



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

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value
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<input type="checkbox"/> Construction inspection and functional testing comply	Date Submitted to AHJ: Date
<input type="checkbox"/> Does not comply	

<b>Intent:</b>	This test applies to all open and closed-circuit cooling towers. Verify the installation of cooling tower conductivity controls, documentation of target maximum cycles of concentration, programming of controls to not allow blowdown until parameter target thresholds are reached, and installation and programming of overflow alarms. Reference NRCC-MCH-E or NRCC-PRF-E for nonresidential (including nonresidential spaces in high-rise multifamily) building permits. Submit one Certificate for each system that must demonstrate compliance, with the Energy Code. References: §110.2(e), §120.5(a)19, NA7.5.18.
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**Reference Table R-1 (Table NA-7)**

Recirculating Water Parameters	Maximum Values
Conductivity (micro-siemens/cm)	2970 micro-siemens/cm
Total dissolved solids (ppm)	1845 ppm
Total alkalinity as CaCO <sub>3</sub> (ppm) excluding galvanized steel	540 ppm
Total alkalinity as CaCO <sub>3</sub> (ppm) galvanized steel (passivated)	450 ppm
Calcium hardness as CaCO <sub>3</sub> (ppm)	540 ppm
Chlorides as Cl (ppm)	270 ppm
Sulfates (ppm)	225 ppm
Silica (ppm)	135 ppm
Langelier saturation index (LSI)	2.5 LSI

**Table A: Construction Inspection**

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

Step	Entry	Item	Code Reference
1.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify the conductivity controls, makeup water flow meter(s), and overflow alarms are installed as specified on the plans.	NA7.5.18.1(a)
2.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify maximum achievable cycles of concentration are documented on the NRCC-MCH-E or NRCC-PRF-E compliance document.	NA7.5.18.1(b)
3.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify blowdown control sequence is available and documented in the building documents.	NA7.5.18.1(c)



Step	Entry	Item	Code Reference
4.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify controls are programmed to automate bleed to the maximum cycles of concentration documented on the NRCC-MCH-E or NRCC-PRF-E form.	NA7.5.18.1(d)
5.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify controls are programmed not to allow blowdown until one or more of the parameters in Table R-1 reaches the value specified in NRCC-MCH-E or NRCC-PRF-E.	NA7.5.18.1(e)
6.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Check "Pass" if construction inspection <b>complies</b> with all requirements. Check "Fail" if construction inspection <b>does not comply</b> with all requirements.	N/A

**Table B: Functional Testing**

Step	Entry	Functional Test	Code Reference
1.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Override the makeup water valve to open until the tower water is above the maximum fill level.	NA7.5.18.2 Step 1
2.1	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Close the makeup water valve.	NA7.5.18.2 Step 2
2.2	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that the overflow alarm is triggered either through an audible signal or via alert to the Energy Management Control System.	NA7.5.18.2 Step 2
3.0	No Entry	Restore the makeup water control parameter to automatic control.	NA7.5.18.2 Step 3
4.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Check pass if Functional Test passes on Steps 1 through 3.	N/A



Declaration Statement	Signatory
<b>Document Author</b> I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
<b>Acceptance Test Technician</b> 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 ATT No.: ATT Cert. No. Title Phone Signature Date Signed
<b>Responsible Person</b> 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. 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 fulfill this requirement.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed