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:	This acceptance test is meant for new installations of constant volume, single zone, unitary (packaged and split) air conditioner and heat pump systems in nonresidential or multifamily occupancies. Either an NRCC-MCH-E for nonresidential construction that is completed and approved by the authority having jurisdiction or an LMCC-MCH-E for multifamily construction that is registered with a CEC approved HERS data registry is required prior to beginning this acceptance test. Submit one Certificate of Acceptance for each room, area, or zone that is directly or indirectly served by a thermostatic controls system. References: §120.2(a), §120.2(b), §110.12(a), §160.3(a), §180.2(b)

Table A: Construction Inspection

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

Step	Entry	Item	Code Reference
1.1	☐ Pass ☐ Fail	Verify that the NRCC-MCH-E as approved by the authority having jurisdiction or LMCC-MCH-E as registered by a CEC approved HERS data registry is available for reference.	§10-103(a)2A
1.2	☐ Pass ☐ Fail	Verify that the demand responsive controls are certified OpenADR 2.0a or OpenADR 2.0b Virtual End Node or a certificate from the manufacturer stating that the demand response control system is capable of responding to a demand response signal from a certified OpenADR 2.0b Virtual End Node by automatically implementing the control functions requested by the Virtual End Node for the equipment it controls.	NA7.5.2.1(b) §120.2(b)4 §110.12(a)1 §160.3(a)2Biv §160.3(a)2G
2.0	No Entry	Thermostatic controls for each zone served by the system – One of the following Steps must pass: 2.1, 2.2, or 2.3	NA7.5.2.1(a)
2.1	P, F, N/A	Thermostat is located within the space-conditioning zone that is served by the HVAC system. (Pass, Fail, or N/A)	§120.2(a) §160.3(a)2A
2.2	P, F, N/A	An Energy Management Control system is installed to comply with the requirement of one or more thermostatic controls. (Pass, Fail, or N/A)	§120.2(a) §160.3(a)2A

Step	Entry	Item	Code Reference
2.3	P, F, N/A	An independent perimeter heating or cooling system that serves more than one zone without individual thermostatic controls is installed. Mark as "pass" only if all of the following steps pass: **2.3.1, 2.3.2, 2.3.3, and 2.3.4.** (Pass, Fail, or N/A)	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.1	P, F, N/A	All zones served by the perimeter system are also served by an interior cooling system (Pass, Fail, or N/A); and	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.2	P, F, N/A	The perimeter system is designed solely to offset envelope heat losses or gains (Pass, Fail, or N/A); and	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.3	P, F, N/A	The perimeter system has at least one thermostatic control for each building orientation of 50 feet or more (Pass, Fail, or N/A); and	Exception to §120.2(a) Exception to §160.3(a)2A
2.3.4	P, F, N/A	The perimeter system is controlled by at least one thermostat located in one of the zones served by the system. (Pass, Fail, or N/A)	Exception to §120.2(a) Exception to §160.3(a)2A
3.0	No Entry	Criteria for Thermostatic zone controls. **Both** steps **3.1 and 3.2** must pass.	NA7.5.2.1(b) §120.2(b)
3.1	P, F, N/A	Set Points and Dead-band. **One** of the following steps must pass: **3.1.1, 3.1.2, 3.1.3, or 3.1.4**	§120.2(b) §160.3(a)2B
3.1.1	P, F, N/A	The thermostatic control is used to control comfort heating only and is capable of being set, locally or remotely, down to 55°F or lower. (Pass, Fail, N/A)	§120.2(b)1 §160.3(a)2Bi
3.1.2	P, F, N/A	The thermostatic control is used to control comfort cooling only and is capable of being set, locally or remotely, up to 85°F or higher. (Pass, Fail, N/A)	§120.2(b)2 §160.3(a)2Bii
3.1.3	P, F, N/A	The thermostatic control is used to control both comfort heating and comfort cooling and requires manual changeover between heating and cooling modes. (Pass, Fail, N/A)	Exception to §120.2(b)3 Exception to §160.3(a)2Biii
3.1.4	P, F, N/A	The thermostatic control is used to control both comfort heating and comfort cooling and does NOT require manual changeover between heating and cooling modes and is capable of all of the following (**all** of the following steps must pass): **3.1.4.1, 3.1.4.2, and 3.1.4.3** (Pass, Fail, N/A)	§120.2(b)3 §160.3(a)2Biii

