### COMPRESSED AIR SYSTEMS

2025-CEC-NRCA-PRC-01a-F

Project Name and Address		Authority Having Jurisdiction			
Name: Project Name		Enforcement Agency: Agency			
Address: P	roject Addre	SS	Permit Num	Permit Number: Permit Number	
City, Zip Co	ode: City, Zi	o Code	Permit App	Permit Application Date: Date	
Building: Er	nter Value	Floor: Enter Value	Room: Enter	Value	Control/tag: Value
<ul><li>Construction inspection and functional testing</li><li>Does not comply</li></ul>		g 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:

. arrocioriar	testing, verify and doc	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 System Capacity System Operating Pressure		Enter Value hp Enter Value psi	(NA7.13.1.1(b)) (NA7.13.1.1(c))	



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# **Table A-2: Construction Inspection - Compressor system control capabilities**Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
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)

**Table A-3: Construction Inspection Compliance** 

Ct	Factoria		Code
Step	Entry	<b>Item</b> Table A-1 must include all compressors in the	Reference
1.0	☐ Pass ☐ Fail	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 Fail	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

**Table B: Functional Testing** 

	B: Functional Testi		Code
Step	Entry	Functional Test	Reference
1.0	Pass Fail	Verify that the methods from the Construction Inspection table A-2 and have been employed to verify that the compressor states can be observed and recorded for every compressor and that the current air demand can be measured or inferred.	NA7.13.1.2 Step 1
2.0	☐ Pass ☐ Fail	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. Select 'pass' if it perform this test run, 'fail' if unable.	NA7.13.1.2 Step 2
2.1	☐ Pass ☐ Fail	During the test (Step 2.0), 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)
2.2	☐ Pass ☐ Fail	During the test (Step 2.0), 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)
3.0	No entry	Confirm that the combinations of compressors states meet the following criteria.	NA7.13.1.2 Step 4
3.1	Pass Fail	No compressor exhibits short-cycling (loading and unloading more often than once per minute).	NA7.13.1.2 Step 4a
3.2	Pass Fail	No compressor exhibits blowoff (venting compressed air at the compressor itself).	NA7.13.1.2 Step 4b
3.3	Pass Fail N/A	For new systems only: The trim compressors are the only compressors partially loaded, while the base compressors will either be fully loaded or off by the end of the test.	NA7.13.1.2 Step 4c
4.0	☐ Pass ☐ Fail	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 <b>does not</b> comply.	N/A

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**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 Number	Compressor State (Passing)	Compressor State (Failing)	Current Air Demand (acfm)
1	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value
2	Off Part Loaded Unloaded Fully Loaded	Blowoff Short Cycling	Enter Value
3	Off Part Loaded Unloaded Fully Loaded	Blowoff Short Cycling	Enter Value
4	Off Part Loaded Unloaded Fully Loaded	Blowoff Short Cycling	Enter Value
5	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value
6	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value
7	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value
8	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value
9	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value
10	Off Part Loaded Unloaded Fully Loaded	☐ Blowoff ☐ Short Cycling	Enter Value

## **COMPRESSED AIR SYSTEMS** 2025-CEC-NRCA-PRC-01a-F

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 made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to ensure this requirement is accomplished. 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, and I will take the necessary steps to ensure this requirement is accomplished.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed