

SUPPLY AIR TEMPERATURE RESET CONTROLS ACCEPTANCE

CEC-NRCA-MCH-16-A (Revised MM/YY)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF ACCEPTANCE		NRCA-MCH-16-A
Supply Air Temperature Reset Controls Acceptance		(Page 1 of 3)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:
System Name or Identification/Tag:	System Location or Area Served:	

<i>Note: Submit one Certificate of Acceptance for each system that must demonstrate compliance.</i>	Enforcement Agency Use: Checked by/Date
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Intent:	Verify that the supply air temperature modulates to meet system temperature setpoint(s).
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A. Construction Inspection
1. Supporting documentation needed to perform test may include, but is not limited to:
<ul style="list-style-type: none"> a. As-built and/or Design Documents, including Mechanical Equipment Schedules and control schedules. b. 20132016 Building Energy Efficiency Standards Nonresidential Compliance Manual (NA7.5.15 Supply Air Temperature Reset Controls Acceptance At-A-Glance). c. 20132016 Building Energy Efficiency Standards Nonresidential Appendix (Section NA7).
2. Instrumentation to perform test includes, but is not limited to:
<ul style="list-style-type: none"> a. Hand-held temperature sensor Date of calibration: _____ (must be within one year)
3. Installation:
Check the appropriate box:
<input type="checkbox"/> The supply air temperature reset controls are installed per the requirements of the 2013 2016 Building Energy Efficiency Standards section 140.4(f): Multi-zone systems shall include controls that automatically reset supply-air temperatures: <ul style="list-style-type: none"> (1) In response to representative building loads or to outdoor air temperature; and (2) By at least 25 percent of the difference between the design supply-air temperature and the design room air temperature.
<input type="checkbox"/> An exception is taken to this requirement (one of the following must be true; acceptance test is not needed): <ul style="list-style-type: none"> (1) Zones served by space-conditioning systems in which at least 75% of the energy for reheating, or providing warm air in mixing systems, is provided from a site-recovered or site-solar energy source. (2) Where supply-air temperature reset would increase overall building energy use. (3) Zones in which specific humidity levels are required to satisfy exempt process loads. Computer rooms or spaces with only IT equipment are not exempt process loads. (4) Zones with a peak supply air quantity of 300 cfm or less. (5) The system has controls to prevent reheat, recool, and simultaneous cooling and heating.
4. Document that all system air temperature sensors are factory or field calibrated or perform field check (check a or b):
<ul style="list-style-type: none"> a. Factory calibrated, or Field-calibrated by TAB technician, commissioning agent, or other.
<input type="checkbox"/> Calibration complete, all sensors within 2% of calibrated reference sensor (provide supporting documentation, e.g. a copy of TAB calibration results).
<ul style="list-style-type: none"> b. I have performed a field check using a calibrated temperature standard (i.e. device that has been calibrated within the last 12 months).
<input type="checkbox"/> Check complete, all air temperature sensors within 2% of calibrated reference sensor (provide supporting documentation, including results from system air sensors and calibrated reference standard).
5. Document current supply air temperature: _____ °F
Notes:



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B. Functional Testing	
Check to make sure that chilled / hot water coils, if used, are not already fully open and calling for maximum cooling / heating. If this is the case, reverse Steps 1 and 2 and/or change the set point range as necessary to conduct this test.	
Reset control parameter is (circle one): Outside air temperature, Zone or return air temperature, Zones calling for heating or cooling, or Other _____.	
Step 1: During occupied mode, adjust the reset control parameter to decrease the supply air temperature (to the lower supply temp. limit).	
a. Supply air temperature controls modulate as intended.	Y / N
b. Actual supply air temperature decreases to meet the new set point within +/- 2°F.	Y / N
c. Supply air temperature stabilizes within 15 minutes.	Y / N
Supply air temperature set point: _____ ° F	Actual supply air temperature: _____ ° F
Step 2: During occupied mode, adjust the reset control parameter to increase the supply air temperature (to the upper supply temp. limit).	
a. Supply air temperature controls modulate as intended.	Y / N
b. Actual supply air temperature increases to meet the new set point within +/- 2°F.	Y / N
c. Supply air temperature stabilizes within 15 minutes.	Y / N
Supply air temperature set point: _____ ° F	Actual supply air temperature: _____ ° F
Step 3: Restore reset control parameter to automatic control.	
a. Supply air temperature controls modulate as intended.	Y / N
b. Actual supply air temperature changes to meet the new set point within +/- 2°F.	Y / N
c. Supply air temperature stabilizes within 15 minutes.	Y / N
Supply air temperature set point: _____ ° F	Actual supply air temperature: _____ ° F

C. Evaluation
<input type="checkbox"/> PASS: All Construction Inspection responses are complete and Functional Testing Results are all circled YES.
Notes:



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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT		
1. I certify that this Certificate of Acceptance documentation is accurate and complete.		
Documentation Author Name:	Documentation Author Signature:	
Documentation Author Company Name:	Date Signed:	
Address:	ATT Certification Identification (if applicable):	
City/State/Zip:	Phone:	
FIELD TECHNICIAN'S DECLARATION STATEMENT		
I certify the following under penalty of perjury, under the laws of the State of California:		
<ol style="list-style-type: none"> The information provided on this Certificate of Acceptance is true and correct. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building. 		
Field Technician Name:	Field Technician Signature:	
Field Technician Company Name:	Position with Company (Title):	
Address:	ATT Certification Identification (if applicable):	
City/State/Zip:	Phone:	Date Signed:
RESPONSIBLE PERSON'S DECLARATION STATEMENT		
I certify the following under penalty of perjury, under the laws of the State of California:		
<ol style="list-style-type: none"> I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement (responsible acceptance person). The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy. 		
Responsible Acceptance Person Name:	Responsible Acceptance Person Signature:	
Responsible Acceptance Person Company Name:	Position with Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

NRCA-MCH-16-A User Instructions

Section A. Construction Inspection

This pre-test section consists of check boxes and data entry requirements. Complete check boxes and enter data as instructed.

Section B. Functional Testing

This section consists of check boxes and yes or no questions arranged by individual test. Check each box or circle the correct answer for each specific test or line item.

Section C. Evaluation

Check the appropriate box as instructed.

Declaration Statements of Acceptance

This section contains fillable fields for three declaration statements: one from the Documentation Author, one from the Field Technician, and one from the Responsible Person. Each area contains a combination of check boxes and data entry requirements, including signature; date; and license number. Complete check boxes and enter data as instructed.

The Documentation Author is the person completing the form. The Field Technician is responsible for performing and documenting the results of the acceptance procedures on the Certificate of Acceptance forms. The Field Technician must sign the Certificate of Acceptance to certify that the information he or she provides on the Certificate of Acceptance is true and correct. It is important to note that the Field Technician is not required to have a contractor's, architect's or engineer's license. A Responsible Person is eligible under Division 3 of the Business and Professions code in the applicable classification to take responsibility for the scope of work specified by the Certificate of Acceptance document. The Responsible Person can also perform the field testing and verification work, and if this is the case the Responsible Person must complete and sign both the Field Technician's signature block and the Responsible Person's signature block on the Certificate of Acceptance form. The Responsible Person assumes responsibility for the acceptance testing work performed by the Field Technician agent or employee.