load must be sufficiently high to run the test (i.e. with a condensing temperature above the minimum SCT set point). The loads can often be increased somewhat as required to perform the Functional Testing.

			Code
Step	Entry	Functional Test	Reference
1.0	No Entry	Override any conflicting controls before	NA7.10.3.2.2
		performing functional tests.	Step 1
1 1	Entor Value °E	Current outdoor ambient dry-bulb temperature	NA7.10.3.2.2
1.1		(DBT).	Step 1
1 2	Enter Value	Current saturated condensing temperature (SCT)	NA7.10.3.2.2
1.2	🗌 °F 🔄 psig	or condensing pressure from the control system.	Step 1
2.0	No Entry	Calculate and document the following	NA7.10.3.2.2
2.0		Calculate and document the following.	Step 2
2.1	Entor Value	Calculate the condenser temperature difference	NA7.10.3.2.2
2.1		(TD) = [SCT - DBT]. (°F)	Step 2
22	Enter Value	Current SCT or pressure control set point	NA7.10.3.2.2
2.2	└─ °F └─ psig		Step 2
		Depending on the control strategy used, program	
3.0	No Entry	Step 2.1 or the value in step 2.2 This will be	NA7.10.3.2.2
5.0		referred to as the "test set point." Allow 5	Step 3
		minutes for condenser fan speed to normalize.	
		Using the control system, raise the test set point	
1.0	No Entry	in 1°F (or 3 psi) increments until the condenser	NA7.10.3.2.2
4.0		fan control modulates to minimum fan motor	Step 4
		speed. Verify and document the following:	
4 1	Pass	For motor speed decreases	NA7.10.3.2.2
4.1	Fail	Fait motor speed decreases.	Step 4(a)
		All condenser fan motors serving common	
4 2	Pass	condenser loop decrease speed in unison in	NA7.10.3.2.2
7.2	🔄 Fail	response to controller output; observed at the	Step 4(b)
	-	control system and at the condenser(s).	
	Enter Value	Record the minimum fan motor control speed.	
4.3	∣	Enter with units as rpm, Hertz, or percent of full	NA7.10.3.2.2
	hertz	speed.	Step 4(c)
	🛛 🔄 % Tull speed		



Step	Entry	Functional Test	Code Reference
4.4	No Entry	If system is already operating at minimum saturated condensing temperature/head pressure, reverse Steps 4 and 5.	NA7.10.3.2.2 Step 4(d)
5.0	No Entry	Using the control system, lower the test set point in 1°F (or 3 psi) increments until the condenser fan control modulates to increase fan motor speed. Verify and document the following:	NA7.10.3.2.2 Step 5
5.1	Pass	Fan motor speed increases.	NA7.10.3.2.2 Step 5(a)
5.2	Pass Fail	All condenser fan motors serving common condenser loop increase speed in unison in response to controller output; observed at the control system and at the condenser(s).	NA7.10.3.2.2 Step 5(b)
6.0	Enter Value	Record the current minimum condensing temperature set point. (°F)	NA7.10.3.2.2 Step 6
6.1	No Entry	Using the control system, change the minimum SCT set point to a value greater than the current operating SCT. Verify and document the following:	NA7.10.3.2.2 Step 6
6.2	Pass	Condenser fan controls modulate to decrease capacity.	NA7.10.3.2.2 Step 6(a)
6.3	Pass	All condenser fans serving common condenser loop modulate in unison.	NA7.10.3.2.2 Step 6(b)
6.4	Pass	Condenser fan controls stabilize within a 5minute period.	NA7.10.3.2.2 Step 6(c)
7.0	No Entry	Restore the Control TD and the minimum SCT set point to the values recorded in Step 2.2 and 6.1.	NA7.10.3.2.2 Step 7
8.0	No Entry	Restore any controls overridden in Step 1.	NA7.10.3.2.2 Step 8
9.0	Pass Fail	Check Pass if Functional Test Compliance Results complies. <u>Check fail if any Functional Tests do not comply with all requirements.</u>	NA7.10.3.2.2 Step 8

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Name Company Name Author Signature Date Signed
Field Technician I assert the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Banangi Encor Falao			

Construction inspection and functional testing comply	Data Submitted to AHIL Data
Does not comply	Date Submitted to AHJ. Date

Intent: This document is used to demonstrate compliance with acceptance requirements for variable speed screw compressors. Reference NRCC-PRC-E. Submit one Certificate of Acceptance for each system that must demonstrate compliance. Reference Section 120.6(a)5C, 120.6(a)7F and NA7.10.4.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1.0	Pass Fail	All single open-drive screw compressors dedicated to a suction group have variable speed control.	NA7.10.4.1(a)
2.1	Pass	All compressor suction and discharge pressure sensors read accurately using a standard.	NA7.10.4.1(b)
2.2	Offset psig	Provide appropriate pressure offset (psig), if applicable.	NA7.10.4.1(b)
3.1	Pass	All input or control temperature sensors read accurately using temperature standard	NA7.10.4.1(c)
3.2	Offset °F N/A	Provide appropriate temperature offset (°F), if applicable.	NA7.10.4.1(c)
4.0	Pass	All sensor readings used by the condenser controller convert or calculate to the correct conversion units at the controller.	NA7.10.4.1(d)
5.0	Pass	Compressor speed controls are operational and connected to compressor motors.	NA7.10.4.1(e)
6.0	Pass	All speed controls are in "auto" mode.	NA7.10.4.1(f)
7.0	Pass Fail	Compressor panel control readings for "RPMs," "% speed," "kW", and "amps" match the readings from the PLC or other control systems.	NA7.10.4.1(g)
8.0	Pass	Verify that compressor nameplate data is correctly entered into the PLC or other control system.	NA7.10.4.1(h)
9.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A



The system cooling load must be sufficiently high to run the test. Artificially increasing or decreasing evaporator loads (add or shut off zone loads, change setpoints, etc.) may be required to perform the Functional Testing.

			Code
Step	Entry	Functional Test	Reference
1.0	No Fotor	Override any conflicting controls before	NA7.10.4.2
1.0	NO ENTRY	performing the Functional Tests.	Step 1
2.0	No Fata	Measure and document all of the following	NA7.10.4.2
2.0	NO Entry	operating conditions in Steps 2.1 and 2.2.	Step 2
2.1		Measure and document the current	NA7.10.4.2
2.1	Enter value	compressor operating suction pressure. (psig)	Step 2
2.2	Enter Value	Measure and document the current compressor operating saturated suction temperature (SST). (°F)	NA7.10.4.2 Step 2
3.0	No Entry	Document the "test suction pressure/saturated suction temperature setpoint". Follow Steps 3.1, 3.2, and 3.3 to determine this setpoint.	NA7.10.4.2 Step 3
3.1	Enter Value	Document the suction pressure setpoint (psig) or the saturated suction temperature setpoint (°F).	NA7.10.4.2 Step 3
3.2	No Entry	Program into the control system a target setpoint equal to the current operating condition measured in Step 2.	NA7.10.4.2 Step 3
3.3	No Entry	Allow 5 minutes for system to normalize.	NA7.10.4.2 Step 3
4.0	No Entry	Verify the compressor operation below maximum speed with Steps 4.1, 4.2, 4.3, and 4.4.	NA7.10.4.2 Step 4
4.1	No Entry	Raise the test suction setpoint in 1 psi increments until the compressor controller modulates to decrease compressor speed.	NA7.10.4.2 Step 4
4.2	Pass	Verify that the compressor speed decreases.	NA7.10.4.2 Step 4(a)
4.3	Pass Fail	Verify that the compressor speed continues to decrease to minimum speed.	NA7.10.4.2 Step 4(b)
4.4	Pass Fail	Verify that any slide valve or other unloading means does not unload until after the minimum speed is reached.	NA7.10.4.2 Step 4(c)
5.0	No Entry	Verify the compressor operation at maximum speed with Steps 5.1, 5.2, 5.3, and 5.4.	NA7.10.4.2 Step 5
5.1	No Entry	Lower the test suction setpoint in 1 psi increments until the compressor controller modulates to increase compressor speed.	NA7.10.4.2 Step 5
5.2	Pass Fail	Verify that any slide valve or other unloading first goes to 100% before compressor increases from minimum speed.	NA7.10.4.2 Step 5(d)



Stop	Entry	Eurotional Tast	Code
Step			Reference
53	Pass	Verify that the compressor begins to increase	NA7.10.4.2
5.5	🔄 Fail	speed.	Step 5(e)
ΕΛ	Pass	Verify that the compressor speed continues to	NA7.10.4.2
5.4	🗌 Fail	increase to 100%.	Step 5(f)
6.0	No Entry	Restore suction setpoints back to original	NA7.10.4.2
0.0	NO ETURY	settings documented in Step 3.	Step 6
7.0	No Entry	Destars any controls disabled in Stop 1	NA7.10.4.2
7.0	NO ETURY	Restore any controls disabled in Step 1.	Step 7
0.0	Pass	Verify that the Functional Test complies with	N1/A
0.0	🗌 Fail	all requirements.	N/A

Declaration Statement	Cimentoria
Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete	Company Name
	Author Signature
	Date Signed
Field Technician	
I assert the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
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	Titlo
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signaturo
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Data Signad
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	



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Construction inspection and functional testing comply	Data Submitted to AHI: Data
Does not comply	Date Submitted to Any. Date

The following acceptance test serves to confirm that the electric resistance under
floor heating system is thermostatically controlled and is automatically disabledIntent:during the summer on-peak period defined by the local electric utility. Reference
NRCC-PRC-E. Submit one Certificate of Acceptance for each system that must
demonstrate compliance. Reference Section 120.6(a)2, 120.6(a)7A, and NA7.10.1

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Inspection Item	Code Reference
1.0	Pass	Local electric utility summer on-peak period is programmed into all underslab heater controls to meet requirements of Section 120.6(a)2.	NA7.10.1.1(a) 120.6(a)2
2.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Step	Entry	Functional Test	Code Reference
1.0	No Entry	Verify that the heaters turn off using Steps 1.1 and	NA7.10.1.2 Step 1
1.1	No Entry	Using the control system, lower the slab temperature setpoint.	NA7.10.1.2 Step 1
1.2	Pass Fail	Using an electrical test meter, verify the underfloor electric resistance heater is OFF.	NA7.10.1.2 Step 1(a)
2.0	No Entry	Verify that the heaters turn on using Steps 2.1 and 2.2.	NA7.10.1.2 Step 2
2.1	No Entry	Using the control system, raise the slab temperature setpoint.	NA7.10.1.2 Step 2
2.2	Pass Fail	Using an electrical test meter, verify the underfloor electric resistance heater is ON.	NA7.10.1.2 Step 2(b)
3.0	No Entry	Verify that the heaters turn off during the local utility company's summer on-peak period using Steps 3.1 and 3.2.	NA7.10.1.2 Step 3



Step	Entry	Functional Test	Code Reference
3.1	No Entry	Using the control system, change the control system's date and time corresponding to the local utility's summer on-peak period. If control system only accounts for time, set system time corresponding to the local utility's summer on-peak period.	NA7.10.1.2 Step 3
3.2	Pass Fail	Using an electrical test meter, verify the underfloor electric resistance heater is OFF.	NA7.10.1.2 Step 3(c)
4.0	No Entry	Restore system to correct date and time, and control setpoints.	NA7.10.1.2 Step 4
5.0	Pass	Check "Pass" if all Functional Test results comply with requirements. <u>Check fail if any Functional Tests</u> do not comply with all requirements.	N/A



CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I assert the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



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Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply Date Submitted to AHJ: Date

Intent: To ensure that the elevator cab lighting and ventilation fan shut off, and verify the elevator cab lighting efficacy. Reference Sections 120.6(f), 160.7(a), and NA7.14.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1.0	Pass	Access to required document NRCC-PRC-E as approved by the authority having jurisdiction.	10-103(a)2A
2.0	Pass Fail	The occupancy sensor has been located to minimize false signals, and the elevator cab does not have any obstructions that could adversely affect the sensor's performance.	NA7.14.1(a)
3.0	Pass Fail N/A	For PIR sensors, verify that the sensor pattern does not enter into the elevator lobby.	NA7.14.1(b)
4.0	Pass	For ultrasonic sensors, verify that the sensor does not emit audible sound.	NA7.14.1(c)
5.0	Pass Fail	Note that some elevators are able to use weight sensors to provide occupancy sensing. In this case, verify that the elevator weight sensing used to provide occupant sensing is functional.	NA7.14.1 (note)
6.0	Pass Fail	Verify that the Compliance Inspection is completed and complies with all requirements.	N/A



Step	Entry	Functional Test	Code Reference
1.0	Pass Fail	Confirm that the lighting and ventilation controlled inside the elevator cab turns off after 15 minutes from the start of an unoccupied condition.	NA7.14.2(a)
2.0	Pass Fail	Verify that the signal sensitivity is adequate to achieve desired control. The sensor should not detect motion in the elevator lobby.	NA7.14.2(b)
3.0	Pass	Verify that lighting and ventilation immediately turn "on" when an unoccupied condition becomes occupied.	NA7.14.2(c)
4.0	Pass	Verify that the lighting and ventilation will not shut off when occupied. Stand in the elevator with the door closed and wait 15 minutes to confirm that the lighting and ventilation remains on.	NA7.14.2(d)
5.0	Pass	Verify that the Compliance Inspection is completed and complies with all requirements. <u>Check fail if any Functional</u> Tests do not comply with all requirements.	N/A


Declaration Statement	Signatory
Document Author I certify that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name
	Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



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Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply Does not comply
Date Submitted to AHJ: Date

Intent: To ensure that the intermittent speed control for escalators and moving walkways are functioning in accordance with Section 120.6(g), NA7.15, and ASME A17.1/CSA B44.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Check	Item	Code Reference
1.0	Pass Fail	Verify that a variable speed drive is installed on the escalator/moving walkway.	NA7.15.1(a)
2.0	Pass Fail	Verify that an occupancy sensor has been installed in a location that will minimize false signals.	NA7.15.1(b)
3.0	Pass	Verify that the occupancy sensors do not trigger from pedestrians on adjacent escalators/moving walkway.	NA7.15.1(c)
4.0	Pass	Verify that the occupancy sensors are unobstructed.	NA7.15.1(d)
5.0	Pass Fail	Verify that the ultrasonic occupancy sensors do not emit audible sound.	NA7.15.1(e)
6.0	Pass Fail	Check if construction inspection complies with all requirements. <u>Check fail if any Construction Inspection</u> <u>Step does not comply with all requirements.</u>	N/A

Table B: Functional Testing

Step	Check	Functional Test	Code Reference
1.0	Enter Value sec	Document the amount of time necessary to ride the entire length of the escalator/moving walkway while standing still (in seconds).	NA7.15.2(a)
2.0	Pass Fail	Stand away from the escalator/moving walkway and wait more than 3 times the escalator/moving walkway travel time and verify that the escalator/moving walkway has slowed to a minimum speed	NA7.15.2(b)
3.0	Pass	Approach the escalator/moving walkway while in an unoccupied mode from multiple angles to verify that passenger detection cannot be bypassed.	NA7.15.2(c)



Step	Check	Functional Test	Code Reference
4.0	Pass	Verify the slow speed setting is 10 ft/min.	NA7.15.2(d)
5.0	Pass	Verify the full speed is less than 100 ft/min.	NA7.15.2(e)
6.0	Pass	Verify the acceleration and deceleration does not exceed 1 ft/sec sq.	NA7.15.2(f)
7.0	Pass	Verify the escalator/moving walkway ramps up to full speed before getting on.	NA7.15.2(g)
8.0	PassFail	Approach the escalator/moving walkway at an average walking pace while in an unoccupied condition from the opposite direction (the exit) and verify a warning alarm sounds to alert the passenger that they are entering from the wrong direction.	NA7.15.2(h)
9.0	Pass	Check Pass if Functional Test Compliance Results complies. <u>Check fail if any Functional Tests</u> do not comply with all requirements.	N/A

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



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Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Dunungi Enter Vulue			Control/tage value

Intent:	A newly installed fan exhaust system serving a laboratory or factory with a design
	exhaust fan system airflow rate greater than 10,000 cfm must meet all discharge
	requirements in ANSI Z9.5-2022, Section 6.4.
	Additionally, the exhaust fan system must be designed to meet either Section
	140.9(c)3B, Section 140.9(c)3C, or Section 140.9(c)3D.
	If Section 140.9(c)3D is the designed objective, then the variable exhaust airflow
	rate control system must use the procedures and system definitions included in
	ANSI Z9.5 (2022) Appendix 3 for either Simple Turndown, Wind Responsive, or
	Contaminant Monitoring.
	Acceptance Test. A Laboratory Test and Balance Report (2025-CEC-NRCA-PRC-
	14b-F) and one of the control acceptance tests must be completed for each
	laboratory space served by the exhaust system and the summary results entered
	here.
	Reference: Section 140.9(c)3 and Reference Nonresidential Appendix NA7.16.

Test and balance - Required and Choose One Fan Power Control Option	Compliance Document	Status of Construction Inspection and Functional Testing
Laboratory Test and Balance Report (Required)	2025-CEC-NRCA-PRC-14b-F	Pass (All comply)Fail (Does not comply)
No control (Section 140.9(c)3B and 140.9(c)3C)	2025-CEC-NRCA-PRC-14b-F	 Pass (All comply) Fail (Does not comply) NA (Control not used)
Simple Turndown Control (Section 140.9(c)3Dva)	2025-CEC-NRCA-PRC-14c1-F	 Pass (All comply) Fail (Does not comply) NA (Control not used)
Wind Responsive Control (Section 140.9(c)3Dvb)	2025-CEC-NRCA-PRC-14c2-F	 Pass (All comply) Fail (Does not comply) NA (Control not used)
Contaminant Monitoring Control (Section 140.9(c)3Dvc)	2025-CEC-NRCA-PRC-14c3-F	 Pass (All comply) Fail (Does not comply) NA (Control not used)



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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.	Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Lic. No.: License No.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Title
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand that a completed, signed copy of this Certificate of Acceptance shall	
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available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	



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Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent:This compliance document is to be completed for each factory or laboratory space
served by a fan exhaust system with a design exhaust fan system airflow rate
greater than 10,000 cfm. If multiple factory or laboratory spaces are served by the
same fan exhaust system, then a separate version of this compliance document
must be completed for each factory or laboratory space served.
Section 140.9(c)3 and Reference Nonresidential Appendix NA7.16.

Table A-1: Construction Inspection – Main

			Code
Step	Entry	Item	Reference
1.0	Pass Fail	Verify access to all necessary specifications and manufacturer documentation. Additionally verify access to permit applications and Energy Code compliance documents approved by the authority having jurisdiction.	10-103
2.0	No Entry	Verify that the following measurements are within 10 percent of the corresponding design values found in the documents specified in Step 1:	NA7.16.1(a)
2.1	Enter Value sf Enter Value cf Pass Fail	Measure and record the area (square feet) and volume (cubic feet) of the factory or laboratory space. Indicate pass if these values are within 10 percent of the corresponding design values referenced in Step 1.	NA7.16.1(a)1
2.2	Enter Value cfm Pass Fail	Measure and record the airflow rate (cubic feet per minute) of the factory or laboratory space. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1.	NA7.16.1(a)2
2.3	Enter Value cfm Pass Fail	Measure and record the occupied minimum airflow rate (cubic feet per minute) of the factory or laboratory space. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1.	NA7.16.1(a)3



Step	Entry	Item	Code Reference
2.4	Enter Value cfm Pass Fail	Measure and record the unoccupied minimum airflow rate (cubic feet per minute) of the factory or laboratory space. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1.	NA7.16.1(a)4
2.5	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) of the factory or laboratory space at design conditions. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1.	NA7.16.1(a)5
2.6	Enter Value W Pass Fail	Measure and record the power of the exhaust fan system at design conditions (watts) of the factory or laboratory space. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1.	NA7.16.1(a)6
2.7	Enter Value W/cfm Pass Fail	Calculate watts per cubic feet per minute at design conditions (divide results of Step 2.6 the results of Step 2.5). Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1.	NA7.16.1(a)7
3.0	☐ Pass ☐ Fail	 From Table A-2, determine if it is true that the Total Design Airflow Rate is greater than unoccupied minimum airflow rate of the space (from the resoures listed in Step 1). If it is true AND if all fume hoods listed in Table A-2 are identified as VAV, then select Pass. If it is true AND any of the fume hoods listed in Table A-2 are identified as CAV, then select Fail. 	NA7.16.1(b)
4.0	True False	Verify pressure independent flow control valves are used.	NA7.16.1(c)
5.0	True False	Document whether the exhaust system has air filtration, scrubbers, or other air treatment devices.	NA7.16.1(d)
6.0	No Entry	Document the fan power requirements as described in Steps 6.1 through 6.4 (below). Use only one of 6.1 through 6.4 and enter NA for the options not used.	NA7.16.1(e)
6.1	Pass, Fail, NA	No Control is selected (2025-CEC-NRCA-PRC-14a) AND Step 5 is 'True.' Enter Pass if Step 2.7 is equal to or less than 0.85 W/cfm, or else enter Fail.	NA7.16.1(e)1

Step	Entry	Item	Code Reference
6.2	Pass, Fail, NA	No Control is selected (2025-CEC-NRCA-PRC-14a) AND Step 5 is 'True', Enter Pass if the rated fan power does not surpass fan kW _{budget} as calculated per Section 140.4(c)1A, or else enter fail.	NA7.16.1(e)1 and NA7.16.1(e)2
6.3	Pass, Fail, NA	No Control is selected (2025-CEC-NRCA-PRC-14a) AND Step 5 is 'False'. Enter Pass if Step 2.7 is equal to or less than 0.65 W/cfm, or else enter Fail.	NA7.16.1(e)2
6.4	Pass, Fail, NA	The selected control is either simple turndown, wind responsive, or contaminant monitoring. Enter Pass if Step 2.7 is equal to or less than 1.3 W/cfm, or else enter Fail.	NA7.16.1(e)3
7.0	Pass Fail	Construction Inspection Pass Conditions All of the following must be true. Steps 2 and 6 contain 'No Entry'. Steps 4 and 5 must record either true or false. Steps 6.1-6.4 must record one pass and three NAs. All other steps must record pass.	NA

Table A-2: Construction Inspection – Listing of Fume Hoods (NA7.16.1(b))

List all fume hoods in the space, indicating variable or constant air volume and the design air flow rate in cubic feet per minute (CFM). Total the design air flow rate (including both VAV and VAC hoods) at the bottom of the table.

Fume Hood	Design Airflow Type	Design Air Flow Rate (cfm)
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value



LAB TEST AND BALANCE

2025-CEC-NRCA-PRC-14b-F

Fume Hood	Design Airflow Type	Design Air Flow Rate (cfm)
Fume Hood Designation	Variable Air Volume (VAV) Constant Air Volume (CAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV) Constant Air Volume (CAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV) Constant Air Volume (CAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Fume Hood Designation	 Variable Air Volume (VAV) Constant Air Volume (CAV) 	Enter Value
Fume Hood Designation	Variable Air Volume (VAV) Constant Air Volume (CAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV) Constant Air Volume (CAV)	Enter Value
Fume Hood Designation	Variable Air Volume (VAV)	Enter Value
Total Design Airflow Rate	(sum both VAV and CAV together)	Enter Value

Table B-1: Functional Test – VAV Laboratory Exhaust System with Occupancy Controls

Note: If control signals have been calibrated to measure flow rates and power consumption, recorded control signals are acceptable methods of measurement.

.	_ .		Code
Step	Entry	Functional lest	Reference
1.0	No Entry	Simulate design conditions by opening all fume hood sashes and other exhaust devices such as snorkels to their design open position and occupy all lab spaces served by the exhaust fan system.	NA7.16.2 Step 1
1.1	Pass	Verify that the occupant sensors can detect occupants in all portions of the spaces and are reporting occupied occupancy status to controller.	NA7.16.2 Step 1(a)
1.2	Pass	Verify that the inlet airflow rate of the exhaust fans meets the design flowrate.	NA7.16.2 Step 1(b)
1.3	Enter Value	Measure and record the fan power (watts) under design conditions.	NA7.16.2 Step 1(c)
1.3	Pass Fail	Verify that fan power under design conditions (Step 1.3) is no greater than the design fan power.	NA7.16.2 Step 1(d)



			Code
Step	Entry	Functional Test	Reference
		Simulate minimum flowrate under occupied conditions	NA7.16.2
20	No Entry	by adjusting fume hoods and other exhaust devices.	Step 2
2.0		Adjust the thermostatic control so that the space	·
		temperature is within the dead band.	
		Verify that the occupant sensors can detect occupants	NA7 16 0
2.1	Eail	in all portions of the spaces and are reporting occupied	Sten 2(2)
		occupancy status to controller.	Step 2(a)
22	Pass	Verify that the total exhaust airflow rate of the space	NA7.16.2
2.2	Fail	meets the minimum allowed occupied airflow rate.	Step 2(b)
22	Enter Value	Measure and record the fan power (watts) under	NA7.16.2
2.5		minimum flowrate, occupied conditions.	Step 2(c)
	Pass	Verify that the power under minimum flowrate occupied	NA7 16 2
2.4	Fail	conditions (Step 2.3) is no greater than measured	Sten 2(d)
		power under design conditions (Step 1.3).	
		Simulate minimum flowrate under unoccupied	
		conditions by adjusting fume hoods and other exhaust	
		devices and vacate all lab spaces served by the exhaust	NA7,16.2
3.0	No Entry	fan system for at least 20 minutes so occupant control	Sten 3
		treats lab spaces as unoccupied. Adjust the thermostatic	
		control so that the space temperature is within the dead	
		band.	
3.1		Verify that the occupant sensors are reporting	NA7.16.2
		unoccupied occupancy status to controller.	Step 3(a)
3.2		Verify that the total exhaust airflow rate of each space	NA7.16.2
	Fail	meets the minimum allowed unoccupied flowrate.	Step 3(b)
3.3	Enter Value	Measure and record the fan power (watts) under	NA7.16.2
		minimum flowrate unoccupied conditions.	Step 3(c)
		Verify that power under minimum flowrate unoccupied	
3.4		conditions (Step 3.3) is no greater than measured	NA7.16.2
		power under minimum flowrate occupied conditions	Step 3(d)
4.0		(Step 2.3).	N 1 4
4.0	No Entry	Return system controls to normal operation	NA
		Functional Test Pass Conditions	
		All of the following must be true.	
5.0		Steps 1.0, 2.0, and 3.0 contain 'No Entry'.	NA
		Steps 1.3, 2.3, and 3.3 must contain non-zero numerical	
		entries.	
		All other steps must record pass.	



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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.	Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Lic. No.: License No.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Title
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	



Project Name and Address	Authority Having Jurisdiction	
Name: Project Name	Enforcement Agency: Agency	
Address: Project Address	Permit Number: Permit Number	
City, Zip Code: City, Zip Code	Permit Application Date: Date	

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply Does not comply	Date Submitted to AHJ: Date	

Intent:	If the builder uses simple turndown control to meet fan system power consumption
	requirements, then this acceptance testing is required in addition to the 2025-CEC-
	NRCA-PRC-14a-F and 2025-CEC-NRCA-PRC-14b-F. It is recommended to complete,
	to the extent possible, both compliance documents 2025-CEC-NRCA-PRC-14a-F and
	2025-CEC-NRCA-PRC-14b-F prior to starting this acceptance test. NOTE: If control
	signals have been calibrated to measured flow rates and power consumption,
	recorded control signals are acceptable methods of measurement.
	Reference Section 140.9(c)3 and Reference Nonresidential Appendix NA7.16.3 and
	NA7.16.4.

Table A-1: Construction Inspection

			Code
Step	Entry	Item	Reference
1.0	Pass Fail	Verify that the following measurements are within 10 percent of the corresponding values found in the design documents specified in Step 1 of 2025- CEC-NRCA-PRC-14b-F:	NA7.16.3(a)
1.1	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) at design conditions. Indicate pass if this design value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.3(a)1
1.2	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at design conditions. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.3(a)2
1.3	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) at occupied minimum acceptable airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.3(a)3



Step	Entry	Item	Code Reference
1.4	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at occupied minimum acceptable airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b- F.	NA7.16.3(a)4
1.5	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at 60 percent of design exhaust fan system airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA- PRC-14b-F.	NA7.16.3(a)5
1.6	Enter Value W/cfm Pass Fail	Calculate watts per cubic feet per minute at design conditions (divide results of Step 1.2 by the results of Step 1.1). Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA- PRC-14b-F.	NA7.16.3(a)6
2.0	Pass Fail	Verify that the measured occupied minimum acceptable exhaust fan system inlet airflow rate is no greater than 60 percent of measured design exhaust fan system airflow rate. Select Pass if Step 1.3 is less than or equal to 0.60 times Step 1.1, or else select Fail.	NA7.16.3(b)
3.0	☐ Pass ☐ Fail	Verify that the measured exhaust fan system power at 60 percent of design fan system airflow rate is no greater than 40 percent of measured exhaust fan system power at design exhaust fan system airflow rate. Select Pass if Step 1.5 less than or equal to 0.40 times Step 1.2, or else select Fail.	NA7.16.3(c)
4.0	Pass Fail	Construction Inspection Pass Conditions All steps must record Pass.	NA



Table B-1: Functional Testing

			Code
Step	Entry	Functional Test	Reference
1.0	No Entry	Simulate design conditions. Adjust the thermostatic control so that the space temperature is within the dead band.	NA7.16.4 Step 1
1.1	Pass Fail	Verify that the occupant sensors can detect occupants in all portions of the spaces and are reporting occupied occupancy status to controller.	NA7.16.4 Step 1(a)
1.2	Enter Value cfm Pass Fail	Verify that the exhaust fan system inlet airflow rate (cubic feet per minute) meets the design airflow rate.	NA7.16.4 Step 1(b)
1.3	Enter Value W	Measure and record fan system power (watts).	NA7.16.4 Step 1(c)
2.0	No Entry	Simulate turndown airflow rate. Adjust the thermostatic control so that the space temperature is within the dead band.	NA7.16.4 Step 2
2.1	Enter Value cfm	Measure and record the exhaust fan system inlet airflow rate (cubic feet per minute).	NA7.16.4 Step 2(a)
2.2	Pass Fail	Confirm that the airflow rate entering fan system for turndown airflow rate is no greater than 60 percent of the exhaust fan system design airflow rate. Select Pass if Step 2.1 less than or equal to 0.60 times Step 1.2, or else select Fail.	NA7.16.4 Step 2(b)
3.0	No Entry	Simulate 60 percent of design airflow rate . Adjust thermostatic control so that the space temperature is within the dead band.	NA7.16.4 Step 3
3.1	Enter Value W	Measure and record fan system power (watts).	NA7.16.4 Step 3(a)
3.2	Pass Fail	Confirm that the fan system power under 60 percent design airflow rate is no greater than 40 percent of the exhaust fan system design airflow rate. Select Pass if Step 3.1 is less or equal to 0.40 times Step 1.3, or else select Fail.	NA7.16.4 Step 3(b)
4.0	Pass Fail	Functional Test Pass Conditions All of the following must be true. Steps 1.0, 2.0, and 3.0 contain 'No Entry.' Steps 1.2, 1.3, 2.1 and 3.1 must record non-zero numerical entries. Steps 1.1, 1.2, 2.2, and 3.2 must record pass.	NA



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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.	Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Lic. No.: License No.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Title
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand that a completed, signed copy of this Certificate of Acceptance shall	5
be posted, or made available with the building permit(s) issued for the building and shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply	Date Submitted to AH1: Date
Does not comply	Bate Submitted to All 5. Bate

If the builder uses wind responsive controls to meet fan system power
consumption requirements, then this acceptance testing is required in addition to
the 2025-CEC-NRCA-PRC-14a-F and 2025-CEC-NRCA-PRC-14b-F. It is
recommended to complete, to the extent possible, both compliance documents
2025-CEC-NRCA-PRC-14a-F and 2025-CEC-NRCA-PRC-14b-F prior to starting this
acceptance test.
Reference Section 140.9(c)3 and Reference Nonresidential Appendix NA7.16.5 and
NA7.16.6.

Table A-1: Construction Inspection

			Code
Step	Entry	Item	Reference
1.0	No Entry	Verify and document the following prior to functional testing:	NA7.16.5
1.1	Pass Fail	Wind speed and direction sensor is factory- calibrated (with calibration certificate) or field calibrated, as specified by Section 140.9(c)3C.	NA7.16.5(a)
1.2	Pass Fail	The sensor is located in a location and at a height that is outside the wake region of nearby structures and experiences similar wind conditions to the free stream environment above the exhaust stacks as specified by Section 140.9(c)3C.	NA7.16.5(b)
1.3	☐ Pass ☐ Fail	The sensor is installed in close proximity to the fan that it will control so that it captures a representative wind speed/direction reading.	NA7.16.5(c)
1.4	Pass Fail	The sensor is wired correctly to the controls to ensure proper control of volume flow rate.	NA7.16.5(d)
1.5	Pass Fail	Wind speed/direction look-up table has been established and matches dispersion analysis results.	NA7.16.5(e)



Step	Entry	Item	Code Reference
1.6	 Airflow Static press Speed/vol Other: 	Verify the methodology to measure volume flow rate is one of the following: airflow sensor, static pressure as proxy, fan speed to volume flow rate curve, or other.	NA7.16.5(f)
2.0	No Entry	Verify that the following measurements are within 10 percent of the corresponding design values found in the documents specified in compliance document 2025-CEC-NRCA-PRC-14b-F, Step 1:	NA7.16.5(g)
2.1	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) at design conditions. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.5(g)1
2.2	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at design conditions. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.5(g)2
2.3	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) at occupied minimum acceptable airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.5(g)3
2.4	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at occupied minimum acceptable airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b- F.	NA7.16.5(g)4
2.5	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at 60 percent of design exhaust fan system airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA- PRC-14b-F.	NA7.16.5(g)5
2.6	Enter Value W/cfm Pass Fail	Calculate watts per cubic feet per minute at design conditions (divide results of Step 2.2 by the results of Step 2.1). Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA- PRC-14b-F.	NA7.16.5(g)6



			Code
Step	Entry	Item	Reference
3.0	Pass Fail	Verify that the measured occupied minimum acceptable exhaust fan system inlet airflow rate is no greater than 60 percent of measured design exhaust fan system airflow rate. Select Pass if Step 2.3 is less than or equal to 0.60 times Step 2.1, or else select Fail.	NA7.16.5(h)
4.0	Pass Fail	Verify that the measured exhaust fan system power at 60 percent of design fan system airflow rate is no greater than 40 percent of measured exhaust fan system power at design exhaust fan system airflow rate. Select Pass if Step 2.5 is less than or equal to 0.40 times Step 2.2, or else select Fail.	NA7.16.5(i)
5.0	Pass Fai	Construction Inspection Pass Conditions All of the following must be true: Steps 1.0 and 2.0 must record 'No Entry'. One option must be selected in Step 1.6. Steps 2.1 through 2.6 must record a non-zero numerical entry and Pass. All other steps must record Pass.	NA

Table B-1: Functional Testing

Table B-1: Functional Testing				
Step	Entry	Functional Test	Code Reference	
1.0	No Entry	Simulate design conditions.	NA7.16.6 Step 1	
1.1	Enter Value cfm	Record airflow rate at the stack (cubic feet per minute).	NA7.16.6 Step 1(a)	
1.2	Enter Value cfm	Record airflow rate entering the exhaust fan system (cubic feet per minute).	NA7.16.6 Step 1(b)	
1.3	Enter Value W	Record exhaust fan system power at maximum wind speed (watts).	NA7.16.6 Step 1(c)	
1.4	No Entry	Restore all curve points.	NA7.16.6 Step 1(d)	
2.0	No Entry	Simulate the minimum occupied airflow rate by inducing a wind speed or overriding curve points.	NA7.16.6 Step 2	
2.1	Enter Value cfm	Record airflow rate at the stack (cubic feet per minute).	NA7.16.6 Step 2(a)	
2.2	Enter Value cfm	Record airflow rate entering the exhaust fan system (cubic feet per minute).	NA7.16.6 Step 2(b)	



Cham	Frature	Functional Test	Code
Step	Entry		Reference
2.3	Pass Fai	Confirm that the airflow rate entering fan system airflow rate at minimum occupied conditions is no greater than 60 percent of the exhaust fan system design airflow rate. Select Pass if Step 2.2 is less than or equal to 0.60 times Step 1.2, or else select Fail.	NA7.16.6 Step 2(c)
3.0	No Entry	Simulate the 60 percent of design airflow rate by inducing wind speed or overriding curve points.	NA7.16.6 Step 3
3.1	Enter Value W	Record exhaust fan system power at 60 percent design airflow rate (watts).	NA7.16.6 Step 3(a)
3.2	Pass Fai	Confirm that the fan system power at 60 percent design airflow rate is no greater than 40 percent of the exhaust fan system airflow rate at maximum wind speed. Select Pass if Step 3.1 is less than or equal to 0.40 times Step 1.3, or else select Fail.	NA7.16.6 Step 3(b)
3.3	No Entry	Restore all curve points.	NA7.16.6 Step 3(c)
4.0	Pass Fai	Functional Test Pass Conditions All of the following must be true. Steps 1.0, 1.4, 2.0, and 3.0 contain 'No Entry'. Steps 1.1, 1.2, 1.3, 2.1, 2.2, and 3.1 must record non-zero numerical entries. Steps 2.3 and 3.2 must record pass.	NA



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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.	Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Lic. No.: License No.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Title
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand that a completed, signed copy of this Certificate of Acceptance shall	5
be posted, or made available with the building permit(s) issued for the building and shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
-----------------------	--------------------	-------------------	--------------------

Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent:If the builder uses contaminant monitoring controls to meet fan system power
consumption requirements, then this acceptance testing is required in addition to
the 2025-CEC-NRCA-PRC-14a-F and 2025-CEC-NRCA-PRC-14b-F. It is
recommended to complete, to the extent possible, both compliance documents
2025-CEC-NRCA-PRC-14a-F and 2025-CEC-NRCA-PRC-14b-F prior to starting this
acceptance test.
Reference Section 140.9(c)3 and Reference Nonresidential Appendix NA7.16.7 and
NA7.16.8.

