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 Application Date: Date

Building: Enter Value	Floor: Enter Value	Room: Enter Value	Control/tag: Value

☐ Construction inspection and functional testing comply ☐ Does not comply	Date Submitted to AHJ: Date

Intent:	Verify that the system detects common faults in air handling units and zone terminal units. Reference NRCC-MCH-E for nonresidential (including nonresidential spaces in high-rise multifamily) building permits or LMCC-MCH-E for nonresidential spaces in low-rise multifamily building permits or LMCC-PRF-E or NRCC-PRF-E for the performance path. Submit one Certificate of Acceptance for each system that must demonstrate compliance. References: §120.2(i), §120.5(a)12, §160.3(a)2H, §160.3(d)1L, and NA7.5.12.

Table A: Construction Inspection

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

Step	Entry	Item	Code Reference
1.0	☐ Pass ☐ Fail	Verify on the submittal documents or sensor specifications that locally installed supply air, outside air, and return air (if applicable) temperature sensors have an accuracy of ±2ºF over the range of 40ºF to 80ºF.	NA7.5.12.1(a)

Table B-1: Functional Testing for Air Handling Unit Economizers

Perform the following test for each AHU with FDD controls. (§120.2(i)7 or §160.3(a)2Hvii):

Step	Check or Status	Functional Test	Code Reference
1.0	☐ Pass ☐ Fail ☐ N/A	If applicable, bypass alarm delays to ensure that faults generate alarms immediately. (Pass, Fail, N/A)	NA7.5.12.2(a) Step 1
2.0	No Entry	**Sensor Failure**	NA7.5.12.2(b)
2.1	☐ Pass ☐ Fail	Disconnect local supply air temperature (SAT) sensor from unit controller and verify that the FDD system reports a fault.	NA7.5.12.2(b) Step 1, Step 2
2.2	☐ Pass ☐ Fail	Connect SAT sensor to the unit controller and verify that FDD indicates normal system operation and clears all faults and alarms.	NA7.5.12.2(b) Step 3, Step 4

Step	Check or Status	Functional Test	Code Reference
2.3	☐ Pass ☐ Fail ☐ N/A	If the outside air temperature ~~sensor~~ (OAT) sensor is local, then disconnect the local OAT from the unit controller and verify that the FDD system reports a fault. (Pass, Fail, N/A)	NA7.5.12.2(b) Step 5, Step 6
2.4	☐ Pass ☐ Fail ☐ N/A	If Step 2.3 performed, then connect the local OAT sensor to the unit controller and verify that FDD indicates normal system operation and clear all faults and alarms. (Pass, Fail, N/A)	NA7.5.12.2(b) Step 7, Step 8
3.0	No Entry	**Inappropriate Economizing**	NA7.5.12.2(c)
3.1	☐ Pass ☐ Fail	Override the operating state to occupied heating mode by overriding zone thermostat(s) to create a heating demand and overriding the OAT sensor below the low limit lockout.	NA7.5.12.2(c) Step 1
3.2	☐ Pass ☐ Fail	From the control system workstation, override the economizer dampers to 100 percent outdoor air and verify that a fault is reported at the control workstation.	NA7.5.12.2(c) Step 2, Step 3
3.3	☐ Pass ☐ Fail	Remove the economizer damper override and verify that the control system indicates normal system operation.	NA7.5.12.2(c) Step 4
3.4	☐ Pass ☐ Fail	Remove all overrides and clear all faults and alarms.	NA7.5.12.2(c) Step 5
3.5	☐ Pass ☐ Fail	Force the operating stat to economizer-only cooling mode by adjusting the zone thermostat(s) to create a cooling demand then overriding the OAT sensor so that free cooling is available.	NA7.5.12.2(c) Step 6
3.6	☐ Pass ☐ Fail	From the control system workstation, override the economizer dampers to zero percent outdoor air and verify that a fault is reported at the control workstation.	NA7.5.12.2(c) Step 7, Step 8
3.7	☐ Pass ☐ Fail	Remove the economizer damper override and verify that the control system indicates normal system operation. Remove all overrides and clear all faults and alarms.	NA7.5.12.2(c) Step 9, Step 10
4.0	☐ Pass ☐ Fail ☐ N/A	If Step 1 performed, then reinstate alarm delays. (Pass, Fail, N/A)	NA7.5.12.2(d) Step 1
5.0	☐ Pass ☐ Fail	Check pass if Functional Test Table B-1 passes on Steps 1 through 4.	N/A

