

COMPRESSED AIR SYSTEM ACCEPTANCECEC-NRCA-PRC-01-F (Revised MM/YY)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF ACCEPTANCE		NRCA-PRC-01-F
Compressed Air System Acceptance		(Page 1 of 4)
Project Name:	Enforcement Agency:	Permit Number:
Project Address:	City:	Zip Code:

<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:	<i>Verify that compressed air system controls are installed and operating correctly.</i>
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A. Construction Inspection	
1. Supporting documentation needed to perform test includes:	
a.	2013 2016 Building Energy Efficiency Standards Nonresidential Compliance Manual (<i>NA7.13 Compressed Air Systems Acceptance At-A-Glance</i>).
b.	2013 2016 Building Energy Efficiency Standards (<i>Section 120.6(e)</i>).
2. Instrumentation to perform test may include, but is not limited to:	
a.	Power meter(s) for every compressor
b.	Pressure transducer(s) for every compressor
c.	Flow meter(s) for every compressor
3. Installation: (all of the following boxes must be checked)	
<input type="checkbox"/>	Equipment installation is complete (including compressors, storage, controls, conditioning equipment, piping, etc.)
<input type="checkbox"/>	Compressed air system is ready for system operation, including completion of all start-up procedures per manufacturer's recommendations.
4. Prior to functional testing, fill out the System Specifications Table. If the number of compressors exceeds the number in this list, please list additional compressors and specifications in the Notes section.	
5. Prior to functional testing, document below the method and tools for observing and recording the states of each compressor in the system, as seen in Step 3 of Functional Testing.	
Method for Observing and Recording Compressor States:	

System Specifications Table

Total Online System Capacity (acfm):	Operating Pressure (psi):
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Compressor Specifications:

Compressor	Size (hp)	Rated Capacity (acfm)	Control Type (check one or fill-in for 'Other')					Acting as Trim Compressor?
			Fixed Speed	Variable Displacement	Variable Speed	Centrifugal	Other	
1								Y / N
2								Y / N
3								Y / N
4								Y / N
5								Y / N
6								Y / N
7								Y / N
8								Y / N
9								Y / N
10								Y / N

If number of compressors exceeds 10, please list the additional compressors with specifications in the following Notes section.

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Notes:

B. Functional Testing							Results
Step 1: Verify that the methods from the Construction Inspection have been employed by confirming the following:							
a. Compressor states can be observed and recorded for every compressor.							Y / N
b. The current air demand (in acfm) can be measured or inferred.							Y / N
Step 2: Run the compressed air supply system steadily at a load within (or close to) the expected operational load range as can be practically implemented for a duration of at least 10 minutes. Verify the following:							
a. System is running steadily for at least 10 minutes.							Y / N
b. System is running within (or close to) the expected operational load range.							Y / N
c. Downstream equipment is not affected by test valve being open (if applicable).							Y / N / NA
Step 3: Observe and record the operating states of each compressor and the current air demand during the test.							
							Current Air Demand (acfm)
	Compressor States (Check one)				Compressor States (Check all that apply)		
Compressor	<i>Off</i>	<i>Unloaded</i>	<i>Partially Loaded</i>	<i>Fully Loaded</i>	<i>Blowoff</i>	<i>Short Cycling</i>	Notes:
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
If number of compressors exceeds 10, please list the additional compressors with specifications in the Notes section.							
Step 4: Confirm that the system exhibits the following behavior following the test:							
a. No compressor exhibits short-cycling (loading and unloading more often than once per minute).							Y / N
b. No compressor exhibits blowoff (venting compressed air at the compressor itself).							Y / N
c. The trim compressors shall be the only compressors partially loaded, while the base compressors will either be fully loaded or off by the end of the test. (only applicable for new systems)							Y / N / NA
Step 5: Return system to initial operating conditions.							Y / N

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C. Testing Results	PASS / FAIL	
Step 1: Verify construction inspection steps are complete (all answers are Y).	<input type="checkbox"/>	<input type="checkbox"/>
Step 2: Run system steadily at operational load range for 10 minutes (all answers are Y or NA).	<input type="checkbox"/>	<input type="checkbox"/>
Step 3: Record all observed states of the compressors and system demand (Table is filled out).	<input type="checkbox"/>	<input type="checkbox"/>
Step 4: System exhibits expected behavior (all answers are Y or NA).	<input type="checkbox"/>	<input type="checkbox"/>

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

NRCA-PRC-01-F User Instructions

Section A. Construction Inspection

This section consists of check boxes for checking the condition of the sensors, equipment and systems before beginning the actual test. Complete each check box to confirm that the construction inspection is complete for all items.

Section B. Functional Testing

This section consists of the steps followed during the acceptance test. Enter data as instructed in each column or answer either yes or no to the yes/no questions.

Section C. Testing Results

This section consists of data entry requirements for the results of the test(s). Enter data associated with the appropriate system type as instructed.

Section D. Evaluation

This section briefly describes the steps followed during the acceptance test. Enter either Pass or Fail in the boxes next to the steps. Any portion that fails should be explained in the given rows.

Documentation Author's Declaration Statement

- NAME is the name of the person completing this form.
- COMPANY is the name of the company the DOCUMENTATION AUTHOR represents.
- ADDRESS is the address of the COMPANY.
- CITY/STATE/ZIP is the city, state and zip code of the COMPANY.
- SIGNATURE is the signature of the DOCUMENTATION AUTHOR.
- DATE is the date on which the acceptance test was completed and the DOCUMENTATION AUTHOR signed the form.
- CEA OR CEPE CERTIFICATION # is the certification number of the CEA (Certified Energy Auditor) or CEPE (Certified Energy Plans Examiner) certification, in case the DOCUMENTATION AUTHOR is CEA or CEPE certified.
- PHONE is the phone number where the DOCUMENTATION AUTHOR can be reached during regular business hours.

Field Technician's Declaration Statement

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.

- COMPANY NAME is the name of the company that the FIELD TECHNICIAN represents.
- FIELD TECHNICIAN'S NAME is the name of the FIELD TECHNICIAN.
- FIELD TECHNICIAN'S SIGNATURE is the signature of the FIELD TECHNICIAN.
- DATE SIGNED is the date on which the acceptance test was completed and the FIELD TECHNICIAN signed the form.
- POSITION WITH COMPANY (TITLE) is the title of the FIELD TECHNICIAN in the company he represents, e.g. SENIOR ELECTRICAL TECHNICIAN.

Responsible Person's Declaration Statement

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.

- COMPANY NAME is the name of the company the RESPONSIBLE PERSON represents.
- PHONE is the phone number where the RESPONSIBLE PERSON can be reached during regular business hours.
- RESPONSIBLE PERSON'S NAME is the name of the RESPONSIBLE PERSON.
- RESPONSIBLE PERSON'S SIGNATURE is the signature of the RESPONSIBLE PERSON.
- LICENSE is the professional license number of the RESPONSIBLE PERSON.
- DATE SIGNED is the date on which the acceptance test was signed by the RESPONSIBLE PERSON.
- POSITION WITH COMPANY (TITLE) is the title of the RESPONSIBLE PERSON in the company he represents, e.g. SENIOR ELECTRICAL ENGINEER.