Table A-1: Construction Inspection

			Code
Step	Entry	Item	Reference
1.0	No Entry	Verify and document the following prior to functional testing:	NA7.16.7
1.1	Pass Fail	Wind speed and direction sensor is factory- calibrated (with calibration certificate) or field calibrated, as specified by Section 140.9(c)3D.	NA7.16.7(a)
1.2	Pass Fail	The sensor is located within each exhaust plenum as specified by Section 140.9(c)3D.	NA7.16.7(b)
1.3	Pass	The sensor is wired correctly to the controls to ensure proper control of volume flow rate.	NA7.16.7(c)
1.4	Pass Fail	Contaminant concentration threshold has been established and matches dispersion analysis results.	NA7.16.7(d)
1.5	 Airflow Static press Speed/vol Other: 	Verify the methodology to measure volume flow rate is one of the following: airflow sensor, static pressure as proxy, fan speed to volume flow rate curve, or other.	NA7.16.7(e)
1.6	Pass Fail	If multiple sensors are present, ensure fan is controlled based on the highest concentration reading.	NA7.16.7(f)
2.0	No Entry	Verify that the following measurements are within 10 percent of the corresponding design values found in the documents specified in compliance document 2025-CEC-NRCA-PRC-14b-F, Step 1:	NA7.16.7(g)



Step	Entry	Item	Code Reference
2.1	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) at design conditions. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.7(g)1
2.2	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at design conditions. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.7(g)2
2.3	Enter Value cfm Pass Fail	Measure and record the inlet airflow rate of the exhaust fan system (cubic feet per minute) at occupied minimum acceptable airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b-F.	NA7.16.7(g)3
2.4	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at occupied minimum acceptable airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA-PRC-14b- F.	NA7.16.7(g)4
2.5	Enter Value W Pass Fail	Measure and record the power of exhaust fan system (watts) at 60 percent of design exhaust fan system airflow rate. Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA- PRC-14b-F.	NA7.16.7(g)5
2.6	Enter Value W/cfm Pass Fail	Calculate watts per cubic feet per minute at design conditions (divide results of Step 2.2 the results of Step 2.1). Indicate pass if this value is within 10 percent of the corresponding design value referenced in Step 1 of 2025-CEC-NRCA- PRC-14b-F.	NA7.16.7(g)6
3.0	Pass Fail	Verify that the measured occupied minimum acceptable exhaust fan system inlet airflow rate is no greater than 60 percent of measured design exhaust fan system airflow rate. Select Pass if Step 2.3 is less than or equal to 0.60 times Step 2.1, or else select Fail.	NA7.16.7(h)



			Code
Step	Entry	Item	Reference
4.0	Pass Fail	Verify that the measured exhaust fan system power at 60 percent of design fan system airflow rate is no greater than 40 percent of measured exhaust fan system power at design exhaust fan system airflow rate. Select Pass if Step 2.5 less than or equal to 0.40 times Step 2.2, or else select Fail.	NA7.16.7(i)
5.0	Pass Fail	Construction Inspection Pass Conditions All of the following must be true: Steps 1.0 and 2.0 must record 'No Entry'. One option must be selected in Step 1.5. Steps 2.1 through 2.6 must record a non-zero numerical entry and Pass. All other steps must record Pass.	NA

Table B-1: Functional Testing

			Code
Step	Entry	Functional Test	Reference
1.0	No Entry	Ensure no contaminant event is present and	NA7.16.8
1.0	NO EIU y	simulate design conditions.	Step 1
1 1	Pass	Verify that the volume flow rate at the stack is at	NA7.16.8
1.1	🔄 Fail	or above the minimum non-event value.	Step 1(a)
1 2	Entor Value ofm	Record airflow rate at the stack (cubic feet per	NA7.16.8
1.2		minute).	Step 1(b)
1 2	Entor Value ofm	Record airflow rate entering the exhaust fan	NA7.16.8
1.5		system (cubic feet per minute).	Step 1(c)
1 /	Entor Value W	Record exhaust fan system power at design	NA7.16.8
1.4		conditions (watts).	Step 1(d)
2.0	No Entry	Cimulate a contaminant quant	NA7.16.8
2.0	NO ETURY	Simulate a contaminant event.	Step 2
2.1	Pass	Verify that the volume flow rate at the stack is at	NA7.16.8
2.1	🗌 Fail	or above the minimum non-event value.	Step 2(a)
2.0	No Entry	Simulate the minimum accuried airflow rate	NA7.16.8
5.0	NO EIIU y		Step 3
2.1	Entor Value cfm	Record airflow rate at the stack (cubic feet per	NA7.16.8
5.1		minute).	Step 3(a)
2 7	Entor Value ofm	Record airflow rate entering the exhaust fan	NA7.16.8
5.2		system (cubic feet per minute).	Step 3(b)
		Confirm that the airflow rate entering fan system	
		airflow rate at minimum occupied conditions is no	
22	Pass	greater than 60 percent of the exhaust fan system	NA7.16.8
3.3	🔄 Fail	design airflow rate.	Step 3(c)
		Select Pass if Step 3.2 is less than or equal to 0.60	
		times Step 1.3, or else select Fail.	



			Code
Step	Entry	Functional Test	Reference
4.0	No Entry	Simulate the 60 percent of design airflow rate.	NA7.16.8 Step 4
4.1	Enter Value W	Record exhaust fan system power at 60 percent design airflow rate (watts).	NA7.16.8 Step 4(a)
4.2	Pass Fail	Confirm that the fan system power at 60 percent design airflow rate is no greater than 40 percent of the exhaust fan system airflow rate at maximum wind speed. Select Pass if Step 4.1 is less than or equal to 0.40 times Step 1.4, or else select Fail.	NA7.16.8 Step 4(b)
5.0	Pass Fai	Functional Test Pass Conditions All of the following must be true. Steps 1.0, 2.0, 3.0, and 4.0 contain 'No Entry'. Steps 1.2, 1.3, 1.4, 3.1, 3.2, and 4.1 must record non-zero numerical entries. Steps 1.1, 2.1, 3.3, and 4.2 must record pass.	NA



Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance substantiates that the 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Construction inspection and functional testing comply	Data Submitted to AUJ, Data
Does not comply	Date Submitted to AnJ. Date

Intent: This document is used to demonstrate compliance with acceptance requirements in Section 140.9(c)4 and Reference Nonresidential Appendix NA7.17 for fume hood automatic sash closure systems. Attach additional copies of pages 1 through 2, as required, for all fume hoods that must be tested.

Fume Hood Location

Building: Floor: Room: Fume Hood Reference:	
---	--

Table A: Construction Inspection

Prior to functional testing, verify and document all the following

Step	Entry	Item	Code Reference
1.0	Pass Fail	Sash zone presence sensor factory calibration certificate is valid.	NA7.17.1(a)
2.0	Pass Fail	Sash obstruction sensor factory calibration certificate is valid.	NA7.17.1(b)
3.0	Pass Fail	Presence sensor has been located and adjusted to minimize false signals.	NA7.17.1(c)
4.0	Pass	Presence sensor pattern does not enter adjacent zones.	NA7.17.1(d)
5.0	Pass	Obstruction sensor has been installed according to manufacturer instructions.	NA7.17.1(e)
6.0	Pass	Presence sensor has been installed according to manufacturer instructions.	NA7.17.1(f)
7.0	Pass	Check if Construction Inspection complies with all requirements.	N/A



 Table B: Functional Testing

 For each sash closure control system to be tested, perform the following:

-		__ .	Code
Step	Entry	Functional Test	Reference
1.0	Pass	Test auto close operation.	NA7.17.2(a) 140.9(c)4Ai
1.1	Pass Fail	Open sash to maximum position or sash stop, whichever is lower. Vacate zone presence sensor range to simulate unoccupied state. Confirm sash closes automatically to minimum, closed position within 5 min.	NA7.17.2(a)1 NA7.17.2(a)2
1.2	Pass Fail	Simulate movement in an area adjacent to sash zone. Verify sash does not open from movement in adjacent zones.	NA7.17.2(a)3
2.0	Pass	Confirm manual control operation: Open test.	NA7.17.2(b) 140.9(c)4Aiv
2.1	Pass Fail	If equipped, disable any auto open control mode. Close sash to its minimum, closed position. Simulate movement in the sash zone. Confirm sash does not open automatically.	NA7.17.2(b) Open test 1-2
2.2	Pass	If equipped, open the sash using a push button, foot pedal or similar mechanism. Confirm sash raises to the maximum position or sash stop.	NA7.17.2(b) Open test 3
3.0	Pass	Confirm manual control operation: Closed test.	NA7.17.2(b)
3.1	Pass Fail	If equipped, close the sash using a push button, foot pedal, or similar mechanism. Otherwise, close sash by hand. Ensure sash closes to minimum, closed height.	NA7.17.2(b) Closed test 1
3.2	Pass Fail	Open sash. If equipped, close sash using push button or similar mechanism. While sash is closing, trigger the stop button. Verify sash stops immediately when stop button is activated.	NA7.17.2(b) Closed test 2
4.0	Pass	Confirm sash object detection operation	NA7.17.2(c)
4.1	Pass Fail	Open sash to maximum position or sash stop, whichever is lower. Place transparent object in pathway. Vacate zone presence sensor range to simulate unoccupied state. Verify sash does not close automatically within 5 min.	NA7.17.2(c)1,2
4.2	Pass Fail	Open sash to maximum position or sash stop, whichever is lower without any obstructions in path of sash. Vacate zone presence sensor range to simulate unoccupied state. When sash begins to close, insert transparent object into path and verify sash stops before contact.	NA7.17.2(c)3,4



Step	Entry	Functional Test	Code Reference
5.0	Pass	Confirm sash net downward force	NA7.17.2(d)
5.1	Enter Value Ibs.	Disable object detection controls. Place scale in sash opening of fume hood. Close sash manually using push button, foot pedal, or similar mechanism. Measure sash closing force in lbs. Closing force shall not exceed 10 lbs.	NA7.17.2(d)1-4
5.2	Enter Value Ibs.	Leaving scale in place, open sash to maximum position or sash stop, whichever is lower. Simulate unoccupied state by vacating sash zone. Measure sash closing force in lbs. Closing force shall not exceed 10 lbs.	NA7.17.2(d)5 140.9(c)4Aii
6.0	Pass Fail	Check pass if Functional Test complies with all requirements. Check fail if and Functional Tests do not pass.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



2025-CEC-NRCA-PRC-16-F

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit #
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply	Data Submitted to AH1: Data
Does not comply	Date Submitted to And. Date

Intent: To demonstrate adiabatic condensers and condenser fan motor variable speed controls comply with the requirements of the Energy Code. Reference NRCC-PRC-E. Submit one Certificate of Acceptance for each system that must demonstrate compliance. Reference Sections 120.6(a)4, 120.6(a)7E, 140.4(h), 170.2(c)4F, and NA7.10.3.3.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass	Verify the control system minimum Saturated Condensing Temperature (SCT) setpoint is at or below 70°F.	NA7.10.3.3.1(a)
2.0	Pass	Verify the control system maximum SCT setpoint (if used) is at or near the system design SCT.	NA7.10.3.3.1(b)
3.0	Pass	Verify accuracy of refrigerant pressure-temperature conversions and consistent use of either temperature or pressure for the controlled variable setpoint in the control system.	NA7.10.3.3.1(c)
4.0	☐ Pass ☐ Fail	Verify the discharge pressure sensor (or condenser pressure if used) reads accurately, using a National Institute of Standards and Technology (NIST) traceable reference pressure gauge or meter. At the minimum, the discharge pressure sensor accuracy shall be verified at two different pressures within the typical operating range. Calibrate if needed. Replace if outside manufacturer's recommended calibration range and retest.	NA7.10.3.3.1(d)
5.0	Pass Fail	Verify the ambient dry bulb temperature using a NIST traceable instrument, including verification of at least two different ambient readings. Calibrate if needed. Replace if outside manufacturer's recommended calibration range and retest.	NA7.10.3.3.1(e)
6.0	Pass	Verify all ambient dry bulb temperature sensors are not mounted in direct sunlight or are provided within a suitable solar shield.	NA7.10.3.3.1(f)

Step	Entry	Item	Code Reference
7.0	Pass	Verify that all sensor readings used by the condenser controller convert or calculate to the correct conversion units and are displayed at the controller (e.g., observed pressure reading is correctly converted to appropriate saturated temperature, etc.).	NA7.10.3.3.1(g)
8.0	Pass	Verify that all fan motors are operational and rotating in the correct direction.	NA7.10.3.3.1(h)
9.0	Pass Fail	Verify that all condenser fan speed controls operate automatically in response to changes in both pressure (SCT) and ambient temperature.	NA7.10.3.3.1(i)
10.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B: Functional Testing

			Code
Step	Entry	Functional Testing	Reference
0	Pass Fail	Confirm that the cooling load and ambient conditions allow for typical system operation with the condenser in dry mode.	NA7.10.3.3.2
1.0	No Entry	Verify mechanical controls and other strategies will not affect tests using steps 1.1, 1.2, 1.3, and 1.4.	NA7.10.3.3.2 Step 1
1.1	Pass Fail	Verify condenser pressure low-limit holdback and/or bypass regulating valves, if any, are set below the minimum SCT setpoint.	NA7.10.3.3.2 Step 1(a)
1.2	Pass Fail	Turn off any heat reclaim controls and any intermittent defrost pressure offset strategies that would affect condenser setpoint control.	NA7.10.3.3.2 Step 1(b)
1.3	Enter Value	Change the adiabatic mode switching temperature in the controller to just below current ambient conditions and document the adiabatic switching setpoint. (°F)	NA7.10.3.3.2 Step 1(c)
1.4	Pass Fail	Verify adiabatic pads are completely dry before beginning tests.	NA7.10.3.3.2 Step 1(c)
2.0	No Entry	Verify stable fan operation at a mid-range speed level using steps 2.1 and 2.2.	NA7.10.3.3.2 Step 2
2.1	Pass Fail	Verify the condenser control value is operating in the variable setpoint control range (i.e., above the minimum SCT setpoint and below the maximum SCT setpoint).	NA7.10.3.3.2 Step 2(a)



Ston	Entry	Eunctional Testing	Code
2.2	Pass Fail	Observe control operation for at least 30 minutes to confirm stable control operation, as shown by condenser fan speed varying as compressor capacity changes, and not ranging from maximum to minimum fan speed or constant "hunting".	NA7.10.3.3.2 Step 2(b)
3.0	No Entry	Identify control Temperature Difference using steps 3.1, 3.2, 3.3, and 3.4.	NA7.10.3.3.2 Step 3
3.1	Enter Value °F Enter Value psig Disch Press Cond Press	Record the current outdoor ambient air dry bulb and refrigeration system condensing temperature/condensing pressure readings from the control system. Note whether discharge pressure or a dedicated condenser pressure sensor is used for condenser pressure control.	NA7.10.3.3.2 Step 3(a)
3.2	Enter Value psig Enter Value °F(TD)	Document current head pressure control setpoints, including the Temperature Difference (TD) setpoint.	NA7.10.3.3.2 Step 3(b)
3.3	Enter Value °F(TD)	Calculate and record the actual observed TD, defined as the difference between the dry bulb temperature and the refrigeration system SCT.	NA7.10.3.3.2 Step 3(c)
3.4	Pass Fail	Confirm agreement between the current control system TD setpoint and the observed TD. If values are different, address and correct controls system methods.	NA7.10.3.3.2 Step 3(d)
4.0	No Entry	Test adjusted control Temperature Difference (Setpoint 1) using steps 4.1, 4.2, 4.3, 4.4, and 4.5.	NA7.10.3.3.2 Step 4
4.1	Enter Value	Enter a smaller TD value into the control system sufficient to cause an observable response, such as 1 to 2 degrees smaller, but not small enough to cause the system to operate continuously at 100% fan speed. Record this value as TD Test Setpoint 1. (°F TD)	NA7.10.3.3.2 Step 4(a)
4.2	Pass Fail	Observe change in control system operation which should include an increase in fan speed and a decrease in condensing temperature.	NA7.10.3.3.2 Step 4(b)
4.3	Enter Value psig Enter Value °F(TD)	Allow time for the control system to achieve stable operation. Document current head pressure control setpoint and TD.	NA7.10.3.3.2 Step 4(c)-(d)
4.4	Enter Value	Calculate and record the actual observed TD, defined as the difference between the wet bulb temperature and the refrigeration system SCT. (°F TD)	NA7.10.3.3.2 Step 4(e)



			Code
Step	Entry	Functional Testing	Reference
4.5	Pass Fail	Confirm agreement between the current control system TD setpoint and the observed TD. If values are different, address and correct control system methods.	NA7.10.3.3.2 Step 4(f)
5.0	No Entry	Test adjusted control Temperature Difference (Setpoint 2) using steps 5.1 through 5.7.	NA7.10.3.3.2 Step 5
5.1	Enter Value	Enter a TD value into the control system that is different from TD Test Setpoint 1 sufficient to cause an observable response. Record this value. (°F TD)	NA7.10.3.3.2 Step 5
5.2	Pass Fail	Observe change in control system operation which should include an increase in fan speed and a decrease in condensing temperature.	NA7.10.3.3.2 Step 5(a)
5.3	Enter Value	Allow time for the control system to achieve stable operation. Record the current outdoor ambient dry bulb temperature. (°F)	NA7.10.3.3.2 Step 5(b)-(c)
5.4	Enter Value °F Enter Value psig	Record the current refrigeration system condensing temperature/condensing pressure readings from the control system.	NA7.10.3.3.2 Step 5(d)
5.5	Enter Value psig Enter Value °F(TD)	Document current head pressure control setpoints, including the TD setpoint.	NA7.10.3.3.2 Step 5(e)
5.6	Enter Value	Calculate and record the actual observed TD, defined as the difference between the dry bulb temperature and the refrigeration system SCT. (°F TD)	NA7.10.3.3.2 Step 5(f)
5.7	Pass Fail	Confirm agreement between the current control system TD setpoint and the observed TD. If values are different, address and correct control system methods.	NA7.10.3.3.2 Step 5(g)
6.0	Enter Value	Document current minimum condensing temperature setpoint using steps 6.1, 6.2, 6.3, and 6.4. (°F)	NA7.10.3.3.2 Step 6
6.1	No Entry	Using the control system, change the minimum condensing temperature setpoint to a value greater than the current operating condensing temperature.	NA7.10.3.3.2 Step 6
6.2	Pass Fail	Condenser fan controls modulate to decrease capacity.	NA7.10.3.3.2 Step 6(a)
6.3	Pass	All condenser fans serving common condenser loop modulate in unison.	NA7.10.3.3.2 Step 6(b)
6.4	Pass Fail	Condenser fan controls stabilize within a 5- minute period.	NA7.10.3.3.2 Step 6(c)



Step	Entry	Functional Testing	Code Reference
7.0	No Entry	Using the control system, reset the system head pressure controls, fan motor controls and minimum condensing temperature control setpoint to original settings documented in Steps 3 and 6.	NA7.10.3.3.2 Step 7
8.0	No Entry	Restore any heat reclaim, floating suction pressure, floating head pressure and defrost functionality. Reset the minimum condensing temperature setpoint to the value documented in Step 6.	NA7.10.3.3.2 Step 8
9.0	Pass Fail	Check "Pass" if all Functional Test results comply with requirements.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	Company Name
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
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	Titla
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	


Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value Flo	oor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply Date Submitted to AHJ: Date

Intent: The purpose of these tests is to confirm proper operation of gas cooler control, including variable speed fan operation and variable setpoint control logic, which are both important elements of floating head pressure control, with the intent to operate with the lowest total system energy (considering both compressors and gas cooler fan power) through the course of the year. Reference NRCC-PRC-E. Submit one Certificate of Acceptance for each system that must demonstrate compliance. Reference Sections 120.6(a)5B, 120.6(a)7G, 120.6(a)8, Table 120.6-C, 120.6(b)2C, 120.6(b)5, Table 120.6-E, 120.6(b)6.

Note: transcritical CO₂ refrigeration systems are unique in that they can operate in one of two modes: subcritical operation and supercritical operation. Subcritical operation generally occurs during periods where ambient conditions are below 75°F to 80°F, where high pressure CO₂ vapor will condense in the gas cooler. Supercritical operation generally occurs during periods where ambient conditions are above 75°F to 80°F, where the high-pressure CO₂ vapor will not condense (or partially condense) in the gas cooler, and pressure and temperature can vary semiindependently during the heat rejection process. Because these two modes of operation are based on ambient conditions, it may not be possible for the field technician to observe both subcritical and supercritical control strategies during a single acceptance test.

The field technician shall perform either the functional test outlined in NA7.20.1.1.2 or NA7.20.1.1.3 depending on the ambient conditions and resulting system operating mode at the time of the test. The construction inspection must be completed regardless of ambient conditions.



Table A: Construction Inspection - Air-Cooled and Adiabatic Gas Coolers

Step	Entry	Item	Code Reference
1.0	Pass	Verify the control system gas cooler saturated condensing temperature (SCT) setpoint is at or below 60°F, or at or below 70°F for systems with a design saturated suction temperature (SST) of greater than or equal to 30°F.	NA7.20.1.1.1(a)
2.0	Pass	Verify accuracy of refrigerant pressure-temperature conversions and consistent use of either temperature or pressure for the controlled variable setpoint in the control system.	NA7.20.1.1.1(b)
3.0	Pass	Verify that the subcritical condensing temperature has an equivalent pressure. Verify accuracy of refrigerant pressure-temperature conversions and consistent use of temperature/pressure for the controlled variable setpoint in the control system. See Step 3.1, 3.2, and 3.3.	NA7.20.1.1.1(b)
3.1	Pass Fail	Verify that the subcritical condensing temperature has an equivalent pressure.	NA7.20.1.1.1(b)1
3.2	Pass	Verify that the pressure/temperature used in the control system is similar to the units used in the setpoint value.	NA7.20.1.1.1(b)2
3.3	Pass Fail	Documentation of conversion values are available if it is necessary to convert between temperature and pressure values.	NA7.20.1.1.1(b)3
4.0	Pass	Verify the gas cooler outlet temperature sensor reads accurately (Use at least two readings).	NA7.20.1.1.1(c)
5.0	Pass Fail	Verify the discharge pressure sensor reads accurately (Use at least two readings).	NA7.20.1.1.1(d)
6.0	Pass	Verify the ambient dry bulb temperature sensor reads accurately (Use at least two readings).	NA7.20.1.1.1(e)
7.0	Pass	Verify the ambient dry bulb temperature sensor is not mounted in direct sunlight or is provided with a suitable solar shield.	NA7.20.1.1.1(f)
8.0	Pass	Verify that all sensor readings used by the gas cooler controller display correct values at the controller, as well as derived values.	NA7.20.1.1.1(g)
9.0	Pass	Verify that all fan motors are operational and rotating in the correct direction.	NA7.20.1.1.1(h)
10.0	Pass	Verify that gas cooler fan speed controls are operational and controlling all gas cooler fan motors in unison.	NA7.20.1.1.1(i)
11.0	Pass	Verify that all speed controls operate automatically in response to changes in pressure, gas cooler outlet temperature, and ambient dry bulb or precool air temperature.	NA7.20.1.1.1(j)



CALIFORNIA ENERGY COMMISSION TRANSCRITICAL REFRIGERATION

Step	Entry	Item	Code Reference
12.0	Pass	Verify the installation of the gas cooler holdback valve, which may be located near the inlet of the intermediate pressure vessel or near the outlet of the gas cooler.	NA7.20.1.1.1(k)
13.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A



Table B: Functional Testing - Gas Cooler (Option A: Control Range Operation)

Planning: The system cooling load must be sufficiently high, and ambient conditions sufficiently below the critical point, to operate subcritically with all gas cooler fans in operation and observe controls in average conditions. Account for weather conditions in scheduling testing by, if necessary, artificially increasing or decreasing evaporator loads in order to perform the Functional Testing at typical system conditions.

Step	Entry	Functional Test	Code Reference
1.0	Complete	Verify mechanical controls and other strategies will not affect tests.	NA7.20.1.1.2 Step 1
1.1	Complete	Turn off any heat reclaim controls and any intermittent defrost pressure offset strategies that would affect gas cooler setpoint control.	NA7.20.1.1.2 Step 1(a)
1.2	Complete	If testing an adiabatic gas cooler, adjust setpoints to ensure that the gas cooler stays in "dry" mode or "precool" mode consistently throughout test.	NA7.20.1.1.2 Step 1(b)
2.0	Pass Fail	Operate in control range and verify stable control.	NA7.20.1.1.2 Step 2
2.1	☐ Pass ☐ Fail	Verify the gas cooler control value is operating in the variable setpoint control range, i.e. above the minimum SCT setpoint and below the maximum SCT setpoint. (If necessary, increase or decrease system load and if system is observed at the minimum SCT, temporarily adjust the minimum SCT to a lower value, if the refrigeration system design will allow. The control temperature difference (TD) can also be increased to result in a higher control value.)	NA7.20.1.1.2 Step 2(a)
2.2	Pass Fail	Observe control operation for at least 30 minutes to confirm stable control operation, as shown by gas cooler fan speed varying as compressor capacity changes, and not ranging from maximum to minimum fan speed or constant "hunting". If required, adjust control response setpoints to achieve stable operation.	NA7.20.1.1.2 Step 2(b)
3.0	No Entry	If applicable, identify control TD. Note: if controller uses another strategy for controlling gas cooler operation, enter "N/A".	NA7.20.1.1.2 Step 3
3.1	Temp.	Record the current outdoor ambient dry bulb or precool air temperature. (°F)	NA7.20.1.1.2 Step 3(a)
3.2	Enter Value Psig	Record the current refrigeration system condensing temperature or condensing pressure readings from the control system. (°F or psig)	NA7.20.1.1.2 Step 3(a)
3.3	Discharge	Record whether discharge pressure or a dedicated gas cooler pressure sensor is used for gas cooler pressure control.	NA7.20.1.1.2 Step 3(a)



Step	Entry	Functional Test	Code Reference
3.4	Set Point	Document current head pressure control setpoint. (psig)	NA7.20.1.1.2 Step 3(b)
3.5	TD Set Point	If applicable, document gas cooler TD setpoint (°F) or enter "N/A."	NA7.20.1.1.2 Step 3(b)
3.6	Observ. TD	Calculate and record the actual observed TD, defined as the difference between the ambient dry bulb temperature or precool air temperature and the refrigeration system SCT. (°F)	NA7.20.1.1.2 Step 3(c)
3.7	Pass Fail N/A	If applicable, confirm agreement between the current control system TD setpoint and the observed TD.	NA7.20.1.1.2 Step 3(d)
4.0	No Entry N/A	If applicable, test adjusted control TD.	NA7.20.1.1.2 Step 4
4.1	TD Set Pt. 1	Enter a smaller TD value into the control system, sufficient to cause an observable response, such as 1-2 degrees smaller, but not small enough to cause system to operate continuously at 100% fan speed. Record this value as TD Test Setpoint 1. (°F)	NA7.20.1.1.2 Step 4(a)
4.2	Pass Fail	Verify a change in control system operation which should include an increase in fan speed and a decrease in condensing temperature.	NA7.20.1.1.2 Step 4(b)
4.3	No Entry	Allow time for control system to achieve stable operation.	NA7.20.1.1.2 Step 4(c)
4.4	Press Set Pt.	Document current head pressure control setpoint. (psig)	NA7.20.1.1.2 Step 4(d)
4.5	TD Set Pt.	If applicable, document current gas cooler TD setpoint (°F) or enter "N/A".	NA7.20.1.1.2 Step 4(d)
4.6	Observ. TD	Calculate and record the actual observed TD, defined as the difference between the ambient dry bulb temperature or precool air temperature and the refrigeration system SCT. (°F)	NA7.20.1.1.2 Step 4(e)
4.7	Pass Fail N/A	If applicable, verify that the current control system TD matches the observed TD.	NA7.20.1.1.2 Step 4(f)
4.8	TD Set Pt. 2	If applicable, enter a smaller TD value into the control system (°F), sufficient to cause an observable response, such as 1-2 degrees smaller, but not small enough to cause system to operate continuously at 100% fan speed. Record this value as TD Test Setpoint 2 or enter "N/A."	NA7.20.1.1.2 Step 4(g)
4.9	Pass Fail	Verify a change in control system operation which should include an increase in fan speed and a decrease in condensing temperature.	NA7.20.1.1.2 Step 4(g)



Step	Entry	Functional Test	Code Reference
4.10	No Entry	Allow time for control system to achieve stable operation.	NA7.20.1.1.2 Step 4(g)
4.11	Press Set Pt.	Document current head pressure control setpoint. (psig)	NA7.20.1.1.2 Step 4(g)
4.12	TD Set Pt. N/A	If applicable, document current gas cooler TD setpoint (°F) or enter "N/A".	NA7.20.1.1.2 Step 4(g)
4.13	Observ. TD	Calculate and record the actual observed TD, defined as the difference between the ambient dry bulb temperature or precool air temperature and the refrigeration system SCT. (°F)	NA7.20.1.1.2 Step 4(g)
4.14	Pass Fail N/A	If applicable, verify that the current control system TD matches the observed TD.	NA7.20.1.1.2 Step 4(g)
5.0	Pass	Verify that all fans operate in unison.	NA7.20.1.1.2 Step 5
6.0	No Entry	Restore setpoints.	NA7.20.1.1.2 Step 6
6.1		Restore heat reclaim and defrost setpoints.	NA7.20.1.1.2 Step 6(a)
6.2	Restored	If applicable, restore the minimum condensing temperature setpoints.	NA7.20.1.1.2 Step 6(b)
6.3	Restored	If applicable, reset adiabatic mode controls to original values.	NA7.20.1.1.2 Step 6(c)
7.0	Pass	Check Pass if Functional Test Compliance Results complies.	N/A



Table C: Functional Testing - Gas Cooler (Option B: Supercritical Operation)

Planning: Ambient conditions must be sufficiently above the critical point to operate supercritically. Account for weather conditions in scheduling testing by, if necessary, artificially increasing or decreasing evaporator loads in order to perform the Functional Testing at typical system conditions.

Step	Entry	Functional Test	Code Reference
1.0	Complete	Verify mechanical controls and other strategies will not affect tests.	NA7.20.1.1.3 Step 1
1.1	Complete	Turn off any heat reclaim controls and any intermittent defrost pressure offset strategies that would affect gas cooler setpoint control.	NA7.20.1.1.3 Step 1(a)
1.2	Complete	If testing an adiabatic gas cooler, adjust setpoints to ensure that the gas cooler stays in "dry" mode or "precool" mode consistently throughout test.	NA7.20.1.1.3 Step 1(b)
2.0	Pass	Verify through controls screens that over a 30-minute period of supercritical operation, the gas cooler holdback valve modulates its opening in response to changes in ambient dry bulb or precool temperature.	NA7.20.1.1.3 Step 2
3.0	No Entry	Restore setpoints.	NA7.20.1.1.2 Step 3
3.1	Restored N/A	Restore heat reclaim and defrost setpoints.	NA7.20.1.1.2 Step 3(a)
3.2	Restored	If applicable, reset adiabatic mode controls to original values.	NA7.20.1.1.2 Step 3(b)
4.0	Pass	Check Pass if Functional Test Compliance Results complies.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I assert the following under penalty of perjury, under the laws of the State of California: 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	Name Company Name Title Phone Signature Date Signed
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.	
I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Summary of tested and compliant steam traps	Data Submitted to AU1: Data
Installation requires remediation– NOT code compliant	Date Submitted to And. Date

Intent:Per Section 120.6(i), this acceptance test applies to steam traps in new industrial
facilities and new steam traps added to support new, nonreplacement, process
equipment in existing industrial facilities where the installed steam trap operating
pressure, which is the steam pressure entering the steam trap during normal
design operating conditions, is greater than 15 psig and the total combined
connected boiler input rating is greater than 5 million Btu/hr.
However, steam traps where steam is diverted to a steam system of lower pressure
for use when the steam trap fails to open are not required to be tested with this
acceptance test.
Reference Section 120.6(i) and NA7.19.

Table A-1: Construction Inspection

Verify and document the following **steam trap system** capabilities prior to any functional testing:

Step	Entry	Item	Code Reference
1.0	Pass Fail	Verify that the distribution system steam trap arrangement and connected steam line operating pressure subject to 120.6(i) were installed as designed including the presence of monitoring equipment, strainer, and blow-off valve.	NA7.19.1.1(a)
2.0	Pass Fail	Visual confirmation of the central steam trap monitoring system installation, operation and programmed as designed.	NA7.19.1.1(b)
3.0	Pass Fail	Confirm the central steam trap monitoring system displays status of all installed steam trap sensors with a descriptive label or cross- references to a look-up table with location of sensor.	NA7.19.1.1(c)
4.0	Pass	Check pass if each construction inspection show 'pass' indicating that it complies with all requirements. Check fail if any inspection does not pass and remediate the steam trap system.	N/A

Table A-2: Summary of Acceptance Test Results

Each row in Table A-2 is a summary of the acceptance test performed for either an individual steam trap (NRCA-PRC-18b-F) or a sample group of up to 7 steam traps (NRCA-PRC-18c-F). Each tested steam trap must be identified. If the tested steam trap represents a sample group, the sample group must be identified (enter 'individual' for individually tested steam traps). The number of steam traps in the sample group must be entered; for individual testing, enter 1. The compliance status of each tested steam trap must be identified. For any steam trap that fails to comply with the acceptance test (NRCA-PRC-18b-F or NRCA-PRC-18c-F), the technician must remediate the installation until it is code compliant. If it cannot be made code compliant, the technician must select 'Remediation Required.'

Tested Steam		Number of Steam	
Тгар	Sample Group	Traps in Group	Compliance Status
Identify Steam Tran	Identify Sample Group	No. of Steam Trans	Code Compliant
		No. of Steam haps	Remediation Required
Identify Steam Tran	Identify Sample Group	No. of Steam Trans	Code Compliant
		noi or occum maps	Remediation Required
Identify Steam Tran	Identify Sample Group	No. of Steam Trans	Code Compliant
			Remediation Required
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	Code Compliant
			Remediation Required
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	Code Compliant
			Remediation Required
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
			Remediation Required
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
			Remediation Required
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
	and a second second		
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
	- / FP	• P •	
Identify Steam Trap	Identify Sample Group	No. of Steam Traps	
			Kemediation Required

Table A-3: Steam Trap System Status

To pass, all tested steam traps must be code compliant in Table A-2. If not code compliant, remediate tested steam trap until it is code compliant. If it cannot be remediated further and is not code compliant, the system fails.

	Pass
	Fail

Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction	
Name: Project Name	Enforcement Agency: Agency	
Address: Project Address	Permit Number: Permit Number	
City, Zip Code: City, Zip Code	Permit Application Date: Date	

 Steam trap passes all tests and complies. Steam trap fails at least one test and does not comply. Steam Trap: Identify Steam Trap Tested 	Date Submitted to AHJ: Date
Steam map: Identity Steam map rested	

Intent: This certificate of acceptance may only be completed for individually tested steam traps and must accompany NRCA-PRC-18a-F. Steam systems that include up to seven (7) steam traps are required to test each steam strap using this certificate of acceptance. Sample groups are NOT permitted for steam systems that include seven or fewer steam traps. One NRCA-PRC-18b-F must be completed for each steam trap tested. For steam systems with more than seven (7) steam traps, sample groups are permitted using NRCA-PRC-18c-F. Reference Section 120.6(i) and NA7.19.

Table B: Functional Testing

The tested steam trap must pass all tests listed in Table B. If the tested steam trap fails any test listed in Table B, the issue must be remedied until the steam trap passes.

			Code
Step	Entry	Functional Test	Reference
1.0	Pass	Identify the status of the steam trap. If the steam line is operational select 'pass.' Otherwise if it is nonoperational at the time of the functional test, select 'fail.'	NA7.19.1.2 Step 1
2.0	Pass	Confirm that central steam trap monitoring system is receiving a signal that reflects the status of the steam trap.	NA7.19.1.2 Step 2
3.0	Pass	Generate a fault at the steam trap sensor for each tested steam trap and select 'pass.' If unable to generate a fault, select 'fail.'	NA7.19.1.2 Step 3
4.0	Pass Fail	Verify that the central steam trap monitoring system detects the fault and reports the fault detection to the operator.	NA7.19.1.2 Step 4
5.0	Pass Fail	Reconnect steam trap sensor and verify the fault detection sensor is communicating with the central steam trap monitoring system.	NA7.19.1.2 Step 5
6.0	Pass Fail	Verify that central steam trap monitoring system does not report a fault.	NA7.19.1.2 Step 6
7.0	Pass	Return system to initial operating conditions.	N/A
8.0	Pass	Check pass if all Functional Test Compliance Results are 'pass.' Check fail if any Functional Test Compliance Results does not comply.	N/A

Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction	
Name: Project Name	Enforcement Agency: Agency	
Address: Project Address	Permit Number: Permit Number	
City, Zip Code: City, Zip Code	Permit Application Date: Date	

Steam trap sample group passes all tests and complies.	
Steam trap sample group fails and does not comply.	Date Submitted to AHJ: Date
Steam Trap Sample Group: Identify Steam Trap Sample Group	

Intent:This certificate of acceptance may optionally be completed for steam systems with
more than seven (7) steam traps and must accompany NRCA-PRC-18a-F. One
NRCA-PRC-18c-F must be completed for each sample group. Steam systems that
include up to seven (7) steam traps are required to use certificate of acceptance
NRCA-PRC-18b-F and may not use sampling.
If the first steam trap in the sample group passes the acceptance test, the
remaining steam traps in the sample group also pass. If the first steam trap in the
sample group fails, the rest of the steam traps in that group must be tested
individually using NRCA-PRC-18b-F and the failed steam trap must be remediated
until it passes as well. Reference Section 120.6(i) and NA7.19.

Table B-1: Sample Group Members

List each steam trap in this sample group (minimum 1, limit 7) and indicate which steam trap was tested.

Steam Trap	Tested (at least one must be tested)	
Steam Trap Identification		
Steam Tran Identification		
Steam hap identified on	Not Tested	
Steam Tran Identification	Tested	
Steam map Identification	Not Tested	
Steam Tran Identification	Tested	
Steam map Identification	Not Tested	
Stoom Trop Idoptification	Tested	
Steam map Identification	Not Tested	
Stoom Trop Identification	Tested	
	Not Tested	
Stoom Trop Identification	Tested	
	Not Tested	



Table B-2: Functional Testing

If any tested steam trap fault detection sensor fails it must be remediated until it passes the test.

Step	Entry	Functional Test	Code Reference
1.0	Pass	Identify the status of the steam trap. If the steam line is operational select 'pass.' Otherwise if it is nonoperational at the time of the functional test, select 'fail.'	NA7.19.1.2 Step 1
2.0	Pass	Confirm that central steam trap monitoring system is receiving a signal that reflects the status of the steam trap.	NA7.19.1.2 Step 2
3.0	Pass	Generate a fault at the steam trap sensor for each tested steam trap and select 'pass.' If unable to generate a fault, select 'fail.'	NA7.19.1.2 Step 3
4.0	Pass	Verify that the central steam trap monitoring system detects the fault and reports the fault detection to the operator.	NA7.19.1.2 Step 4
5.0	Pass	Reconnect steam trap sensor and verify the fault detection sensor is communicating with the central steam trap monitoring system.	NA7.19.1.2 Step 5
6.0	Pass	Verify that central steam trap monitoring system does not report a fault.	NA7.19.1.2 Step 6
7.0	Pass	Return system to initial operating conditions.	N/A
8.0	Pass Fail	Check pass if all Functional Test Compliance Results are 'pass.' Check fail if any Functional Test Compliance Results are 'fail'. If failed, then all members of the steam trap group (Table B-1) must be tested individually using NRCA- PRC-18b-F and the tested steam trap must be remediated until it passes.	N/A

Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



CALIFORNIA ENERGY COMMISSION FENESTRATION ACCEPTANCE 2025-CEC-NRCA-ENV-02-F

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

 Construction inspection complies Does not comply 	Date Submitted to AHJ: Date	

Intent:	Each fenestration product must provide an NFRC Label Certificate or the California Energy Commission's Fenestration Certificate to identify the thermal performance of each fenestration product being installed (NA7.4.1) and Section 10-111. All site-built fenestration must include the California Energy Commission's Fenestration Certificate. The labels must be located at the job site for verification by the enforcement agency. In addition, the responsible party must fill out the Fenestration Acceptance Certificate. The responsible
	party must fill out the Fenestration Acceptance Certificate. The responsible party must verify the thermal performance of each specified fenestration product being installed matches the label certificate, energy compliance documentation and building plans. A copy of the certificate and any associated documentation must be given to the building owner and the enforcement agency for their records. The Fenestration Certificate of Compliance is used to document Fenestration products not certified or rated by NFRC by using the Commission's Default Table values in Section 110.6-A and Table 110.6-B or the
	calculated values as indicated Nonresidential Appendix NA6.