Step	Entry	Item	Code Reference
3.1.4.1	P, F, N/A	A minimum heating setpoint of 55°F or lower (Pass, Fail, N/A); and	§120.2(b)3 §160.3(a)2Biii
3.1.4.2	P, F, N/A	A maximum cooling setpoint of 85°F or higher (Pass, Fail, N/A); and	§120.2(b)3 §160.3(a)2Biii
3.1.4.3	P, F, N/A	A temperature range or dead band of at least 5°F within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum. (Pass, Fail, N/A)	§120.2(b)3 §160.3(a)2Biii
3.2	P, F, N/A	Additional Thermostatic Setback Controls. **One** of the following steps must pass: **3.2.1, 3.2.2, 3.2.3, or 3.2.4**	§120.2(b) §160.3(a)2B
3.2.1	P, F, N/A	The heating or cooling systems is NOT a heat pump system and is NOT controlled by an Energy Management Control System, and has a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours (a setback thermostat). (Pass, Fail, N/A)	§110.2(c)1 §120.2(b)4 §160.3(a)1 §160.3(a)2Biv §180.2(b)2Aiv
3.2.2	P, F, N/A	Thermostatic setback control is **NOT** required. The heating or cooling system is one of the following (**One** of the following steps must pass): **3.2.2.1, 3.2.2.2, 3.2.2.3, or 3.2.2.4**. (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.1	P, F, N/A	Gravity gas wall heater (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.2	P, F, N/A	Gravity floor heater (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.3	P, F, N/A	Gravity room heater (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.2.4	P, F, N/A	Non-central electric heater, fireplace or decorative gas appliance, wood stove, room air conditioner, or room air-conditioner heat pump. (Pass, Fail, N/A)	Exception to §110.2(c)
3.2.3	P, F, N/A	The heating or cooling system is a heat pump WITH supplementary electric resistance heaters and has all of the following controls. **All** of the following steps must pass: **3.2.3.1, 3.2.3.2, and 3.2.3.3.** (Pass, Fail, N/A)	110.2(c) 110.2(b)
3.2.3.1	P, F, N/A	Has a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours (a setback thermostat). (Pass, Fail, N/A)	110.2(c)1

Step	Entry	Item	Code Reference
3.2.3.2	P, F, N/A	The cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. (Pass, Fail, N/A)	110.2(b)2
3.2.3.3	P, F, N/A	Verify that supplementary heater operation is prevented when the heating load can be met by the heat pump alone, UNLESS the thermostatic controls provide preferential rate control, intelligent recovery, staging, ramping or another control mechanism designed to preclude the unnecessary operation of supplementary heating; supplementary heater operation is limited the following conditions: • Defrost • Transient Periods (i.e., start-ups or following thermostat setpoint advance) (Pass, Fail, N/A)	§110.2(b)1 Exception to §110.2(b)1
3.2.4	P, F, N/A	The heating or cooling system is a heat pump WITHOUT supplementary electric resistance heaters and has a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours (a setback thermostat). (Pass, Fail, N/A)	110.2(c)1 110.2(b)
4.0	No Entry	Demand Response Controls & Demand Responsive Zonal HVAC Controls. **All** of the following steps must pass: **4.1, 4.2, 4.3, 4.4, and 4.5.**	NA7.5.2.1(b) §120.2(b) §160.3(a)2B §110.12
4.1	☐ Pass ☐ Fail	Verify that the demand responsive controls are capable of communicating with the Virtual End Node (VEN) using wired or wireless bi-directional communication pathway.	§110.12(a)2
4.2	☐ Pass ☐ Fail	Verify that when the demand responsive control communications are disabled or unavailable, all demand responsive controls continue to perform all other control functions provided by the control.	§110.12(a)4
4.3	☐ Pass ☐ Fail	Verify that the demand response control system has been certified to the Energy Commission as meeting all of the requirements in Joint Appendix 5 (Occupant Controlled Smart Thermostat). https://www.energy.ca.gov/rules-and-regulations/building-energy-efficiency/manufacturer-certification-building-equipment-7	§110.12(a)5

