



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

Building:	Floor:	Room:	Control/tag:
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☐ Construction inspection and functional testing comply ☐ Does not comply	Date Submitted to AHJ:
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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.
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Table A: Construction Inspection

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

Step	Entry	Item	Code Reference
1.0	☐ Pass ☐ Fail	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 ☐ Fail	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 ☐ Fail	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 ☐ Fail	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)
11.0	☐ Pass ☐ Fail	All speed controls are in "auto" mode.	NA7.10.3.2.1(k)



Step	Entry	Item	Code Reference
12.0	☐ 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: Functional Testing

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.

Step	Entry	Functional Test	Code Reference
1.0	No Entry	Override any conflicting controls before performing functional tests.	NA7.10.3.2.2 Step 1
1.1	°F	Current outdoor ambient dry-bulb temperature (DBT).	NA7.10.3.2.2 Step 1
1.2	☐ °F ☐ psig	Current saturated condensing temperature (SCT) or condensing pressure from the control system.	NA7.10.3.2.2 Step 1
2.0	No Entry	Calculate and document the following.	NA7.10.3.2.2 Step 2
2.1		Calculate the condenser temperature difference (TD) = [SCT – DBT]. (°F)	NA7.10.3.2.2 Step 2
2.2	☐ °F ☐ psig	Current SCT or pressure control set point.	NA7.10.3.2.2 Step 2
3.0	No Entry	Depending on the control strategy used, program a setpoint equal to the calculation obtained in Step 2.1 or the value in step 2.2.. This will be referred to as the "test set point." Allow 5 minutes for condenser fan speed to normalize.	NA7.10.3.2.2 Step 3
4.0	No Entry	Using the control system, raise the test set point in 1°F (or 3 psi) increments until the condenser fan control modulates to minimum fan motor speed. Verify and document the following:	NA7.10.3.2.2 Step 4
4.1	☐ Pass ☐ Fail	Fan motor speed decreases.	NA7.10.3.2.2 Step 4(a)
4.2	☐ Pass ☐ Fail	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).	NA7.10.3.2.2 Step 4(b)
4.3	☐ rpm ☐ hertz ☐ % full speed	Record the minimum fan motor control speed. Enter with units as rpm, Hertz, or percent of full speed.	NA7.10.3.2.2 Step 4(c)
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)



Step	Entry	Functional Test	Code Reference
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 ☐ Fail	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		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 ☐ Fail	Condenser fan controls modulate to decrease capacity.	NA7.10.3.2.2 Step 6(a)
6.3	☐ Pass ☐ Fail	All condenser fans serving common condenser loop modulate in unison.	NA7.10.3.2.2 Step 6(b)
6.4	☐ Pass ☐ Fail	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. Check fail if any Functional Tests do not comply with all requirements.	NA7.10.3.2.2 Step 8



Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Author 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.	Field Tech. Name Company Name Title Phone Field Tech. 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.	Responsible Name Company Name License No. Title Phone Responsible Signature Date Signed