Responsible	The responsible party must verify the following (NA7.4.1.1 and Section 10-			
Party	103(a)):			
	 a) Verify access to an enforcement agency approved Fenestration 			
	Certificate of Compliance (NRCC-ENV-E or NRCC-PRF-E) and a			
	completed Certificate of Installation (NRCI-ENV-01-E); and			
	b) For non-rated fenestration, record the U-factor, solar heat gain			
	coefficient (R)SHGC, and visible light transmitted (VT) for the installed			
	fenestration product(s); and			
	c) For rated fenestration, record the installed fenestration product(s)			
	NFRC's Certified Product Directory (CPD) number or Certificate Number			
	when the Component Modeling Approach Label is submitted; and			
	d) Verify that the delivery receipt, purchase order, or detailed receipt			
	matches the delivered fenestration product(s); and			
	e) Verify that the thermal performance (U-Factor, (R)SHGC, VT) for the			
	fenestration product(s) matches the building plans, energy compliance			
	documentation (NRCC-ENV-E, NRCC-PRF-E, and NRCI-ENV-01-E), and			
	the label certificate (b or c above); and			
	f) Verify that the Certificate of Acceptance (this form) is completed and			
	signed.			
	The Certificate of Acceptance form is limited to seven (7) fenestration types,			
	use as many forms as needed to document all fenestration.			
	Certified Product Directory National Fenestration Rating Council (nfrc.org)			



Table A. Required Documentation (NA7.4.1.2)

Fenestration Design-Plans Identification	Non-rated Fenestration	Rated Fenestration NERC Label ID	Cross Reference Receint	Cross Reference NRCC-ENV-E, NRCC-PRF-E, and NRCI-ENV-01-E
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match
Design ID	U-Factor (max) (R)SHGC (max) VT (min)	NFRC Label	 Matches Delivery Receipt(s) Matches Purchase Order Matches Detailed Receipt Fails to match 	 Matches Designs Fails to match



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California:	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Name
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	Litle Data Cianad
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Date Signed
and conforms to the applicable acceptance requirements and procedures specified in Reference	Phone
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Signature
installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder (installer and bas been posted or made available with the building permit(s) issued for the building	
Bosponsible Person	
Lassort the following under penalty of perium, under the laws of the State of California:	
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.	Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Lic. No.: License No.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Date Signed
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	-
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections, and I will take the necessary steps to	
fulfill this requirement. 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. I will take the	
necessary steps to ensure this requirement.	



DAYLIGHT DESIGN FACTORS

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter ValueFloor: Enter ValueRoom: Enter ValueControl/tag: Value

Construction inspection complies

Date Submitted to AHJ: Date

Intent: This document is used to demonstrate compliance with acceptance requirements in Sections 140.3(d), 140.6(a)2L, 170.2(e)2Bxii, and Reference Nonresidential Appendix NA7.4.4, NA7.4.5, and NA7.4.6 for daylight design power adjustment factors (PAFs). Attach additional sets of pages 1 through 5, as required, for all units and assemblies that must be tested. Note that there are three different features tested by this form. If one type of feature is not present in the design, the technician is to skip the preceding rows and mark "N/A" in the last row for inspection compliance for that feature.

Table A-1: Construction Inspection - Clerestory Fenestration

Step	Entry	Item	Code Reference
1.0	No Entry	All clerestory fenestration devices are tested for buildings with up to 7 unit. If building has more than 7 clerestory fenestration unit, then 7 units are randomly chosen for testing.	NA7.4.4.1
2.0	No Entry	Before installation, the responsible person or installer must verify the following requirements are met:	NA7.4.4.2
2.1	Pass	Verify that the height of the clerestory fenestration's head height and glazing height match the building plans.	NA7.4.4.2(a)
2.2	Pass	Verify that the installation of the clerestory fenestration meets the manufacturer's installation instructions.	NA7.4.4.2(b)
2.3	Pass	Verify that a completed and signed copy of the Declaration Statement on the Certificate of Installation is on site for verification by the building inspector.	NA7.4.4.2(c)
3.0	No Entry	After installation, the field technician or responsible person must verify the following requirements are met:	NA7.4.4.3
3.1	Pass Fail	Verify that the Certificate of Installation and the Declaration Statement are signed before the inspection of the installation.	NA7.4.4.3(a)
3.2	Pass Fail N/A	Verify that the clerestory fenestration shading is controlled separately from other fenestration shading control (if operable shading is installed on the clerestory fenestration).	NA7.4.4.3(b)
3.3	Pass	Verify that the Declaration Statements of the Certificate of Acceptance are signed.	NA7.4.4.3(c)



Step	Entry	Item	Code Reference
3.4	Pass Fail	Verify that certificates and additional copies are provided to the builder, enforcement agency, and building owner at occupancy. Available manufacturer's warranty and user manual are provided to building owner.	NA7.4.4.3(d), NA7.4.4.4(a), NA7.4.4.4(b)
4.0	Pass	Check if construction inspection complies with all requirements.	N/A

Table A-2: Construction Inspection - Interior and Exterior Horizontal Slats

Step	Entry	Item	Code Reference
1.0	No Entry	All horizontal slat devices are tested for building with up to 7 assemblies. If building has more than 7 horizontal slat assemblies, then 7 assemblies are randomly chosen for testing.	NA7.4.5.1
2.0	No Entry	Before installation, the responsible person or installer must verify the following requirements are met:	NA7.4.5.2
2.1	Pass Fail	Verify that the horizontal (not diagonal or vertical) distance from the front edge of the slate to the back edge of the slat below it matches the building plans.	NA7.4.5.2(a)
2.2	Pass Fail	Verify that the vertical (not diagonal or horizontal) distance from the lowest edge of the slat to the highest edge of the slat below it matches the building plans.	NA7.4.5.2(b)
2.3	Pass Fail	Verify that there is a factory installed label permanently affixed and prominently located at a mounting point of the slat to the building.	NA7.4.5.2(c)
2.4	Pass	Verify the visible reflectance on the ASTM E903 test results match the building plans.	NA7.4.5.2(d)
2.5	Pass	Verify that the horizontal slats ASTM E1175 test results match the building plans (if the horizontal slat surfaces are not opaque and free of perforations).	NA7.4.5.2(e)
2.6	Pass	Verify that the installation of horizontal slats meets the manufacturer's installation instructions.	NA7.4.5.2(f)
2.7	Pass	Verify that a signed copy of the Certificate(s) of Installation is left at the job site for verification by the building inspector.	NA7.4.5.2(g)
3.0	No Entry	After installation, the field technician or responsible person must verify the following requirements are met:	NA7.4.5.3
3.1	Pass	Verify that the Certificate of Installation and the Declaration Statement are signed before the inspection of the installation.	NA7.4.5.3(a)
3.2	Pass	Verify that the horizontal slats are permanently mounted.	NA7.4.5.3(b)



Step	Entry	Item	Code Reference
3.3.1	Pass Fail	Verify that the extension matches the length shown on the building plans if the horizontal slats extend beyond each side of the window jamb.	NA7.4.5.3(c)
3.3.2	Pass Fail N/A	Verify that the horizonal slats are within rough opening or fins on window jambs match building plans, if the horizontal slats do not extend beyond each side of the window jamb.	NA7.4.5.3(d)
3.4	Pass	Verify that the horizontal slat assemblies extend the entire height of the window.	NA7.4.5.3(e)
3.5	Pass	Verify that the exterior horizontal slats are horizontal or slope downwards from the window and the interior horizontal slats are horizontal or slope upwards from the window.	NA7.4.5.3(f)
3.6	Pass	Verify that the Declaration Statements of the Certificate of Acceptance are signed.	NA7.4.5.3(g)
3.7	Pass	Verify that additional copies are provided to the builder, enforcement agency, and building owner at occupancy. Available manufacturer's warranty and user manual are provided to building owner as well as ASTM E903 test results and, if applicable, ASTM E1175 results.	NA7.4.5.3(h), NA7.4.5.4(a), NA7.4.5.4(b), NA7.4.5.4(c),
4.0	Pass Fail N/A	Check if construction inspection complies with all requirements.	N/A

Table A-3: Construction Inspection - Interior and Exterior Light Shelves

Step	Entry	Item	Code Reference
1.0		All light shelf devices are tested for building with up to 7 units. If building has more than 7 light shelf unit, then 7 units are randomly chosen for testing.	NA7.4.6.1
2.0	No Entry	Before installation, the responsible person or installer must verify the following requirements are met:	NA7.4.6.2
2.1	☐ Pass ☐ Fail	Verify that the horizontal (not diagonal or vertical) distance from the front edge of the interior light shelf to the back edge of the light shelf top matches the building plans.	NA7.4.6.2(a)
2.2	Pass	Verify that the vertical (not diagonal or horizontal) distance from the highest edge of the interior light shelf to the top of the clerestory window above it matches the building plans.	NA7.4.6.2(b)
2.3	Pass Fail	Verify that the visible reflectance on the ASTM E903 test results of the interior light shelf matches the building plans.	NA7.4.6.2(c)
2.4	No Entry	If there is an exterior light shelf, verify the following:	NA7.4.6.2(d)



Step	Entry	Item	Code Reference
2.4.1	Pass Fail	The horizontal (not diagonal or vertical) distance from the front edge of the exterior light shelf to the back edge of the exterior light shelf matches the building plans.	NA7.4.6.2(d)1
2.4.2	Pass Fail N/A	The vertical (not diagonal or horizontal) distance from the lowest edge of the exterior light shelf to the sill of the window below it matches the building plans.	NA7.4.6.2(d)2
2.4.3	Pass Fail N/A	The visible reflectance on the ASTM E903 test results matches the building plans if the exterior light shelf is less than two feet below the clerestory window-sill.	NA7.4.6.2(d)3
2.5	Pass	Verify that the light shelves are installed at the height specified in the building plans.	NA7.4.6.2(e)
2.6	Pass	Verify that the installation of light shelves shall meet the manufacturer's installation instructions.	NA7.4.6.2(f)
2.7	Pass Fail	Verify that there is a signed copy of the Certificate(s) of Installation left at the job site for verification by the building inspector.	NA7.4.6.2(g)
3	No Entry	After installation, the field technician or responsible person must verify the following requirements are met:	NA7.4.6.3
3.1	Pass	Verify that the Certificate of Installation and the Declaration Statement are signed before the inspection of the installation.	NA7.4.6.3(a)
3.2	☐ Pass ☐ Fail ☐ N/A	If there is any window area below the interior light shelf on the same floor, then verify there is an exterior light shelf above that window area.	NA7.4.6.3(b)
3.3	Pass Fail	Verify that the light shelf is permanently mounted.	NA7.4.6.3(c)
3.4	Pass	Verify that the light shelf extends beyond each side of the window jamb by the length shown on the building plans.	NA7.4.6.3(d)
3.5	Pass	Verify that the interior light shelves are horizontal.	NA7.4.6.3(e)
3.6	Pass Fail N/A	If there is an exterior light shelf, verify that the exterior light shelf is horizontal or slopes downwards from the window.	NA7.4.6.3(f)
3.7	Pass Fail	Verify that the Declaration Statements of the Certificate of Acceptance are signed.	NA7.4.6.3(h)
3.8	Pass Fail	Verify that the certificates and additional copies are provided to the builder, enforcement agency, and building owner at occupancy. Available manufacturer's warranty and user manual are provided to building owner as well as ASTM E903 test results and, if applicable, ASTM E1175 results.	NA7.4.6.3(i), NA7.4.6.4(a), NA7.4.6.4(b), NA7.4.6.4(c),
3.9	Pass Fail N/A	Check if construction inspection complies with all requirements.	N/A

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name
	Author Signature
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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	Name Company Name Title Date Signed Phone
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.	Signature
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to ensure this requirement.	Name Company Name Lic. No.: License No. Date Signed Phone Signature



CALIFORNIA ENERGY COMMISSION SHUT-OFF LIGHTING CONTROLS 2025-CEC-NRCA-LTI-02-A

Project Name and Address	Authority Having Jurisdiction		
Name: Project Name	Enforcement Agency: Agency		
Adress: Project Address	Permit Number: Permit Number		
City, Zip Code: City, Zip Code	Permit Application Date: Date		

Construction inspection and functional testing comply	Date Submitted to AH1: Date
Does not comply	Date Submitted to Arib. Date

Intent: This document is used to demonstrate compliance with acceptance requirements in §130.4(a)4, §160.5(e)1D and Reference Nonresidential Appendix NA7.6.2 for shut-off lighting controls. Attach additional sets of pages 1 through 9 as required, for all controls that must be tested.

Indicate all types of shut-off controls tested for this project

-	
Automat	ic time switch lighting controls (Tables A-1 and B-1 of this document must be
└── complete	ed)
Occupan	t sensing lighting controls (including occupant sensors, partial-ON occupant
sensors,	partial-OFF occupant sensors, and/or vacancy sensors) (Tables A-2 and B-2 of
this docu	ument must be completed)
Multi-zor	ne occupant sensing lighting controls in office spaces larger than 250 square feet
└── (Tables /	A-2 and B-3 of this document must be completed)
Occupant sensors, this docu	at sensing lighting controls (including occupant sensors, partial-ON occupant partial-OFF occupant sensors, and/or vacancy sensors) (Tables A-2 and B-2 or ument must be completed) ne occupant sensing lighting controls in office spaces larger than 250 square fe A-2 and B-3 of this document must be completed)

Automatic Time Switch Lighting Controls

Table A-1. Automatic Time Switch Lighting Controls Construction Inspection

Step	Entry	Item	Code Reference
1		The automatic time switch controls are shown on plan documents and are installed.	NA7.6.2.5(a)
2		Automatic time switch controls are programmed with acceptable weekday, weekend, and holiday (if applicable) schedules.	NA7.6.2.5(b) §110.9(b)1Aii §130.1(c)1A §130.1(c)4 §160.5(b)4Cia §160.5(b)4Civ
3	28	Document weekday, weekend, and holidays schedules, as well as all set-up and preference program settings.	NA7.6.2.5(c)
4		The correct time and date are properly set in the automatic time switch controls.	NA7.6.2.5(d)
Y			NA7.6.2.5(e) §110.9(b)1
5		The battery backup (if applicable) is installed and energized.	



			Code
Step	Entry	Item	Reference
6		Manual override time limit is set to no more than 2 hours, OR The automatic time switch control's manual override time is exempt from the 2-hour limit.	NA7.6.2.5(f) §110.9(b)1Ai §130.1(c)3 160.5(b)4Ciii
7		Manual override switches located remotely from area with controlled luminaires allow the user to see the controlled luminaires or have a visual signal or display showing the current state of the controlled luminaires.	NA7.6.2.5(g) §130.1(c)3 §130.1(a) §160.5(b)4Ciii §160.5(b)4A
N/A	Pass	Construction Inspection Compliance.	N/A

Table B-1: Automatic Time Switch Lighting Controls Functional Testing

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Enter Value

Step	Entry	Functional Test	Code Reference
1	No Entry	Occupied Test . Simulate occupied condition in the controlled space.	NA7.6.2.6(a)
1.1	Yes No	The automatic time switch control turns on the controlled lighting.	NA7.6.2.6(a)1
2	No Entry	Unoccupied Test . Simulate an unoccupied condition in the controlled space.	NA7.6.2.6(b)
2.1	☐ Yes ☐ No	The automatic time switch control turns off all controlled lighting.	NA7.6.2.6(b)1 §130.1(c)1A §160.5(b)4Cia
2.2	Pes	For the area controlled by an automatic time switch control with a configured automatic holiday shut-off, the controlled lighting can be turned off automatically by the holiday shut-off, OR the area is not required to comply with automatic holiday shut-off.	NA7.6.2.6(b)2 §110.9(b)1Aii §130.1(c)4 §160.5(b)4Civ
2.3	Yes	For the area controlled by an automatic time switch control with a time override located in and for the area, the lighting can be turned on manually by initiating the time override. The lighting is configured to remain on for no more than 2 hours OR the area is not required to comply with the 2-hour time override limit.	NA7.6.2.6(b)3 §110.9(b)1Ai §130.1(c)3 §160.5(b)4Ciii
N/A	Pass	Functional Testing Compliance.	N/A

Occupant Sensing Lighting Controls

Table A-2: Occupant Sensing Lighting Control Construction Inspection

Ster	e Entry	Item	Code Reference
1		The occupant sensing lighting controls are shown on plan documents and are installed.	NA7.6.2.1(a)
2		Occupant sensing lighting control is installed per manufacturer's instructions to minimize false triggering – such as to install an occupancy sensor away from HVAC diffusers to avoid probable false triggering.	NA7.6.2.1(b)
N/A	Pass Fail	Construction Inspection Compliance.	N/A
			3

CALIFORNIA ENERGY COMMISSION SHUT-OFF LIGHTING CONTROLS 2025-CEC-NRCA-LTI-02-A

Table B-2: Occupant Sensing Lighting Control Functional Testing

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control: Enter Value

Step	Entry	Functional Test	Code Reference
N/A	Yes No	Control is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.6.2.2
1	No Entry	Unoccupied Test . Simulate an unoccupied condition in the controlled space.	NA7.6.2.3(a)
1.1	☐ Yes ☐ No	 The occupant sensing control turn the controlled lighting off or partially-off, if applicable, in 20 minutes or less from start of an unoccupied condition. In addition: For partial-on occupant sensing controls, occupant sensing controls and vacancy sensing controls, the controlled lighting is turned off in unoccupied condition. In the partial off state, partial OFF occupant sensing controls automatically reduce lighting power by at least 50 percent, OR: For warehouses with metal halide or high pressure sodium lighting, automatically reduce lighting power by at least 40 percent. For parking garages, parking areas, and loading and unloading areas, occupant sensing controls have at least one control step between 20 to 50 percent of design lighting power. 	NA7.6.2.3(a)1 §110.9(b)4A §130.1(c)6A-C §160.5(b)4Cv- vi §130.1(c)6E §160.5(b)4Cvic
2	No Entry	Occupied Test . Simulate an occupied condition in	NA7.6.2.3(b)
2.1	Yes	the controlled space. Status indicator or annunciator operates correctly.	NA7.6.2.3(b)1 §110.9(b)4C



Step	Entry	Functional Test	Code Reference
2.2	☐ Yes ☐ No	 Immediately upon an occupied condition: The occupant sensing control or partial off occupant sensing control turns on controlled lighting; OR The vacancy sensing control indicate a space is occupied and the controlled lighting can be turned on manually; OR The partial-on occupant sensing controls automatically turns on the controlled lighting at between 50 to 70 percent of controlled lighting power. After the partial-on stage, manual switches can be activated to turn on the controlled lighting at full controlled lighting power. 	NA7.6.2.3(b)2 §130.1(c)5A §160.5(b)4Cv- vi
N/A	Pass Fail	Functional Testing Compliance.	N/A

Table B-3: Multi-Zone Occupant Sensing Lighting Controls Functional Testing

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control: Enter Value

			Code
Step	Entry	Functional Test	Reference
N/A	☐ Yes ☐ No	Control is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.6.2.2
1	No Entry	Occupied Control Zone Test. Simulate an occupied condition in the control zone controlled NA7.6.2.4(a) by the occupant sensor.	
1.1	Yes No	Immediately upon occupancy of the control zone, the occupant sensors turn on controlled lighting.	NA7.6.2.4(a)1
1.2	Enter Value	Enter the illuminance value in footcandles (fc) measured at a location in the control zone where the controlled lighting is at full light output or designed light output if it has been documented that dimming luminaires have been intentionally tuned to less than full output and the design illuminance levels are provided. Informational note: Daylight responsive controls may need to be temporarily overridden to achieve full or designed light output for the test.	NA7.6.2.4(a)2
1.3	Yes	Signal sensitivity is adequate to achieve desired control.	NA7.6.2.4(a)3
1.4	Yes No	Status indicator or annunciator operates properly.	NA7.6.2.4(a)4 §110.9(b)4C

T



			Code
Step	Entry	Functional Test	Reference
2	No Entry	Unoccupied Control Zone Test . Simulate an unoccupied condition in the control zone controlled by the occupant sensor. Confirm that at least one other control zone within the office space is occupied.	NA7.6.2.4(b)
2.1	☐ Yes ☐ No	The occupant sensor uniformly reduces light output of the controlled lighting in 20 minutes or less from the start of the unoccupied condition in the control zone.	NA7.6.2.4(b)1 §130.1(c)6Dii §160.5(b)4Cvib II
2.2	Enter Value	Enter the illuminance value during unoccupancy in footcandles (fc) measured at the same location as in Step 1.2.	NA7.6.2.4(b)2
2.3	Enter Value	Calculate the ratio of the illuminance during unoccupancy to the illuminance at full or designed light output in %. ([Step 2.2 / Step 1.2] x 100)	NA7.6.2.4(b)2
2.4	☐ Yes ☐ No	The ratio of illuminance from Step 2.3 is no more than 20%.	NA7.6.2.4(b)2 §130.1(c)6Dii §160.5(b)4Cvib II
2.5	☐ Yes ☐ No	The occupant sensing control does not trigger a false on from movement outside of the control zone or from HVAC operation. Informational note: The field of view of occupant sensors in the adjacent control zones in office spaces larger than 250 square feet may overlap, but the field of view should stay away from an adjacent enclosed space that is not part of the office space, like conference rooms, and private offices.	NA7.6.2.4(b)3
2.6	Yes	Signal sensitivity is adequate to achieve desired control.	NA7.6.2.4(b)4
3	No Entry	Control Zone Size Test. Follow the procedures described in either Method 1 (Steps 3.1 – 3.1.3) OR Method 2 (Steps 3.2 – 3.2.4)	NA7.6.2.4(c)
4N	C K		



			Code
Step	Entry	Functional Test	Reference
3.1	No Entry	 Method 1: Simulate an unoccupied condition in the control zone controlled by the occupant sensor while standing in an adjacent control zone. Determine the "edge" of the control zone controlled by the occupant sensor by moving toward the occupant sensor until the lights controlled by the occupant sensor turn on to simulate an occupied condition for that control zone. Informational note: While moving toward the occupant sensor and the occupant sensor turn on the sensor turn of the sensor turn of the sensor turn on turn on the sensor turn on the sensor turn on the sensor turn on the sensor turn on turn on the sensor turn on turn	NA7.6.2.4(c) Method 1
		motions, or sounds may be necessary to trigger the occupant sensor.	2
3.1.1	Enter Value	Enter the distance in feet (ft) measured from the "edge" of the control zone to the spot that is directly below the occupant sensor. This is the radius of the control zone.	NA7.6.2.4(c)1 Method 1
3.1.2	Enter Value	Calculate the area (in ft^2) of the control zone by using the formula: Area = 3.14 *radius ² .	NA7.6.2.4(c)2 Method 1
3.1.3	☐ Yes ☐ No	The area of the control zone (Step 3.1.2) is less than or equal to 600 square feet.	NA7.6.2.4(c)3 Method 1 §130.1(c)6Di §160.5(b)4Cvib I
3.2	No Entry	Method 2 : Simulate an unoccupied condition for the entire office space.	NA7.6.2.4(c) Method 2
3.2.1	Enter Value	Walk through the space and count the number of zones of lighting that turn on automatically. Enter the number of zones that turn on automatically.	NA7.6.2.4(c)1 Method 2
3.2.2	Enter Value	Enter the area of the office space (in ft ²) from construction plans or from other information source such as construction documents or Nonresidential Certificates of Compliance (NRCCs).	NA7.6.2.4(c)2 Method 2
3.2.3	Enter Value	Divide the area of the office by the number of zones. Enter the value in square feet. This calculated value is the assessed control zone size.	NA7.6.2.4(c)3 Method 2



Step	Entry	Functional Test	Code Reference
3.2.4	Yes No	The area of the control zone is less than or equal to 600 square feet.	NA7.6.2.4(c)4 Method 2 §130.1(c)6Di §160.5(b)4Cvib I
4	☐ Yes ☐ No	Unoccupied Office Test . Simulate an unoccupied condition in all control zones controlled by all occupant sensors in the office. In 20 minutes or less from the start of the unoccupied condition of the entire office, all controlled lighting in the office is turned off.	NA7.6.2.4(d) §130.1(c)6Diii §160.5(b)4Cvib III
N/A	Pass Fail	Functional Testing Compliance.	N/A



SHUT-OFF LIGHTING CONTROLS 2025-CEC-NRCA-LTI-02-A

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature
	Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction	
Name: Project Name	Enforcement Agency: Agency	
Address: Project Address	Permit Number: Permit Number	
City, Zip Code: City, Zip Code	Permit Application Date: Date	

Construction inspection and functional testing comply	Date Submitted to AHJ: Date

Indicate all control methods used for this project:

Continuous dimming controls (Tables A and B-1 of this document must be completed)
Stepped switching/stepped dimming controls (Tables A and B-2 of this document should be completed)

Table A: Construction Inspection

Step	Entry	Item	Reference
1		The daylight responsive controls are shown on the plan documents and are installed.	NA7.6.1.1
2		The daylit zones are shown on page(s) of plans; OR The daylit zones are drawn in on page(s) of as-built plans (attached).	NA7.6.1.1(a) §130.1(d)2A §160.5(b)4Dvi
3		The general lighting in skylit daylit zones, primary sidelit daylit zones and secondary sidelit daylit zones is controlled by daylight responsive controls. In parking garages, the general lighting in the combined primary and secondary sidelit daylit zones is controlled by daylight responsive controls.	NA7.6.1.1(b) §130.1(d)1 §160.5(b)4Di, ii, iii §160.5(b)4Dv
4		The daylight responsive controls provide separate control for luminaires in each type of daylit zone. General lighting in overlapping skylit daylit zone and a sidelit daylit zone are controlled as part of the skylit zone. General lighting in both a primary sidelit daylit zone and secondary sidelit daylit zone are controlled as part of the primary sidelit daylit zone.	NA7.6.1.1(c) §130.1(d)2B §160.5(b)4Dvii
5		All photosensors are not readily accessible to unauthorized personnel.	NA7.6.1.1(d) §130.1(d)2D §160.5(b)4Dix
N/A	Pass	Construction Inspection Compliance.	N/A

Continuous Dimming Control Systems

Duildin an Eastern Malue		Deener Enter Malue	
Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: value

Table B-1: Continuous Dimming Control Systems Functional Testing

Chara	F		Code
Step	Entry	Functional lest	Reference
N/A	Yes No	method is used, attach a page listing untested controls in sample.	NA7.6.1.2
1	No Entry	Reference Location . Identify the reference location (the minimum daylight location in the controlled zone) for each daylit zone type in the space. For parking garages, illuminance levels should be measured at the farthest edge of the secondary sidelit daylit zone away from the opening or glazing.	NA7.6.1.4(a) §130.1(d)2C §160.5(b)4Dvii
1.1	Enter Value	Specify the power estimation method to be used: default ratio of power to light (Dfc), cut sheet ratio of power to light (CSfc) – cut sheet must be attached, measured Amps multiplied by Volts (VA), or measured watts (W).	N/A
2	No Entry	No Daylight Test . Simulate or provide conditions without daylight.	NA7.6.1.4(b)
2.1	Enter Value	Indicate the method used to simulate or provide conditions without daylight: nighttime manual measurement (Night), nighttime illuminance logging (Log), cover fenestration (CF), or cover photosensor (CP).	N/A
2.2	Enter Value	Enter the reference illuminance value in footcandles (fc), as measured at the reference location. This is the electric lighting illuminance without any daylight.	NA7.6.1.4(b)1
2.3	Enter Value	Enter the measured full load power in Volt-Amps (VA) if power estimation method (Step 1.1) = VA or in watts (W) if power estimation method = W. OR Indicate not applicable (N/A) if power estimation method (Step 1.1) = Dfc or CSfc.	N/A
2.4	Yes No	Daylight responsive control system turns on all controlled lighting to full light output unless it has been documented that continuous dimming luminaires have been intentionally tuned to less than full light output and the design illuminance levels are provided.	NA7.6.1.4(b)2
2.5	Yes	Light output is stable with no visible flicker.	NA7.6.1.4(b)3



Stop	Entry	Eurotional Tost	Code
3	No Entry	Full Daylight Test . Simulate or provide bright conditions where the daylight illuminance is greater than 150% of the reference illuminance measured in Step 2.2.	NA7.6.1.4(c) §130.1(d)2Ciii §130.1(d)2Civ §160.5(b)4Dviii c §160.5(b)4Dviii d
3.1	Enter Value	Turn off electric lighting. Enter the daylight illuminance (light level with the electric lighting turned off) value in footcandles (fc) measured at the reference location.	N/A
3.2	Enter Value	Calculate the ratio of daylight illuminance to the reference illuminance in %. ([Step 3.1 / Step 2.2] x 100)	N/A
3.3	Yes No	The ratio of daylight illuminance to the reference illuminance (Step 3.2) is greater than 150%.	NA7.6.1.4(c) §130.1(d)2Ciii §130.1(d)2Civ §160.5(b)4Dviii c §160.5(b)4Dviii d
3.4	Enter Value	Turn on electric lighting. Enter the total illuminance (combined daylight and electric light illuminance) in footcandles (fc) measured at the reference location if power estimation method (Step 1.1) = Dfc or CSfc. OR Enter the measured power in Volt-Amps (VA) if power estimation method (Step 1.1) = VA, or in watts (W) if power estimation method (Step 1.1) = W.	N/A
3.5	Enter Value	Calculate the electric lighting illuminance in footcandles (fc) at the reference location if power estimation method (Step 1.1) = Dfc or CSfc. (Step 3.4 - Step 3.1) OR indicate not applicable (N/A) if power estimation method (Step 1.1) = VA or W.	N/A
3.6	Enter Value	Calculate the fraction of rated light output in % if power estimation method (Step 1.1) = Dfc or CSfc. ([Step 3.5 / Step 2.2] x 100) OR Indicate not applicable (N/A) if power estimation method (Step 1.1) = VA or W.	N/A
3.7	Enter Value	Enter the dimmed luminaire fraction of rated power in %, if power estimation method (Step 1.1) = Dfc or CSfc, and label the control system being tested on the manufacturer's cut sheet or the default graph on page 6. OR Indicate not applicable (N/A) if power estimation method (Step 1.1) = VA or W.	N/A


Step	Entry	Functional Test	Code Reference
3.8	Enter Value	Calculate the system power reduction in %. If power estimation method (Step 1.1) = Dfc or CSfc, system power reduction = [1 - dimmed luminaire fraction of rated power (Step 3.7)]. OR If power estimation method (Step 1.1) = VA or W, system power reduction = [1 - measured power (Step 3.4)/full load power (Step 2.3)].	N/A
3.9	☐ Yes ☐ No	For areas other than parking garages, the controlled lighting power reduction (Step 3.8) is at least 90%. OR For parking garages, the controlled lighting power reduction is 100%.	NA7.6.1.4(c)1 §130.1(d)2Ciii §130.1 (d)2Civ §160.5(b)4Dviii c§160.5(b)4Dvi iid
3.10	Yes No	Only the luminaires in the daylit zones are affected by daylight control.	NA7.6.1.4(c)2
3.11	Enter Value	If a PAF is claimed for daylight continuous dimming plus OFF controls, the system automatically turns off the luminaires that are receiving this credit. Enter yes (Y), no (N), or not applicable (N/A).	NA7.6.1.4(c)3 §140.6(a)2H §170.2(e)2Bviii
4	No Entry	Partial Daylight Test. Follow the procedures described in either the Partial Daylight Test (Steps $4.1 - 4.11$) OR the Alternate Partial Daylight Test (Steps $5 - 5.7$)	NA7.6.1.4(d) NA7.6.1.4(e)
4.1	No Entry	Turn off electric lighting. Simulate or provide daylight conditions where illuminance (fc) provided only by daylight only at the reference location is between 60 and 95% of the reference illuminance measured in Step 2.2.	NA7.6.1.4(d)
4.2	☐ Yes ☐ No	There are 0 control steps between ON and OFF. (If yes, indicate not applicable (N/A) for Steps 4.3 through 4.10)	N/A
4.3	Enter Value	Indicate method used to simulate or provide conditions with partial daylight: natural daylight manual measurement (ND), light logging (Log), partially cover fenestration (PCF), open loop setpoint adjustment (OLSA).	N/A
4.4	Enter Value	Enter the daylight illuminance (light level without electric light) in footcandles (fc) measured at the reference location.	N/A
4.5	Enter Value	Calculate the ratio of daylight illuminance to the reference illuminance in %. ([Step 4.4 / Step 2.2] x 100)	N/A
4.6	Enter Value	The ratio of daylight illuminance to the reference illuminance (Step 4.5) is between 60 and 95%. Enter yes (Y), no (N), or N/A.	N/A



Step	Entry	Functional Test	Code Reference
4.7	Enter Value	Turn on electric lighting. Enter the total illuminance (combined daylight and electric light illuminance) in footcandles (fc) measured at the reference location.	N/A
4.8	Enter Value	The total illuminance (Step 4.7) is greater than or equal to the reference illuminance (Step 2.2).	NA7.6.1.4(d)1 §130.1(d)2Cii §160.5(b)4Dviii b
4.9	Enter Value	Calculate the ratio of total illuminance to the reference illuminance in %. ([Step 4.7 / Step 2.2] x 100)	N/A
4.10	Enter Value	The ratio of total illuminance to the reference illuminance (Step 4.9) is less than or equal to 150%. Enter yes (Y), no (N), or N/A.	NA7.6.1.4(d)2
4.11	Yes No	The light output is stable with no visible flicker. Only luminaires in daylit zones are affected by daylight control.	NA7.6.1.4(d)3
5	No Entry	Alternate Partial Daylight Test. To use the alternate partial daylight test, outdoor horizontal illuminance must be 4,000 fc or greater and illuminance from daylight only at the reference location (daylight illuminance) is no greater than 80% of reference illuminance (Step 2.2). Measure the outdoor horizontal illuminance level and the daylight illuminance level, and do not proceed until the illuminance criteria are met.	NA7.6.1.4(e)
5.1	Yes No	There are 0 control steps between ON and OFF. (If yes, indicate not applicable (N/A) for Steps 5.2 through 5.5)	N/A
5.2	Enter Value	Turn off electric lighting. Enter the daylight illuminance (light level without electric light) in footcandles (fc) measured at the reference location.	NA7.6.1.4(e)1
5.3	Enter Value	Turn on electric lighting. Enter the total illuminance (combined daylight and electric light illuminance) in footcandles (fc) measured at the reference location.	NA7.6.1.4(e)2
5.4	Enter Value	Calculate the partial daylight combined illuminance maximum (PDCIM). (Step 2.2 + [0.40 x Step 5.2])	N/A
5.5	Enter Value	The total illuminance (Step 5.3) is greater than or equal to the reference illuminance (Step 2.2) and less than or equal to the PDCIM (Step 5.4). Enter yes (Y), no (N), or N/A.	NA7.6.1.4(e)3
5.6	Yes _ No	The light output is stable with no visible flicker.	NA7.6.1.4(e)4



Step	Entry	Functional Test	Code Reference
5.7	Yes	Only luminaires in daylit zones are affected by daylight control.	NA7.6.1.4(e)5
N/A	Pass	Functional Testing Compliance.	N/A



Stepped Switching or Stepped Dimming Control Systems

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Table B-2: Stepped Switching or Stepped Dimming Control Systems Functional Testing

Step	Entry	Functional Test	Code Reference
N/A	Yes	Control is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.6.1.2
	No Entry	Reference Location . Identify the reference location (the minimum daylight location in the controlled zone) for each daylit zone type in the space. For parking garages, illuminance levels should be measured at the farthest edge of the secondary sidelit daylit zone away from the opening or glazing.	NA7.6.1.5(a) §130.1(d)2Civ §160.5(b)4Dviii
1.1	Enter Value	Specify the control type: stepped dimming (SD) or stepped switching (SW).	N/A



Step	Entry	Functional Test	Code Reference
1.2	Enter Value	Specify the power estimation method to be used: counting (C) – only for stepped switching, cut sheet (CS) – ballast cut sheet with steps of power and light must be attached, measured Amps multiplied by Volts (VA), or measured watts (W).	N/A
2	No Entry	No Daylight Test . Simulate or provide conditions without daylight.	NA7.6.1.5(b)
2.1	Enter Value	Indicate the method used to simulate or provide conditions without daylight: nighttime manual measurement (Night), nighttime illuminance logging (Log) – attach plot of illuminance or power, cover fenestration (CF), or cover photosensor (CP).	N/A
2.2	Enter Value	Enter the reference illuminance value in footcandles (fc), as measured at the reference location. This is the electric lighting illuminance level without any daylight.	NA7.6.1.5(b)1
2.3	Enter Value	Enter the measured Amps multiplied by Volts in Volt-Amps (VA) if power estimation method (Step 1.2) = VA. OR Enter the measured watts (W) if power estimation method (Step 1.2) = W. OR Indicate not applicable (N/A) if power estimation method (Step 1.2) = C or CS.	N/A
2.4	☐ Yes ☐ No	Daylight responsive control system turns on all stages of controlled lighting to full light output unless it has been documented that dimming luminaires have been intentionally tuned to less than full output and the design illuminance levels are provided.	NA7.6.1.5(b)2
2.5	Enter Value	Light output is stable with no visible flicker.	NA7.6.1.5(b)3
3	No Entry	Full Daylight Test . Simulate or provide bright conditions where the daylight illuminance is greater than 150% of the reference illuminance measured in Step 2.2.	NA7.6.1.5(c) §130.1(d)2Ciii §130.1(d)2Civ §160.5(b)4Dviii c §160.5(b)4Dviii d
3.1	Enter Value	Turn off electric lighting. Enter the daylight illuminance (light level with the electric lighting turned off) value in footcandles (fc) measured at the reference location.	N/A
3.2	Enter Value	Calculate the ratio of daylight illuminance to the reference illuminance in %. ([Step 3.1 / Step 2.2] x 100)	N/A



Sten	Fntry	Functional Test	Code Reference
			NA7.6.1.5(c)
3.3	☐ Yes ☐ No	The ratio of daylight illuminance (Step 3.1) to the reference illuminance (Step 3.2) is greater than 150%.	§130.1(d)2Ciii §130.1(d)2Civ §160.5(b)4Dviii c §160.5(b)4Dviii d
3.4	Enter Value	Enter the measured system power in Volt-Amps (VA) or watts (W) if power estimation method (Step 1.2) = VA or W. OR Indicate not applicable (N/A) if power estimation method (Step 1.2) = C or CS.	N/A
3.5	Enter Value	Enter the fraction of system wattage turned off in % if the power estimation method (Step 1.2) = C. OR Indicate not applicable (N/A) if the power estimation method (Step 1.2) = CS, VA, or W.	N/A
3.6	Enter Value	Enter the power reduction of dimmed lamps in % calculated from the manufacturer's cut sheet if the power estimation method (Step 1.2) = CS. OR Indicate not applicable (N/A) if the power estimation method (Step 1.2) = C, VA, or W.	N/A
3.7	Enter Value	Calculate the system power reduction in %. If power estimation method (Step 1.2) = C, system power reduction = fraction of system wattage turned off (Step 3.5). OR If power estimation method (Step 1.2) = CS, system power reduction = power reduction of dimmed lamps (Step 3.6). OR If power estimation method (Step 1.2) = VA or W, system power reduction = [1 - measured system power at dimmed stage (Step 3.4)/full load system power (Step 2.3)].	N/A
3.8	Yes	For areas other than parking garages, the controlled lighting power reduction (Step 3.7) is at least 90% OR For parking garages, the controlled lighting power reduction is 100%.	NA7.6.1.5(c)1 §130.1(d)2Ciii §130.1(d)2Civ §160.5(b)4Dviii c §160.5(b)4Dviii d
3.9	Yes	Only the luminaires in the daylit zones are affected by daylight control.	NA7.6.1.5(c)3



Step	Entry	Functional Test	Code Reference
4	No Entry	Partial Daylight Test . For each control stage tested in this step, the control stages with lower setpoints than the stage tested are left on and those stages of control with higher setpoints are dimmed or controlled off. Simulate or provide conditions so that each control stage turns on and off or dims.	NA7.6.1.5(d)
4.1	Enter Value	Enter the number of control steps between on and off. If the control system has 1 to 3 steps between on and off, test all control steps. If the control system has more than 3 steps between on and off, testing 3 control steps is sufficient for demonstrating compliance. If the control system has 0 steps between on and off, the partial daylight test is not necessary.	NA7.6.1.5(d)
4.2	Yes No	There are 0 control steps between on and off. (If yes, indicate not applicable (N/A) for Steps 4.3 through 4.26.)	N/A
4.3	Enter Value	Indicate method used to simulate or provide conditions with partial daylight: natural daylight manual measurement (ND), light logging (Log), partially cover fenestration (PCF), open loop setpoint adjustment (OLSA).	N/A
4.4	No Entry	First stage of control (partial daylight test)	N/A
4.5	Enter Value	Enter the total illuminance (combined daylight and electric light illuminance) in footcandles (fc) measured at the reference location just after the first stage of control dims or shuts off a stage of lighting.	NA7.6.1.5(d)1
4.6	Enter Value	The total illuminance (Step 4.5) is greater than or equal to the reference illuminance (Step 2.2). Enter yes (Y) or no (N).	NA7.6.1.5(d)1 §130.1(d)2Cii §160.5(b)4Dviii b
4.7	Enter Value	Calculate the ratio of total illuminance to the reference illuminance in %. ([Step 4.5 / Step 2.2] x 100)	N/A
4.8	Enter Value	The ratio of total illuminance to the reference illuminance (Step 4.7) is less than or equal to 150%. Enter yes (Y) or no (N).	NA7.6.1.5(d)2
4.9	Enter Value	Light output is stable with no visible flicker. (Note: only luminaires in daylit zones are affected by daylight control)	NA7.6.1.5(d)3
4.10	Enter Value	The control stage does not cycle on and off between dim and undimmed while daylight illuminance remains constant. Enter yes (Y) or no (N).	NA7.6.1.5(d)4



Step	Entrv	Functional Test	Code Reference
4.11	No Entry	Second stage of control (partial daylight test)	N/A
4.12	Yes	There is only 1 control step between ON and OFF. (If yes, indicate not applicable (N/A) for steps 4.13 through 4.26.)	N/A
4.13	Enter Value	Enter the total illuminance (combined daylight and electric light illuminance) in footcandles (fc) measured at the reference location just after the second stage of control dims or shuts off a stage of lighting.	NA7.6.1.5(d)1
4.14	Enter Value	The total illuminance (Step 4.13) is greater than or equal to the reference illuminance (Step 2.2). Enter yes (Y) or no (N).	NA7.6.1.5(d)1 §130.1(d)2Cii §160.5(b)4Dviii b
4.15	Enter Value	Calculate the ratio of total illuminance to the reference illuminance in %. ([Step 4.13 / Step 2.2] x 100)	N/A
4.16	Enter Value	The ratio of total illuminance to the reference illuminance (Step 4.15) is less than or equal to 150%. Enter yes (Y) or no (N).	NA7.6.1.5(d)2
4.17	Enter Value	Light output is stable with no visible flicker. (Note: only luminaires in daylit zones are affected by daylight control)	NA7.6.1.5(d)3
4.18	Enter Value	The control stage does not cycle on and off between dim and undimmed while daylight illuminance remains constant. Enter yes (Y) or no (N).	NA7.6.1.5(d)4
4.19	No Entry	Third stage of control (partial daylight test)	N/A
4.20	☐ Yes ☐ No	There are only 2 control steps between ON and OFF. (If yes, indicate not applicable (N/A) for Steps 4.21 through 4.26.)	N/A
4.21	Enter Value	Enter the total illuminance (combined daylight and electric light illuminance) in footcandles (fc) measured at the reference location just after the third stage of control dims or shuts off a stage of lighting.	NA7.6.1.5(d)1
4.22	Enter Value	The total illuminance (Step 4.21) is greater than or equal to the reference illuminance (Step 2.2). Enter yes (Y) or no (N).	NA7.6.1.5(d)1 §130.1(d)2Cii §160.5(b)4Dviii b
4.23	Enter Value	Calculate the ratio of total illuminance to the reference illuminance in %. ([Step 4.21 / Step 2.2] x 100)	N/A
4.24	Enter Value	The ratio of total illuminance to the reference illuminance (Step 4.23) is less than or equal to 150%. Enter yes (Y) or no (N).	NA7.6.1.5(d)2



Step	Entry	Functional Test	Code Reference
4.25	Enter Value	Light output is stable with no visible flicker. (Note: only luminaires in daylit zones are affected by daylight control)	NA7.6.1.5(d)3
4.26	Enter Value	The control stage does not cycle on and off between dim and undimmed while daylight illuminance remains constant. Enter yes (Y) or no (N).	NA7.6.1.5(d)4
4.27	Pass Fail	Functional Testing Compliance.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	~
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated	Title
in the plans and specifications approved by the enforcement agency and conforms to the applicable	Phone
acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have	Signature
confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Project Name	Local Enforcement Agency
Project Address	Permit Number
City, Zip Code	Permit Issue Date

Complies Date Submitted to Local Enforcement	
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	This document is used to demonstrate compliance with acceptance requirements in
	130.4(a)5, 130.4(a)8, 160.5(e)1E, and 160.5(e)1H and Reference
Intent:	Nonresidential Appendix NA7.6.3 and NA7.6.5 for demand responsive lighting and
	controlled receptacle controls. Attach additional sets of pages 2 through 8, as
	required, for all controls that must be tested.