Step	Entry	Item	Code Reference
4.4	☐ Pass ☐ Fail	Verify that the controls are programmed to provide an adjustable rate of change for the temperature setup increase, decrease, and reset.	§110.12(b)4
4.5	☐ Pass ☐ Fail	Verify that the controls have the following features: **All** of the following steps must pass: **4.5.1, 4.5.2, and 4.5.3**	§110.12(b)5
4.5.1	☐ Pass ☐ Fail	Disabled. Disabled by authorized facility operators;	§110.12(a)5A
4.5.2	☐ Pass ☐ Fail	Manual control. Manual control by authorized facility operators to allow adjustment of heating and cooling set points globally from a single point in the EMCS.	§110.12(a)5B
4.5.3	☐ Pass ☐ Fail	Automatic Demand Shed Control. Upon receipt of a demand response signal, the space conditioning systems conduct a centralized demand shed for non-critical zones during the demand response period.	§110.12(b)1 §110.12(b)2 §110.12(a)5C
5.0	No Entry	Occupancy and Pre-Occupancy Programming. **Both** of the following steps must pass: **5.1 and 5.2**	NA7.5.2.1(c)
5.1	☐ Pass ☐ Fail	Occupied, unoccupied, and holiday schedules have been programmed per the schedule provided.	NA7.5.2.1(c)
5.2	☐ Pass ☐ Fail	Pre-occupancy purge has been programmed for the 1-hour period immediately before the building is normally occupied to provide ventilation by one of the following methods (**One** of the following steps must pass): **5.2.1 or 5.2.2**	NA7.5.2.1(d) §120.1(d)2 §160.2(c)5B
5.2.1	P, F, N/A	The minimum CFM specified by design for the heating or cooling unit is supplied to all zones served by the unit during the 1-hour period immediately before the building is normally occupied. (Pass, Fail, N/A)	NRCC-MCH-E or LMCC-MCH-E, Table J. §120.1(d)2 §160.2(c)5B
5.2.2	P, F, N/A	Three complete air changes to the zone served by the heating or cooling unit is supplied to all zones served by the unit during the 1-hour period immediately before the building is normally occupied. (Pass, Fail, N/A)	NRCC-MCH-E or LMCC-MCH-E, Table J. §120.2(d)2 §160.2(c)5B
6.0	☐ 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