Table B-2: Functional Testing for Air Handling Unit Valves

Perform the following test for each AHU with FDD controls~~.~~ (§120.2(i)7 or §160.3(a)2Hvii)~~:~~

Step	Check or Status	Functional Test	Code Reference
1.0	☐ Pass ☐ Fail ☐ N/A	If applicable, bypass alarm delays to ensure that faults generate alarms immediately. (Pass, Fail, N/A)	NA7.5.12.3(a) Step1
2.0	No Entry	**Valve/actuator Fault**	NA7.5.12.3(b)
2.1	☐ Pass ☐ Fail	Override the operating state to ~~"~~occupied cooling~~"~~ mode by overriding zone thermostat(s) to create a cooling demand and overriding the OAT sensor to 90°F.	NA7.5.12.3(b) Step 1
2.2	☐ Pass ☐ Fail	From the control system workstation, override the heating coil valves to the full~~-~~ open position (100 percent heating mode).	NA7.5.12.3(b) Step 2
2.3	☐ Pass ☐ Fail	Verify flow through the valve by differential temperature or differential pressure method.	NA7.5.12.3(b) Step 3
2.4	☐ Pass ☐ Fail	Verify that a fault is reported at the control workstation.	NA7.5.12.3(b) Step 4
2.5	☐ Pass ☐ Fail	Remove the heating coil valve override and verify that the control system indicates normal system operation.	NA7.5.12.3(b) Step 5
2.6	☐ Pass ☐ Fail	Remove all overrides and clear all faults and alarms.	NA7.5.12.3(b) Step 6
2.7	☐ Pass ☐ Fail	Override the operating state to occupied heating mode by overriding zone thermostat(s) to create a heating demand and overriding the OAT sensor to 40°F.	NA7.5.12.3(b) Step 7
2.8	☐ Pass ☐ Fail	From the control system workstation, override the cooling coil valve to the full~~-~~ open position (100 percent cooling mode).	NA7.5.12.3(b) Step 8
2.9	☐ Pass ☐ Fail	Verify flow through the valve by differential temperature or differential pressure method.	NA7.5.12.3(b) Step 9
2.10	☐ Pass ☐ Fail	Verify that a fault is reported at the control workstation.	NA7.5.12.3(b) Step 10
2.11	☐ Pass ☐ Fail	Remove the cooling coil valve override and verify that the control system indicates normal system operation.	NA7.5.12.3(b) Step 11
2.12	☐ Pass ☐ Fail	Remove all overrides and clear all faults and alarms.	NA7.5.12.3(b) Step 12
3.0	☐ Pass ☐ Fail ☐ N/A	If Step 1 performed, then reinstate alarm delays. (Pass, Fail, N/A)	NA7.5.12.3(c) Step 1

Step	Check or Status	Functional Test	Code Reference
4.0	☐ Pass ☐ Fail	Check pass if Functional Test Table B-2 passes on Steps 1 through 3.	N/A

Table B-3: Functional Testing for Zone Terminal Units

Perform the following test for each VAV box. A minimum of five percent of all terminal boxes (all types together) must be tested~~.~~ (§120.2(i)7 or §160.3(a)2Hvii)**:**