Indicate all types of demand responsive controls tested for this project

Demand responsive lighting controls using illuminance measurement (Tables A-1 and B-1
of this document should be completed).
Demand responsive lighting controls using current measurement (Tables A-1 and B-2 of
this document should be completed).
Demand responsive lighting controls using full facility current measurement (Tables A-1
and B-3 of this document should be completed).
Demand responsive controls for controlled receptacles (Tables A-2 and B-4 of this
document should be completed).

Table A-1. Demand Responsive Lighting Control Construction Inspection

Step	Entry	Item	Code Reference
1		The demand responsive lighting controls are shown on plan documents and are installed.	NA7.6.3.1
2		The demand responsive control is setup to communicate in one of the following communication protocols: Wi-Fi, ZigBee, BACnet, Ethernet, or other wired or wireless bi-directional communication protocol. The demand responsive control is set up to communicate for the functional testing of NA7.6.3.2	NA7.6.3.1(a) §110.12(a)2
N/A	Pass	Construction Inspection Compliance.	N/A

CALIFORNIA ENERGY COMMISSION DEMAND RESPONSIVE CONTROLS 2025-CEC-NRCA-LTI-04-A

Demand Responsive Lighting Controls Illuminance Measurement

Building: Enter Value Floor: En	ter Value Room: Enter	Value Control: Enter Value
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Table B-1: Functional Testing Method 1: Illuminance Measurement

Sten	Entry		Code Reference
N/A	Yes	Space is representative of sample. If sampling method is used, attach a page listing untested spaces in sample.	NA7.6.3.2
1	No Entry	Select one location for illuminance measurement. The preferred measurement location is not in a skylit or primary sidelit area so that the illuminance meter is not in direct view of window or skylight. If this is not possible, perform the test at a time and location at which daylight illuminance provides less than half of the design illuminance.	NA7.6.3.2.1, Method 1(a)
1.1	Enter value	Enter the design illuminance value in footcandles (fc).	N/A
2	No Entry	Full output test	NA7.6.3.2.1, Method 1(b)
2.1	No Entry	Using the manual switches/dimmers, set the lighting system to full output. For a lighting system that has been task tuned, override the controls to allow the lighting system to go to full output. The lighting in areas with photocontrols or occupant/vacancy sensors may be at less than full output or may be off.	NA7.6.3.2.1, Method 1(b)1
2.2	Enter value	Measure the illuminance at the selected location and enter the value in footcandles (fc).	NA7.6.3.2.1, Method 1(b)2
2.3	No Entry	Simulate a demand response condition using the demand responsive control.	NA7.6.3.2.1, Method 1(b)3
2.4	Enter value	Measure the illuminance at the selected location with the electric lighting system in the demand response condition and enter the value in footcandles (fc).	NA7.6.3.2.1, Method 1(b)4
2.5	Enter value	Calculate the percent reduction in illuminance from the full output condition to the demand response condition and enter the value in %. (Percent reduction = [(Step 2.2 – Step 2.4) / Step 2.2] x 100%)	N/A
2.6	Enter value	Enter the area of the controlled space in square feet (ft^2) .	N/A



Step	Entry	Functional Test	Code Reference
2.7	Enter value	Calculate the area-weighted average reduction in illuminance from the full output condition to the demand response condition for the building using the given formula and enter the value in %. Area-weighted average reduction = $[(\text{Step } 2.5_1*\text{Step } 2.6_1) + (\text{Step } 2.5_2*\text{Step } 2.6_2) +$ $(\text{Step } 2.5_3*\text{Step } 2.6_3) +] / [\text{Step } 2.6_1 + \text{Step } 2.6_2 +$ $+ \text{Step } 2.6_3 +] * 100\%$	NA7.6.3.2.1, Method 1(b)5
2.8	Yes No	The area-weighted average reduction (Step 2.7) is at least 15%. (Step $2.7 \ge 15\%$)	NA7.6.3.2.1, Method 1(b)5 §110.12(c)1
3	No Entry	Minimum output test	NA7.6.3.2.1, Method 1(c)
3.1	No Entry	Using the manual switches/dimmers in each space, set the lighting system to minimum output (but not off). The lighting in areas with photocontrols or occupant/vacancy sensors may be at more than minimum output or may be off.	NA7.6.3.2.1, Method 1(c)1i
3.2	Enter value	Measure the illuminance at the selected location and enter the value in footcandles (fc).	NA7.6.3.2.1, Method 1(c)1ii
3.3	No Entry	Simulate a demand response condition using the demand responsive control.	NA7.6.3.2.1, Method 1(c)2i
3.4	Enter value	Measure the illuminance at the selected location with the electric lighting system in the demand response condition and enter the value in footcandles (fc).	NA7.6.3.2.1, Method 1(c)2ii
3.5	☐ Yes ☐ No	The illuminance in the demand response condition (Step 3.4) is not less than the illuminance in the minimum output condition (Step 3.2). (Step $3.4 \ge$ Step 3.2) Exception: In daylit spaces, the illuminance in the demand response condition (Step 3.4) may reduce below the illuminance in the minimum output condition.	NA7.6.3.2.1, Method 1(c)3i
N/A	Pass Fail	Functional Testing Compliance.	N/A

CALIFORNIA ENERGY COMMISSION DEMAND RESPONSIVE CONTROLS 2025-CEC-NRCA-LTI-04-A

Demand Responsive Lighting Controls Current Measurement

Building: Enter Value Floor: Enter Value	Room: Enter Value	Control: Enter Value
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Table B-2: Functional Testing Method 2: Current Measurement

Step	Entry	Functional Test	Code Reference
N/A	Yes	Space is representative of sample. If sampling method is used, attach a page listing untested spaces in sample.	NA7.6.3.2
1	No Entry	At the lighting circuit panel, select at least one lighting control circuit that serves spaces required to meet §110.12.	NA7.6.3.2.2, Method 2(a)
2	No Entry	Full output test	NA7.6.3.2.2, Method 2(b)
2.1	No Entry	Using the manual switches/dimmers, set the lighting system to full output in the space served by the selected circuit. The lighting in areas with photocontrols or occupant/vacancy sensors may be at less than full output or may be off.	NA7.6.3.2.2, Method 2(b)1
2.2	Enter value	Measure the current at the selected circuit and enter the value in amperes (A).	NA7.6.3.2.2, Method 2(b)2
2.3	Enter value	Calculate the sum of all the circuit currents in the full output condition and enter the value in amperes (A).	NA7.6.3.2.2, Method 2(b)5
2.4	No Entry	Simulate a demand response condition using the demand responsive control in the space served by the selected circuit.	NA7.6.3.2.2, Method 2(b)3
2.5	Enter value	Measure the current at the selected circuit with the electric lighting system in the demand response condition and enter the value in amperes (A).	NA7.6.3.2.2, Method 2(b)4
2.6	Enter value	Calculate the sum of all the circuit currents in the demand response condition and enter the value in amperes (A).	NA7.6.3.2.2, Method 2(b)5
2.7	Enter value	Calculate the percent reduction in current at the selected circuit from the full output condition to the demand response condition and enter the value in %. (Percent reduction = [(Step 2.2 - Step 2.5) / Step 2.2] * 100%)	N/A
2.8	Enter value	Calculate the total percent reduction in current from the full output condition to the demand response condition and enter the value in %. (Total percent reduction = [(Step 2.3 - Step 2.6) / Step 2.3] * 100%)	NA7.6.3.2.2, Method 2(b)5
2.9	Yes or No	The total percent reduction in current (Step 2.8) is at least 15%. (Step $2.8 \ge 15\%$)	NA7.6.3.2.2, Method 2(b)5
3	No Entry	Minimum output test	NA7.6.3.2.2, Method 2(c)

Step	Entry	Functional Test	Code Reference
3.1	No Entry	Using the manual switches/dimmers in each space, set the lighting system to minimum output (but not off) in the space served by the selected circuit. The lighting in areas with photocontrols or occupant/vacancy sensors may be at more than minimum output or may be off.	NA7.6.3.2.2, Method 2(c)1
3.2	Enter value	Measure the current at the selected circuit and enter the value in amperes (A).	NA7.6.3.2.2, Method 2(c)2
3.3	No Entry	Simulate a demand response condition using the demand responsive control in the space served by the selected circuit.	NA7.6.3.2.2, Method 2(c)3
3.4	Enter value	Measure the current at the selected circuit with the electric lighting system in the demand response condition and enter the value in amperes (A).	NA7.6.3.2.2, Method 2(c)4
3.5	☐ Yes ☐ No	The current in the demand response condition (Step 3.4) is not less than the current in the minimum output condition (Step 3.2). (Step $3.4 \ge$ Step 3.2) Exception: Circuits that supply power to the daylit portion of enclosed spaces as long as the current for lighting in the non-daylit portions of the enclosed space in the demand response condition is not reduced below the current in the minimum light output condition.	NA7.6.3.2.2, Method 2(c)5
N/A	Pass	Functional Testing Compliance.	N/A

Demand Responsive Lighting Controls Full Facility Current Measurement

	Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control: Enter Value
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Table B-3: Functional Testing Method 3: Full Facility Current Measurement

			Code
Step	Entry	Functional Test	Reference
1	No Entry	At circuit panel, select the circuit that serves the disaggregated lighting load of the entire facility and serves spaces required to meet §110.12.	NA7.6.3.2.3, Method 3(a)
2	No Entry	Full output test	NA7.6.3.2.3, Method 3(b)
2.1	No Entry	Using the facility lighting controls, set the lighting system to full output. The lighting in areas with photocontrols or occupant/vacancy sensors may be at less than full output or may be off.	NA7.6.3.2.3, Method 3(b)1
2.2	Enter value	Measure the current at the lighting circuit and enter the value in amperes (A).	NA7.6.3.2.3, Method 3(b)2
2.3	No Entry	Simulate a demand response condition using the demand responsive control.	NA7.6.3.2.3, Method 3(b)3



Step	Entry	Functional Test	Code Reference
2.4	Enter value	Measure the current at the lighting circuit with the electric lighting system in the demand response condition and enter the value in amperes (A).	NA7.6.3.2.3, Method 3(b)4
2.5	Enter value	Calculate the percent reduction in current from the full output condition to the demand response condition and enter the value in %. (Percent reduction = [(Step 2.2 - Step 2.4) / Step 2.2] * 100%)	NA7.6.3.2.3, Method 3(b)5, Method 3(b)6
2.6	Yes	The percent reduction in current (Step 2.5) is at least 15%. (Step $2.5 \ge 15\%$)	NA7.6.3.2.3, Method 3(b)6
3	No Entry	Minimum output test	NA7.6.3.2.3, Method 3(c)
3.1	No Entry	Using the facility controls, set the lighting system to minimum output (but not off). The lighting in areas with photocontrols or occupant/vacancy sensors may be at more than minimum output or may be off.	NA7.6.3.2.3, Method 3(c)1
3.2	Enter value	Measure the current at the lighting circuit and enter the value in amperes (A).	NA7.6.3.2.3, Method 3(c)2
3.3	No Entry	Simulate a demand response condition using the demand responsive control.	NA7.6.3.2.3, Method 3(c)3
3.4	Enter value	Measure the current at the lighting circuit with the electric lighting system in the demand response condition and enter the value in amperes (A).	NA7.6.3.2.3, Method 3(c)4
3.5	Yes No	The current in the demand response condition (Step 3.4) is not less than the current in the minimum output condition (Step 3.2). (Step $3.4 \ge$ Step 3.2)	NA7.6.3.2.3, Method 3(c)5
N/A	Pass	Functional Testing Compliance.	N/A
NO			



Table A-2. Demand Responsive Controls for Controlled Receptacle ConstructionInspection

Step	Entry	Item	Code Reference
1		The demand responsive controls for controlled receptacles are shown on plan documents and are installed.	NA7.6.5.1(c)
2		The demand responsive control is setup to communicate in one of the following communication protocols: Wi-Fi, ZigBee, BACnet, Ethernet, or other wired or wireless bi-directional communication protocol. The demand responsive control is setup to communicate for the functional testing of NA7.6.5.2.	NA7.6.5.1
3		Controlled receptacles or circuits have permanent marking to differentiate them from uncontrolled receptacles or circuits.	NA7.6.5.1(d) §130.5(d)3 §160.6(d)3
4		Controlled receptacles are controlled by an automatic shut-off control.	NA7.6.5.1(e) §130.5(d)1 §160.6(d)1
N/A	Pass	Construction Inspection Compliance.	N/A

Demand Responsive Controls for Controlled Receptacles

	Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control: Enter Value
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Table B-4: Demand Responsive Controls – Controlled Receptacle Functional Testing

Step	Entry	Functional Test	Code Reference
N/A	Yes No	Space is representative of sample. If sampling method is used, attach a page listing untested spaces in sample.	NA7.6.5.2
1	No Entry	On test.	NA7.6.5.2(a), On test
1.1	No Entry	Trigger the shut-off control to turn the demand responsive controlled receptacle on, or if the receptacle has a manual control turn the receptacle on.	NA7.6.5.2(a), On test (1)
1.2	Yes No	The controlled outlet has full voltage (125 V) present.	NA7.6.5.2(a), On test (2)
1.3	No Entry	Simulate a demand response condition using the demand responsive control.	NA7.6.5.2(a), On test (3)
1.4	Yes	The controlled outlet has zero voltage (0 V) present (deenergized).	NA7.6.5.2(a), On test (4)
1.5	Yes No	The controlled receptacle cannot be overridden to turn on by the automatic shut-off controls or any manual control.	NA7.6.5.2(a), On test (5)

			Code		
Step	Entry	Functional Test	Reference		
16	No Entry	Simulate a normal condition (non-demand response	NA7.6.5.2(a),		
1.0		condition).	On test (6)		
17	Yes	The controlled outlet has full voltage (125 V)	NA7.6.5.2(a),		
1.7	No	present.	On test (7)		
2	No Entry	Off test.	NA7.6.5.2(b),		
			Off test		
		Trigger the automatic shut-off control to turn the			
2.1	No Entry	demand responsive controlled receptacle off, or if	NA7.6.5.2(b),		
		the receptacle has a manual control turn the	Off test (1)		
		receptacle off.			
2.2	Yes	The controlled outlet has zero voltage (0 V) present	NA7.6.5.2(b),		
	No	(deenergized).	Off test (2)		
2.3	No Entry	Simulate a demand response condition using the	NA7.6.5.2(b),		
2.5		demand responsive control.	Off test (3)		
24	🗌 Yes	The controlled outlet has zero voltage (0 V) present	NA7.6.5.2(b)3		
<u> </u>	No No	(deenergized).	, Off test (4)		
		The demand responsive controlled receptacle	NA7652(b)		
2.5		cannot be overridden to turn on by automatic shut-	$\int \frac{1}{\sqrt{1000}} \int \frac{1}{100$		
		off controls or any manual control.			
2.6	No Entry	Simulate a normal condition (non-demand response	NA7.6.5.2(b),		
2.0		condition).	Off test (6)		
27	🗌 Yes	The controlled outlet has zero voltage (0 V) present	NA7.6.5.2(b),		
2./	No No	(deenergized).	Off test (7)		
N/A	Pass	Functional Testing Compliance	N/A		
	Fail	Tunctonal resting compliance.	IN/A		
NOTCREORING					



Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT Certification Title Date Signed Phone Signature
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to fulfill this requirement.	Name Company Name Title Date Signed Phone Signature



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Construction inspection and functional testing comply	Data Submitted to AH1: Data
Does not comply	Date Submitted to All. Date

Intent:	This document is used to demonstrate compliance with acceptance requirements in §130.4(a)7 and §160.5(e)1G, and Reference Nonresidential Appendix NA7.6.4 for lighting systems receiving the institutional tuning power adjustment factor (PAF). Attach additional sets of pages 1 through 4, as required, for all systems that must be tested.
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Indicate functional testing methods used for this project:

Check box if observations of systems were taken during institutional tuning (Tables A and B-1 of this document should be completed).
Check box if verification of systems already tuned (Tables A and B-2 of this document should be completed).

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1		The construction documents specify which lighting systems shall have their maximum light output or maximum power draw set to no greater than 85 percent of full light output or full power draw.	NA7.6.4.1(a)
2		The controls or the methods of controlling the maximum output of luminaires is such that the maximum light output of the controlled lighting system can be limited, and that normal operation of the controlled lighting does not override the maximum light output.	NA7.6.4.1(b)
3		The controls are not readily accessible to unauthorized personnel.	NA7.6.4.1(c) §140.6(a)2Jii §170.2(e)2Bx b
N/A	Pass Fail	Construction Inspection Compliance.	N/A



Observation of Systems During Institutional Tuning

Building: Enter Value Floor: Enter Value Room: Enter Value Control/tag: Value				
5	Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Table B-1: Functional Testing Method 1 - Observation of Systems During InstitutionalTuning

Step	Entry	Functional Test	Code Reference
N/A	Yes	Space is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.6.4
1	No Entry	Determination of light output or maximum power prior to institutional tuning (Current measurements may be used instead of power measurements to show power reduction.)	NA7.6.4.2.1, Step 1
1.1	No Entry	Set all lighting controls to provide maximum output of the tested system without applying the limits specified for institutional tuning.	NA7.6.4.2.1, Step 1(a)
1.2	Enter Value	Measure the full light output at a location where the illuminance is due to the controlled lighting and enter the value in footcandles (fc). OR Measure the power of the controlled lighting and enter the value in watts (W). (If current measurements are being used, enter the measured current in amperes (A).)	NA7.6.4.2.1, Step 1(b)
2	No Entry	Institutional tuning and post-tuning measurement	NA7.6.4.2.1, Step 2
2.1	Enter Value	Apply the limits specified for institutional tuning to the lighting system. Do not alter any other control settings.	NA7.6.4.2.1, Step 2(a) §140.6(a)2Jiii §170.2(e)2Bx c
2.2	Enter Value	Measure the light output at the same location as in Step 1.2 and enter the value in footcandles (fc). OR Measure the power of the same circuit as in Step 1.2 and enter the value in watts (W). (If current measurements are being used, enter the measured current in amperes (A).)	NA7.6.4.2.1, Step 2(b)
2.3	Enter Value	Calculate ratio of the light or power output of the system after institutional tuning to the light or power output of the system before institutional tuning and enter the value in %. ([Step 2.2 / Step 1.2] x 100)	N/A
2.4	Yes No	The light output or power after institutional tuning is 85% or less of the light output or power before institutional tuning. (Step 2.3 \leq 85%)	NA7.6.4.2.1, Step 2(c), §140.6(a)2Ji §170.2(e)2Bx a



Step	Entry	Functional Test	Code Reference
N/A	Pass	Functional Testing Compliance.	N/A

Verification of Systems Already Tuned

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
J			

Table B-2: Functional Testing Method 2 - Verification of Systems Already Tuned

Step	Entry	Functional Test	Code Reference
N/A	Yes or No	Space is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.6.4
1	No Entry	Measurement of tuned lighting system (Current measurements may be used instead of power measurements to show power reduction.)	NA7.6.4.2.2, Step 1
1.1	No Entry	Set all lighting controls except institutional tuning controls to provide maximum output of tested system. Controls set to maximum light output include but not limited to manual dimmers, multilevel occupant sensing controls, and automatic daylighting controls.	NA7.6.4.2.2, Step 1(a), §140.6(a)2Jiii §170.2(e)2Bx c
1.2	Enter Value	Measure the full light output at a location where most of the illuminance is due to the controlled lighting and enter the value in footcandles (fc). OR Measure the power of the controlled lighting and enter the value in watts (W). (If current measurements are being used, enter the measured current in amperes (A).)	NA7.6.4.2.2, Step 1(b)
2	No Entry	Measurement of lighting system with institutional tuning overridden	NA7.6.4.2.2, Step 2
2.1	No Entry	Reset institutional tuning controls to allow full light output. Set all lighting controls to provide maximum output of tested system including but not limited to institutional tuning controls, manual dimmers, multilevel occupant sensing controls, and automatic daylighting controls.	NA7.6.4.2.2, Step 2(a)
2.2	Enter Value	Measure the light output at the same location as in Step 1.2 and enter the value in footcandles (fc). OR Measure the power of the same circuit as in Step 1.2 and enter the value in watts (W). (If current measurements are being used, enter the measured current in amperes (A).)	NA7.6.4.2.2, Step 2(b)



Step	Entry	Functional Test	Code Reference
2.3	Enter Value	Calculate ratio of the light or power output of the system after institutional tuning to the light or power output of the system before institutional tuning and enter the value in %. ([Step 1.2 / Step 2.2] x 100)	N/A
2.4	Yes No	The light output or power after institutional tuning is 85% or less of the light output or power before institutional tuning. (Step $2.3 \le 85\%$)	NA7.6.4.2.2, Step 2(c), §140.6(a)2Ji §170.2(e)2Bx a
3	No Entry	If the tested system passes the test in (Step 2.4 = Y), restore institutional tuning settings.	NA7.6.4.2.2, Step 3(a)
N/A	Pass Fail	Functional Testing Compliance.	N/A
			January 1, 2020



CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	Nama
The information provided on this Cartificate of Acceptance is true and correct. I am the percent who	
The information provided on this Certificate of Acceptance is true and correct. I am the person who	
construction or installation identified on this Cortificate of Accontance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7 I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
installation identified on this Certificate of Acceptance has been completed and signed by the responsible	Date Signed
builder/installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
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	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
instructed with the documentation the builder provides to the building owner at accurance. I will take the	
ncluded with the documentation the builder provides to the building owner at occupancy. I will take the	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip Code: City, Zip Code	Permit Application Date: Date

Construction inspection and functional testing comply	Date Submitted to AHJ: Date
Does not comply	

Intent:	This document is used to demonstrate compliance with acceptance requirements in §130.4(a)6, §160.5(e)1F, and Reference Nonresidential Appendix NA7.8 for
	outdoor lighting controls. Attach additional sets of pages 1 through 4 as required,
	for all controls that must be tested.

Indicate all types of outdoor lighting controls tested for this project:

Photocontrols (Tables A-1 and B-1 of this document should be completed).
Automatic scheduling controls (including astronomical time switch controls) (Tables A-2 and B-2 of this document should be completed).
Motion sensing controls (Tables A-3 and B-3 of this document should be completed).

Photo Controls

Table A-1: Photocontrol Construction Inspection

Step	Entry	Item	Code Reference
1		The photocontrols are shown on plan documents and are installed.	NA7.8.2.1
N/A	Pass	Construction Inspection Compliance.	N/A

Table B-1: Photo Control Functional Testing

Step	Entry	Functional Test	Code Reference
N/A	Yes	Control is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.8.2.2
1	Yes or No	During daytime simulation, all controlled luminaires are turned off.	NA7.8.2.2(a) §130.2(c)1 §160.5(c)2A
2	Yes or No	During nighttime simulation, all controlled luminaires are turned on.	NA7.8.2.2(b)
N/A	Pass Fail	Functional Testing Compliance.	N/A

Automatic Scheduling Controls

Step	Entry	Item	Code Reference
1		The automatic scheduling controls are shown on plan documents and are installed.	NA7.8.5.1(a)
2		The automatic scheduling control is programmed with on and off schedules that match the schedules in the construction documents. OR If the schedule is unknown, the programmed schedule matches the default schedule where the off schedule is from 12:00 A.M. to 6:00 A.M. and the on schedule is all other nighttime hours, 7 days per week.	NA7.8.5.1(b)
3		The lighting control programming includes on and off schedules for weekdays, weekends, and holidays (if applicable).	NA7.8.5.1(c)
4		The correct time and date are properly set in the control.	NA7.8.5.1(d)
N/A	Pass Fail	Construction Inspection Compliance.	N/A

Table A-2: Automatic Scheduling Control Construction Inspection

Table B-2: Automatic Scheduling Control Functional Testing

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

			Code
Step	Entry	Functional Test	Reference
		During daytime simulation, all controlled luminaires	NA7.8.5.2(a)
1		are turned off	§130.2(c)1
			§160.5(c)2A
		During nighttime simulation with the programmed	NA7.8.5.2(b)
2		occupied period, all controlled luminaires are	§130.2(c)2C
		turned on.	§160.5(c)2Biii
		During nighttime simulation with the programmed	NA7.8.5.2(c)
		unoccupied period, the controlled luminaires are	§130.2(c)2B
3		turned off or the lighting power of controlled	§130.2(c)2C
		luminaires is reduced by at least 50% and no more	§160.5(c)2Bii
		than 90%.	§160.5(c)2Biii
N/A	Pass	Functional Testing Compliance.	N/A

Motion Sensing Controls

Table A-3: Motion Sensing Control Construction Inspection

Step	Entry	Item	Code Reference
1		The motion sensing controls are shown on plan documents and are installed.	NA7.8.1.1(a)
2		The motion sensor is located to minimize false signals.	NA7.8.1.1(b)
3		The desired motion sensor coverage is not blocked by obstructions that could adversely affect performance.	NA7.8.1.1(c)
N/A	Pass	Construction Inspection Compliance.	N/A

Table B-3: Motion Sensing Control Functional Testing

	Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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			Code
Step	Entry	Functional Test	Reference
N/A	Yes No	Control is representative of sample. If sampling method is used, attach a page listing untested controls in sample.	NA7.8.1.2
1	No Entry	Simulate motion in the area under luminaire controlled by the motion sensor.	NA7.8.1.2, Step 1
1.1	Yes	Status indicator operates correctly.	NA7.8.1.2, Step 1(a)
1.2	Yes No	Controlled luminaires turn on immediately upon entry into the controlled area.	NA7.8.1.2, Step 1(b) §130.2(c)3C §160.5(c)2Ciii
1.3	Yes	The signal sensitivity is adequate to achieve desired control.	NA7.8.1.2, Step 1(c)
2	No Entry	Simulate no motion in the controlled area.	NA7.8.1.2, Step 2
2.1	Yes	The controlled luminaires are turned off or the lighting power of each controlled luminaire is reduced by at least 50% and no more than 90% within 15 minutes from the start of an unoccupied condition. Fraction of light output reduction is an acceptable proxy for reduction in lighting power.	NA7.8.1.2, Step 2(a) §130.2(c)3B §130.2(c)3C §160.5(c)2Cii §160.5(c)2Ciii
2.2	Yes	The sensor does not trigger a false "on" from movement outside of the controlled area.	NA7.8.1.2, Step 2(b)
2.3	Yes	The signal sensitivity is adequate to achieve the desired control.	NA7.8.1.2, Step 2(c)
N/A	Pass	Functional Testing Compliance.	N/A



Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name
	Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate of Acceptance shall this requirement. I understand that a signed copy of this Certificate of acceptance to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter ValueFloor: Enter ValueRoom: Enter ValueControl/tag: Value

Construction inspection and functional testing comply Does not comply

Date Submitted to AHJ: Date

Intent:	Verify measured outside airflow sensor reading is within 10% of the total required
	outside airflow. Required for all newly installed HVAC units or additions and
	alterations to existing HVAC systems including ducts. Reference NRCC-MCH-E for
	nonresidential (including nonresidential spaces in high-rise multifamily) building
	permits or NRCC-PRF-E for the performance path, or LMCC-MCH-E or LMCC-PRF-E
	for nonresidential spaces in low-rise multifamily building permits. Submit one
	Certificate of Acceptance for each system that must demonstrate compliance. NRCA-
	MCH-02-A can be performed in conjunction with NRCA-MCH-07-A Supply Fan VFD
	Acceptance (if applicable) since testing activities overlap. Reference § 120.1(e), §
	120.1(d)2, § 120.5(a)1, § 160.2(c)6, § 160.2(c)5B, § 160.3(d)1A, and NA7.5.1.

Table A: Construction Inspection for Air Volume Systems

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass	Access to required document NRCC-MCH-E or NRCC-PRF-E as approved by the authority having jurisdiction, or LMCC-MCH-E registered by a CEC approved ECC data registry or LMCC-PRF-E.	§10-103(a)2A
2.0	No Entry	For VAV systems, complete ALL of Steps 2, 3, and 4 and respond N/A for ALL of Steps 5, 6, and 7. For CAV systems, respond N/A for ALL of Steps 2, 3, and 4, and complete ALL of Steps 5, 6, and 7.	N/A
2.1 or	P, F, N/A	VAV Only: Outside airflow is factory calibrated; attach factory calibration spec-sheet. (Pass, Fail, N/A-if CAV)	NA7.5.1.1.1(a) NA7.5.1.1.1(b)
2.2	P, F, N/A	VAV Only: Outside airflow is field calibrated, attach calibration results report. (Pass, Fail, N/A-if CAV)	NA7.5.1.1.1(a) NA7.5.1.1.1(b)
3.0	P, F, N/A	VAV Only: Dynamic damper control is being used to control outside air. (Pass, Fail, N/A-if CAV)	NA7.5.1.1.1(c)
4.0	No Entry	VAV Only: Identify the dynamic control being utilized to control outside air. (Description or N/A)	NA7.5.1.1.1(d)
4.1	Response:	Describe Control or N/A	NA7.5.1.1.1(d)

Stop	Entro	Itom	Code
5.0	епту Р, F, N/A	CAV Only: System is designed to provide a fixed minimum outside air when the unit is on. (Pass, Fail, N/A-if VAV)	NA7.5.1.2.1(a)
6.0	P, F, N/A	CAV Only: Minimum position is marked on the outside air damper. (Pass, Fail, N/A-if VAV)	NA7.5.1.2.1(d)
7.0	P, F, N/A	CAV Only: The system has means of maintaining the minimum outdoor air damper position. (Pass, Fail, N/A-if VAV)	NA7.5.1.2.1(e)
8.0	No Entry	Method of delivering outside air to the heating or cooling unit. Either 8.1 or 8.2 must pass.	N/A
8.1 or	P, F, N/A	Return Plenum Ducted. If outside air is ducted at or to the return plenum, confirm that the ducted is within 5 ft of the heating or cooling unit, or 15 ft with direction and velocity requirement as specified by NRCC-MCH-E or NRCC-PRF-E or LMCC-MCH-E or LMCC-PRF-E. (Pass, Fail, N/A)	NA7.5.1.1.1(e) NA7.5.1.2.1(b) §120.1(e) §160.2(c)6
8.2	P, F, N/A	Direct Unit Ducted. If the outside air is ducted directly to the unit, verify that return air plenum is NOT used to distribute outside air to the heating or cooling unit. (i.e. outside air is ducted directly to the unit, outside air is provided independent of the unit, or economizer). (Pass, Fail, N/A)	NA7.5.1.1.1(e) NA7.5.1.2.1(b) §120.1(e) §160.2(c)6
9.0	Pass	Pre-occupancy Purge: Verify that the pre- occupancy purge has been programmed to meet the requirements of Standards Section 120.1(d)2.	NA7.5.1.1.1(f) NA7.5.1.2.1(c) §120.1(d)2 §160.2(c)5B
10.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B-1: Functional Testing for Constant Air Ventilation (CAV) System This table is to be completed for CAV systems only, skip this table when testing a VAV system.

Step	Entry	Functional Test	Code Reference
1.0	P, F, N/A	Disable demand control ventilation. (if applicable) (Pass, Fail, N/A)	N/A
2.0	P, F, N/A	Verify unit is not in economizer mode during test. (economizer disabled) (Pass, Fail, N/A)	NA7.5.1.2.2 Step 1
3.0	Enter Value	Testing at full supply airflow, measure outdoor airflow reading. (CFM)	NA7.5.1.2.2 Step 1(a)



Step	Entry	Functional Test	Code Reference
4.0	Enter Value	Record required outdoor airflow from NRCC-MCH-E or NRCC-PRF-E or LMCC-MCH-E or LMCC-PRF-E. (CFM)	NA7.5.1.2.2 Step 1(a)
5.0	Pass	Return to initial conditions.	N/A
6.0	Enter Value	Calculate 100 x (Step3/Step4) (Percent)	NA7.5.1.2.2 Step 1(a)
7.0	Pass	Check pass if value in Step $6 \ge 90\%$ and $\le 110\%$.	NA7.5.1.2.2 Step 1(a)

Table B-2: Functional Testing for Variable Air Ventilation (VAV) SystemThis table is to be completed for VAV systems only, skip this table when testing a CAV system.

