



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
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<input type="checkbox"/> Construction inspection and functional testing comply	Date Submitted to AHJ: Date
<input type="checkbox"/> Does not comply	

Intent:	The objective of this acceptance test is to verify the heat recovery ventilation (HRV) or energy recovery ventilation (ERV) requirement in multifamily buildings with four habitable stories or more for compliance with Section 170.2(c)3Bivb, a central ERV/HRV serving multiple dwelling units. Either an NRCC-MCH-E or NRCC-PRF-E for nonresidential construction spaces 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-ECC data registry is required prior to beginning this acceptance test. This test may only be performed by a certified mechanical ATT. Reference: §170.2(c)3Bivb , NA7.18.4, and NA7.5.4.2.
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Table A: Construction Inspection

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

Step	Entry	Item	Code Reference
1.1	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that the NRCC-MCH-E or NRCC-PRF-E as approved by the authority having jurisdiction or LMCC-MCH-E as registered by a CEC approved HERS-ECC data registry is available for reference.	§10-103(a)2A
1.2	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that either the product specifications/tear sheets for the installed equipment are available or the product is listed with equipment certification databases such as HVI, AHRI, or other CEC approved directories. HVI: HVI-Certified Products Directory - Home Ventilating Institute AHRI: AHRI Certification Directory (ahridirectory.org)	N/A
2.0	Table J	Record the total design ventilation airflow rate for the dwelling units served by the central ventilation system as specified on NRCC-MCH-E or NRCC-PRF-E or LMCC-MCH-E (CFM)	NA7.18.4.1(a), §160.2(b)2Av
3.1	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Visually confirm that an ERV/HRV is installed and record the make and model.	NA7.18.4.1(b)
3.2	Model	Model Number	NA7.18.4.1(b)
3.3	Maker	Manufacturer	NA7.18.4.1(b)

Step	Entry	Item	Code Reference
4.0	<input type="checkbox"/> Pass <input type="checkbox"/> 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	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that the ERV/HRV can provide the airflow rate that meets the design ventilation airflow rate by checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 1
2.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that the ERV/HRV's nominal sensible recovery efficiency is 67 percent or greater, by checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 2
3.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that the ERV/HRV can meet the fan power design requirements recorded in NRCC-MCH-E- or LMCC-MCH-ENRCC-PERF , Table J or NRCC-PRF-E , <u>Table H3</u> by checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 3
4.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that the ERV/HRV has a recovery bypass or free cooling function by visual inspection and checking its product specifications (Table A, 1.2).	NA7.18.4.2 Step 4
5.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Verify that that the ERV/HRV recovery bypass or free cooling control capabilities meets one of the following specifications: Pass one of Steps 5.1-5.4 (marking the others "N/A") and complete Step 5.5.	NA7.18.4.2 Step 4
5.1, or	P, F, N/A	Fixed Dry Bulb. Economizer is off for the following climate Zones (CZ) and outside air temperatures (OAT): CZ 1, 3, 5, or 11-16 OAT (°F) ≥ 75 2, 4, or 10 ≥ 73 6, 8, or 9 ≥ 71 7 ≥ 69 (Pass, Fail, N/A)	Table 170.2-G
5.2, or	P, F, N/A	Differential Dry Bulb. Economizer is off for the following CZ and OAT exceeding return air temperature (OAT>RT): CZ 1, 3, 5, or 11-16 OAT $\geq RT$ (°F) 2, 4, or 10 $\geq RT-2$ 6, 8, or 9 $\geq RT-4$ 7 $\geq RT-6$ (Pass, Fail, N/A)	Table 170.2-G

Step	Entry	Functional Test	Code Reference
5.3, or	P, F, N/A	Fixed Enthalpy and Fixed Dry Bulb, All CZ. Economizer off when outdoor air enthalpy exceeds 28 Btu/lbs. of dry air or outdoor air temperature exceeds 75°F. NOTE: At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. (Pass, Fail, N/A)	Table 170.2-G
5.4	P, F, N/A	If the Energy Commission Executive Director has given approval for any other control device not listed such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, to be used in compliance with Section 170.2(c)4Ci. Submit approval to ATTCP. (Pass, Fail, N/A)	Table 170.2-G, §170.2(c)4Ci.
5.5	P, F, N/A	Verify that devices with selectable (rather than adjustable) setpoints are capable of being set to within 2°F and 2 Btu/lbs. of the setpoint listed. (Pass, Fail, N/A)	Table 170.2-G
6.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Pass if NRCA-MCH-05-A has been successfully completed for this HRV/ERV system, and proceed to Step 7, or fail and complete all Steps 6.1-6.4. (Pass, Fail, N/A)	NA7.18.4.2 Step 5
6.1	P, F, N/A	Disable demand control ventilation systems (if applicable). (Pass, Fail, N/A)	NA7.5.4.2 Step 1
6.2	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Enable the HRV/ERV controls and simulate a cooling demand large enough to drive the HRV/ERV system into full cooling mode (e.g., the heat recovery bypass) is fully open. Verify and document the following:	NA7.5.4.2 Step 2
6.2.1	P, F, N/A	HRV/ERV bypass damper is 100 percent open and return air damper is 100 percent closed. NOTE: If bypass is achieved through heat/energy recovery wheel rotation speed modulation, wheel speed is fully stopped. (Pass, Fail, N/A)	NA7.5.4.2 Step 2(a)
6.2.2	P, F, N/A	All applicable fans and dampers operate as intended to maintain building pressure. (Pass, Fail, N/A)	NA7.5.4.2 Step 2(b)
6.2.3	P, F, N/A	The unit heating is disabled (if unit has heating capability). (Pass, Fail, N/A)	NA7.5.4.2 Step 2(c)

Step	Entry	Functional Test	Code Reference
6.3	P, F, N/A	If unit has heating capability, simulate a heating demand and set the HRV/ERV controls so that it is capable of operating (i.e. actual outdoor air conditions are below lockout setpoint). Verify that the heat recovery bypass control modulates bypass damper/wheel speed to control temperature setpoint. (Pass, Fail, N/A)	NA7.5.4.2 Step 4(j)
6.4	P, F, N/A	Restore demand control ventilation systems (if applicable) and remove all system overrides initiated during the test. (Pass, Fail, N/A)	NA7.5.4.2 Step 6
7.0	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	Check pass if Functional Test is completed on all Steps 1 through 6.	N/A

DRAFT



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