

## COMPRESSED AIR SYSTEMS 2022-CEC-NRCA-PRC-01-F

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

Building:	Floor:	Room:	Control/tag:

	<ul> <li>Construction inspection and functional testing comply</li> <li>Does not comply</li> </ul>	Date Submitted to AHJ:
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**Intent:** Construction inspection and functional testing for a compressed air system to verify that controls are installed and operating correctly. Per §120.6(e)2, this test applies to large, compressed air systems with three or more compressors with a combined horsepower greater than 100. Complete separate form for each compressor.

## Table A: Construction Inspection

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

			Code
Step	Entry	Item	Reference
1	No entry	Verify and Document compressor data	NA7.13.1.1(a)
1.1	hp	Size	NA7.13.1.1(a)
1.2	acfm	Rated Capacity	NA7.13.1.1(a)
1.3		Control Type	NA7.13.1.1(a)
2	hp	Total system capacity (the sum of the individual capacities).	NA7.13.1.1(b)
3	Pass	System operating pressure.	NA7.13.1.1(c)
4	True True	Compressor(s) designated as trim compressors.	NA7.13.1.1(d)
5	Pass Fail	Verify a means for observing and recording the states of each compressor in the system, which shall include at least the following states: Off, Unloaded, Partially Loaded, Fully loaded, Short cycling, Blow off	NA7.13.1.1(e)
6	Pass Fail	Check if construction inspection complies with all requirements.	N/A

## Table B: Functional Testing

Step	Entry	Functional Test	Code Reference
1	No entry	Verify that the methods from the Construction Inspection have been employed by confirming the following:	NA7.13.1.2 Step 1
1.1	Pass	Compressor states can be observed and recorded for every compressor.	NA7.13.1.2 Step 1



Step	Entry	Functional Test	Code Reference
	Pass	The current air demand can be measured or	NA7.13.1.2
1.2	🗌 Fail	inferred.	Step 1
2	No entry	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:	NA7.13.1.2 Step 2
2.1	Pass Fail	System is running steadily for at least 10 minutes.	NA7.13.1.2 Step 2
2.2	Pass Fail	System is running within (or close to) the expected operational load range.	NA7.13.1.2 Step 2
3	No entry	Observe and record the following during the test:	NA7.13.1.2 Step 3
3.1	No entry	Enter individual compressor states in Table C below.	NA7.13.1.2 Step 3
3.2	acfm	Total compressor air demand from Table C below.	NA7.13.1.2 Step 3
4	No entry	Confirm that the system exhibits the following behavior following the test:	NA7.13.1.2 Step 4
4.1	Pass Fail	No compressor exhibits short-cycling (loading and unloading more often than once per minute).	NA7.13.1.2 Step 4a
4.2	Pass Fail	No compressor exhibits blowoff (venting compressed air at the compressor itself).	NA7.13.1.2 Step 4b
4.3	Pass Fail N/A	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)	NA7.13.1.2 Step 4c
5	Pass Fail	Return system to initial operating conditions.	N/A
6	Pass Fail	Check Pass if Functional Test Compliance Results complies	N/A



	compressor Status (NA7.13.1.2)		
Unit		Compressor State	
Number	Compressor State (Passing)	(Failing)	Notes:
	Off Part Loaded	Blowoff	
1	🗌 Unloaded 🔲 Fully Loaded	Short Cycling	
2	Off Part Loaded	Blowoff	
2	🗌 Unloaded 🔄 Fully Loaded	Short Cycling	
3	Off Part Loaded	Blowoff	
3	🗌 Unloaded 🛛 🗌 Fully Loaded	Short Cycling	
4	Off Part Loaded	Blowoff	
4	Unloaded 🗌 Fully Loaded	Short Cycling	
5	Off Part Loaded	Blowoff	
5	Unloaded 🗌 Fully Loaded	Short Cycling	
6	Off Part Loaded	Blowoff	
0	Unloaded 🗌 Fully Loaded	Short Cycling	
7	Off Part Loaded	Blowoff	
/	Unloaded Fully Loaded	Short Cycling	
8	Off Part Loaded	Blowoff	
0	Unloaded 🗌 Fully Loaded	Short Cycling	
9	Off Part Loaded	Blowoff	
9	Unloaded 🗌 Fully Loaded	Short Cycling	
10	Off Part Loaded	Blowoff	
10	Unloaded 🗌 Fully Loaded	Short Cycling	

## Table C: Compressor Status (NA7.13.1.2)



Declaration Statement	Signatory
Document Author	
I assert that this Certificate of Acceptance documentation is accurate and complete	
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.	
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	
(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 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.	