Step	Entry	Functional Test	Code Reference
1.0	P, F, N/A	Disable demand control ventilation. (if applicable) (Pass, Fail, N/A)	N/A
2.0	P, F, N/A	Verify unit is not in economizer mode during test. (economizer disabled) (Pass, Fail, N/A)	NA7.5.1.1.2 Step 1
3.0	Pass Fail	Testing at full supply airflow, adjust supply air to achieve design airflow or maximum airflow at full cooling.	NA7.5.1.1.2 Step 2
4.0	Enter Value	Testing at full supply airflow, measure outdoor airflow reading. (CFM)	NA7.5.1.1.2 Step 2(a)
5.0	Enter Value	Record required outdoor airflow from NRCC-MCH-E or NRCC-PRF-E or LMCC-MCH-E or LMCC-PRF-E. (CFM)	NA7.5.1.1.2 Step 2(a)
6.0	Enter Value	Time for outside air damper to stabilize after full supply airflow is achieved. (Minutes)	NA7.5.1.1.2 Step 2(b)
7.0	Pass Fail	Adjust supply airflow to either the sum of the minimum zone airflows, full heating, or 30% of the total design airflow.	NA7.5.1.1.2 Step 3
8.0	Enter Value	Measure outdoor airflow reading. (CFM)	NA7.5.1.1.2 Step 3(a)
9.0	Enter Value	Time for outside air damper to stabilize after reduced supply airflow is achieved. (Minutes)	NA7.5.1.1.2 Step 3(b)
10.0	Pass Fail	Return to initial conditions.	NA7.5.1.1.2 Step 4
11.0	Enter Value	Calculate 100 x (Step4/Step5) (Percent)	NA7.5.1.2.2 Step 1a
12.0	Enter Value	Calculate 100 x (Step8/Step5) (Percent)	NA7.5.1.1.2 Step 3a
13.0	Pass	Check pass if both Steps 6 and 9 are both 5 minutes or less AND if both Steps 11 and 12 are \geq 90% and \leq 110%.	N/A







CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
Field Technician	Date Signed
I certify the following under penalty of periury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Lassert the following under penalty of periury, under the laws of the State of California:	
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	Namo
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

 Building: Enter Value
 Floor: Enter Value
 Room: Enter Value
 Control/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent:	This acceptance test is meant for new installations of constant volume, single zone, unitary (packaged and split) air conditioner and heat pump systems in nonresidential or multifamily occupancies. Either an NRCC-MCH-E for nonresidential construction that is completed and approved by the authority having jurisdiction or NRCC-PRF-E for the performance path, or a LMCC-MCH-E or LMCC-PRF-E for multifamily
	construction that is registered with a CEC approved ECC data registry, is required prior to beginning this acceptance test. Submit one Certificate of Acceptance for each room, area, or zone that is directly or indirectly served by a thermostatic controls system. References: $\delta_{120} 2(a) \delta_{120} 2(b) \delta_{110} 12(a) \delta_{160} 3(a) \delta_{180} 2(b) and$
	NA7.5.2.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

			Code
Step	Entry	Item	Reference
1.1	Pass Fail	Verify that the NRCC-MCH-E as approved by the authority having jurisdiction or NRCC-PRF-E for the performance path, or LMCC-MCH-E or LMCC-PRF-E as registered by a CEC approved ECC data registry, is available for reference.	§10-103(a)2A
1.2	Pass Fail	Verify that the demand responsive controls are certified OpenADR 2.0a or OpenADR 2.0b Virtual End Node or certified Baseline Profile OpenADR 3.0 Virtual End Node or certified to the Energy Commission stating that the demand response control system is capable of responding to a demand response signal from a certified OpenADR 2.0b or a certified Baseline Profile OpenADR 3.0 Virtual End Node by automatically implementing the control functions requested by the Virtual End Node for the equipment it controls.	NA7.5.2.1(b) §120.2(b)4 §110.12(a)1 §160.3(a)2Biv §160.3(a)2G
2.0	No Entry	Thermostatic controls for each zone served by the system – One of the following Steps must pass: 2.1, 2.2, or 2.3	NA7.5.2.1(a)



Step	Entry	Item	Code Reference
2.1	P, F, N/A	Thermostat is located as required by §120.2(a). (Pass, Fail, or N/A)	§120.2(a) §160.3(a)2A
2.2	P, F, N/A	An Energy Management Control system is installed to comply with the requirement of one or more thermostatic controls. (Pass, Fail, or N/A)	§120.2(a) §160.3(a)2A
2.3	P, F, N/A	An independent perimeter heating or cooling system that serves more than one zone without individual thermostatic controls is installed. Mark as "pass" only if all of the following Steps pass: 2.3.1 , 2.3.2 , 2.3.3 , and 2.3.4 . (Pass, Fail, or N/A)	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.1	P, F, N/A	All zones served by the perimeter system are also served by an interior cooling system (Pass, Fail, or N/A); and	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.2	P, F, N/A	The perimeter system is designed solely to offset envelope heat losses or gains (Pass, Fail, or N/A); and	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.3	P, F, N/A	The perimeter system has at least one thermostatic control for each building orientation of 50 feet or more (Pass, Fail, or N/A); and	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.4	P, F, N/A	The perimeter system is controlled by at least one thermostat located in one of the zones served by the system. (Pass, Fail, or N/A)	Exception to §120.2(a) Exception to §160.3(a)2A
3.0	No Entry	Criteria for Thermostatic zone controls. Both steps 3.1 and 3.2 must pass.	NA7.5.2.1(b) §120.2(b)
3.1	P, F, N/A	Set Points and Dead-band. One of the following steps must pass: 3.1.1, 3.1.2, 3.1.3, or 3.1.4	§120.2(b) §160.3(a)2B
3.1.1	P, F, N/A	The thermostatic control is used to control comfort heating only and is capable of being set, locally or remotely, down to 55°F or lower. (Pass, Fail, N/A)	§120.2(b)1 §160.3(a)2Bi
3.1.2	P, F, N/A	The thermostatic control is used to control comfort cooling only and is capable of being set, locally or remotely, up to 85°F or higher. (Pass, Fail, N/A)	§120.2(b)2 §160.3(a)2Bii
3.1.3	P, F, N/A	The thermostatic control is used to control both comfort heating and comfort cooling and requires manual changeover between heating and cooling modes. (Pass, Fail, N/A)	Exception to §120.2(b)3 Exception to §160.3(a)2Biii

Step	Entry	Item	Code Reference
3.1.4	P, F, N/A	The thermostatic control is used to control both comfort heating and comfort cooling and does NOT require manual changeover between heating and cooling modes and is capable of all of the following (all of the following steps must pass): 3.1.4.1 , 3.1.4.2 , and 3.1.4.3 (Pass, Fail, N/A)	§120.2(b)3 §160.3(a)2Biii
3.1.4.1	P, F, N/A	A minimum heating setpoint of 55°F or lower (Pass, Fail, N/A); and	§120.2(b)3 §160.3(a)2Biii
3.1.4.2	P, F, N/A	A maximum cooling setpoint of 85°F or higher (Pass, Fail, N/A); and	§120.2(b)3 §160.3(a)2Biii
3.1.4.3	P, F, N/A	A temperature range or dead band of at least 5°F within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum. (Pass, Fail, N/A)	§120.2(b)3 §160.3(a)2Biii
3.2	P, F, N/A	Additional Thermostatic Setback Controls. One of the following steps must pass: 3.2.1 , 3.2.2 , 3.2.3 , or 3.2.4	§120.2(b) §160.3(a)2B
3.2.1	P, F, N/A	The heating or cooling systems is NOT a heat pump system and is NOT controlled by an Energy Management Control System, and has a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours (a setback thermostat). (Pass, Fail, N/A)	§110.2(c)1 §120.2(b)4 §160.3(a)1 §160.3(a)2Biv §180.2(b)2Aiv
3.2.2	P, F, N/A	Thermostatic setback control is NOT required. The heating or cooling system is one of the following (One of the following steps must pass): 3.2.2.1, 3.2.2.2, 3.2.2.3, or 3.2.2.4 . (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.1	P, F, N/A	Gravity gas wall heater (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.2	P, F, N/A	Gravity floor heater (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.3	P, F, N/A	Gravity room heater (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.4	P, F, N/A	Non-central electric heater, fireplace or decorative gas appliance, wood stove, room air conditioner, or room air-conditioner heat pump. (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.3	P, F, N/A	The heating or cooling system is a heat pump WITH supplementary heaters and has all of the following controls. All of the following steps must pass: 3.2.3.1, 3.2.3.2, and 3.2.3.3. (Pass, Fail, N/A)	§110.2(c) §110.2(b)

Step	Entry	Item	Code Reference
3.2.3.1	P, F, N/A	Has a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours (a setback thermostat). (Pass, Fail, N/A)	§110.2(c)1
3.2.3.2	P, F, N/A	The cut-on temperature for heat pump heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for heat pump heating is higher than the cut-off temperature for supplementary heating. (Pass, Fail, N/A)	§110.2(b)2
3.2.3.3	P, F, N/A	 Verify that supplementary heater operation is prevented when the heating load can be met by the heat pump alone, UNLESS the thermostatic controls provide preferential rate control, intelligent recovery, staging, ramping or another control mechanism designed to preclude the unnecessary operation of supplementary heating; supplementary heater operation is limited the following conditions: Defrost Transient Periods (i.e., start-ups or following thermostat setpoint advance) 	§110.2(b)1 Exception 1 to §110.2(b)
3.2.4	P, F, N/A	The heating or cooling system is a heat pump WITHOUT supplementary heaters and has a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours (a setback thermostat). (Pass, Fail, N/A)	§110.2(c)1 §110.2(b)
4.0	No Entry	Demand Response Controls & Demand Responsive Zonal HVAC Controls. All of the following steps must pass: 4.1, 4.2, 4.3, 4.4, and 4.5.	NA7.5.2.1(b) §120.2(b) §160.3(a)2B §110.12
4.1	Pass Fail	Verify that the demand responsive controls are capable of communicating with the Virtual End Node (VEN) using wired or wireless bi-directional communication protocol.	§110.12(a)2
4.2	Pass	Verify that when the demand responsive signal is disabled or unavailable, all demand responsive controls continue to perform all other control functions provided by the control.	§110.12(a)4


Step	Entry	Item	Code Reference
4.3	Pass Fail	Verify that the demand response control system has been certified to the Energy Commission as meeting all of the requirements in Reference Joint Appendix 5 (<u>Occupant Controlled Smart</u> <u>Thermostat</u>). https://www.energy.ca.gov/rules- and-regulations/building-energy- efficiency/manufacturer-certification-building- equipment-7	§110.12(a)5
4.4	Pass Fail	Verify that the controls are programmed to provide an adjustable rate of change for the temperature setup increase, decrease, and reset.	§110.12(b)4
4.5	Pass	Verify that the controls have the following features: All of the following steps must pass: 4.5.1, 4.5.2, and 4.5.3	§110.12(b)5
4.5.1	Pass	Disabled. Disabled by authorized facility operators;	§110.12(b)5A
4.5.2	Pass	Manual control. Manual control by authorized facility operators to allow adjustment of heating and cooling set points globally from a single point in the EMCS.	§110.12(b)5B
4.5.3	Pass	Automatic Demand Shed Control. Upon receipt of a demand response signal, the space conditioning systems conduct a centralized demand shed for non-critical zones during the demand response period.	§110.12(b)1 §110.12(b)2 §110.12(a)5C
5.0	No Entry	Occupancy and Pre-Occupancy Programming. Both of the following steps must pass: 5.1 and 5.2	NA7.5.2.1(c)
5.1	Pass	Occupied, unoccupied, and holiday schedules have been programmed per the schedule provided.	NA7.5.2.1(c)
5.2	Pass Fail	Pre-occupancy purge has been programmed for the 1-hour period immediately before the building is normally occupied to provide ventilation by one of the following methods (One of the following steps must pass): 5.2.1 or 5.2.2	NA7.5.2.1(d) §120.1(d)2 §160.2(c)5B
5.2.1	P, F, N/A	The minimum CFM specified by design for the heating or cooling unit is supplied to all zones served by the unit during the 1-hour period immediately before the building is normally occupied. (Pass, Fail, N/A)	NRCC-MCH-E or LMCC-MCH- E, Table J. §120.1(d)2 §160.2(c)5B
5.2.2	P, F, N/A	Three complete air changes to the zone served by the heating or cooling unit is supplied to all zones served by the unit during the 1-hour period immediately before the building is normally occupied. (Pass, Fail, N/A)	NRCC-MCH-E or LMCC-MCH- E, Table J. §120.1(d)2 §160.2(c)5B



Step	Entry	Item	Code Reference
6.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B: I	Functional Tes	tina	ACIS.
Step	Entry	Functional Test	Code Reference
1.0	P, F, N/A	Disable economizer control and demand-controlled ventilation (if applicable) to prevent unexpected interactions. (Pass, Fail, N/A)	NA7.5.2.2 Step 1
2.0	No Entry	Occupied Mode: Simulate a heating demand during the occupied condition. ALL of the following steps must pass: 2.1, 2.2, 2.6, and 2.4.	NA7.5.2.2 Step 2
2.1	Pass	Supply fan operates continuously.	NA7.5.2.2 Step 2(a)
2.2	Pass	The unit provides heating.	NA7.5.2.2 Step 2(b)
2.3	Pass	No cooling is provided by the unit.	NA7.5.2.2 Step 2(c)
2.4	Pass	Outside air damper is at minimum position.	NA7.5.2.2 Step 2(d)
3.0	No Entry	Occupied Mode: Simulate operation in the dead band during occupied condition. ALL of the following steps must pass: 3.1, 3.2, 3.3, and 3.4.	NA7.5.2.2 Step 3
3.1	Pass Fail	Supply fan operates continuously.	NA7.5.2.2 Step 3(e)
3.2	Pass Fail	No heating is provided by the unit.	NA7.5.2.2 Step 3(f)
3.3	Pass	No cooling is provided by the unit.	NA7.5.2.2 Step 3(f)
3.4	Pass Fail	Outside air damper is at minimum position.	NA7.5.2.2 Step 3(g)
4.0	No Entry	Simulate cooling demand during occupied condition. Lock out economizer (if applicable). ALL of the following steps must pass: 4.1, 4.2, 4.3, and 4.4 .	NA7.5.2.2 Step 4
4.1	Pass	Supply fan operates continuously.	NA7.5.2.2 Step 4(h)



			Code
Step	Entry	Functional Test	Reference
4.2	Pass	No beating is provided by the unit	NA7.5.2.2
7.2	Fail		Step 4(j)
43	Pass	Cooling is provided by the unit	NA7.5.2.2
1.5	Fail		Step 4(i)
44	Pass	Outside air damper is at minimum position	NA7.5.2.2
	🔄 Fail		Step 4(k)
F 0	No Fata	Simulate operation in the dead band during	NA7.5.2.2
5.0	NO Entry	noccupied mode. All of the following steps must	Step 5
		pass. 5.1, 5.2, 5.3, and 5.4 .	
5.1		Supply fan turns off.	Step 5(1)
5.2	E Fail	No heating is provided by the unit.	Step $5(n)$
			NA7 5 2 2
5.3	Fail	No cooling is provided by the unit.	Step $5(n)$
			NΔ7 5 2 2
5.4	Fail	Outside air damper closes completely.	Sten 5(m)
		Simulate heating demand during unoccupied	
6.0	No Entry	conditions. All of the following steps must pass:	NA7.5.2.2
010		6.1, 6.2, 6.3, and 6.4.	Step 6
<u> </u>	Pass		NA7.5.2.2
6.1	Fail	Supply fan cycles on and off.	Step 6(o)
6.2	Pass	The unit provides herebing	NA7.5.2.2
0.2	🗌 Fail	The unit provides heating.	Step 6(p)
6.2	Pass	No cooling is provided by the unit	NA7.5.2.2
0.5	🗌 Fail	No cooling is provided by the unit.	Step 6(q)
61	Pass	Outside air damper is either closed or at minimum	NA7.5.2.2
0.4	🗌 Fail	position.	Step 6(r)
		Simulate cooling demand during unoccupied	
7.0	No Entry	condition. Lock out economizer (if applicable). All of	NA7.5.2.2
7.0	NO Entry	the following steps must pass:	Step 7
		7.1 , 7.2 , 7.3 , and 7.4 .	
71	Pass	Supply fan cycles on and off	NA7.5.2.2
/.1	Fail		Step 7(s)
7.2	Pass	No heating is provided by the unit	NA7.5.2.2
	Fail		Step 7(u)
7.3	Pass	Cooling is provided by the unit.	NA7.5.2.2
			Step 7(t)
7.4		Outside air damper is either closed or at minimum	NA/.5.2.2
		position.	Step /(v)
0.0	No Cotra	Simulate manual override during unoccupied	NA7.5.2.2
ð.U	NO ENTRY	9.1 and 9.2	Step 8
		0.1 anu 0.2.	NA7500
8.1		System operates in "occupied" mode.	Ston g(w)



SLEP LIILIY	Eunctional Test	Deference
	System reverts back to "unoccupied" mode when	NA7522
8.2	manual override time period expires	Sten 8(v)
	System returned to initial operating conditions	
Pass	Restore economizer and demand control ventilation	NA7.5.2.2
9.0	systems (if applicable), and remove all system	Step 9
	overrides initiated during the test.	
100 Pass	Check pass if Functional Test passes on Steps 1	
Fail	through 9	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value Floor: Enter Value Room: Enter Value Control/tag: Value	Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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ananig. Er			Room Enter	Value	control/tagi value
Constru	iction inspec ot comply	tion and functional testi	ng comply	Date Sub	omitted to AHJ: Date
ntonti	Submit on	Cortificato of Accontan	co tocting duct	lookogo r	ate for each nowly

Intent:	Submit one Certificate of Acceptance testing duct leakage rate for each newly
	installed, repaired, or altered heating, ventilating or air conditioning (HVAC) duct
	system. Either an NRCC-MCH-E for nonresidential construction that is completed and
	approved by the authority having jurisdiction or an LMCC-MCH-E for multifamily
	construction that is registered with a CEC approved ECC data registry is required
	prior to beginning this acceptance test. Submit one Certificate of Acceptance for each
	system that must demonstrate compliance. Reference: §120.4(g), §120.5(a)3, §
	141.0(b)2D, §141.0(b)2E, §160.3(c)2Hi, §160.3(b)5K, §160.3(c)2Ciid, §160.3(c)2A-E,
	§160.3(d)1C, §180.2(b)2Bii, §180.2(b)2Biii, and NA7.5.3.
	NOTE: Only ATT certified technicians can perform this acceptance test.

 Table A: Construction Inspection

 Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass Fail	Confirm access to design drawings, cut-sheets, NRCC-MCH-E or LMCC-MCH-E, approved by the authority having jurisdiction.	§10-103(a)2A
2.0	No Entry	System installation type (Select one of Steps 2.1, 2.2 or 2.3).	N/A
2.1, or		Qualifying newly constructed system.	§120.4(g)1, §160.3(c)2Hi
2.2, or		Qualifying altered duct systems.	§141.0(b)2D, §180.2(b)2Bii
2.3		Qualifying altered space-conditioning systems.	§141.0(b)2E, §180.2(b)2Biii
3.0	No Entry	System operational capacity.	N/A
3.1, or	Enter Value	Condenser nominal cooling capacity (ton).	NA7.5.3.2.3.1
3.2	Enter Value	If heating only; heating capacity (kBtu/h).	NA7.5.3.2.3.1
4.0	No Entry	The apparatus for duct system pressurization and duct system leakage measurements must consist of a duct system pressurization and leakage airflow measurement device meeting the specifications below for all of Steps 4.1-4.4.	NA7.5.3.2.2(a)

Step	Entry	Item	Code Reference
4.1	Pass Fail	The pressure measurement instrumentation has an accuracy of plus or minus 0.2 Pa and makes use of a static pressure probe.	NA7.5.3.2.1(a)
4.2	Pass	All measurements of duct leakage airflow shall have an accuracy of plus or minus 3 percent of measured airflow or better using digital gauges.	NA7.5.3.2.1(b)
4.3	Pass Fail	All instrumentation used for duct leakage diagnostics measurements is calibrated according to the manufacturer's calibration procedure.	NA7.5.3.2.1(c)
4.4	PassFail	The apparatus for determining leakage in and verifying sealing of all accessible leaks in existing duct systems provide means for introducing controllable amounts of non-toxic visual or theatrical smoke into the duct pressurization apparatus for identifying leaks in accessible portions of the duct system. The means for generating smoke shall have sufficient capacity to ensure that any accessible leaks will emit visibly identifiable smoke	NA7.5.3.2.2(b)
5.0	No Entry	Newly Constructed Systems: Duct connections meet the requirements of Steps 5.1 and 5.2.	NA7.5.3.1(a), §120.4(a)-(f), §160.3(b)5
5.1	Pass	Confirm access to all installed plenums and duct work.	NA7.5.3.1(d) &(f)
5.2	Pass Fail	Reference NRCC-MCH-E, Table L and LMCC-MCH- E, Table L to verify that the duct design requirement has been complete on the signed and approved form.	NA7.5.3.1(a), §120.4(a)-(f), §160.3(b)5, §160.3(c)2A-E
6.0	No Entry	Newly Constructed Systems, Altered Duct Systems, and Altered Space-Conditioning Systems: Visually inspect and verify for all of Steps 6.1-6.5 have been sealed.	N/A
6.1	Pass	Connections to plenums and other connections to the forced air unit.	NA7.5.3.1(h)
6.2	Pass Fail	Refrigerant lines and other penetrations into the forced air unit.	NA7.5.3.1(i)
6.3	Pass Fail	Air handler door panel (do not use permanent sealing material, metal tape is acceptable).	NA7.5.3.1(j)
6.4	Pass Fail	Register boots sealed to surrounding material.	NA7.5.3.1(k)
6.5	Pass	Connections between lengths of duct, as well as connections to takeoffs, wyes, trees, and splitter boxes.	NA7.5.3.1(I)



Step	Entry	Item	Code Reference
7.0	No Entry	Inspect all plenums and enough of the installed duct work to be confident that all of the following are reasonably accurate (in descending order of priority) for all of Steps 7.1-7.5.	N/A
7.1	Pass Fail	Joints and seams are not sealed with a cloth- backed rubber adhesive tape unless used in combination with mastic and draw bands.	NA7.5.3.1(f), 120.4(b)1D, 120.4(b)2D, §160.3(c)2Cid, §160.3(c)2Ciid, §180.2(b)2Bii, §180.2(b)2Biii
7.2	Pass Fail	Insulation Requirements — reference NRCC-MCH- E, Section L and LMCC-MCH-E, Section L, approved design drawing and cut-sheets (if available) for the system and verify the insulation by location has been installed as indicated and is either R-8 or R-4.2. Flex duct must also be labeled as either R-8 or R-4.2.	NA7.5.3.1(g), §120.4(a)-(d), §160.3(b)5, §160.3(c)2A-E
7.3	Pass Fail	Drawbands: Reference the approved design drawing and cut sheets (if available). Verify that all drawbands are specific to be stainless-steel worm-driven hose clamps or UV-resistant nylon duct ties, have a minimum tensile strength rating of 150 pounds, and make note of the manufacturer's recommended tightening. Visually inspect a representative amount of drawband installations.	NA7.5.3.1(b), §120.4(b)2E, §180.2(b)2Bii, §180.2(b)2Biii, §160.3(b)5Cv, §160.3(c)2Ciie
7.4	Pass Fail	Constriction of flexible ducts: Visually verify that the flexible ducts are not compressed against an immovable object, squeezed through an opening, or contorted to extreme configurations. Visually verify that any bends radius (at the centerline) in a flexible duct does not exceed one duct diameter.	NA7.5.3.1(c)
7.5	Pass Fail	For outdoor duct work, reference approved design drawing and cut sheets (if available). Verify that the insulation is protected from sunlight, moisture, equipment maintenance, wind, and weather by the appropriate application of aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation may also be protected by direct application of paint with a coating that is water retardant and provides shielding from solar radiation.	NA7.5.3.1(g), §120.4(f), §160.3(b)5I, §160.3(c)2G



Step	Entry	Item	Code Reference
8.0	Pass Fail	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A



Table B-1: Functional TestingProcedure — Pressurized Duct Leakage Test

Stop	Entry	Eurotional Test	Code
1.0	P, F, or N/A	Temporarily seal all the supply registers and return grilles, except for one large centrally located return grille or the air handler cabinet access door or panel. (Pass, Fail, or N/A)	NA 7.5.3.2.3.2.1(c)
2.0	P, F, or N/A	Verify that all outside air dampers and/or economizers are sealed prior to pressurizing the system. (Pass, Fail, or N/A)	NA7.5.3.2.3.2.1(c)
3.0	P, F, or N/A	Attach the fan flowmeter device to the duct system at the unsealed return grille or the air handler cabinet access door or panel. (CFM)	NA7.5.3.2.3.2.1(d)
4.0	P, F, or N/A	Install a static pressure probe at a supply register located close to the air handler, or at the supply plenum. (CFM)	NA7.5.3.2.3.2.1 (e)
5.0	P, F, or N/A	Adjust the fan flowmeter to produce a positive 25 Pa (0.1 inches water) pressure at the supply register or the supply plenum with respect to the outside or with respect to the building space with the entry door open to the outside. (Pass, Fail, or N/A)	NA7.5.3.2.3.2.1 (f)
6.0	Enter Value	Record the flow through the flowmeter, this is the duct leakage flow at 25 Pa (0.1 inches water). (CFM)	NA7.5.3.2.3.2.1 (g)
7.0	Enter Value	 Calculate the nominal air handler air flow: Air conditioner or heat pump: 400 cfm per rated ton of cooling capacity (Table A-3.1). Heating-only system furnace: 21.7 cfm per kBtu/hr of rated heating output capacity (Table A-3.2). (CFM) 	NA7.5.3.2.3.1
8.0	Enter Value	Divide the duct leakage flow (STEP 6) by the nominal air handler airflow (STEP 7) and convert to a percentage (multiply by 100). (Percent)	NA7.5.3.2.3.2.1 (h)
9.0	Pass Fail	 Pass or Fail New duct system: 6% or less is passing. Existing duct system: 15% or less is passing. 	§120.4(g)1, §141.0(b)2D, §141.0(b)2E, §160.3(c)2Hi, §180.2(b)2Ai, §180.2(b)2Aii, §180.2(b)2Aiii, §180.2(b)2Aiii, §180.2(b)2Bii, §180.2(b)2Biii



			Code
Step	Entry	Functional Test	Reference
10.0	No Entry	If Fail: Newly constructed systems must be repaired until they pass. Altered duct systems and altered space- conditioning systems may be allowed to pass using the Smoke Test of Accessible Duct Sealing and the Visual Inspection of Accessible Duct Sealing if further repairing is not possible.	NA7.5.3.2.3.2, NA7.5.3.2.3.2.2, NA7.5.3.2.3.2.3, NA7.5.3.2.3.2.4
11.0	P, F, or N/A	Return system to normal operating condition. (Pass, Fail, or N/A)	N/A
12.0	Pass Fail	Check pass if Functional Test is completed on Steps 1 through 11 and Step 9 passes.	N/A

 Table B-2: Functional Testing

 Procedure — Smoke Test and Visual Inspection of Accessible Duct Sealing

Sten	Entry	Functional Test	Code
0.0	No Entry	This functional test may only be performed if Functional Test B-1 (Pressurized duct leakage test) results in a "Fail" on B-1, Step 9 for altered duct systems and altered space-conditioning systems only. This test may NOT be performed on newly constructed systems.	NA7.5.3.2.3.2.3, NA7.5.3.2.3.2.4
1.0	No Entry	Inject either theatrical or other non-toxic smoke into a fan pressurization device that is maintaining a duct pressure difference of 25 Pa (0.1 inches water) relative to the duct surroundings, with all grilles and registers in the duct system sealed.	NA7.5.3.2.3.2.3 (a)
2.0	No Entry	Visually inspect all accessible portions of the duct system during smoke injection.	NA7.5.3.2.3.2.3 (b)
3.0	Pass	 The system passes the test if one of the following conditions is met: A. No visible smoke exits the accessible portions of the duct systems; or B. Smoke only emanates from the furnace cabinet which is gasketed and sealed by the manufacturer and no visible smoke exits from the accessible portions of the duct system. 	NA7.5.3.2.3.2.3 (c)
4.0	No Entry	Visual Inspection of Accessible Duct Sealing — Visually inspect and verify that all of the following locations have been sealed during the smoke test:	N/A
5.0	P, F, or N/A	Connections to plenums and other connections to the air-handling unit. (Pass, Fail, or N/A)	NA7.5.3.2.3.2.4 (a)



Sten	Entry	Functional Test	Code Reference
6.0	P, F, or N/A	Refrigerant lines and other penetrations into the air-bandling unit (Pass Fail or N/A)	NA7.5.3.2.3.2.4
7.0	P, F, or N/A	Air handler access door or panel (do not use permanent sealing material, metal tape is acceptable). (Pass, Fail, or N/A)	NA7.5.3.2.3.2.4 (c)
8.0	P, F, or N/A	Register boots sealed to surrounding material.	NA7.5.3.2.3.2.4 (d)
9.0	P, F, or N/A	Connections between lengths of duct, as well as connections to takeoff, wyes, tees, and splitter boxes. (Pass, Fail, or N/A)	NA7.5.3.2.3.2.4 (e)
10.0	P, F, or N/A	Return system to normal operating condition. (Pass, Fail, or N/A)	N/A
11.0	Pass Fail	Check pass if Functional Test passes on Step 3 or if steps 5-10 are either pass or N/A.	N/A
0			



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Banang. Encor Falao			

Construction inspection and functional testing comply Does not comply
Date Submitted to AHJ: Date

Intent:	This Certificate of Acceptance is intended to verify Energy Code compliance for popresidential and botel/motel (see NRCA-MCH-23-A for multi-family) buildings with
	newly installed economizers, dedicated outdoor air systems (DOAS), Heat Recovery
	Ventilation (HRV) systems, and energy recovery ventilation (ERV) systems.
	Economizers must be certified to the California Energy Commission in compliance with
	JA6.3. Submit one Certificate of Acceptance for each economizer, DOAS, HRV, or ERV
	system that must demonstrate compliance with the Energy Code. For direct Energy
	Code reference see JA6.3, NA7.5.4, §140.4(e), §140.4(q),§120.5(a)4, §160.3(d)1D,
	and §170.2(c)4C.

Reference Table R-1 (Table 140.4-G)

			Fixed Enthalpy with
Climate Zones	Fixed Dry Bulb	Differential Dry Bulb	Fixed Dry bulb
1, 3, 5, 11-16	T _{OA} > 75 °F	Toa > Tra °F	N/A
2, 4, and 10	T _{OA} > 73 °F	T _{OA} > T _{RA} – 2 °F	N/A
6, 8, 9	T _{OA} > 71 °F	T _{OA} > T _{RA} – 4 °F	N/A
7	T _{OA} > 69 °F	T _{OA} > T _{RA} – 6 °F	N/A
All Climate Zones	N/A	N/A	$H_{OA} > 28$ Btu/lb or
			T _{OA} > 75 °F

Where: T_{OA} = Outside Air Temperature

 T_{RA} = Return Air Temperature

H_{OA} = Outdoor Air Enthalpy

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.1	Pass Fail	All documentation shipped with the economizer, DOAS, HRV, or ERV system including manuals and sensor performance curves are available for review.	NA7.5.4.1(d)
1.2	Pass	Verify that the sensor output value measured during sensor calibration is plotted on the performance curve.	NA7.5.4.1(e)



			Code
Step	Entry	Item	Reference
2.1 and	P, F, or N/A	Verify that the bypass high limit shutoff control for the economizer, DOAS, HRV, or ERV system complies with Reference Table R-1 . (Pass, Fail, or N/A)	NA7.5.4.1(a), §140.4(e)2, Table 140.4-G, §170.2(c)4Cii, Table 170.2-G
2.2	P, F, or N/A	Verify that at altitudes substantially different than sea level, the Fixed Enthalpy limit value is set to the enthalpy value at 75°F and 50% relative humidity. (Pass, Fail, or N/A)	NA7.5.4.1(a), §140.4(e)2, Table 140.4-G, §170.2(c)4Cii, Table 170.2-G
3	P, F, or N/A	Alternative to Step 2 If using Dew Point, Fixed Enthalpy, Electronic Enthalpy, or Differential Enthalpy Controls Energy Commission Executive Director approval for use in California must be attached. (Pass, Fail, or N/A)	NA7.5.4.1(a), §140.4(e)2, Table 140.4-G, §170.2(c)4Cii, Table 170.2-G
4	P, F, or N/A	Verify that devices with selectable (rather than adjustable) setpoints are capable of being set to within 2°F and 2 Btu/lb of the setpoint listed. (Pass, Fail, or N/A)	NA7.5.4.1(a), §140.4(e)2, Table 140.4-G, §170.2(c)4Cii, Table 170.2-G
5	P, F, or N/A	Verify that if the high-limit control is fixed dry-bulb or fixed enthalpy with fixed dry-bulb, it has an adjustable setpoint. (Pass, Fail, or N/A)	NA7.5.4.1(b)
6	Pass	Verify that the economizer, DOAS, HRV, or ERV system bypass lockout control sensor is located to prevent false readings.	NA7.5.4.1(c)
7.1, or	P, F, or N/A	Verify if using damper for bypass control that the economizer, DOAS, HRV, or ERV system bypass damper moves freely without binding. (Pass, Fail, or N/A)	NA7.5.4.1(f)
7.2	P, F, or N/A	Indicate if bypass control is achieved through heat/energy recovery wheel rotation speed modulation as means other than air dampers. (Pass, Fail, or N/A)	NA7.5.4.1(f)1
8	Pass Fail	Verify that the economizer, DOAS, HRV, or ERV system bypass has control systems, including two- stage or electronic thermostats, that cycle compressors off when the bypass can provide partial cooling.	NA7.5.4.1(g)
9.0	P, F, or N/A	For economizers only - DOAS, HRV, or ERV system indicate N/A and proceed to Step 11.1. Using the documentation provided in Step 1.1, verify that the air economizer and all air dampers have ALL of the following features (9.1-9.8). (Pass, Fail, or N/A-for non-economizers)	NA7.5.4.1(h), §140.4(e)2E, §170.2(c)4Ciii



			Code
Step	Entry	Item	Reference
9.1	Pass	Warranty. 5-year Manufacturer warranty of economizer assembly.	NA7.5.4.1(h), §140.4(e)2Ei, §170.2(c)4Ciiia
9.2	PassFail	Damper reliability testing. Certification from suppliers of economizers that the economizer assembly, including but not limited to outdoor air damper, return air damper, drive linkage, and actuator, have been tested and are able to open and close against the rated airflow and pressure of the system for 60,000 damper opening and closing cycles.	NA7.5.4.1(h), §140.4(e)2Eii, §170.2(c)4Ciiib
9.3	Pass	Damper leakage. Economizer outdoor air and return air dampers have a maximum leakage rate of 10 cfm/sf at 250 Pascals (1.0 in. of water) when tested in accordance with AMCA Standard 500-D.	NA7.5.4.1(h), §140.4(e)2Eiii, §170.2(c)4Ciiic
9.4	P, F, or N/A	Adjustable setpoint. If the high-limit control is fixed dry-bulb or fixed enthalpy with fixed dry-bulb then verify that the control has an adjustable setpoint. (Pass, Fail, or N/A)	NA7.5.4.1(h), §140.4(e)2Eiv, §170.2(c)4Ciiid
9.5	Pass Fail	 Sensor accuracy. Outdoor air, return air, mixed air, and supply air sensors are calibrated within the following accuracies. 1. Dry bulb and wet bulb temperatures accurate to ±2°F over the range of 40°F to 80°F. 2. Enthalpy accurate to ±3 Btu/lb over the range of 20 Btu/lb to 36 Btu/lb 3. Relative humidity (RH) accurate to ±5 percent over the range of 20 percent to 80 percent RH. 	NA7.5.4.1(h), §140.4(e)2Ev, §170.2(c)4Ciiie
9.6	Pass Fail	Sensor calibration data. Data used for control of the economizer is plotted on a sensor performance curve.	NA7.5.4.1(h), §140.4(e)2Evi, §170.2(c)4Ciiif
9.7	Pass	Sensor high limit control. Sensors used for the high limit control are located to prevent false readings, including but not limited to being properly shielded from direct sunlight.	NA7.5.4.1(h), §140.4(e)2Evii, §170.2(c)4Ciiig
9.8	Pass Fail	Relief air system. Relief air systems is capable of providing 100 percent outside air without over- pressurizing the building.	NA7.5.4.1(h), §140.4(e)2Eviii, §170.2(c)4Ciiih
10	P, F, or N/A	For economizers only - DOAS, HRV, or ERV system indicate N/A and proceed to Step 11.1. Verify that the economizer inlet damper is designed to modulate up to 100 percent open, and return air damper to 100 percent closed, without over-pressurizing the building. (Pass, Fail, or N/A)	NA7.5.4.1(i)



Step	Entry	Item	Code Reference
11.1, or	P, F, or N/A	For systems with DDC controls verify that lockout sensor(s) are either factory calibrated or field calibrated. (Pass, Fail, or N/A)	NA7.5.4.1(j)
11.2	P, F, or N/A	For systems with non-DDC controls, verify that manufacturer's startup and testing procedures have been applied. (Pass, Fail, or N/A)	NA7.5.4.1(k)
12	P, F, or N/A	For economizers only - DOAS, HRV, or ERV systems enter N/A. Verify that the economizer has been certified to the Energy Commission by consulting the <u>CEC Air</u> <u>Economizer Certified List</u> (https://www.energy.ca.gov/media/3259). (Pass, Fail, or N/A)	NA7.5.4.1(I), §140.4(e)2Eiii, §170.2(c)4Ciiic
13	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	NA

Table B: Functional Testing for Air Economizer Controls

Step	Entry	Functional Test	Code Reference
0	Exception	For economizers, DOAS, HRV, or ERV systems. If the economizer is installed by the HVAC system manufacturer technician (not the economizer technician) and certified to the Energy Commission, then the economizer is not required to comply with this functional test (NA7.5.4.2). This functional test (NA7.5.4.2) is not required if the DOAS, HRV, or ERV unit does not include bypass or control to disable energy recovery as specified by Section 140.4(q)2, or if it does not meet the exhaust air heat recovery ratio as specified by Section 140.4(q)1. Enter Step 0 as "Exception, by-pass all functional testing and mark Step 7 as passing; otherwise enter Step 0 as N/A.	§120.5(a)4 Exceptions, §140.4(q)1, §140.4(q)2, §160.3(d)1D Exception
1	P, F, or N/A	(if applicable). (Pass, Fail, or N/A)	NA7.5.4.2 Step 1
2.0	Pass	Enable the economizer, DOAS, HRV, or ERV system and simulate a cooling demand large enough to drive the bypass to fully open position. Maintain this status for all of Step 2.	NA7.5.4.2 Step 2
2.1	Pass	Verify either of the following: 1. Using dampers – bypass is 100 percent open, and return is 100 percent closed; or 2. Using HRV/ERV wheel – wheel is fully stopped.	NA7.5.4.2 Step 2(a), Step 2(a)1

			Code
Step	Entry	Functional Test	Reference
2.2	Pass	Verify that all applicable fans and dampers/wheels	NA7.5.4.2
2.2	🗌 Fail	operate as intended to maintain building pressure.	Step 2(b)
2.2		Verify that the economizer heating is disabled	NA7.5.4.2
2.5	P, F, OF N/A	(if applicable). (Pass, Fail, or N/A)	Step 2(c)
		For economizers only – DOAS, HRV, or ERV	
		systems enter as N/A and proceed to Step 4.	NA7.5.4.2
3.0	P, F, or N/A	Disable the economizer and simulate a cooling	Step 3,
		demand. Maintain this status for all of Step 3.	Step 3(g)
		(Pass, Fail, or N/A)	
2 1	Pass	Verify that the economizer damper closes to its	NA7.5.4.2
5.1	🗌 Fail	minimum position.	Step 3(d)
2 2	Pass	Verify that all applicable fans and dampers	NA7.5.4.2
5.2	🗌 Fail	operate as intended to maintain building pressure.	Step 3(e)
2.2	D E or N/A	Verify that the unit heating is disabled (if unit has	NA7.5.4.2
5.5	P, F, OFN/A	heating capability). (Pass, Fail, or N/A)	Step 3(f)
		If unit has heating capability, simulate a heating	
		demand and set economizer, DOAS, HRV, or ERV	
4.0		systems so that it is capable of operating (i.e.,	Stop 1
		actual outdoor air conditions are below lockout	этер т
		setpoint). Maintain this status for all of Step 4.	
		For economizers only – DOAS, HRV, or ERV	
		systems enter Steps 4.1 and 4.2 as N/A and	NA7542
4.1	P, F, or N/A	proceed to Step 4.3.	Stop $4(h)$
		Verify that the economizer damper is at minimum	
		position. (Pass, Fail, or N/A)	
		For economizers only – DOAS, HRV, or ERV	
		systems enter Steps 4.1 and 4.2 as N/A and	NA7 5 4 2
4.2	P, F, or N/A	proceed to Step 4.3.	Sten $4(i)$
		Verify that the return air damper opens.	
		(Pass, Fail, or N/A)	
		For DOAS, HRV, or ERV systems only -	
		economizers enter as N/A and proceed to Step 5.	
43	P F or N/A	Verify that the DOAS, HRV, or ERV systems	NA7.5.4.2
1.5		bypass control modulates bypass damper/wheel	Step 4(j)
		speed to control temperature setpoint.	
		(Pass, Fail, or N/A)	
	X Y	For economizers only – DOAS, HRV, or ERV	
		systems enter as N/A and proceed to Step 6.	NA7.5.4.2
5	P, F, or N/A	Turn off the unit and verify that the economizer	Step 5,
		damper closes completely.	Step 5(k)
		(Pass, Fail, or N/A)	
_	Pass	Restore demand control ventilation systems (if	NA7.5.4.2
6		applicable) and remove all system overrides	Step 6
		initiated.	



Stop	Entry	Functional Test	Code
Step		Check "Pass" if functional test complies with all	REIEIEIICE
_	Pass	requirements.	
7	E Fail	Check "Fail" if functional test does not comply	N/A
		with all requirements.	
		Station Compliant CE CON	



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance lest lechnician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
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	AII NO.: AII Cert. NO.
construction or installation identified on this Certificate of Acceptance complies with the applicable	litie
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	5
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent:	Demand ventilation controls (DVC) complying with §120.1(d)4 are required for a				
	space with a design occupant density, or a maximum occupant load factor for egress				
	purposes in the CBC, greater than or equal to 25 people per 1,000 square feet (40				
	square feet or less per person) if the ventilation system serving the space has one or				
	more of the following: an air economizer; modulating outside air control; or design				
	outdoor airflow rate > $3,000$ cfm ($\S120.1(d)3$). This acceptance test verifies that a				
	system required to employ a DVC can vary outside air ventilation flow rates based on				
	maintaining interior carbon dioxide (CO ₂) concentration setpoints in compliance with				
	§120.1(d)4. NRCA-MCH-02-A must be completed either prior to or concurrently with				
	this acceptance test for the space in which the CO ₂ monitor is located. One NRCA-				
	MCH-06-A must be completed for each CO ₂ sensor in the system that must				
	demonstrate compliance. For direct Energy Code reference see §120.1(d), §120.1(c),				
	§120.5(a), §160.2(c), §160.3(d)1E, NA7.5.1, and NA7.5.5.				