Step	Check or Status	Functional Test	Code Reference
1.0	No Entry	**Sensor drift/failure**	NA7.5.12.4(a)
1.1	☐ Pass ☐ Fail	Disconnect the tubing to the differential pressure sensor of the VAV box.	NA7.5.12.4(a) Step 1
1.2	☐ Pass ☐ Fail	Verify that control system detects and reports the fault.	NA7.5.12.4(a) Step 2
1.3	☐ Pass ☐ Fail	Reconnect the sensor and verify proper sensor operation.	NA7.5.12.4(a) Step 3
1.4	☐ Pass ☐ Fail	Verify that the control system does not report a fault.	NA7.5.12.4(a) Step 4
2.0	No Entry	**Damper/actuator fault**	NA7.5.12.4(b)
2.1	☐ Pass ☐ Fail	Damper stuck open: Command the damper to be fully open (room temperature above setpoint).	NA7.5.12.4(b)1 Step 1
2.2	☐ Pass ☐ Fail	Disconnect the actuator to the damper.	NA7.5.12.4(b)1 Step 2
2.3	☐ Pass ☐ Fail	Adjust the cooling setpoint so that the room temperature is below the cooling setpoint to command the damper to the minimum position. Verify that the control system reports a fault.	NA7.5.12.4(b)1 Step 3
2.4	☐ Pass ☐ Fail	Reconnect the actuator and restore to normal operation.	NA7.5.12.4(b)1 Step 4
2.5	☐ Pass ☐ Fail	Damper stuck closed: Set the damper to the minimum position.	NA7.5.12.4(b)2 Step 1
2.6	☐ Pass ☐ Fail	Disconnect the actuator to the damper.	NA7.5.12.4(b)2 Step 2
2.7	☐ Pass ☐ Fail	Set the cooling setpoint below the room temperature to simulate a call for cooling. Verify that the control system reports a fault.	NA7.5.12.4(b)2 Step 3
2.8	☐ Pass ☐ Fail	Reconnect the actuator and restore to normal operation.	NA7.5.12.4(b)2 Step 4
3.0	No Entry	**Valve/actuator fault** (For systems with hydronic reheat)	NA7.5.12.4(c)

Step	Check or Status	Functional Test	Code Reference
3.1	☐ Pass ☐ Fail	Command the reheat coil valve to (full) open.	NA7.5.12.4(c) Step 1
3.2	☐ Pass ☐ Fail	Disconnect power to the actuator. Set the heating setpoint temperature to be lower than the current space temperature, to command the valve closed. Verify that the fault is reported at the control workstation.	NA7.5.12.4(c) Step 2
3.3	☐ Pass ☐ Fail	Reconnect the actuator and restore normal operation.	NA7.5.12.4(c) Step 3
4.0	No Entry	**Feedback loop tuning fault** (unstable airflow)	NA7.5.12.4(d)
4.1	☐ Pass ☐ Fail	Set the integral coefficient of the box controller to a value 50 times the current value.	NA7.5.12.4(d) Step 1
4.2	☐ Pass ☐ Fail	The damper cycles continuously and airflow is unstable. Verify that the control system detects and reports the fault.	NA7.5.12.4(d) Step 2
4.3	☐ Pass ☐ Fail	Reset the integral coefficient of the controller to the original value to restore normal operation.	NA7.5.12.4(d) Step 3
5.0	☐ Pass ☐ Fail	**Disconnected inlet duct**: From the control system workstation, command~~s~~ the damper to full closed, then disconnect power to the actuator and verify that a fault is reported at the control workstation.	NA7.5.12.4(e) Step 1
6.0	☐ Pass ☐ Fail	**Discharge air temperature sensor**: Adjust zone setpoints to drive the box from dead band to full heating.	NA7.5.12.4(f) Step 1
6.1	☐ Pass ☐ Fail	Verify that in heating, the supply air temperature resets up to the maximum setpoint while the airflow is maintained at the dead band flow rate.	NA7.5.12.4(f) Step 2
6.2	☐ Pass ☐ Fail	Verify that after the supply air temperature is reset up to the maximum setpoint, the airflow rate then increases up to the heating maximum flow rate in order to meet the heating load.	NA7.5.12.4(f) Step 3
7.0	☐ Pass ☐ Fail	Remove all overrides, clear all faults and alarms, and return the system to normal operation.	N/A
8.0	☐ Pass ☐ Fail	Check pass if Functional Test Table B-3 passes on Steps 1 through 7.	N/A

Declaration Statement	Signatory
Document Author I assert that this Certificate of Acceptance documentation is accurate and complete.	Name Company Name Author Signature Date Signed
Acceptance Test 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 ATT No.: ATT Cert. No. 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 ~~(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.	Name Company Name Lic. No.: License No. Title Phone Signature Date Signed