DEMAND SHED CONTROL

2022-CEC-NRCA-MCH-11-A

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
			.(0)

Construction inspection and functional testing complyDoes Not Comply	Date Submitted to AHJ: Date

Intent: Ensure that the central demand shed sequences have been properly programmed into the DDC system. 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. Submit one Certificate of Acceptance for each zonal HVAC control system that must demonstrate compliance. References: §110.12(a), §110.12(b), §120.2(h), §120.5(a)10, §160.3(a)2G, §160.3(d)1J, and NA7.5.10.

Table A: Construction Inspection

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

Step	Entry	Item	Code Reference
1	☐ Pass ☐ Fail	Verify access to the following required documentation: Designs specific to the Energy Management Control System (EMCS) and demand response control system (if separate) as approved by the authority having jurisdiction.	N/A
2	☐ Pass ☐ Fail	Verify access to the NRCC-MCH-E or LMCC-MCH-E as approved by the authority having jurisdiction.	N/A
3.1, or	Pass Fail N/A	Verify access to a printed copy of the OpenADR 2.0a or OpenADR 2.0b Virtual End Node (VEN) certificate for the demand response control system.	§110.12(a)1A
3.2	☐ Pass ☐ Fail ☐ N/A	Verify access to 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.	§110.12(a)1B
4	Pass Fail	Verify that the EMCS interface can enable activation of the central demand shed controls.	NA7.5.10(a)

Step	Entry	Item	Code Reference
5	Pass Fail	Verify that the demand responsive controls are capable of communicating using one or more of the following for communications that occur within the building: Wi-Fi, ZigBee, BACnet, Ethernet, or hard wiring.	§110.12(a)2
6	Pass Fail	Verify and document that when the demand responsive control communications are disabled or unavailable, all demand responsive controls shall continue to perform all other control functions provided by the control.	§110.12(a)4
7	Pass Fail	Verify and document 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).	§110.12(a)5
8	Pass Fail	Verify and document that the controls are programmed to provide an adjustable rate of change for the temperature setup increase, decrease, and reset.	§110.12(b)4
9	Pass Fail	Verify and document that the controls have the following feature: Disabled. Disabled by authorized facility operators.	§110.12(b)5A
10	☐ Pass ☐ Fail	Verify and document that the controls have the following feature: 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(b)5B
11	☐ Pass ☐ Fail	Indicate that the Construction Inspection complies with ALL requirements.	N/A

Table B: Functional Testing for Automatic Demand Shed Control Acceptance

	A O		Code
Step	Entry	Functional Test	Reference
1	☐ Pass ☐ Fail	Engage the global demand shed system with the HVAC system in cooling mode. Maintain this status for Steps 2 through 3.	NA7.5.10.2 Step 1, §110.12(b)5C
2	Pass Fail	Verify that the cooling setpoint in non-critical spaces increases by the proper amount (4 degrees or more).	NA7.5.10.2 Step 1(a), §110.12(b)1
3	Pass Fail	Verify that the cooling setpoint in critical spaces do not change.	NA7.5.10.2 Step 1(b)
4	Pass Fail	Engage the global demand shed system with the HVAC system in heating mode. Maintain this status for Steps 5 through 6.	§110.12(b)5C

Step			Code
	Entry	Functional Test	Reference
5	☐ Pass ☐ Fail	Verify that the heating setpoint in non-critical spaces decreases by the proper amount (4 degrees or more).	§110.12(b)2
6	☐ Pass ☐ Fail	Disengage the global demand shed system. Maintain this status for Steps 7 through 8.	NA7.5.10.2 Step 2, §110.12(b)5C
7	☐ Pass ☐ Fail	Verify that the cooling setpoint in non-critical spaces return to their original values.	NA7.5.10.2 Step 2(c), §110.12(b)3
8	Pass Fail	Verify that the cooling setpoint in critical spaces do not change.	NA7.5.10.2 Step 2(d), §110.12(b)3
9	☐ Pass ☐ Fail	Return the system to normal operating conditions.	N/A
10	☐ Pass ☐ Fail	Indicate that the Functional Test complies with ALL requirements.	N/A
	CRIOS		

Declaration Statement	Signatory
Document Author	Name
I assert that this Certificate of Acceptance documentation is accurate and complete.	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:	Name
The information provided on this Certificate of Acceptance is true and correct. I am the person who	Company Name
performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The	ATT No.: ATT Cert. No.
construction or installation identified on this Certificate of Acceptance complies with the applicable	Title
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Phone
and conforms to the applicable acceptance requirements and procedures specified in Reference	Signature
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or	Date Signed
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	Name
(responsible acceptance person). The information provided on this Certificate of Acceptance substantiates	Company Name
that the construction or installation identified on this Certificate of Acceptance complies with the	Lic. No.: License No.
acceptance requirements indicated in the plans and specifications approved by the enforcement agency	Title
and conforms to the applicable acceptance requirements and procedures specified in Reference	Phone
Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction	Signature
or installation identified on this Certificate of Acceptance has been completed and is posted or made	Date Signed
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.	