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following

Step	Entry	Item	Code Reference
1.1	Pass Fail	Verify that the NRCC-MCH-E as approved by the authority having jurisdiction or NRCC-PRF-E for the performance path or LMCC-MCH-E or LMCC- PRF-E is available for reference.	§10-103(a)2A
1.2	Pass Fail N/A	Verify access to any applicable factory calibration certificate(s). (Pass, Fail, or N/A)	N/A
1.3	Pass Fail Concurrent	Verify access to a compliant NRCA-MCH-02-A (maybe conducted concurrently) for the space in which the CO ₂ sensor is located. (Pass, Fail, or Concurrent)	NA7.5.1
2.0	No Entry	Using the documentation in Step 1. verify that the CO_2 sensor is factory calibrated by verifying all of Step 2.	NA7.5.5.1(a), §120.1(d)4, §160.2(c)5D



			Code
Step	Entry	Item	Reference
2.1	Pass Fail	Verify that the CO ₂ sensor is accurate to within plus or minus 75 ppm at a 600 ppm and 1000 ppm concentration when measured at sea level and 25°C.	NA7.5.5.1(a), §120.1(d)4F, §160.2(c)5Dvi
2.2	Pass	Verify that the sensor is certified by the manufacturer to require calibration no more frequently than once every 5 years.	NA7.5.5.1(a), §120.1(d)4F, §160.2(c)5Dvi
2.3	Pass Fail	Verify that upon detection of sensor failure, the system provides a signal which resets the system to supply the minimum quantity of outside air to levels indicated by the approved design.	NA7.5.5.1(a), NRCC-MCH-E- Table J, LMCC-MCH-E Table J, NRCC- PRF-E Table H9, LMCC-PRF-E §120.1(c)3, §120.1(d)4F, 160.2(c)3, §160.2(c)5Dvi
2.4	Pass Fail N/A	If the system includes Direct Digital Control, then verify that the CO ₂ sensor(s) reading for each zone is be displayed continuously and recorded. (Pass, Fail, N/A)	NA7.5.5.1(a), §120.1(d)4G, §160.2(c)5Dvii
3	Pass Fail	Verify that the sensor is located in the high density space between 3 ft and 6 ft above the floor or at the anticipated level of the occupants' heads.	NA7.5.5.1(b), §120.1(d)4B, §160.2(c)5Dii
4.0	No Entry	Verify either Step 4.1 or 4.2.	N/A
4.1, or	Pass Fail N/A	Verify that the DVC system is set to assume that outdoor air CO_2 concentrations are 400 ppm. (Pass, Fail, N/A)	NA7.5.5.1(c), §120.1(d)4Di, §160.2(c)5Diva
4.2	Pass Fail N/A	Verify that the DVC system uses a CO ₂ sensor located within 4 ft of the outdoor air intake to measure and use outdoor air CO ₂ concentrations. (Pass, Fail, N/A)	NA7.5.5.1(c), §120.1(d)4Dii, §160.2(c)5Divb
5	Pass Fail	Verify that the DCV control CO ₂ setpoint is set to less than or equal to 600 ppm plus the outdoor air CO ₂ concentration in all rooms with CO ₂ sensors (reference Step 4).	NA7.5.5.1(c), §120.1(d)4C, §160.2(c)5Diii
6	Pass	Verify that the space in which the CO ₂ sensor is installed is no greater than one sensor per 10,000 ft ² .	§120.1(d)4A, §160.2(c)5Di



Step	Entry	Item	Code Reference
7	Pass Fail N/A	If a zone or a space is served by more than one sensor, then verify that the DCV and sensors are configured such that a signal from any one sensor indicating that CO_2 is near or at the setpoint within the zone or space will trigger the system to increase ventilation. (Pass, Fail, N/A)	§120.1(d)4A §160.2(c)5Di
8	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B: Functional Testing				
Step	Entry	Functional Test	Code Reference	
1.0	Pass Fail	Disable economizer controls.	NA7.5.5.2 Step 1	
2.0	Pass	Simulate a signal for the DVC at the CO ₂ sensor slightly above the CO ₂ concentration setpoint and verify the following for all of Step 2.	NA7.5.5.2 Step 2	
2.1, or	Pass Fail N/A	For single zone units, verify that the outdoor air damper modulates open to satisfy the total ventilation air called for in the NRCC-MCH-E, Table J or NRCC-PRF-E, Table H9, LMCC-MCH-E Table J, or LMCC-PRF-E. (Pass, Fail, N/A)	NA7.5.5.2 Step 2(a)	
2.2	☐ Pass ☐ Fail ☐ N/A	For multiple zone units, verify that the zone damper (or outdoor air damper when applicable) modulates open to satisfy the zone ventilation requirements. (Pass, Fail, N/A)	NA7.5.5.2 Step 2(b)	
3.0	Pass	Simulate a signal for the DVC at the CO ₂ sensor well below the CO ₂ concentration setpoint. Verify either Steps 3.1 or 3.2.	NA7.5.5.2 Step 3	
3.1, or	Pass Fail N/A	For single zone units, verify that the outdoor air damper modulates to the design minimum value. (Pass, Fail, N/A)	NA7.5.5.2 Step 3(c), NRCC-MCH-E Table J, LMCC-MCH-E Table J, NRCC-PRF-E, Table H9, LMCC-PRF-E	



Sten	Fntry	Functional Test	Code Reference	
3.2	Pass Fail	For multiple zone units, verify that the zone damper (or outdoor air damper when applicable) modulates to satisfy the reduced zone ventilation requirements. (Pass, Fail, N/A)	NA7.5.5.2 Step 3(d), NRCC-MCH-E Table J, LMCC-MCH-E Table J, NRCC- PRF-E, Table H9, LMCC-PRF- E	
4	Pass Fail	Restore economizer controls and remove all system overrides initiated during the test.	NA7.5.5.2 Step 4	
5	Pass Fail	With all controls restored, apply CO ₂ calibration gas at a concentration slightly above the setpoint to the CO ₂ sensor. Verify that the outdoor air damper modulates open to satisfy the total ventilation air called for in the NRCC-MCH-E, Table J or or NRCC-PRF-E, Table H9 or LMCC-MCH-E, Table J or LMCC-PRF-E.	NA7.5.5.2 Step 5, NRCC-MCH-E Table J LMCC-MCH-E Table J NRCC-PRF-E Table H9 LMCC-PRF-E	
6	Pass	Check "Pass" if the Functional Test complies with all requirements in Steps 1-5.	N/A	
6 Fail all requirements in Steps 1-5.				



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency,	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	
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	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply Does not comply	Date Submitted to AHJ: Date
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Intent:	Verify that the supply fan speed in a variable air volume system modulates to meet
	system airflow demand. Either an NRCC-MCH-E for nonresidential construction that is
	completed and approved by the authority having jurisdiction or NRCC-PRF-E for the
	performance path or an LMCC-MCH-E or LMCC-PRF-E for multifamily construction
	that is registered with a CEC approved ECC data registry is required prior to
	beginning this acceptance test. Submit one Certificate of Acceptance for each system
	that must demonstrate compliance. NRCA-MCH-07-A can be performed in
	conjunction with NRCA-MCH-02-A Outdoor Air Acceptance since testing activities
	overlap. Reference: §140.4(c)2, §170.2(c)4Aii, and NA7.5.6

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following for each system or control.

			Code
Step	Entry	Item	Reference
1	Pass Fail	Verify that the NRCC-MCH-E as approved by the authority having jurisdiction or NRCC-PRF-E for the performance path or LMCC-MCH-E or LMCC- PRF-E as registered by an ECC approved HERS data registry is available for reference.	§10-103(a)2A
2	Pass	Verify that the supply fan includes device(s) for modulating airflow, such as variable speed drive or electrically commutated motor.	NA7.5.6.1(a)
3.0	No Entry	For multiple zone systems, verify that discharge static pressure sensors are either factory calibrated or field-calibrated by verifying one of the following: Steps 3.1 or 3.2.	NA7.5.6.1(b)1
3.1, or	Pass Fail N/A	Factory calibrated.	NA7.5.6.1(b)1



			Code
Step	Entry	Item	Reference
3.2	☐ Pass ☐ Fail ☐ N/A	Field calibrated. (Pass, Fail, or N/A)	NA7.5.6.1(b)1
4.0	No Entry	Verify that the static pressure location, setpoint, and reset control meet the requirements of §140.4(c)2A and §140.4(c)2B (if applicable) or §170.2(c)4Aiia and §170.2(c)4Aiib (if applicable) by completing all of Step 4: Complete 4.1 or 4.2 and then complete 4.3.	NA7.5.6.1(b)2
4.1, or	Pass Fail N/A	Verify that the set point is no greater than one- third of the total design fan static pressure. (Pass, Fail, or N/A)	§140.4(c)2A, §170.2(c)4Aiia
4.2, and	☐ Pass ☐ Fail ☐ N/A	If the system includes a direct digital control of individual zone boxes reporting to the central control panel, then verify that the static pressure setpoints are able to be reset based on the zone requiring the most pressure (i.e., the set point is reset lower until one zone damper is nearly wide open). (Pass, Fail, or N/A)	§140.4(c)2B, §170.2(c)4Aiib
4.3	Pass Fail N/A	If the static pressure sensor is located downstream of major duct splits, then verify that multiple sensors are installed in each major branch with fan capacity controlled to satisfy the sensor furthest below its setpoint. (Pass, Fail, or N/A)	§140.4(c)2A, §170.2(c)4Aiia
5	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Step	Entry	Functional Test	Code Reference
1.0	Pass	Simulate demand for full design airflow for all of Step 1.	NA7.5.6.2 Step 1
1.1	Pass Fail	Verify that the supply fan controls modulate to increase capacity.	NA7.5.6.2 Step 1(a)

Step	Entry	Functional Test	Code Reference
1.2	Pass Fail N/A	For multiple zone system, verify that the supply fan maintains discharge static pressure within +/- 10 percent of the current operating setpoint. (Pass, Fail, or N/A)	NA7.5.6.2 Step 1(b)
1.3	Pass Fail	Verify that the supply fan controls stabilize within a 5 minute period.	NA7.5.6.2 Step 1(c)
2.0	Pass	Simulate demand for reduced or minimum airflow for all of Step 2.	NA7.5.6.2 Step 2
2.1	Pass	Verify that the supply fan controls modulate to decrease capacity.	NA7.5.6.2 Step 2(d)
2.2	Pass Fail N/A	For systems with DDC to the zone level, verify that the current operating setpoint has decreased. (Pass, Fail, or N/A)	NA7.5.6.2 Step 2(e)
2.3	Pass Fail N/A	For multiple zone system, verify that the supply fan maintains discharge static pressure within +/- 10 percent of the current operating setpoint. (Pass, Fail, or N/A)	NA7.5.6.2 Step 2(f)
2.4	Pass Fail	Verify that the supply fan controls stabilize within a 5 minute period.	NA7.5.6.2 Step 2(g)
3	Pass Fail	Restore system to normal operating conditions.	NA7.5.6.2 Step 3
4	Pass Fail	Check pass if Functional Test passes on Steps 1 through 3	N/A





Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Acceptance Test Technician	Namo
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 or this Certificate of Acceptance kas 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.	Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of periury, under the laws of the State of California:	
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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Request Date: Date

DUIIUINU. ENLER VAIUE FIOOR. ENLER VAIUE KOOMI. ENLER VAIUE CONTROLAU.	uilding: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value	
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Construction inspection and functional testing comply	Data Submitted to AH1: Data
Does not comply	Date Submitted to And. Date

Intent: Ensure that control valves serving variable flow systems can withstand the pump pressure over the full range of operation. Submit one Certificate for the system that must demonstrate compliance, attach additional function tests only (NOT additional construction inspections) for each additional Pump Tag ID. Reference: §120.5(a)7, §160.3(d)1G, and NA7.5.7.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass Fail	Verify access to valve and piping design drawing as approved by the authority having jurisdiction.	N/A
2.0	Pass	Verify access to documentation showing the shut-off head pressure of each pump in the system.	N/A
3.0	Pass	Verify that the valve and piping arrangements are installed as specified by the design drawings.	NA7.5.7.1(a)
4.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Step	Entry	Functional Test	Code Reference
1.0	No Entry	For each of the pumps serving the distribution system, dead head the pumps using the discharge isolation values at the pumps. Complete all of Steps $1.1 - 1.4$	NA7.5.7.2 Step 1
1.1	Enter Value	Record the differential pressure across the pumps. (Ft. w.c.)	NA7.5.7.2 Step 1(a)
1.2	Enter Value	From the required documentation (Construction Inspection Step 1); record the shut-off head pressure for the Pump Tag ID. (Ft. w.c.)	NA7.5.7.2 Step 1(b)



			Code
Step	Entry	Functional Test	Reference
1.3	Enter Value	Calculate: 100 x (Step 1.1 – Step 1.2)/Step 1.2 Note: may result in a positive or negative percentage. (percent)	NA7.5.7.2 Step 1(b)
1.4	Pass	Verify that Step 1.3 is between -5% and $+5\%$.	NA7.5.7.2 Step 1(b)
2.0	No Entry	Reopen the pump discharge isolation valves. Automatically close all valves on the systems being tested. If 3-way valves are present, close off the bypass line. Complete all of Steps 2.1 - 2.4.	NA7.5.7.2 Step 2
2.1	Pass	Verify that the 2-way valve automatically closes.	NA7.5.7.2 Step 2(c)
2.2	Enter Value	Record the pressure differential across the pump. (Ft w.c.)	NA7.5.7.2 Step 2(d)
2.3	Enter Value	Calculate: 100 x (Step 2.2 – Step 1.1)/Step 1.1 Note: may result in a positive or negative percentage. (percent)	NA7.5.7.2 Step 2(e)
2.4	Pass Fail	Verify that Step 2.3 is between -5% and +5%	NA7.5.7.2 Step 2(e)
3	No Entry	Restore system to normal operating conditions	NA7.5.7.2 Step 3
4	Pass	Check pass if Functional Test passes on Steps 1 through 3.	N/A

NOTCP FOR MAIN



	C'ana ta an
Declaration Statement	Signatory
Lassort that this Cortificate of Accontance documentation is accurate and complete	Name Company Namo
I assert that this certificate of Acceptance documentation is accurate and complete.	Author Signature
	Data Signad
Accontance Test Teshnisian	
L certify the following under penalty of periury under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No : ATT Cert No
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
installation identified on this Certificate of Acceptance has been completed and signed by the responsible	5
builder/installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
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available to the enforcement agency for all applicable inspections. I will take the percessary steps to fulfill	
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included with the documentation the builder provides to the building owner at occupancy. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter ValueFloor: Enter ValueRoom: Enter ValueControl/tag: Value

Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent: Ensure that both the chilled water and hot water supply temperatures are automatically reset based on either building loads or outdoor air temperature, as indicated in the control sequences. Exception: Hydronic systems that use variable flow to reduce pumping energy. Submit one Certificate of Acceptance for each system that must demonstrate compliance. References: §120.5(a)9, §140.4(k)1, §140.4(k)4, §160.3(d)11, §170.2(c)41i, §170.2(c)41iv, and NA7.5.8.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following

Step	Entry	Item	Reference
1	Pass	Verify access to all factory calibration sheets.	N/A
2	Pass	Verify that the supply water temperature sensors have been either factory or field calibrated.	NA7.5.8.1(a)
3	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

			Code
Step	Entry	Functional Test	Reference
1.0	No Entry	Change reset control variable to its maximum value	NA7.5.8.2
1.0	NO EIIUY	for all of Step 1.	Step 1
	Pass	Verify that the chilled or hot water temperature	NA7.5.8.2
1.1	🔤 Fail	setpoint is reset to appropriate value.	Step 1(a)
1.7	Pass	Verify that the actual supply temperature changes	NA7.5.8.2
1.2	🗌 Fail	to within 2 percent of the new setpoint.	Step 1(b)
2.0	No Entry	Change reset control variable to its minimum value	NA7.5.8.2
2.0	NO ENULY	for all of Step 2.	Step 2



Step			Code
	Entry	Functional Test	Reference
			NA7.5.8.2
			Step 2(c)
2.1		Verify that the chilled or hot water temperature	
	E Fail	setpoint is reset to appropriate value.	
		Verify that the actual supply terrareture shares	NA7.5.8.2
2.2		to within 2 necessary of the new extension	Step 2(d)
		to within 2 percent of the new setpoint.	
		Restore reset control variable to automatic control	NA7 5 8 2
3.0	No Entry	for all of Step 3	Sten 3
		Verify that the chilled or hot water temperature cot	ΝΔ7582
3.1		noint is reset to appropriate value	Sten 3(0)
		Verify that actual supply temperature changes to	ΝΔ7 5 8 2
3.2		within 2 percent of the new setpoint	Ston 2(f)
		Check pass if Functional Test passes on Stops 1	
4		through 3	N/A
		FOROMPLA	
	108 ⁶		



CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
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builder/installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
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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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
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included with the documentation the builder provides to the building owner at occupancy. I will take the	
necessary steps to fulfill this requirement.	



ALIFORNIA ENERGY COMMISSION

HYDRONIC FLOW CONTROL

2025-CEC-NRCA-MCH-10-A

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Duildin an Eastern Malue		Desaus Fates Males	
Building: Enter Value	Floor: Enter value	Room: Enter Value	Control/tag: value

Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent:Ensure that hydronic pump speed varies with building heating and cooling loads.
Submit one Certificate of Acceptance for each system that must demonstrate
compliance. Reference: §120.5(a)7, §140.4(k)6Bi, §140.4(k)6Bii, §160.3(d)1G,
§170.2(c)4Ivic, §170.2(c)4Ivid, and NA7.5.9.

Table A: Construction Inspection

_			Code
Step	Entry	Item	Reference
1	Pass	Verify access to the following documentation: As- built, Design Documentation, or mechanical equipment schedules as approved by the authority having jurisdiction.	N/A
2.0	No Entry	For the static pressure location, setpoint, and reset control. Check one of the following:	NA7.5.9.1(a)
2.1, or	☐ Pass ☐ Fail ☐ N/A	For systems WITHOUT direct digital control of individual coils reporting to the central control panel, verify that the differential pressure is measured at the most remote heat exchange, or the heat exchanger requiring the greatest differential pressure. (Pass, Fail, N/A)	§140.4(k)6Bi, §170.2(c)4Ivic
2.2	Pass Fail N/A	For system WITH direct digital control of individual coils with a central control panel, verify that the static pressure set point is reset based on the valve requiring the most pressure, and the setpoint is no less than 80 percent open. Pressure sensors may be mounted anywhere. (Pass, Fail, N/A)	§140.4(k)6Bii, §170.2(c)4Ivid
3	Pass Fail	Verify that the pressure sensors are either factory or field calibrated.	NA7.5.9.1(b)
4	Pass Fail	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A


Stop	Entry	Eurotional Test	Code
Step	Entry	Modulate control valves to reduce water flow to 50	Reference
1.0	Pass	percent of the design flow or less, but not lower than the pump minimum flow. Complete all of Steps 1.1-1.7.	NA7.5.9.2 Step 1
1.1	Pass	Verify that the pump operating speed decreases (for system with DDC to the zone level).	NA7.5.9.2 Step 1(a)
1.2	Pass Fail N/A	For all other systems that are not DDC, verify that the current operating setpoint has not increased.	NA7.5.9.2 Step 1(b)
1.3	Enter Value	Record the system pressure as measured at the control sensor. (ft. w.c. or psig)	NA7.5.9.2 Step 1(c)
1.4	Enter Value	Record the system pressure setpoint. (ft. w.c. or psig)	NA7.5.9.2 Step 1(c)
1.5	Enter Value	Calculate 100 x (Step 1.3 – Step 1.4)/Step 1.4. (percent)	NA7.5.9.2 Step 1(c)
1.6	Pass	Verify that the system pressure is within 5 percent of current operating setpoint. (Step 1.5 between -5% and +5%)	NA7.5.9.2 Step 1(c)
1.7	Pass	Verify that the system operation stabilizes within 5 minutes after test procedures are initiated.	NA7.5.9.2 Step 1(d)
2.0	No Entry	Open control valves to increase water flow to a minimum of 90 percent design flow. Complete all of Steps 2.1-2.8.	NA7.5.9.2 Step 2
2.1	Pass	Verify that the pump speed increases.	NA7.5.9.2 Step 2(e)
2.2	Pass Fail	Verify that the pumps are operating at 100 percent speed.	NA7.5.9.2 Step 2(f)
2.3	Enter Value	Record the system pressure as measured at the control sensor. (ft. w.c. or psig)	N/A
2.4	Enter Value	Record the system pressure setpoint. (ft. w.c. or psig)	N/A
2.5	Pass	Verify that the system pressure setpoint in Step 2.4 is greater than the setpoint in Step 1.4.	NA7.5.9.2 Step 2(g)
2.6	Enter Value	Calculate: 100 x (Step 2.3 – Step 2.4)/Step 2.4. (percent)	N/A
2.7	Pass Fail	Verify that the system pressure is within ±5 percent of current operating setpoint. (Step 2.6 is between -5% and +5%)	NA7.5.9.2 Step 2(h)
2.8	Pass Fail	Verify that the system operation stabilizes within 5 minutes after test procedures are initiated.	NA7.5.9.2 Step 2(h)
3.0	No Entry	Restore system to normal operating conditions.	NA7.5.9.2 Step 3
4.0	Pass	Check pass if Functional Test passes on Steps 1 through 3.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
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builder/installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
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design, construction or installation of features, materials, components, or manufactured devices for the	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
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Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Dunung, Enter Value			control/tag. value

Construction inspection and functional testing comply Does Not Comply

Date Submitted to AHJ: Date

Intent: Ensure that the central demand shed sequences have been properly programmed into the DDC system. Reference NRCC-MCH-E for nonresidential (including nonresidential spaces in high-rise multifamily) building permits or LMCC-MCH-E or LMCC-PRF-E for nonresidential spaces in low-rise multifamily building permits or NRCC-PRF-E for the performance path. Submit one Certificate of Acceptance for each zonal HVAC control system that must demonstrate compliance. References: §110.12(a), §110.12(b), §120.2(h), §120.5(a)10, §160.3(a)2G, §160.3(d)1J, and NA7.5.10.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1	Pass Fail	Verify access to the following required documentation: Designs specific to the Energy Management Control System (EMCS) and demand response control system (if separate) as approved by the authority having jurisdiction.	N/A
2	Pass	Verify access to the NRCC-MCH-E or LMCC-MCH-E or NRCC-PRF-E or LMCC-PRF-E as approved by the authority having jurisdiction.	N/A
3.1, or	Pass Fail N/A	Verify access to a printed copy of the OpenADR 2.0a or OpenADR 2.0b or a certified Baseline Profile OpenADR 3.0 Virtual End Node (VEN) certificate for the demand response control system.	§110.12(a)1A
3.2	Pass Fail	Verify that the demand response control system is certified to the Energy Commission and is capable of responding to a demand response signal from a certified OpenADR 2.0b or a certified Baseline Profile OpenADR 3.0 Virtual End Node by automatically implementing the control functions requested by the Virtual End Node for the equipment it controls.	§110.12(a)1B
4	Pass	Verify that the EMCS interface can enable activation of the central demand shed controls.	NA7.5.10.1(a)



			Code
Step	Entry	Item	Reference
5	Pass Fail	Verify that the demand responsive controls are capable of communicating using one or more of the following for communications that occur within the building: Wi-Fi, ZigBee, BACnet, Ethernet, or hard wiring.	§110.12(a)2
6	Pass Fail	Verify and document that when the demand response signal is disabled or unavailable, all demand responsive controls shall continue to perform all other control functions provided by the control.	§110.12(a)4
7	Pass Fail	Verify and document that the demand response control thermostat has been certified to the Energy Commission as meeting all of the requirements in Reference Joint Appendix JA5 (Occupant Controlled Smart Thermostat).	§110.12(a)5
8	Pass Fail	Verify and document that the controls are programmed to provide an adjustable rate of change for the temperature increase, decrease, and reset.	§110.12(b)4
9	Pass Fail	Verify and document that the controls have the following feature: Disabled. Disabled by authorized facility operators.	§110.12(b)5A
10	Pass Fail	Verify and document that the controls have the following feature: Manual control. Manual control by authorized facility operators to allow adjustment of heating and cooling set points globally from a single point in the EMCS.	§110.12(b)5B
11	Pass Fail	Indicate that the Construction Inspection complies with ALL requirements.	N/A

Table B: Functional Testing for Automatic Demand Shed Control Acceptance

			Code
Step	Entry	Functional Test	Reference
		Engage the global demand shed system with the	NA7.5.10.2
1		HVAC system in cooling mode. Maintain this status	Step 1,
		for Steps 2 through 3.	§110.12(b)5C
		Verify that the cooling setpoint in noncritical	NA7.5.10.2
2		spaces increases by the proper amount (4 degrees	Step 1(a),
		or more).	§110.12(b)1
		Varify that the cooling cotpoint in critical chacos	NA7.5.10.2
3		doos pot change	Step 1(b)
		does not change.	
		Disongago the global domand shed system	NA7.5.10.2
4	Fass	Maintain this status for Stone E through 6	Step 2,
		Maintain this status for steps 5 through 6.	§110.12(b)5C



			Code
Step	Entry	Functional Test	Reference
5	Pass	Verify that the cooling setpoint in noncritical spaces returns to their original values.	NA7.5.10.2 Step 2(c), §110.12(b)3
6	Pass	Verify that the cooling setpoint in critical spaces does not change.	NA7.5.10.2 Step 2(d), §110.12(b)3
7	Pass	Return the system to normal operating conditions.	NA7.5.10.2 Step 3
8	Pass	Indicate that the Functional Test complies with ALL requirements.	N/A

California Energy Commission



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance lest lechnician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
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construction of installation identified on this certificate of Acceptance complies with the applicable	nue Dhono
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Signaturo
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
installation identified on this Certificate of Accentance has been completed and signed by the responsible	Date Signed
builder/installer and has been posted or made available with the building permit(s) issued for the building	
Responsible Person	
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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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
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Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Banangi Enter Talae			oona ol agi talao

Construction inspection and functional testing comply Date S

Date Submitted to AHJ: Date

Intent:Submit one Certificate of Acceptance for each Fault Detection and Diagnostics
(FDD) system that must demonstrate compliance. Reference NRCC-MCH-E for
nonresidential (including nonresidential spaces in high-rise multifamily) building
permits or LMCC-MCH-E for nonresidential spaces in low-rise multifamily building
permits or LMCC-PRF-E or NRCC-PRF-E for the performance path. This acceptance
test is recommended to be performed in conjunction with NRCA-MCH-02-A
(Outside Air) and NRCA-MCH-05-A (Air Economizer Controls). References:
§120.2(i), §120.5(a)11, §160.3(a)2H, §160.3(d)1K, and NA7.5.11.

Table A: Construction Inspection

Ston	Entra		Code
Step	Entry		Kererence
1.0	Pass Fail	E or LMCC-MCH-E or LMCC-PRF-E or NRCC-PRF-E, designs, specification sheets, and schedules as approved by the authority having jurisdiction.	§10-103(a)2A
1.1	Pass Fail	Verify access to the following documents: NRCA-MCH- 02-A (Outside Air) and NRCA-MCH-05-A (Air Economizer Controls); recommended to be completed simultaneously.	N/A
2	Pass	Verify that the FDD hardware is installed on the unit.	NA7.5.11.1(a)
3	Pass Fail	Verify the FDD system matches the make and model reported on the design drawings.	NA7.5.11.1(b)
4	Pass Fail	Verify the following air temperature sensors are permanently installed: Outside air, Supply air, and Return air.	NA7.5.11.1(c)
5	Pass	Verify the controller has the capability of displaying the value of the following parameters: Air temperatures: outside air, supply air, and return air.	NA7.5.11.1(d)
6	Pass	Verify the controller provides system status by indicating the following conditions: Free cooling available, Economizer enabled, Compressor enabled, Heating enabled, and Mixed air low limit cycle active.	NA7.5.11.1(e)



Step	Entry	Item	Code Reference
7	Pass	Indicate that the Construction Inspection complies with ALL requirements.	N/A

Step	Entry	Functional Test	Code Reference		
1.0	Pass	Test air temperature sensor failure/fault by first verifying the FDD system indicates normal operation.	NA7.5.11.2.1 Step 1		
1.1	Pass	Disconnect outside air temperature sensor from unit controller and verify that the FDD system reports a fault.	NA7.5.11.2.1 Step 2		
1.2	Pass	Connect outside air temperature sensor to unit controller and verify that the FDD system indicates normal operation.	NA7.5.11.2.1 Step 3		
2	Pass	Test excess outside air sensor failure/fault by coordinating this test with NRCA-MCH-02-A (Outdoor Air). If outdoor air test passes, verify that the FDD system indicates normal operation.	NA7.5.11.2.2		
3.0	Pass Fail	Test economizer operation by interfering with normal unit operation so NA7.5.4 "Air Economizer Controls" test fails by immobilizing the outdoor air economizer damper according to manufacturer's instructions and verify FDD system reports a fault.	NA7.5.11.2.3 Step 1		
3.1	Pass	Successfully complete and pass NA7.5.4 Air Economizer Controls and verify that the FDD system reports normal operation.	NA7.5.11.2.3 Step 2		
4	Pass	Indicate that the Functional Test complies with ALL requirements.	N/A		



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Namo
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No : ATT Cort No
construction or installation identified on this Certificate of Acceptance complies with the applicable	Titlo
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Date Signed
and conforms to the applicable acceptance requirements and procedures specified in Reference	Phone
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Signature
installation identified on this Certificate of Acceptance has been completed and signed by the responsible	Signature
builder/installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
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	Titlo
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent: Verify that the system detects common faults in air handling units and zone terminal units. Reference NRCC-MCH-E for nonresidential (including nonresidential spaces in high-rise multifamily) building permits or LMCC-MCH-E for nonresidential spaces in low-rise multifamily building permits or LMCC-PRF-E or NRCC-PRF-E for the performance path. Submit one Certificate of Acceptance for each system that must demonstrate compliance. References: §120.2(i), §120.5(a)12, §160.3(a)2H, §160.3(d)1L, and NA7.5.12.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass Fail	Verify on the submittal documents or sensor specifications that locally installed supply air, outside air, and return air (if applicable) temperature sensors have an accuracy of ±2°F over the range of 40°F to 80°F.	NA7.5.12.1(a)

Table B-1: Functional Testing for Air Handling Unit Economizers

Perform the following test for each AHU with FDD controls (§120.2(i)7 or §160.3(a)2Hvii):

Step	Check or Status	Functional Test	Code Reference
1.0	Pass Fail N/A	If applicable, bypass alarm delays to ensure that faults generate alarms immediately. (Pass, Fail, N/A)	NA7.5.12.2(a) Step 1
2.0	No Entry	Sensor Failure	NA7.5.12.2(b)
2.1	Pass Fail	Disconnect local supply air temperature (SAT) sensor from unit controller and verify that the FDD system reports a fault.	NA7.5.12.2(b) Step 1, Step 2
2.2	Pass	Connect SAT sensor to the unit controller and verify that FDD indicates normal system operation and clears all faults and alarms.	NA7.5.12.2(b) Step 3, Step 4
2.3	Pass Fail N/A	If the outside air temperature (OAT) sensor is local, then disconnect the local OAT from the unit controller and verify that the FDD system reports a fault. (Pass, Fail, N/A)	NA7.5.12.2(b) Step 5, Step 6



	Check or		Code
Step	Status	Functional Test	Reference
2.4	Pass Fail N/A	If Step 2.3 performed, then connect the local OAT sensor to the unit controller and verify that FDD indicates normal system operation and clear all faults and alarms. (Pass, Fail, N/A)	NA7.5.12.2(b) Step 7, Step 8
3.0	No Entry	Inappropriate Economizing	NA7.5.12.2(c)
3.1	Pass	Override the operating state to occupied heating mode by overriding zone thermostat(s) to create a heating demand and overriding the OAT sensor below the low limit lockout.	NA7.5.12.2(c) Step 1
3.2	Pass	From the control system workstation, override the economizer dampers to 100 percent outdoor air and verify that a fault is reported at the control workstation.	NA7.5.12.2(c) Step 2, Step 3
3.3	Pass	Remove the economizer damper override and verify that the control system indicates normal system operation.	NA7.5.12.2(c) Step 4
3.4	Pass	Remove all overrides and clear all faults and alarms.	NA7.5.12.2(c) Step 5
3.5	Pass	Force the operating stat to economizer-only cooling mode by adjusting the zone thermostat(s) to create a cooling demand then overriding the OAT sensor so that free cooling is available.	NA7.5.12.2(c) Step 6
3.6	Pass	From the control system workstation, override the economizer dampers to zero percent outdoor air and verify that a fault is reported at the control workstation.	NA7.5.12.2(c) Step 7, Step 8
3.7	Pass	Remove the economizer damper override and verify that the control system indicates normal system operation. Remove all overrides and clear all faults and alarms.	NA7.5.12.2(c) Step 9, Step 10
4.0	Pass Fail N/A	If Step 1 performed, then reinstate alarm delays. (Pass, Fail, N/A)	NA7.5.12.2(d) Step 1
5.0	Pass Fail	Check pass if Functional Test Table B-1 passes on Steps 1 through 4.	N/A



Table B-2: Functional Testing for Air Handling Unit ValvesPerform the following test for each AHU with FDD controls (§120.2(i)7 or §160.3(a)2Hvii):

	Check or		Code
Step	Status	Functional Test	Reference
1.0	Pass Fail N/A	If applicable, bypass alarm delays to ensure that faults generate alarms immediately. (Pass, Fail, N/A)	NA7.5.12.3(a) Step1
2.0	No Entry	Valve/actuator Fault	NA7.5.12.3(b)
2.1	Pass	Override the operating state to occupied cooling mode by overriding zone thermostat(s) to create a cooling demand and overriding the OAT sensor to 90°F.	NA7.5.12.3(b) Step 1
2.2	Pass	From the control system workstation, override the heating coil valves to the full open position (100 percent heating mode).	NA7.5.12.3(b) Step 2
2.3	Pass	Verify flow through the valve by differential temperature or differential pressure method.	NA7.5.12.3(b) Step 3
2.4	Pass	Verify that a fault is reported at the control workstation.	NA7.5.12.3(b) Step 4
2.5	Pass Fail	Remove the heating coil valve override and verify that the control system indicates normal system operation.	NA7.5.12.3(b) Step 5
2.6	Pass	Remove all overrides and clear all faults and alarms.	NA7.5.12.3(b) Step 6
2.7	Pass	Override the operating state to occupied heating mode by overriding zone thermostat(s) to create a heating demand and overriding the OAT sensor to 40°F.	NA7.5.12.3(b) Step 7
2.8	Pass Fail	From the control system workstation, override the cooling coil valve to the full open position (100 percent cooling mode).	NA7.5.12.3(b) Step 8
2.9	Pass	Verify flow through the valve by differential temperature or differential pressure method.	NA7.5.12.3(b) Step 9
2.10	Pass	Verify that a fault is reported at the control workstation.	NA7.5.12.3(b) Step 10
2.11	Pass Fail	Remove the cooling coil valve override and verify that the control system indicates normal system operation.	NA7.5.12.3(b) Step 11
2.12	Pass	Remove all overrides and clear all faults and alarms.	NA7.5.12.3(b) Step 12
3.0	Pass Fail N/A	If Step 1 performed, then reinstate alarm delays. (Pass, Fail, N/A)	NA7.5.12.3(c) Step 1
4.0	Pass	Check pass if Functional Test Table B-2 passes on Steps 1 through 3.	N/A



Table B-3: Functional Testing for Zone Terminal Units

Perform the following test for each VAV box. A minimum of five percent of all terminal boxes (all types together) must be tested (§120.2(i)7 or §160.3(a)2Hvii):

Step	Check or Status	Functional Test	Code Reference
1.0	No Entry	Sensor drift/failure	NA7.5.12.4(a)
1.1	Pass	Disconnect the tubing to the differential pressure sensor of the VAV box.	NA7.5.12.4(a) Step 1
1.2	Pass	Verify that control system detects and reports the fault.	NA7.5.12.4(a) Step 2
1.3	Pass Fail	Reconnect the sensor and verify proper sensor operation.	NA7.5.12.4(a) Step 3
1.4	Pass Fail	Verify that the control system does not report a fault.	NA7.5.12.4(a) Step 4
2.0	No Entry	Damper/actuator fault	NA7.5.12.4(b)
2.1	Pass Fail	Damper stuck open: Command the damper to be fully open (room temperature above setpoint).	NA7.5.12.4(b)1 Step 1
2.2	Pass	Disconnect the actuator to the damper.	NA7.5.12.4(b)1 Step 2
2.3	Pass	Adjust the cooling setpoint so that the room temperature is below the cooling setpoint to command the damper to the minimum position. Verify that the control system reports a fault.	NA7.5.12.4(b)1 Step 3
2.4	Pass Fail	Reconnect the actuator and restore to normal operation.	NA7.5.12.4(b)1 Step 4
2.5	Pass Fail	Damper stuck closed: Set the damper to the minimum position.	NA7.5.12.4(b)2 Step 1
2.6	Pass	Disconnect the actuator to the damper.	NA7.5.12.4(b)2 Step 2
2.7	Pass	Set the cooling setpoint below the room temperature to simulate a call for cooling. Verify that the control system reports a fault.	NA7.5.12.4(b)2 Step 3
2.8	Pass Fail	Reconnect the actuator and restore to normal operation.	NA7.5.12.4(b)2 Step 4
3.0	No Entry	Valve/actuator fault (For systems with hydronic reheat)	NA7.5.12.4(c)
3.1	Pass	Command the reheat coil valve to (full) open.	NA7.5.12.4(c) Step 1



Step	Check or Status	Functional Test	Code Reference
3.2	Pass Fail	Disconnect power to the actuator. Set the heating setpoint temperature to be lower than the current space temperature, to command the valve closed. Verify that the fault is reported at the control workstation.	NA7.5.12.4(c) Step 2
3.3	Pass	Reconnect the actuator and restore normal operation.	NA7.5.12.4(c) Step 3
4.0	No Entry	Feedback loop tuning fault (unstable airflow)	NA7.5.12.4(d)
4.1	Pass	Set the integral coefficient of the box controller to a value 50 times the current value.	NA7.5.12.4(d) Step 1
4.2	Pass	The damper cycles continuously and airflow is unstable. Verify that the control system detects and reports the fault.	NA7.5.12.4(d) Step 2
4.3	Pass Fail	Reset the integral coefficient of the controller to the original value to restore normal operation.	NA7.5.12.4(d) Step 3
5.0	Pass Fail	Disconnected inlet duct : From the control system workstation, command the damper to full closed, then disconnect power to the actuator and verify that a fault is reported at the control workstation.	NA7.5.12.4(e) Step 1
6.0	Pass Fail	Discharge air temperature sensor : Adjust zone setpoints to drive the box from dead band to full heating.	NA7.5.12.4(f) Step 1
6.1	Pass Fail	Verify that in heating, the supply air temperature resets up to the maximum setpoint while the airflow is maintained at the dead band flow rate.	NA7.5.12.4(f) Step 2
6.2	Pass	Verify that after the supply air temperature is reset up to the maximum setpoint, the airflow rate then increases up to the heating maximum flow rate in order to meet the heating load.	NA7.5.12.4(f) Step 3
7.0	Pass Fail	Remove all overrides, clear all faults and alarms, and return the system to normal operation.	N/A
8.0	Pass Fail	Check pass if Functional Test Table B-3 passes on Steps 1 through 7.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Acceptance Date: Date

Building: Enter Value Floor: Enter Value Room: Enter Value Control/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent:	This acceptance test applies to direct expansion (DX) systems with distributed
	energy storage (DES/DXAC). These acceptance requirements are in addition to
	those for other systems or equipment such as economizers or packaged
	equipment. This acceptance test was developed by AEC for Distributed Energy
	Storage for Direct-Expansion Air Conditioners, January 27, 2005, and is directly
	referenced by the 2025 Building Energy Efficiency Standards. Submit one
	Certificate of Acceptance for each system that must demonstrate compliance.
	References: §120.5(a)13, §160.3(d)1M, and NA7.5.13.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1.0	Pass	Check all of the following: designs, plans, schematics, and schedules as approved by the authority having jurisdiction.	N/A
2.0	No Entry	Prior to Performance Testing, verify and document the following:	NA7.5.13.1
2.1	Pass	The water tank is filled to the proper level.	NA7.5.13.1(a)
2.2	Pass	The water tank foundation structural strength is identified in the design, plans, schematics, or schedule and approved by the authority having jurisdiction.	NA7.5.13.1(b)
2.3	Pass	The water tank is insulated, and the top cover is in place.	NA7.5.13.1(c)
2.4	Pass	The DES/DXAC is installed correctly (refrigerant piping, etc.).	NA7.5.13.1(d)
2.5	Pass	Verify that the correct model number is installed and configured.	NA7.5.13.1(e)
3.0	Pass	Verify that the proper time and date as specified by manufacturer's installation manual for approved installers has been set.	NA7.5.13.3
4.0	Pass	Indicate that the Construction Inspection complies with ALL requirements.	N/A



Step	Entry	Functional Test	Code Reference
1.0	No Entry	Simulate cooling load during daytime period (e.g. by setting time schedule to include actual time and placing thermostat cooling set-point below actual temperature). Verify and document the following:	NA7.5.13.2 Step 1
1.1	Pass	Supply fan operates continuously.	NA7.5.13.2 Step 1(a)
1.2	Pass Fail	The DES/DXAC runs to meet the cooling demand (in ice melt mode).	NA7.5.13.2 Step 1(b)
1.3	Pass Fail	The DES/DXAC has no ice and there is a call for cooling while the DES/DXAC runs in direct cooling mode.	NA7.5.13.2 Step 1(c)
2.0	No Entry	Simulate no cooling load during daytime condition. Verify and document the following:	NA7.5.13.2 Step 2
2.1	Pass	Supply fan operates as specified by the facility thermostat or control system.	NA7.5.13.2 Step 2(d)
2.2	Pass	The DES/DXAC and the condensing unit do not run.	NA7.5.13.2 Step 2(e)
3.0	Pass	Simulate no cooling load during morning shoulder time period. Verify and document that the DES/DXAC is idle.	NA7.5.13.2 Step 3(f)
4.0	Pass Fail	Simulate a cooling load during morning shoulder time period. Verify and document that the DES/DXAC runs in direct cooling mode.	NA7.5.13.2 Step 4(g)
5.0	No Entry	Return the system to normal operations.	N/A
6.0	Pass	Indicate that the Functional Test complies with ALL requirements.	N/A
40			



Declaration Statement	Signatory
Document Author	Name
I assert this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value Floor: Enter Value Room: Enter Value Control/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent: This acceptance test is intended for Thermal Energy Storage (TES) Systems that are used in conjunction with chilled water air conditioning systems as limited under Eligibility Criteria in Table A-2. Submit one Certificate of Acceptance for each system that must demonstrate compliance. References: §120.5(a)14, §160.3(d)1N, and NA7.5.14.