Step	Entry	Functional Test	Code Reference
1.0	P, F, N/A	Disable economizer control and demand-controlled ventilation (if applicable) to prevent unexpected interactions. (Pass, Fail, N/A)	NA7.5.2.2 Step 1
2.0	No Entry	**Occupied Mode:** Simulate a heating demand during the occupied condition. **ALL** of the following steps must pass: **2.1, 2.2, 2.6, and 2.4.**	NA7.5.2.2 Step 2
2.1	☐ Pass ☐ Fail	Supply fan operates continuously	NA7.5.2.2 Step 2(a)
2.2	☐ Pass ☐ Fail	The unit provides heating	NA7.5.2.2 Step 2(b)
2.3	☐ Pass ☐ Fail	No cooling is provided by the unit	NA7.5.2.2 Step 2(c)
2.4	☐ Pass ☐ Fail	Outside air damper is at minimum position	NA7.5.2.2 Step 2(d)
3.0	No Entry	**Occupied Mode:** Simulate operation in the dead band during occupied condition. **ALL** of the following steps must pass: **3.1, 3.2, 3.3, and 3.4.**	NA7.5.2.2 Step 3
3.1	☐ Pass ☐ Fail	Supply fan operates continuously	NA7.5.2.2 Step 3(e)
3.2	☐ Pass ☐ Fail	No heating is provided by the unit	NA7.5.2.2 Step 3(f)
3.3	☐ Pass ☐ Fail	No cooling is provided by the unit	NA7.5.2.2 Step 3(f)
3.4	☐ Pass ☐ Fail	Outside air damper is at minimum position	NA7.5.2.2 Step 3(g)
4.0	No Entry	Simulate cooling demand during occupied condition. Lock out economizer (if applicable). **ALL** of the following steps must pass: **4.1, 4.2, 4.3, and 4.4**.	NA7.5.2.2 Step 4
4.1	☐ Pass ☐ Fail	Supply fan operates continuously	NA7.5.2.2 Step 4(h)
4.2	☐ Pass ☐ Fail	No heating is provided by the unit	NA7.5.2.2 Step 4(j)
4.3	☐ Pass ☐ Fail	Cooling is provided by the unit	NA7.5.2.2 Step 4(i)
4.4	☐ Pass ☐ Fail	Outside air damper is at minimum position	NA7.5.2.2 Step 4(k)
5.0	No Entry	Simulate operation in the dead band during unoccupied mode. **All** of the following steps must pass: **5.1, 5.2, 5.3, and 5.4**.	NA7.5.2.2 Step 5
5.1	☐ Pass ☐ Fail	Supply fan turns off	NA7.5.2.2 Step 5(l)

Step	Entry	Functional Test	Code Reference
5.2	☐ Pass ☐ Fail	No heating is provided by the unit	NA7.5.2.2 Step 5(n)
5.3	☐ Pass ☐ Fail	No cooling is provided by the unit	NA7.5.2.2 Step 5(n)
5.4	☐ Pass ☐ Fail	Outside air damper closes completely	NA7.5.2.2 Step 5(m)
6.0	No Entry	Simulate heating demand during unoccupied conditions. **All** of the following steps must pass: **6.1, 6.2, 6.3, and 6.4**.	NA7.5.2.2 Step 6
6.1	☐ Pass ☐ Fail	Supply fan cycles on and off	NA7.5.2.2 Step 6(o)
6.2	☐ Pass ☐ Fail	The unit provides heating	NA7.5.2.2 Step 6(p)
6.3	☐ Pass ☐ Fail	No cooling is provided by the unit	NA7.5.2.2 Step 6(q)
6.4	☐ Pass ☐ Fail	Outside air damper is either closed or at minimum position	NA7.5.2.2 Step 6(r)
7.0	No Entry	Simulate cooling demand during unoccupied condition. Lock out economizer (if applicable). **All** of the following steps must pass: **7.1, 7.2, 7.3, and 7.4**.	NA7.5.2.2 Step 7
7.1	☐ Pass ☐ Fail	Supply fan cycles on and off	NA7.5.2.2 Step 7(s)
7.2	☐ Pass ☐ Fail	No heating is provided by the unit	NA7.5.2.2 Step 7(u)
7.3	☐ Pass ☐ Fail	Cooling is provided by the unit	NA7.5.2.2 Step 7(t)
7.4	☐ Pass ☐ Fail	Outside air damper is either closed or at minimum position	NA7.5.2.2 Step 7(v)
8.0	No Entry	Simulate manual override during unoccupied condition. **Both** of the following steps must pass: **8.1 and 8.2.**	NA7.5.2.2 Step 8
8.1	☐ Pass ☐ Fail	System operates in "occupied" mode	NA7.5.2.2 Step 8(w)
8.2	☐ Pass ☐ Fail	System reverts back to "unoccupied" mode when manual override time period expires	NA7.5.2.2 Step 8(x)
9.0	☐ Pass ☐ Fail	System returned to initial operating conditions. Restore economizer and demand control ventilation systems (if applicable), and remove all system overrides initiated during the test.	NA7.5.2.2 Step 9
10.0	☐ Pass ☐ Fail	Check pass if Functional Test passes on Steps 1 through 9	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