Table A-1: Construction Inspection

Prior to functional testing, verify access to the following documentation:

Step	Entry	Item	Code Reference
1	Pass	Designs, plans, schematics, and schedules as approved by the authority have jurisdiction.	§10-103(a)
2	Pass	Using a California Energy Commission approved compliance software; software inputs and output results for the TES system as approved by the authority having jurisdiction.	NA7.5.14.1
3	Pass	Manufacturer specifications or tear sheets for the installed TES system as available.	NA7.5.14.1

Table A-2: Construction Inspection

Verify system eligibility (check one):

			Code
Step	Entry	Item	Reference
1		Chilled Water Storage	NA7.5.14.1(a)
2		Ice-on-Coil Internal Melt	NA7.5.14.1(b)
3		Ice-on-Coil External Melt	NA7.5.14.1(c)
4		Ice Harvester	NA7.5.14.1(d)
5		Brine	NA7.5.14.1(e)
6		Ice-Slurry	NA7.5.14.1(f)
7		Eutectic Salt	NA7.5.14.1(g)
8		Clathrate Hydrate Slurry (CHS)	NA7.5.14.1(h)
9		Cryogenic	NA7.5.14.1(i)
10		Encapsulated (e.g., Ice Balls)	NA7.5.14.1(j)

Table A-3: Construction Inspection

Compare the installed unit to the documentation from Table A-1, Step 2 (Check all of the following):

Step	Entry	Item	Code Reference
1	No Entry	TES System Chiller	NA7.5.14.1
1.1	Pass	Brand and Model	NA7.5.14.1(k)
1.2	Pass	Type (Centrifugal, Reciprocating, Other)	NA7.5.14.1(I)
1.3	Pass	Heat Rejection Type (Air, Water, Other)	NA7.5.14.1(m)
1.4	Pass	Charge Mode Capacity (Tons)	NA7.5.14.1(n)
1.5	Pass	Discharge Mode Capacity (Tons)	NA7.5.14.1(o)
1.6	Pass	Discharge Mode Efficiency (kW/Ton or EER)	NA7.5.14.1(p)
1.7	Pass	Charge Mode Efficiency (kW/Ton or EER)	NA7.5.14.1(q)
1.8	Pass	Fluid Type and Percentage	NA7.5.14.1(r)
2	No Entry	TES System Storage	NA7.5.14.1
2.1	Pass	Brand and Model	NA7.5.14.1(s)
2.2	Pass	Number of Tanks	NA7.5.14.1(t)
2.3	Pass	Storage Capacity per Tank (ton-hours)	NA7.5.14.1(u)
2.4	Pass	Storage Rate (tons)	NA7.5.14.1(v)
2.5	Pass	Minimum Charging Temperature	NA7.5.14.1(w)
2.6	Pass Fail	Discharge Rate (tons)	NA7.5.14.1(x)
3	Pass	Indicate that the Construction Inspection complies with ALL requirements.	NA

Table B: Functional Testing

Acceptance testing should be conducted in two parts: TES System Verification (Part 1) and TES System Controls and Operation (Part 2).

			Code
Step	Entry	Functional Test	Reference
1	Pass	Chiller(s) start-up procedure has been completed.	NA7.5.14.2 Part 1(a)
2	Pass Fail	System fluid test and balance has been completed.	NA7.5.14.2 Part 1(b)



			Code
Step	Entry	Functional Test	Reference
2	Pass	Air constation and putter has been completed	NA7.5.14.2
5	🗌 Fail	Air separation and purge has been completed.	Part 1(c)
4	Pass	Fluid (e.g., glycol) has been verified at the concentration	NA7.5.14.2
4	🗌 Fail	and type indicated on the design documents.	Part 1(d)
г	Pass	The TES system has been fully charged at least once	NA7.5.14.2
5	🗌 Fail	and the charge duration noted.	Part 1(e)
C	Pass	The system has been partially discharged at least once	NA7.5.14.2
D	🗌 Fail	and the discharge duration noted.	Part 1(f)
7	Pass	The system is in a partial charge state in preparation for	NA7.5.14.2
/	🔲 Fail	the TES System Controls and Operation Verification.	Part 1(g)
0	Pass	The schedule of operation has been activated as	NA7.5.14.2
0	🔲 Fail	designed.	Part 1(h)
٥	🗌 Pass	Mode documentation describes the state of system	NA7.5.14.2
9	📃 Fail	components in each mode of operation.	Part 1(i)
		Verify that the TES system and the chilled water plant is	
10		controlled and monitored by an energy management	Part 2(a)
		system (EMS).	Part Z(a)
		Indicate one of the following methods of simulation that	
11	M	will be used during the test. Manual selection (M) or use	NA7.5.14.2
11	E	of an EMS by inputting the schedule as indicated by the	Part 2(b)
		designer or manufacturer (E).	
12	🗌 Pass	Storage/charge mode. Verify that TES system stores	NA7.5.14.2
12	🔄 Fail	energy.	Part 2(c)
		End of charge signal. Simulate a full storage charge by	
13	Pass	changing the (manufacturer recommended) thermal	NA7.5.14.2
15	🔄 Fail	storage end of charge output sensor to the EMS. Verify	Part 2(d)
		that the storage charging has stopped.	
		Discharge mode. Generate a call for cooling. Verify that	NA7 5 14 2
14	Fail	the storage starts discharging with the compressors off.	Part 2(e)
		Return to the off/secured mode.	1 at 2(e)
		Mechanical cooling only mode. Generate a call for	
15	Pass	cooling. Verify that the storage does not discharge, and	NA7.5.14.2
15	📙 Fail	the cooling load is met by the compressor only. Return	Part 2(f)
		to the off/secure mode.	
		Discharge and mechanical cooling mode. Generate a call	NA7 5 14 2
16		for cooling. Verify that the TES system discharges with	Part $2(\alpha)$
		the compressor sharing the load.	1 010 2(9)
	Pass	Off/storage-secured mode. Verify that the storage does	NA7 5 14 2
17		not discharge and all compressors are off, regardless of	Part 2(h)
		the presence of calls for cooling.	
		Charge plus cool mode. If provisions for this mode have	
	Pass	been made by the system designer, then verify that the	NA7.5.14.2
18	Fail	tank(s) can be charged while serving an active cooling	Part 2(i)
		load; or, verify that the energy storage is disallowed or	
		discontinued while an active cooling load is present.	



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Lechnician	Namo
The information provided on this Certificate of Acceptance is true and correct. I am the person who	
nerformed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No : ATT Cert No
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
installation identified on this Certificate of Acceptance has been completed and signed by the responsible	5
builder/installer and has been posted or made available with the building permit(s) issued for the building.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance compiles with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
Cartificate of Accontance has been completed and is posted or made available with the building permit(c)	Date Signed
certificate of Acceptance has been completed and is posted of made available with the building permit(s) issued for the building. I understand that a completed, signed copy of this Cortificate of Acceptance shall	
be nosted, or made available with the building permit(s) issued for the building and shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Acceptance Date: Date

Building: Enter ValueFloor: Enter ValueRoom: Enter ValueControl/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent: Verify that the supply air temperature modulates to meet system temperature setpoint(s). Reference NRCC-MCH-E for nonresidential (including nonresidential spaces in high-rise multifamily) building permits or LMCC-MCH-E for nonresidential spaces in low-rise multifamily building permits or LMCC-PRF-E or NRCC-PRF-E for the performance path. Submit one Certificate of Acceptance for each system that must demonstrate compliance. References: §120.5(a)15, §140.4(f), §160.3(d)10, §170.2(c)4D, and NA7.5.15.

Table A: Construction Inspection

Ston	Entra	Thom	Code
Step	Entry	Item	Reference
1	No Entry	Check the following Required Documentation:	N/A
1.1	Pass Fail	Designs, plans, schematics, and schedules as approved by the authority having jurisdiction.	N/A
1.2	Pass Fail	NRCC-MCH-E or LMCC-MCH-E or LMCC-PRF-E or NRCC-PRF-E as approved by the authority having jurisdiction	§10-103(a)2A
1.3	Pass Fail	Manufacturer specifications, calibration certificates, or tear sheets for the installed system as available.	N/A
2	No Entry	Prior to functional testing, verify and document the following:	NA7.5.15.1
2.1	Pass	Supply air temperature reset controls are installed as specified by the requirements.	NA7.5.15.1(a), §140.4(f), §170.2(c)4D
2.2	Pass	All system air temperature sensors are factory or field calibrated within 2% of a calibrated reference temperature sensor.	NA7.5.15.1(b)
2.3	Enter Value	Document current supply air temperature (°F).	NA7.5.15.1(c)
3	Pass	Verify that the Construction Inspection complies with ALL requirements.	N/A



Step	Entrv	Functional Test	Code Reference
0	Pass Fail N/A	Check to make sure that chilled/hot water coils, if used, are not already fully open and calling for maximum cooling/heating. If so, reverse Steps 2 and 3 and/or change the set point range as necessary to conduct this test. (Pass, Fail, N/A)	NA7.5.15.2(a)
1	No Entry	Identify the control parameter.	NA7.5.15.2(b)
1.1, or	Check or	Outside air temperature.	N/A
1.2, or	Check or	Zone or return air temperature.	N/A
1.3, or	Check or	Zone calling for heating or cooling.	N/A
1.4	Check or	Other.	N/A
2	No Entry	During occupied mode, adjust the reset control parameter to decrease the supply air temperature (to the lower supply temperature limit). Verify and document the following:	NA7.5.15.2 Step 1
2.1	Pass	Supply air temperature controls modulate as intended.	NA7.5.15.2 Step 1(a)
2.2	Pass Fail	Actual supply air decreases to meet the new setpoint within $\pm 2^{\circ}$ F.	NA7.5.15.2 Step 1(b)
2.2.1	Enter Value °F	Supply air temperature set point.	N/A
2.2.2	Enter Value °F	Actual supply air temperature.	N/A
2.3	Pass	Supply air temperature stabilizes within 15 minutes.	NA7.5.15.2 Step 1(c)
3	No Entry	During occupied mode, adjust the reset control parameter to increase the supply of air temperature (to the upper supply temperature limit). Verify the following:	NA7.5.15.2 Step 2
3.1	Pass Fail	Supply air temperature controls modulate as intended.	NA7.5.15.2 Step 2(a)
3.2	Pass Fail	Actual supply air temperature changes to meet the new setpoint within $\pm 2^{\circ}$ F.	NA7.5.15.2 Step 2(b)



Step	Entry	Functional Test	Code Reference
3.2.1	Enter Value °F	Supply air temperature set point.	N/A
3.2.2	Enter Value °F	Actual supply air temperature.	N/A
3.3	Pass	Supply air temperature stabilizes within 15 minutes.	NA7.5.15.2 Step 2(c)
4	No Entry	Restore reset control parameter to automatic control. Verify and document the following:	NA7.5.15.2 Step 3
4.1	Pass	Supply air temperature controls modulate as intended.	NA7.5.15.2 Step 3(a)
4.2	Pass	Actual supply air temperature changes to meet the new setpoint within $\pm 2^{\circ}$ F.	NA7.5.15.2 Step 3(b)
4.2.1	Enter Value °F	Supply air temperature set point.	N/A
4.2.2	Enter Value °F	Actual supply air temperature.	N/A
4.3	Pass Fail	Supply air temperature stabilizes within 15 minutes.	NA7.5.15.2 Step 3(c)
5	Pass Fail	Verify that the Functional Test complies with ALL requirements.	N/A





Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Duce Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Eloor: Enter Value	Room: Enter Value	Control/tag: Value
Bullangi Enter Value			control/tagi value

Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent:Ensure that the condenser water supply temperature is automatically reset as
indicated in the control sequence(s). Reference NRCC-MCH-E for nonresidential
(including nonresidential spaces in high-rise multifamily) building permits or LMCC-
MCH-E for nonresidential spaces in low-rise multifamily building permits or LMCC-
PRF-E or NRCC-PRF-E for the performance path. Submit one Certificate of
Acceptance for each system that must demonstrate compliance. References:
§120.5(a)16, §140.4(k)4, §160.3(d)1P, §170.2(c)4Iiv, and NA7.5.16.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1	Pass	Confirm access to required documentation. Designs, plans, schematics, and schedules as approved by the authority having jurisdiction.	N/A
2	Pass	Required Documentation. Building documents, including: manufacturer specifications, calibration certificates, or tear sheets for the installed system as available.	N/A
3	Pass Fail	Verify and document that the condenser water supply system, control system, and temperature control sequence, including condenser water supply high and low limits, are available and documented in the building documents.	NA7.5.16.1(a)
4	Pass Fail	Verify and document that the cooling tower fan motors are operational, and cooling tower fan speed controls (e.g., VSDs) are installed, operational, and connected to cooling tower fan motors as specified by Original Equipment Manufacturer (OEM) start-up manuals and sequence of operation.	NA7.5.16.1(b)
5	Pass	Verify and document that the cooling tower fan control sequence, including tower design wet-bulb temperature and approach, is available and documented in the building documents.	NA7.5.16.1(c)



Step	Entry	Item	Code Reference
6	Pass	Verify and document that the following temperature sensors are installed as specified by the plans: outdoor air dry-bulb, outdoor air wet- bulb, entering condenser water, and leaving chilled water. Note any discrepancies.	NA7.5.16.1(d)
7	Pass	Verify and document that all ambient dry-bulb temperature, relative humidity, and pressure sensors used by controller are factory calibrated within 2% of a calibrated reference sensor.	NA7.5.16.1(e)
8	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B-1: Temperature Documentation prior to Functional Testing

Step	Entry	Item	Code Reference
1	Enter Value	Document the outdoor air dry-bulb temperature. (°F)	NA7.5.16.1(f)
2	Enter Value	Document the outdoor air wet-bulb temperature. (°F)	NA7.5.16.1(f)
3	Enter Value	Document the entering condenser water temperature. (°F)	NA7.5.16.1(f)
4	Enter Value	Document the leaving chilled water temperature. (°F)	NA7.5.16.1(f)
5	Pass Fail	Check if all temperature recordings from Steps 1 through 4 were documented successfully.	N/A

StepEntryFunctional TestReference1.0If the actual control sequence differs significantly from that implied by the tests and/or has already been tested during the building commissioning process, attach a description of the control sequence, a description of the tests that were done to verify the system operates according to the sequence, the test results, and a plot of associated trend data. Skip to Step 19.NA7.5.16.2(c)				Code
1.0 Pass Fail If the actual control sequence differs significantly from that implied by the tests and/or has already been tested during the building commissioning process, attach a description of the control sequence, a description of the tests that were done to verify the system operates according to the sequence, the test results, and a plot of associated trend data. Skip to Step 19.	Step	Entry	Functional Test	Reference
	1.0	Pass Fail	If the actual control sequence differs significantly from that implied by the tests and/or has already been tested during the building commissioning process, attach a description of the control sequence, a description of the tests that were done to verify the system operates according to the sequence, the test results, and a plot of associated trend data. Skip to Step 19.	NA7.5.16.2(c)



Step	Entry	Functional Test	Code Reference
2.0	Pass	Pre-Functional Test Requirement. The system cooling load must be sufficiently high to run the test. If necessary, artificially increase the evaporator load to perform the functional tests or wait until a time of stable chiller operation. If necessary, reverse the series of Steps from 6 through 10 and the series of Steps from 11 through 15 in the test based on atmospheric conditions and buildings loads.	NA7.5.16.2(a)
3.0	Pass	Pre-Functional Test Requirement. If testing in cold ambient conditions, ensure that freeze protection controls are installed and functional to prevent equipment damage.	NA7.5.16.2(b)
4.0	WB, L, C, O	Identify the reset control parameter: WB - Outside air wet-bulb temperature L - Load signal from chiller C - Condenser water and chilled temperatures O - Other	NA7.5.16.2(d)
5.0	Pass	Adjust the reset control parameter to decrease the condenser water supply temperature toward the lower supply temperature limit. Allow time for the system to stabilize. Maintain this status for Steps 6 through 9.	NA7.5.16.2 Step 1
6.0	Pass Fail	Verify and document that the condenser water supply temperature controls modulate as intended.	NA7.5.16.2 Step 1(a)
7.0	Pass	Verify and document that the actual condenser water supply temperature decreases to meet the new setpoint within $\pm 2^{\circ}$ Fahrenheit.	NA7.5.16.2 Step 1(b)
8.0	Pass	Verify and document that the cooling tower fan(s) stage properly and/or adjust speed accordingly to meet higher setpoint.	NA7.5.16.2 Step 1(c)
9.0	Pass Fail	Verify and document that the chiller load amperage decreases.	NA7.5.16.2 Step 1(d)
10.0	Pass	Adjust the reset control parameter to increase the condenser water supply temperature toward the upper supply temperature limit. Maintain this status for Steps 11 through 14.	NA7.5.16.2 Step 2
11.0	Pass Fail	Verify and document that the condenser water supply temperature controls modulate as intended.	NA7.5.16.2 Step 2(e)
12.0	Pass	Verify and document that the actual condenser water supply temperature increases to meet the new setpoint within $\pm 2^{\circ}$ Fahrenheit.	NA7.5.16.2 Step 2(f)
13.0	Pass Fail	Verify and document that the cooling tower fan(s) stage properly and/or adjust speed accordingly to meet the lower setpoint.	NA7.5.16.2 Step 2(g)

Pass Fail Pass Fail Pass Fail Fail	Verify and document that the chiller load amperage increases. Restore reset control parameter to automatic control. Maintain this status for Steps 16 through 18. Verify and document that the condenser water	NA7.5.16.2 Step 2(h) NA7.5.16.2
Pass Fail Pass Pass Fail	Restore reset control parameter to automatic control. Maintain this status for Steps 16 through 18. Verify and document that the condenser water	NA7.5.16.2
Pass Fail	Verify and document that the condenser water	Step 3
	supply temperature controls modulate as intended	NA7.5.16.2 Step 3(i)
Pass	Verify and document that the actual condenser water supply temperature changes to meet the new setpoint.	NA7.5.16.2 Step 3(j)
Pass	Verify and document that the cooling tower fan(s) and chiller(s) stage properly and/or adjust speed accordingly to return to normal operation and meet the setpoint.	NA7.5.16.2 Step 3(k)
	Verify that the Functional Testing is complete and	N/A
(08 ^E		
-	Pass Fail Pass Fail	Image: Pass new setpoint. Image: Pass and chiller(s) stage properly and/or adjust speed accordingly to return to normal operation and meet the setpoint. Image: Pass Verify that the Functional Testing is complete and passes ALL requirements.



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I assert the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
installation identified on this Cartificate of Assentance has been sempleted and signed by the responsible	Date Signed
huilder/installer and has been posted or made available with the huilding permit(s) issued for the huilding	_
Personsible Person	
Lassert the following under penalty of periury, under the laws of the State of California:	
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.	Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Company Name
installation identified on this Certificate of Acceptance complies with the acceptance requirements	LIC. No.: LICENSE NO.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	l Itle Dhana
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature Data Signad
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



EMCS SYSTEM ACCEPTANCE 2025-CEC-NRCA-MCH-18-A

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Dullully. Litter value	TIOUL LITE VALUE	ROUTH. LITER VALUE	Control/tay. value

Construction inspection and functional testing comply Does not comply
Date Submitted to AHJ: Date

Intent:	NRCA-MCH-18-A includes only a construction inspection for an installed energy management control system (EMCS). Functional testing is to be performed as
	directed by the EMCS manufacturer. Construction inspection includes verifying that
	performed when required. Either an NRCC-MCH-E for nonresidential construction
	that is completed and approved by the authority having jurisdiction or an LMCC-
	MCH-E for multifamily construction that is registered with a CEC approved ECC data
	registry is required or LMCC-PRF-E or NRCC-PRF-E for the performance path prior
	EMCS that must demonstrate compliance Reference: 8110 12(b) 8120 5(a)17
	§130.0(e), §130.4(b)2, §130.0-§130.5, §140.6-§150.0, §150.2, §160.3(d)1Q, and
	§160.5(b)3.

Table A: Construction Inspection

Step	Entry	Item	Code Reference
1.0	No Entry	Required Documentation (check all of the following):	N/A
1.1	Pass Fail	Designs, plans, schematics, and schedules as approved by the authority having jurisdiction.	N/A
1.2	Pass Fail	Building documents including: manufacturer specifications, calibration certificates, or tear sheets for the installed system as available.	N/A
1.3	Pass Fail	NRCA-MCH-11-A (Automatic Demand Shed Control) must be completed.	§110.12(b)
2.0	No Entry	Verify and document the following (check all of the following):	N/A
2.1	Pass Fail	Relying on documentation from the manufacturer, verify that the EMCS has completed the initial startup and can achieve normal operation.	N/A
2.2	Pass	Verify that all unitary heating or cooling systems under thermostatic control of the EMCS are identified on NRCC-MCH-E, Section I or NRCC-PRF-E, Section H8or LMCC-PRF-E or LMCC-MCH-01-E.	§110.2(c) §10-103(a)2A
2.3	P, F, N/A	IF Construction Inspection 2.2 is selected on NRCA- MCH-03-A, THEN verify that NRCA-MCH-03-A is completed. (Pass, Fail, N/A)	N/A



			Code
Step	Entry	Item	Reference
2.4	P, F, N/A	IF the EMCS is installed to function as a lighting control that is required by the Standards, THEN verify that NRCI-LTI-02-E or LMCI-LTI-02-E (EMCS for Lighting Control Systems) has been completed and approved by the authority having jurisdiction. (Pass, Fail, N/A)	§130.0(e)2, §130.4(b)2, §110.9, §130.0-§130.5, §140.6-§150.0, §150.2, NA7.7.2
2.5	No Entry	For all lighting controls systems for which an EMCS is identified as providing compliance (NRCC-LTI-E, NRCC-LTO-E, LMCC-LTI-01-E, LMCC-LTO-01-E), verify that the following acceptance tests have been completed (Pass, Fail, N/A):	§130.0(e) §160.5(b)3
2.5.1	P, F, N/A	NRCA-LTI-02-A (Shut-Off Lighting Controls)	§130.0(e) §160.5(b)3
2.5.2	P, F, N/A	NRCA-LTI-03-A (Automatic Daylighting Controls)	§130.0(e) §160.5(b)3
2.5.3	P, F, N/A	NRCA-LTI-04-A (Demand Responsive Controls)	§130.0(e) §160.5(b)3
2.5.4	P, F, N/A	NRCA-LTI-05-A (Institutional Tuning Power Adjustment Factor)	§130.0(e) §160.5(b)3
2.5.5	P, F, N/A	NRCA-LTO-02-A (Outdoor Lighting Controls)	§130.0(e) §160.5(b)3
3.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A



CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature
	Date Signed
Acceptance Test Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
			control/tagi value

Construction inspection and functional testing comply Does not comply Date Submitted to AHJ: Date

Intent:	Ensure that the occupancy sensor is functional and in compliance with the design
	and with the Energy Code. Either an NRCC-MCH-E or NRCC-PRF-E for the
	performance path for nonresidential construction that is completed and approved
	by the authority having jurisdiction or LMCC-PRF-E or LMCC-MCH-E for multifamily
	construction that is registered with a CEC approved ECC data registry is required
	prior to beginning this acceptance test. Submit one Certificate of Acceptance for
	each system that must demonstrate compliance. References: §120.1(d)2,
	§120.1(c), §120.2(e)3, §120.5(a)18, §160.2(c), §160.2(c)5B, §160.3(a)2Diii,
	§160.3(d)1R, and NA7.5.17.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following for each system:

Step	Entry	Item	Code Reference
1.0	No Entry	Required Documentation.	N/A
1.1	Pass	Designs, plans, schematics, and schedules as approved by the authority having jurisdiction.	N/A
1.2	Pass Fail	Verify that the NRCC-MCH-E as approved by the authority having jurisdiction or LMCC-MCH- E as registered by a CEC approved ECC data registry or LMCC-PRF-E or NRCC-PRF-E is available for reference.	§10-103(a)2A
2.0	No Entry	Prior to functional testing, verify and document the following (check ALL of the following):	N/A
2.1	Pass Fail	Verify that NRCC-MCH-E or LMCC-MCH-E, Table I has identified that the spaces served by the zone are designated as eligible to be in occupied standby mode and calls for an occupancy sensor to be installed.	NA7.5.17.1(a, §120.2(e)3, §160.3(a)2Diii
2.2	Pass Fail	Verify that the occupant sensor is placed so that it can detect occupants in the space without obstruction. Repeat for all spaces served by the zone.	NA7.5.17.1(b)



Step	Entry	Item	Code Reference
2.3	Pass	Confirm that the mechanical system is controlled by an independent signal if the occupant sensor also controls the lighting.	NA7.5.17.1(c)
3.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Step	Entry	Functional Test	Code Reference
1.0	Pass	Put the zone in occupied mode (i.e., adjust the occupancy schedule).	NA7.5.17.2 Step 1
2.0	Pass	Physically occupy the space and confirm that the occupant sensor detects the presence of an occupant in the zone.	NA7.5.17.2 Step 2
3.0	Pass	Adjust the thermostat control so that the space temperature is within the deadband.	NA7.5.17.2 Step 3
4.0	Pass	Confirm that the zone is supplied with minimum ventilation by comparing steps 4.1 and 4.2.	NA7.5.17.2 Step 4
4.1	Design CFM	NRCC-MCH-E or LMCC-MCH-01-E, Table J or NRCC-PRF-E, Table H9, LMCC-PRF-E, Minimum Ventilation Required (CFM).	NA7.5.17.2 Step 4
4.2	Measured CFM	Measured ventilation (CFM).	NA7.5.17.2 Step 4
5.0	Pass Fail	Adjust setpoint outside of occupied heating/cooling deadband but inside the occupied standby deadband. Confirm the zone is in heating or cooling mode.	NA7.5.17.2 Step 5
6.0	No Entry	Physically vacate all spaces served by the zone.	NA7.5.17.2 Step 6
7.0	Pass Fail	For space conditioning systems that also provide ventilation to the zone, confirm that within five minutes of occupant sensing controls indicating that the zone is unoccupied the setpoint is setup or setback and the zone is within the occupied standby deadband. Occupant sensing controls may have a time delay of up to 20 minutes before indicating the space is unoccupied and occupant sensing zone controls may allow up to an additional 5 minute time delay after occupant sensing controls have indicated all rooms served by the zone are unoccupied before resetting zone temperature setpoints and shutting off zone ventilation air).	NA7.5.17.2 Step 7


			Code
Step	Entry	Functional Test	Reference
8.0	Pass	Confirm that no ventilation is being supplied to	NA7.5.17.2
0.0	🔄 🔄 Fail	the space with the occupant sensor.	Step 8
9.0	Pass	Put the zone in pre-occupancy ventilation mode (i.e., adjust the occupancy schedule to one hour prior to normal scheduled occupancy).	NA7.5.17.2 Step 9
10.0	No Entry	Physically vacate all spaces served by the zone.	NA7.5.17.2 Step 10
11.0	Pass Fail	Confirm that within 5 minutes of occupant sensing controls indicating that all spaces served by the zone are unoccupied, the zone is supplied with pre-occupancy ventilation rate as specified in NRCC-MCH-E or LMCC-MCH-01-E, Table J or NRCC-PRF-E, Table H9, LMCC-PRF-E or three complete air changes is supplied to the zone during the one hour period immediately before the zone is scheduled to be occupied.	NA7.5.17.2 Step 11, §120.1(d)2, §120.1(c), §160.2(c)5B, §160.2(c)
12.0	Pass Fail	Occupy a space served by the zone during the one hour immediately prior to scheduled occupancy. Confirm that the zone is supplied with pre-occupancy ventilation rate as specified in NRCC-MCH-E or LMCC-MCH-01-E, Table J or NRCC-PRF-E, Table H9, LMCC-PRF-E.	NA7.5.17.2 Step 12, §120.1(d)2, §160.2(c)5B
13.0	Pass	Restore the system to normal operation.	NA7.5.17.2 Step 13
14.0	Pass	Check pass if Functional Test passes on Steps 1 through 13.	N/A



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic. No.: License No.
installation identified on this Certificate of Acceptance complies with the acceptance requirements	Title
indicated in the plans and specifications approved by the enforcement agency and conforms to the	Phone
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Signature
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value Floor: Enter Value Room: Enter Value Control/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent:	• This form is completed only when NA1.9 Acceptance Test Technicians Alternative
	Procedure is used in accordance with Section 160.2(b)2Biv, where a certified ATT
	is allowed to perform the test that is typically performed by an ECC-Rater for
	multifamily buildings with four or more stories.
	Submit one Certificate of Acceptance for each ventilation system installed to

- Submit one Certificate of Acceptance for each ventilation system installed to verify conformance with the requirements of the Energy Standards §160.2(b)2, Reference Nonresidential Appendices NA7.18.1.1 and NA2.2, and California Energy Commission adopted version of ANSI/ASHRAE Standard 62.2-2022.
- Certificate of Acceptance NRCA-MCH-21-H must be completed prior to beginning NRCA-MCH-20a-H.

Table A-1: Construction Documents and Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass Fail	Design, drawings, and cut-sheets as approved by the authority having jurisdiction.	N/A
2.0	Pass	NRCC-MCH-E, or NRCC-PRF-E, as approved by the authority having jurisdiction.	§10-103(a)2A
3.0	Pass Fail	NRCA-MCH-21-H is completed.	N/A
4.0	Pass	Verify that the system is connected and able to deliver outside air to the dwelling unit when the system is operating.	NA7.18.1.1.1(a)
5.0	В, S, E	Specify the ventilation system type as one of the following: B – Balanced S – Supply Only E – Exhaust Only	NA7.18.1.1.1(b)
6.0	Pass	Verify that the installed ventilation system is a continuous ventilation system.	NA7.18.1.1.1(c), ASHRAE 62.2 §4.1



			Code
Step	Entry	Item	Reference
7.0	C,O,V,X, N/A	If using multifamily building central ventilation systems to serve multiple dwelling units, specify the balancing system as one of the following: C – Constant Air Regulator O – Orifice Plate V – Variable Speed Central Fan X - Other N/A	NA7.18.1.1.1(c), §160.2(b)2Av
8.0	Pass	Confirm the kitchen range hood is ventilated to the outside.	NA7.18.1.1.1(d)
9.0	Pass Fail	Verify that a manual ON/OFF switch associated with dwelling unit ventilation system is operational and labeled with the following or equivalent text: "This switch controls the indoor air quality ventilation for the home. Leave it on unless the outdoor air quality is very poor."	§160.2(b)2Aix
10.0	Pass	Verify that all the steps in Table A-1 has passed.	N/A

Table A-2: Instrumentation Specific Requirements

			Code
Step	Entry	Item	Reference
1.0	Pass Fail	Verify that pressure measurement instrumentation is accurate to plus or minus 0.2 Pa or plus or minus 1% of the pressure reading.	NA2.2.2.1
2.0	☐ Pass ☐ Fail	Verify that pressure measurement instrumentation includes a sensor plus data acquisition system.	NA2.2.2.1
3.0	Pass	Verify that pressure measurement instrumentation makes use of a static pressure probe.	NA 2.2.2.1
4.0	Pass Fail	Verify that ventilation system airflow rate measurement apparatus is listed on the Energy Commission website: <u>Airflow Measurement</u> <u>Apparatus (ca.gov)</u> , https://www.energy.ca.gov/rules-and- regulations/building-energy- efficiency/manufacturer-certification-building- equipment-9	NA2.2.2.2, NA2.2.4
5.0	Pass	Verify that ventilation system airflow rate measurement apparatus is calibrated according to the manufacturer procedures.	NA2.2.2.2, NA2.2.2.3
6.0	Pass	Verify that all the steps in Table A-2 has passed.	N/A

Table A-3: Acceptance Test Compliance Documents to be Completed

Consulting compliance document NRCC-MCH-E or NRCC-PRF-E identify which of the following acceptance test compliance documents are to be completed:

Step	Entry	Item	Code Reference
1.0		NRCA-MCH-20b-H – Kitchen Range Hood	N/A
2.0		NRCA-MCH-20c-H – IAQ Ventilation System	N/A
3.0		NRCA-MCH-20d-H – HRV or ERV System	N/A



	[
Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Name Company Name
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	LIC. NO.: LICENSE NO.
indicated in the plans and specifications approved by the enforcement agency and conforms to the	litie
applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I	Phone
have confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Signature
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date Signed
issued for the building. I understand 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 shall be made	
available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill	
this requirement. 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. I will take the	
necessary steps to fulfill this requirement.	
	1



CALIFORNIA ENERGY COMMISSION

KITCHEN RANGE EXHAUST 2025-CEC-NRCA-MCH-20b-H

Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
Bunanigi Enter Value			control/tagi value

Construction inspection and functional testing comply Does Not Comply Date Submitted to AHJ: Date

Intent:	• This form is completed only when NA1.9 Acceptance Test Technicians Alternative
	Procedure is used in accordance with Section 160.2(b)2Biv, where a certified ATT
	is allowed to perform the test that is typically performed by an ECC-Rater for
	multifamily buildings with four or more stories.
	 Submit one Certificate of Acceptance for each ventilation system installed to
	verify conformance with the requirements of the Energy Standards §160.2(b)2,
	Reference Nonresidential Appendices NA7.18.1.1 and NA2.2, and California
	Energy Commission adopted version of ANSI/ASHRAE Standard 62.2-2022.

NRCA-MCH-20a-H must be completed prior to beginning NRCA-MCH-20b-H. NRCA-MCH-21-H must be completed prior to beginning NRCA-MCH-20b-H.

Table B-1: Functional Testing – Kitchen Range Hood

			Code
Step	Entry	Functional lest	Reference
1.0	Enter News		NA7.18.1.1.1(e),
1.0	Enter Name	Kitchen range nood manufacturer name.	NA2.2.4.1.4(a)
2.0	Enter Model	Equipment model number	NA7.18.1.1.1(e),
2.0		Equipment model number.	NA2.2.4.1.4(a)
3.0	No Entry	Confirm the kitchen range hood is listed in the HVI, AHAM or other CEC approved directory by selecting one of the following.	N/A
	Pass	The kitchen range hood is <u>HVI certified</u> .	NA7.18.1.1.1(f),
3.1, or	Fail	https://www.hvi.org/hvi-certified-products-	NA2.2.4.1.4(b),
	□ N/A	directory/ (Pass, Fail, N/A)	§160.2(b)2Bii
3.2, or	Pass Fail N/A	The kitchen range hood is <u>AHAM certified</u> . <u>https://www.aham.org/AHAM/What_We_Do/Kitc</u> <u>hen_Range_Hood_Certification</u> (Pass, Fail, N/A)	NA7.18.1.1.1(f), NA2.2.4.1.4(b), §160.2(b)2Bii
3.3	Name or N/A	If the kitchen range hood is certified by another CEC approved directory (enter name or N/A).	NA7.18.1.1.1(f), NA2.2.4.1.4(b), §160.2(b)2Bii
4.0	Enter Value	Record the rated airflow or capture efficiency value listed in the directory. (CFM)	NA2.2.4.1.4(c)
5.0	Enter Value	Record the sound rating value listed in the directory. (Sone)	NA2.2.4.1.4(d)



KITCHEN RANGE EXHAUST

2025-CEC-NRCA-MCH-20b-H

			Code
Step	Entry	Functional Test	Reference
6.0		Record the design airflow or capture efficiency	NRCC-MCH-E
6.0	Enter Value	value (CFM or eff.)	DRE-E Table HQ
			NRCC-MCH-F
7.0	Enter Value	Record the design value (Sone)	Table Q
		Passes if the rated airflow value is greater than	NA2.2.4.1.4(e),
8.0	Fail	or equal to the design value.	§160.2(b)2Avi,
		Check If B-1,4 \geq = B-1,6.	§160.2(D)2BII
9.0	Pass	equal to the design value.	§160.2(b)2Avi
		Check if B-1,5 <= B-1,7.	§160.2(b)2Bii
10.0	Pass	Passes if Steps 1 through 9 are all completed	Ν/Δ
10.0	Fail	and checked.	ПЛА



CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency and	Phone
conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential	Signature
Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California:	
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	Name
scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement.	Company Name
The information provided on this Certificate of Acceptance substantiates that the construction or	Lic No : License No
installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated	Title
in the plans and specifications approved by the enforcement agency and conforms to the applicable	Phone
acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have	Signature
confirmed that the Certificate(s) of Installation for the construction or installation identified on this	Date Signed
Certificate of Acceptance has been completed and is posted or made available with the building permit(s)	Date orgined
issued for the building. I understand 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 shall be made available	
to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this	
requirement. 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. I will take the necessary	
steps to fulfill this requirement.	



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter Value Floor: Enter Value Room: Enter Value Control/tag: Value

Construction inspection and functional testing comply Date Submitted to AHJ: Date

• This form is completed only when NA1.9 Acceptance Test Technicians Alternative
Procedure is used in accordance with Section 160.2(b)2Biv, where a certified ATT
is allowed to perform the test that is typically performed by an ECC-Rater for
multifamily buildings with four or more stories.
Submit one Certificate of Acceptance for each ventilation system installed to
verify conformance with the requirements of the Energy Standards §160.2(b)2,
Reference Nonresidential Appendices NA7.18.1.1 and NA2.2, and California
Energy Commission adopted version of ANSI/ASHRAE Standard 62.2-2022.
• NRCA-MCH-20a-H must be completed prior to beginning NRCA-MCH-20c-H.
NRCA-MCH-21-H must be completed prior to beginning NRCA-MCH-20c-H.

Table B-1: Functional Testing – IAQ Ventilation System

Step	Entry	Functional Test	Code Reference
1	Pass Fail N/A	If multiple fans are specified to operate simultaneously to provide the total required ventilation airflow, the measurements within this functional test must be made with all applicable fans operating simultaneously. Verify that all fans are operational. (Pass, Fail, N/A)	NA2.2.4.1
2	Pass Fail	Activate the ventilation system using the system control and record all values in Table B-2.	NA2.2.4.1, NA2.2.4.1.1(b)

Table B-2: Functional Testing - Record Fan Data (NA2.2.4.1.1(a)(b)(c))

STEP	Fan Location or ID	Exhaust Measurement (CFM)	Supply Measurement (CFM)
1	Enter Location or ID	Enter Value	Enter Value
2	Enter Location or ID	Enter Value	Enter Value
3	Enter Location or ID	Enter Value	Enter Value
4	Enter Location or ID	Enter Value	Enter Value
5	Enter Location or ID	Enter Value	Enter Value
6	Total of all Fans	6.1 Enter Value	6.2 Enter Value
7	Average of All Fans	7.1 Enter Value	7.2 Enter Value



Table B-3: Functional Testing – Required Calculations

Stop	Entra	Eurotional Test	Code
Step	Encry		Reference
			NRCC-MCH-E
1	Entor Value	Record the design ventilation air flow rate for	Table J, <u>or</u>
L L		the dwelling unit. (CFM)	NRCC-PRF-E
			Table H9
		BALANCED SYSTEM Only: Calculate the	
		percent difference between the exhaust and	
2	Percent or N/A	supply airflow rates.	NA2.2.4.1.2(e)
		Calculate 100 x (B-2,6.1 – B-2,6.2) ÷ B-2,6.1	
		(Enter value in units of percent or N/A)	

Table B-4: Functional Testing – Conditions for Passing

Conditions for passing ventilation systems that serve one dwelling unit.

Step	Entry	Functional Test	Code Reference
1	Pass Fail N/A	 Supply Only Ventilation System passes if ALL of the following are true: B-2,6.2 ≥ B-3,1 (Pass, Fail, N/A) 	NA2.2.4.1.1(c), §160.2(b)2Aivb1
2	Pass Fail N/A	Balanced Only Ventilation System passes if ALL of the following are true: • B-3,2 < 20%, AND • Exhaust (B-2,7.1) \geq B-3,1, AND • Supply (B-2,7.2) \geq B-3,1 (Pass, Fail, N/A)	NA2.2.4.1.2(g), §160.2(b)2Aivb1

Table B-5: Functional Testing – Conditions for Passing

Conditions for passing ventilation systems that serve multiple dwelling units.

			Code
Step	Entry	Functional Test	Reference
1	P, F, N/A	 Supply Only Ventilation System passes if both of the following are true: B-4,1 passes, and Supply: B-2,6.2 < (1.2 x B-3,1) (Pass, Fail, N/A) 	§160.2(b)2Avc
2	P, F, N/A	 Balanced Ventilation System passes if all of the following are true: B-4,2 Passes, AND B-2,7.1 < (1.2 x B-3,1), AND B-2,7.2 < (1.2 x B-3,1) (Pass, Fail, N/A) 	§160.2(b)2Avc

Table B-6: Functional Testing – Conditions for Passing

Check for passing conditions.



Step	Entry	Functional Test	Code Reference
1	Pass	Return system to normal operating conditions.	N/A
2	Pass Fail	System passes if Tables B-1 through B-5 are completed as required and one of the following conditions for passing are checked: Table B-4, 1 or 2, indicate PASS or Table B-5, 1 or 2 indicate PASS	N/A

California Energy Commission



Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	Company Name
	Author Signature
	Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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	Name Company Name ATT No.: ATT Cert. No. Title Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person	
I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

 Building: Enter Value
 Floor: Enter Value
 Room: Enter Value
 Control/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent:	• This form is completed only when NA1.9 Acceptance Test Technicians Alternative
	Procedure is used in accordance with Section 160.2(b)2Biv, where a certified ATT
	is allowed to perform the test that is typically performed by an ECC-Rater for
	multifamily buildings with four or more stories.
	Submit one Certificate of Acceptance for each HRV or ERV system installed to
	verify conformance with the requirements of the Energy Standards §160.2(b)2,
	§170.2(c)3Biva, Reference Nonresidential Appendices NA7.18.1.1 and NA2.2, and
	California Energy Commission adopted version of ANSI/ASHRAE Standard 62.2-
	2022.
	• NRCA-MCH-20a-H must be completed prior to beginning NRCA-MCH-20d-H.
	NRCA-NRCA-MCH-21-H must be completed prior to beginning NRCA-MCH-20d-H.

			Code
Step	Entry	Functional Test	Reference
1.0			NA7.18.1.1.2,
1.0	Enter Name	Manufacturer Name.	NA2.2.4.1.5(1),
			9100.2(D)2DIII
2.0	Entor Model	Manufacturor Model Number	NA7.18.1.1.2,
2.0	Enter Model	Manufacturer Model Number.	8160 2(b)2Biii
3.0	H, O, or F	 Confirm the model number is listed in the HVI or other CEC approved directory by selecting one of the following: H - <u>HVI certified</u>. https://www.hvi.org/hvicertified-products-directory/ O - The model is certified by another CEC approved directory. F - If the system is not listed in the HVI or other CEC-approved directory, then the system does not comply. FULL STOP Do not proceed with acceptance test. 	NA7.18.1.1.2, NA2.2.4.1.5(2), NA2.2.4.1.5(5)d, §160.2(b)2Biii
4.0	Applies or N/A	If compliance with a fan efficacy performance rating is required, mark as "Applies" and perform all of Step 4, or else mark as N/A and skip to Step 5.0	NA2.2.4.1.5(3)

Table B-1: Functional Testing – Heat or Energy Recovery Ventilation



Step	Entry	Functional Test	Code Reference
4.1	Enter Value	Enter the required/design ventilation airflow for the installed HRV/ERV. (cfm)	NA2.2.4.1.5(3)a NRCC-MCH-E <u>or</u> NRCC-PRF-E
4.2	Enter Value	Enter the power consumed at 32 degrees F, at the closest Net Airflow listed in the directory that is greater than or equal to the ventilation airflow from HVI or other CEC approved directory. OR Enter the power consumed using linear interpolation using Equation NA2.2-1 (Reference Nonresidential Appendices). (Watts)	NA2.2.4.1.5(3)b
4.3	D or L	Indicate which method was used in B-1,4.2 D – HVI (or other) directory L – linear interpolation	N/A
4.4	Enter Value	Enter the Net Airflow used in the directory lookup or the design ventilation airflow from B-1,4.1 if using linear interpolation in B- 1,4.2. (CFM)	NA2.2.4.1.5(3)c
4.5	Enter Value	Divide the value for power consumed (B- 1,4.2 or B-1,4.3) by the net airflow (B- 1,4.1). (Watts/CFM)	NA2.2.4.1.5(3)c
4.6	Enter Value	Enter the required/design fan efficacy for the installed HRV/ERV.	NRCC-MCH-E <u>or</u> NRCC-PRF-E
4.7	Pass	Select "Pass" if the system complies with: B-1,4.5 \leq B-1,4.6	NA2.2.4.1.5(5)b
5.0	Applies or N/A	If compliance with a sensible recovery efficiency (SRE) performance rating is required, mark as "Applies" and perform all of Step 5, or else mark as N/A and skip to Step 6.0	NA2.2.4.1.5(4)
5.1	Enter Value	Enter the required ventilation airflow for the installed HRV/ERV. (cfm)	NA2.2.4.1.5(4)a, NRCC-MCH-E or NRCC-PRF-E



Step	Entry	Functional Test	Code Reference
5.2	Enter Value	Enter the SRE at 32 degrees F, at the closest Net Airflow listed in the directory that is greater than or equal to the ventilation airflow required on the certificate of compliance. OR Enter the SRE at 32 degrees F using linear interpolation using Equation NA2.2-2 (Reference Nonresidential Appendices). (%, Percent)	NA2.2.4.1.5(4)b
5.3	D or L	Indicate which method was used in B-1,5.2 D – HVI (or other) directory L – linear interpolation	N/A
5.4	Enter Value	Enter the Net Airflow used in the directory lookup or the design ventilation airflow from B-1,5.1 if using linear interpolation in B- 1,5.2. (CFM)	NA2.2.4.1.5(4)b
5.5	Enter Value	Enter the required/design SRE for the installed HRV/ERV. (%, Percent)	NRCC-MCH-E or NRCC-PRF-E
5.6	Pass Fail	The system complies if B-1,5.2 \geq B-1,5.5	NA2.2.4.1.5(5)a
6.0	P, F, N/A	If both B-1,4.0 and B-1,5.0 apply, then B- 1,4.4 and B-1-5.4 must be equal. (Pass, Fail, N/A)	NA2.2.4.1.5(5)c
7.0	☐ Pass ☐ Fail	Select "Pass" if all of the following are true: B-1,3.0 is NOT Failed; If B-1,4.0 Applies then B-1,4.7 must Pass; If B-1,5.0 Applies then B-1,5.6 must Pass; If both B-1,4.0 and 5.0 Apply then B-1,6 must Pass	N/A
NO CROR			



Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Field Technician	
I certify the following under penalty of perjury, under the laws of the State of California:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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.	
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

 Building: Enter Value
 Floor: Enter Value
 Room: Enter Value
 Control/tag: Value

Construction inspection and functional testing Comply
 Does not comply
 Date Submitted to AHJ: Date

Intent:	This form is com Procedure is used ATT is allowed to multifamily build Submit one Certi envelope leakage §160.2(b)2Aivb2 ANSI/RESNET/IC The certified ATT	pleted only when NA1.9 Acceptance Test Technicians Alternative d in accordance with Section 160.2(b)2Aivb2, where a certified o perform the test that is typically performed by an ECC-Rater for ings with four or more stories. ficate of Acceptance for each dwelling unit to verify that the e conforms to the requirements of the Energy Standards and Reference Nonresidential Appendices NA7.18.2, NA2.3, CC 380-2019, and ASTM E779-19 (2019).
	The certified ATT completing NRCA	F is required to complete this Certificate of Acceptance prior to A-MCH-20(a-d)-H.

Table A-1: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass	Confirm the pressure boundary wall, ceiling, and floor penetrations are sealed.	NA7.18.2.1(a)
2.0	Pass	Confirm all gaps around the windows and doors are sealed.	NA7.18.2.1(b)
3.0	Pass Fail	Confirm all chases are sealed at floor level using a hard cover and the hard cover is sealed.	NA7.18.2.1(c)
4.0	Pass Fail	Check if Construction Inspection complies with all requirements.	N/A

Table A-2: Instrument Specifications

The equipment listed must have their calibrations checked at the manufacturer's recommended interval, and at least annually if not specified.

Step	Entry	Item	Code Reference
1.0	Pass Fail	Air-Moving Fan is capable of moving air into or out of the unit to achieve target pressure differences with the exterior.	NA2.3.2, RESNET 380 §4.1.1

Step	Entry	Item	Code Reference
2.0	Model Serial No.	Manometer. Capable of measuring pressure differences within a maximum error of 1% of reading or 0.25Pa (0.001 in. H20), whichever is greater.	NA2.3.2, RESNET 380 §4.1.2
3.0	Model Serial No.	Airflow Meter. Capable of measuring volumetric airflow with a maximum error of 5% of measured flow.	NA2.3.2, RESNET 380 §4.1.3
4.0	Model Serial No.	Thermometer. Capable of measuring air temperature within an accuracy of $\pm 1^{\circ}C$ (2°F).	NA2.3.2, RESNET 380 §4.1.4
5.0	Model Serial No.	Blower Door . A device that combines the Air-Moving Fan (1), Airflow Meter (3.0) and a cover to integrate into the building opening. NOTE: it is highly recommended that the assemblage of the blower door system also integrates the Manometer (2.0) and include manufacturer software that will correct CFM measurements for altitude and air temperature (i.e., air viscosity and density). Otherwise, these corrections must be made manually.	NA2.3.2, RESNET 380 §4.1.5

Table B-1: Functional Test Preparation

Table B-1: Functional Test Preparation			
Step	Entry	Item	Code Reference
1.0	Pass Fail	Open doors and windows of all directly adjacent units (all sides, top, and bottom).	NA2.3.3(1)
2.0	Pass	Fenestration: Exterior doors and windows must be closed and latched.	RESNET 380 §4.2.1
3.0	P, F, N/A	Attached Garage: Doors and windows to the garage must be closed and latched. (Pass, Fail, N/A)	RESNET 380 §4.2.2
4.0	U, V, N/A	Crawlspaces. U - Unvented crawlspaces. Interior access doors and hatched must be open and exterior doors and hatches must be closed. V – Vented Crawlspaces. Interior access doors and hatched must be closed and exterior vents left as found. N/A	RESNET 380 §4.2.3



Step	Entry	Item	Code Reference
5.0	A, O, N/A	 Attics. A - Air Sealed & insulated Roof Deck: Interior access doors and hatches must be opened. O - All others: Interior access doors and hatches must be open. N/A 	RESNET 380 §4.2.4
6.0	A, O, N/A	 Basement. A - Air Sealed & Insulated: Interior access doors and hatches must be closed. O - Otherwise: Interior access doors and hatches must be open. N/A 	RESNET 380 §4.2.5
7.0	Pass	Interior Doors: All doors between rooms inside the dwelling unit must be open.	RESNET 380 §4.2.6
8.0	P, F, N/A	Chimney dampers & combustion-air inlets on solid fuel appliances must be closed. (Pass, Fail, N/A)	RESNET 380 §4.2.7
9.0	P, F, N/A	Combustion appliance flue gas vents must be left as found. (Pass, Fail, N/A)	RESNET 380 §4.2.8
10.0	P, F, N/A	Fans must be turned off. (i.e. clothes dryer, ceiling fan, attic/crawlspace fan, kitchen/bathroom exhaust fan, air handler, ventilation fan, etc.) (Pass, Fail, N/A)	RESNET 380 §4.2.9
11.0	P, F, N/A	Non-motorized dampers connected to exterior or unconditioned space must be left as found. (Pass, Fail, N/A)	RESNET 380 §4.2.10.1
12.0	P, F, N/A	Motorized dampers connected to exterior or unconditioned space must be closed (not further sealed). (Pass, Fail, N/A)	RESNET 380 §4.2.10.2
13.0	P, F, N/A	Intermittent local exhaust must be left open. (Pass, Fail, N/A)	RESNET 380 §4.2.11.1
14.0	P, F, N/A	Intermittent whole-house ventilation System (include HVAC fan-integrated outdoor air inlets) must not be sealed. (Pass, Fail, N/A)	RESNET 380 §4.2.11.2
15.0	P, F, N/A	Continuously operating local exhaust must be sealed at the exterior where conditions allow. (Pass, Fail, N/A)	RESNET 380 §4.2.11.3

Step	Entry	Item	Code Reference
16.0	P, F, N/A	Continuously operating whole-house ventilation system must be sealed at the exterior where conditions allow. (Pass, Fail, N/A)	RESNET 380 §4.2.11.4
17.0	P, F, N/A	All other openings must be left open. (Pass, Fail, N/A)	RESNET 380 §4.2.11.5
18.0	P, F, N/A	Whole-building fan louvers/shutters must be closed (if there is a seasonal cover, it must be installed). (Pass, Fail, N/A)	RESNET 380 §4.2.12
19.0	P, F, N/A	Evaporative Coolers openings must be placed in off position (if there is a seasonal cover, it must be installed). (Pass, Fail, N/A)	RESNET 380 §4.2.13
20.0	P, F, N/A	Operable window trickle-vents and through-wall vents must be closed. (Pass, Fail, N/A)	RESNET 380 §4.2.14
21.0	P, F, N/A	Supply registers and return grills must be left as found and uncovered. (Pass, Fail, N/A)	RESNET 380 §4.2.15
22.0	P, F, N/A	Plumbing drains with p-traps must be filled with water or sealed. (Pass, Fail, N/A)	RESNET 380 §4.2.16
23.0	P, F, N/A	Vented combustion appliances must remain off or in pilot-only mode. (Pass, Fail, N/A)	RESNET 380 §4.2.17
24.0	P, F, N/A	Code or manufacturer required component air bypasses must not be sealed. (Pass, Fail, N/A)	RESNET 380 §4.2.18

Table B-2: Installation of Functional Test Apparatus

Step	Entry	Item	Code Reference
1.0	No Entry	Blower Door Installation.	NA2.3.3(2), RESNET 380 §4.3.1
1.1	P, F, N/A	Installed in an existing doorway or window with no obstructions within five (5) feet of the fan inlet and two (2) feet of the fan outlet. (Pass, Fail, N/A)	NA2.3.3(2), RESNET 380 §4.3.1.1
1.2	P, F, N/A	Installed in a door or window that is NOT exposed to wind, where conditions allow. (Pass, Fail, N/A)	NA2.3.3(2), RESNET 380 §4.3.1.1

Step	Entry	Item	Code Reference
1.3	P, F, N/A	If using a fenestration to unconditioned space, the unconditioned space has unrestricted pathway to exterior and all windows and doors of the unconditioned space are open. (Pass, Fail, N/A)	NA2.3.3(2), RESNET 380 §4.3.1.1
1.4	P, F, N/A	If using a fenestration to an interior shared hallway, the hallway must be connected to exterior by open doors or windows. (Pass, Fail, N/A)	NA2.3.3(2), RESNET 380 §4.3.1.1
1.5	Location	Describe location of blower door installation.	NA2.3.3(2), RESNET 380 §4.3.1.1
2.0	Pass Fail	Tubing used to measure the pressure difference must be installed in accordance with manufacturer's instructions and vertical sections must be positioned out of direct sunlight.	NA2.3.3(2), RESNET 380 §4.3.1.2

Table B-3: Functional Testing

Table B-3: Functional Testing			
Step	Entry	Item	Code Reference
1.1	Enter Value Deg. C Deg. F	Measure indoor temperature.	RESNET 380 §4.3.1.3
1.2	Enter Value Deg. C Deg. F	Measure outdoor temperature.	RESNET 380 §4.3.1.3
2.0	Enter Value	Observations of general weather conditions.	RESNET 380 §4.3.1.3
3.0	Enter Value	Altitude of project site above sea-level. (Feet)	RESNET 380 §4.3.1.4
4.0	Enter Value	Measure, or obtain from designs, the total dwelling unit surface area, which is the sum of the area of walls between dwelling units, exterior walls, ceiling, and floor. (Square Feet)	NA2.3.3(2)
4.1	Enter Value	Square footage of the dwelling unit. (Square Feet)	NA2.3.3(2)
4.2	Enter Value	Sum of the area of all exterior walls. (Square Feet)	NA2.3.3(2)
4.3	Enter Value	Sum of area of all walls between dwelling units. (Square Feet)	NA2.3.3(2)
4.4	Enter Value	Total: (Step 4.1 x 2) + Step 4.2 + Step 4.3. (Square Feet)	NA2.3.3(2)



Step	Entry	Item	Code Reference
5.0	Enter Value	Pretest Baseline Building Pressure: Air- Moving Fan (OFF) (SEALED): Manometer measured pressure difference across enclosure (minimum 10 second average) (Pa)	RESNET 380 §4.4.1.1
6.0	Pressurized or Depressurized	Induced Enclosure Pressure: Air-Moving Fan (ON) (UNSEALED). Adjust to create an induced enclosure pressure difference of 50 \pm 3 Pa (0.2 in. \pm 0.012 H ₂ O).	RESNET 380 §4.4.1.2
6.1	Pressure (Pa) Airflow (CFM) Not Achieved	If induced enclosure pressure difference of 50 \pm 3 Pa is achieved, then record the average value of the induced enclosure pressure difference and Airflow over a minimum 10-second period. If induced enclosure pressure difference of 50 \pm 3 Pa is not achieved, retry using additional fans. (Pa and CFM or Not Achieved) Or else, proceed to 6.2.	RESNET 380 §4.4.1.2
6.2	Pressure (Pa) Airflow (CFM)	If induced enclosure pressure difference of 50 \pm 3 Pa is still not achieved from step B-3,6.1, then record the highest induced pressure difference and airflow over a minimum 10-second period. (Pa and CFM) <u>Note</u> : 15 Pa (0.06 in. H ₂ O) is the minimum allowable.	RESNET 380 §4.4.1.4
6.3	Adj. Airflow (CFM)	If (Step 6.2), then adjust to CFM50: Step 6.2 (CFM) x (50÷Step 6.2(Pa))^0.65 (CFM) <u>Note</u> : a manometer equipped to make the correction is permitted.	RESNET 380 §4.4.1.4
7.0	No Entry	Return Systems and home to normal operating or as found condition.	RESNET 380 §4.4.1.3
AND A			



Step	Entry	Item	Code Reference
8.0	Cor. Airflow (CFM50)	Corrected CFM50. Correct the CFM measurement for air viscosity and density using the installed manufacturer integrated software for the Blower Door assemblage (Construction Inspection 5) (CFM)	RESNET 380 §4.4.1.5
		include such software, then the corrections must be performed manually following the requirements of ASTM E779- 10 (2010), Section 9, Equation 4.	
9.0	Adj. Airflow (CFM50)	Adjusted CFM50. Corrected CFM50 (Step 8) x 1.1. (CFM)	NA2.3.4(1), RESNET 380 §4.5.1 Eqn. (5a)
10.0	CFM50/SQ-FT	CFM50/ft ² . Adjusted CFM50 (Step 9) ÷ Step B-3,4.4 (CFM/sqft)	NA2.3.4(3) RESNET 380 §4.5.2 Eqn. 10
11.0	Pass Fail	Select "Pass" if: Step $10 \le 0.3$ CFM/sqft	NA2.3.5, §160.2(b)2Aivb2



Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. The information provided on this Certificate of Acceptance and attest to the declarations 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Identify Ventilation Systems in Sample Group (NA7.18.3)

Tested System	Building	Floor	Dwelling Units	Control/tag
	Building	Floor	Dwelling Units	Control System
	Building	Floor	Dwelling Units	Control System
	Building	Floor	Dwelling Units	Control System

] Construction inspection and functional testing comply	,
Does not comply	

Date Submitted to AHJ: Date

Intent:	The objective of this acceptance test is to verify the leakage of a new central
	ventilation duct system(s) (Section 160.2(b)2Ci) that serve multiple dwelling units
	and provides continuous airflows or are part of a balanced ventilation system to
	meet the requirements specified in Sections 160.2(b)2Aiv or 160.2(b)2Av. This test
	is restricted to multifamily buildings of four habitable stories or more. This
	compliance document is used to record the results of one system duct leakage test
	performed. These test procedures are based on ASTM E1554/1554M-13 (2018)
	Method D – Total duct leakage test. This test can only be performed by a certified
	mechanical ATT. Reference NA7.18.3.

 Table A: Construction Inspection

 Prior to functional testing, verify and document all of the following:

Sten	Entry	Item	Code Reference
1.1	Pass Fail	Access to required document NRCC-MCH-E or NRCC-PRF-E as approved by the authority having jurisdiction.	§10-103(a)2A
1.2	Pass	Product specifications or tear sheets for the installed equipment.	NA7.18.3.2 (Step 8)
2.1, or	Pass Fail N/A	Verify that each system listed in the Sample Group serves more than six dwelling units and that the designer acknowledges that the duct system ducts will be pressurized to 50 Pa (0.2 inches water) with respect to outside. (Pass, Fail, N/A)	NA7.18.3, §160.2(b)2Ci
2.2	Pass Fail N/A	Verify that each system listed in the Sample Group serves two to six dwelling units and that the designer acknowledges that the duct system ducts will be pressurized to 25 Pa (0.1 inches water) with respect to outside. (Pass, Fail, N/A)	NA7.18.3, §160.2(b)2Ci



Step	Entry	Item	Code Reference
3.1, or	P, F, N/A	Testing at Rough-In. Verify that the spaces between the grille or register boots and the wallboard are sealed, and at least one grille or register is removed to verify proper sealing. (Pass, Fail, N/A)	NA7.18.3.2
3.2	P, F, N/A	Verify that the grilles or registers are installed (Pass, Fail, N/A)	NA7.18.3.2
4	Pass	Confirm all windows and other openings are open to connect the building to the outside.	NA7.18.3.1(a)
5	Pass	Confirm HVAC dampers are in their normal operating positions (NOP).	NA7.18.3.1(b)
Table B: Functional Testing			

Table B: Functional Testing

			Code
Step	Entry	Functional Test	Reference
1.0	No Entry	Massura and record any ironmental data:	NA7.18.3.2
1.0	NO EILUY		(Step 1)
	Fisher Malue	Quiteride (ambricat) Tenne antime (05)	NA7.18.3.2
1.1	Enter value	Outside (ambient) Temperature (°F)	(Step 1)
1.2			NA7.18.3.2
1.2	Enter value	Indoor Temperature (°F)	(Step 1)
			NA7.18.3.2
1.3	Enter Value	Barometric Pressure (inches Hg)	(Step 1)
2.0	Pass Fail	Install static pressure probe in main plenum pointing into airstream induced by the test. If the test fan is on the roof, the static pressure probe will need to be connected to the measurement device at the test site with a tube long enough to make the connection.	NA7.18.3.2 (Step 2)
3.1, or	Pass Fail N/A	Test fan is mounted inside, with the building open to the outside, use the building as reference pressure. (Pass, Fail, N/A)	NA7.18.3.2 (Step 3)
3.2	Pass Fail N/A	Test fan is located on the roof, use the outside as the reference pressure. (Pass, Fail, N/A)	NA7.18.3.2 (Step 3)
4.0	No Entry	Attach the test fan to the duct system, check one of the following.	NA7.18.3.2 (Step 4)
4.1, or	Pass Fail N/A	For roof top and wall mounted exhaust systems, remove the fan from the curb or opening and seal the test fan to the curb following test equipment manufacturer's instructions, making sure the dampers are open (NOP). (Pass, Fail, N/A)	NA7.18.3.2 (Step 4a)



Step	Entry	Functional Test	Code Reference
4.2	Pass Fail	Alternatively, the test fan may be applied to a grille opening on the inside of the building following test equipment manufacturer's instructions. (Pass, Fail, N/A)	NA7.18.3.2 (Step 4b)
5.0	No Entry	Temporarily seal the system including:	NA7.18.3.2 (Step 5)
5.1	Pass	All grilles on the system using masking tape and air impermeable sheeting or duct mask made for this application.	NA7.18.3.2 (Step 5a)
5.2	Pass	Air handler access door or panel (do not use permanent sealing material, metal tape is acceptable).	NA7.18.3.2 (Step 5b)
5.3	P, F, N/A	For systems with an air handler with supply and return plenums, the entire duct system including the air handler must be included in the test. (Pass, Fail, N/A)	NA7.18.3.2 (Step 5c)
6.0	Pass	Adjust the test fan speed to maintain 25 Pa or 50 Pa as appropriate at the static pressure probe location.	NA7.18.3.2 (Step 6)
7.0	No Entry	Record the following:	NA7.18.3.2 (Step 7)
7.1	Enter Value	Air Flow (CFM)	NA7.18.3.2 (Step 7)
7.2	Enter Value	Temperature (°F)	NA7.18.3.2 (Step 7)
8.0	Enter Value	Determine the nominal fan airflow using the product specifications of the installed equipment for the design static pressure. (CFM)	NA7.18.3.2 (Step 8)
9.0	Enter Value	Divide the duct leakage flow (Step 7.1) by the nominal fan flow (Step 8) and convert to a percentage (multiply by 100).	NA7.18.3.2 (Step 9)
10.0	Pass	If the duct leakage flow percentage (Step 9) is equal to or less than the target compliance criterion of 6% leakage the system passes.	NA7.18.3.2 (Step 9), §160.2(b)2Ci
40	KICR .		



CALIFORNIA ENERGY COMMISSION

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name
	Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Application Date: Date

Building: Enter ValueFloor: Enter ValueRoom: Enter ValueControl/tag: Value

Construction inspection and functional testing comply
 Does not comply
 Date Submitted to AHJ: Date

Intent:The objective of this acceptance test is to verify the heat recovery ventilation
(HRV) or energy recovery ventilation (ERV) requirement in multifamily buildings
with four habitable stories or more for compliance with Section 170.2(c)3Bivb, a
central ERV/HRV serving multiple dwelling units. Either an NRCC-MCH-E or NRCC-
PRF-E for nonresidential construction spaces that is completed and approved by
the authority having jurisdiction is required prior to beginning this acceptance test.
This test may only be performed by a certified mechanical ATT. Reference:
160.2(b)2Av, NA7.18.4, and NA7.5.4.2.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

			Code
Step	Entry	Item	Reference
1.1	Pass	Verify that the NRCC-MCH-E or NRCC-PRF-E as approved by the authority having jurisdiction is available for reference.	§10-103(a)2A
1.2	Pass Fail	Verify that either the product specifications/tear sheets for the installed equipment are available or the product is listed with equipment certification databases such as HVI, AHRI, or other CEC approved directories. HVI: <u>HVI-Certified Products Directory - Home</u> <u>Ventilating Institute</u> AHRI: <u>AHRI Certification Directory</u> (<u>ahridirectory.org</u>)	N/A
2.0	Table J	Record the total design ventilation airflow rate for the dwelling units served by the central ventilation system as specified on NRCC-MCH-E or NRCC- PRF-E	NA7.18.4.1(a), §160.2(b)2Av
3.1	Pass	Visually confirm that an ERV/HRV is installed and record the make and model.	NA7.18.4.1(b)
3.2	Model	Model Number	NA7.18.4.1(b)
3.3	Maker	Manufacturer	NA7.18.4.1(b)
4.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B: Functional Testing

Step	Entry	Functional Test	Code Reference
1.0	Pass	Verify that the ERV/HRV can provide the airflow rate that meets the design ventilation airflow rate by checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 1
2.0	Pass Fail	Verify that the ERV/HRV's nominal sensible recovery efficiency is 67 percent or greater, by checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 2
3.0	Pass	Verify that the ERV/HRV can meet the fan power design requirements recorded in NRCC-MCH-E Table J or NRCC-PRF-E, Table H3 by checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 3
4.0	Pass	Verify that the ERV/HRV has a recovery bypass or free cooling function by visual inspection and checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 4
5.0	Pass	Verify that that the ERV/HRV recovery bypass or free cooling control capabilities meets one of the following specifications: Pass one of Steps 5.1-5.4 (marking the others "N/A") and complete Step 5.5.	NA7.18.4.2 Step 4
5.1, or	P, F, N/A	Fixed Dry Bulb. Economizer is off for the following climate Zones (CZ) and outside air temperatures (OAT):CZOAT (°F)1, 3, 5, or 11-16> 752, 4, or 10> 736, 8, or 9> 717> 69(Pass, Fail, N/A)	Table 170.2-G
5.2, or	P, F, N/A	Differential Dry Bulb. Economizer is off for the following CZ and OAT exceeding return air temperature (OAT>RT): CZCZOAT (°F)1, 3, 5, or 11-16> RT2, 4, or 10> RT-26, 8, or 9> RT-47> RT-6(Pass, Fail, N/A)	Table 170.2-G



Step	Entry	Functional Test	Code Reference
5.3, or	P, F, N/A	Fixed Enthalpy and Fixed Dry Bulb, All CZ. Economizer off when outdoor air enthalpy exceeds 28 Btu/lbs. of dry air or outdoor air temperature exceeds 75°F. NOTE: At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. (Pass, Fail, N/A)	Table 170.2-G
5.4	P, F, N/A	If the Energy Commission Executive Director has given approval for any other control device not listed such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, to be used in compliance with Section 170.2(c)4Ci. Submit approval to ATTCP. (Pass, Fail, N/A)	Table 170.2-G, §170.2(c)4Ci.
5.5	P, F, N/A	Verify that devices with selectable (rather than adjustable) setpoints are capable of being set to within 2°F and 2 Btu/lb. of the setpoint listed. (Pass, Fail, N/A)	Table 170.2-G
6.0	Pass	Pass if NRCA-MCH-05-A has been successfully completed for this HRV/ERV system, and proceed to Step 7, or fail and complete all Steps 6.1-6.4. (Pass, Fail)	NA7.18.4.2 Step 5
6.1	P, F, N/A	Disable demand control ventilation systems (if applicable). (Pass, Fail, N/A)	NA7.5.4.2 Step 1
6.2	Pass Fail	Enable the HRV/ERV controls and simulate a cooling demand large enough to drive the HRV/ERV system into full cooling mode (e.g., the heat recovery bypass) is fully open. Verify and document the following:	NA7.5.4.2 Step 2
6.2.1	P, F, N/A	HRV/ERV bypass damper is 100 percent open and return air damper is 100 percent closed. NOTE: If bypass is achieved through heat/energy recovery wheel rotation speed modulation, wheel speed is fully stopped. (Pass, Fail, N/A)	NA7.5.4.2 Step 2(a)
6.2.2	P, F, N/A	All applicable fans and dampers operate as intended to maintain building pressure. (Pass, Fail, N/A)	NA7.5.4.2 Step 2(b)
6.2.3	P, F, N/A	The unit heating is disabled (if unit has heating capability). (Pass, Fail, N/A)	NA7.5.4.2 Step 2(c)



6.3 P, F, N/A If unit has heating capability, simulate a heating demand and set the HRV/ERV controls so that it is capable of operating (i.e. actual outdoor air conditions are below lockout setpoint). Verify that the heat recovery bypass control modulates bypass damper/wheel speed to control temperature setpoint. (Pass, Fail, N/A) NA7.5.4 6.4 P, F, N/A Restore demand control ventilation systems (if applicable) and remove all system overrides initiated during the test. (Pass, Fail, N/A) NA7.5.4 7.0 Pass Check pass if Functional Test is completed on all Steps 1 through 6. N/A		Entry	Functional Test	Code Referen	се
6.4 P, F, N/A Restore demand control ventilation systems (if applicable) and remove all system overrides initiated during the test. (Pass, Fail, N/A) NA7.5.4 Step 6 7.0 Pass Check pass if Functional Test is completed on all Steps 1 through 6. N/A	6.3	P, F, N/A	If unit has heating capability, simulate a heating demand and set the HRV/ERV controls so that it is capable of operating (i.e. actual outdoor air conditions are below lockout setpoint). Verify that the heat recovery bypass control modulates bypass damper/wheel speed to control temperature setpoint. (Pass, Fail, N/A)	NA7.5.4 Step 4(.2
7.0 Pass Fail Check pass if Functional Test is completed on all Steps 1 through 6. N/A	6.4	P, F, N/A	Restore demand control ventilation systems (if applicable) and remove all system overrides initiated during the test. (Pass, Fail, N/A)	NA7.5.4 Step 6	.2
TO BE WHITE OR COMPLEMENT OF TO BE WHITE OR COMPLEMENT. THE OR COMPLEMENT OF TO BE WHITE OF TO	7.0	Pass	Check pass if Functional Test is completed on all Steps 1 through 6.	N/A	



Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Acceptance Test Technician	
I certify the following under penalty of perjury, under the laws of the State of California: 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	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: 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. 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 understand 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 shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement. 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. I will take the necessary steps to fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed



Project Name and Address	Authority Having Jurisdiction
Name: Project Name	Enforcement Agency: Agency
Address: Project Address	Permit Number: Permit Number
City, Zip: City, Zip Code	Permit Request Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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Construction inspection and functional testing comply Does not comply	Date Submitted to AHJ: Date
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Intent:This test applies to all open and closed-circuit cooling towers. Verify the installation
of cooling tower conductivity controls, documentation of target maximum cycles of
concentration, programming of controls to not allow blowdown until parameter
target thresholds are reached, and installation and programming of overflow alarms.
Reference NRCC-MCH-E or NRCC-PRF-E for nonresidential (including nonresidential
spaces in high-rise multifamily) building permits. Submit one Certificate for each
system that must demonstrate compliance, with the Energy Code. References:
§110.2(e), §120.5(a)19, NA7.5.18.

Reference Table R-1 (Table NA-7)

Recirculating Water Parameters	Maximum Values
Conductivity (micro-siemens/cm)	2970 micro-siemens/cm
Total dissolved solids (ppm)	1845 ppm
Total alkalinity as CaCO23 (ppm)	540 ppm
excluding galvanized steel	
Total alkalinity as CaCO3 (ppm)	450 ppm
galvanized steel (passivated)	
Calcium hardness as CACO3 (ppm)	540 ppm
Chlorides as Cl (ppm)	270 ppm
Sulfates (ppm)	225 ppm
Silica (ppm)	135 ppm
Langelier saturation index (LSI)	2.5 LSI

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	Pass	Verify the conductivity controls, makeup water flow meter(s), and overflow alarms are installed as specified on the plans.	NA7.5.18.1(a)
2.0	Pass	Verify maximum achievable cycles of concentration are documented on the NRCC-MCH-E or NRCC-PRF- E compliance document.	NA7.5.18.1(b)
3.0	Pass Fail	Verify blowdown control sequence is available and documented in the building documents.	NA7.5.18.1(c)



Step	Entry	Item	Code Reference
4.0	Pass	Verify controls are programmed to automate bleed to the maximum cycles of concentration documented on the NRCC-MCH-E or NRCC-PRF-E form.	NA7.5.18.1(d)
5.0	Pass	Verify controls are programmed not to allow blowdown until one or more of the parameters in Table R-1 reaches the value specified in NRCC-MCH- E or NRCC-PRF-E.	NA7.5.18.1(e)
6.0	Pass	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B: Functional Testing

			Code
Step	Entry	Functional Test	Reference
1.0	🔄 Pass	Override the makeup water valve to open until the	NA7.5.18.2
	Fail	tower water is above the maximum fill level.	Step 1
2.1	Pass	Close the makeup water valve.	NA7.5.18.2
2.1	🔄 Fail		Step 2
		Verify that the overflow alarm is triggered either	NA75182
2.2		through an audible signal or via alert to the Energy	NA7.J.10.2
		Management Control System.	Step 2
		Destave the makeup water central parameter to	NA7.5.18.2
3.0	No Entry	Restore the makeup water control parameter to	Step 3
		automatic control.	0.06
	Pass	Check pass if Functional Test passes on Steps 1	
4.0		through 3.	N/A
40			


Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature
	Date Signed
Acceptance Test Technician I certify the following under penalty of perjury, under the laws of the State of California: 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.	Name Company Name ATT No.: ATT Cert. No. Title Phone Signature Date Signed
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