

Nonresidential Acceptance Testing

2016 Energy Code Permit Guide

What is Acceptance Testing?

Certain lighting, HVAC controls, air distribution ducts, envelope features, and equipment require *acceptance testing* at the time of commissioning. Acceptance testing, also known as *acceptance criteria verification*, is a test performed *in the field* to determine if specific requirements are met for optimal operational efficiency and to avoid premature system failure. To certify compliance with the acceptance requirements, *NRCA Certificate of Acceptance* documents must be completed and **collected by field inspectors** prior to the permit closing. This permit guide is intended to assist in keeping track of those forms.

Steps for collecting Certificate of Acceptance documents:

To be completed by	Instructions
Permit Tech	1. Determine scope of project and building features being installed.
Permit Tech	2. For each question, checkmark “Yes”, below, for applicable building features.
Field Inspector	3. For applicable features check marked “Yes”, checkmark “Collected” after corresponding signed and completed Certification of Acceptance document have been collected
Field Inspector	4. If it is agreed that an acceptance test is not needed, then remove “Yes” checkmark.

Do not close the permit until the installed feature meets the acceptance testing requirements and the form is completed and signed.

Type	Permit Tech		Field Inspector	
	Building Feature	Yes	Certificate of Acceptance document	Collected
Mechanical	Outdoor Air – Will there be a space that is required to have mechanical ventilation being installed?		NRCA-MCH-02-A	
	Constant Volume Single Zone HVAC – Are constant, single zone, unitary air conditioner and/or heat pump systems being installed?		NRCA-MCH-03-A	
	Air Distribution Duct Leakage Testing – Are new or replaced space conditioning system ducts serving new or existing buildings being installed?		NRCA-MCH-04-A	
	Air Economizer Controls – Will cooling fan systems with a design total mechanical cooling capacity over 54,000 Btu/hr be installed?		NRCA-MCH-05-A	
	Demand Control Ventilation - Are HVAC systems with an air economizer, a design occupant density greater than or equal to 25 people per 100 sq. ft., or either a single zone system with any controls or a multiple zone system with direct digital controls to the zone level required?		NRCA-MCH-06-A	
	Supply Fan Variable Flow Controls – Will variable air volume systems be installed?		NRCA-MCH-07-A	
	Valve leakage Test – Are hydronic variable flow, water-cooled air conditioners and/or hydronic heat pump systems being installed?		NRCA-MCH-08-A	
	Supply Water Temperature Reset Controls – Are systems with a design capacity exceeding 500,000 Btu/hr supplying chilled or heated water being installed?		NRCA-MCH-09-A	
	Hydronic System Variable Flow Controls – Will hydronic variable flow systems be installed?		NRCA-MCH-10-A	
	Automatic Demand Shed Controls – Will HVAC Systems with Direct Digital Control to the Zone level be installed?		NRCA-MCH-11-A	
	FDD Package Direct Expansion Units – Are new air-cooled unitary direct-expansion units, equipped with an economizer and mechanical cooling capacity at AHRI conditions of greater than or equal to 54,000 Btu/hr being installed?		NRCA-MCH-12-A	
	FDD Air Handling Units and Zone Control Units - Are air handling units and/or zone terminal units being installed?		NRCA-MCH-13-A	
	Distributed Energy Storage DX-AC Systems – Are distributed energy storage DX-AC systems being installed?		NRCA-MCH-14-A	

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	Building Feature	Yes	Certificate of Acceptance document	Collected
	Thermal Energy Storage Systems – Will thermal energy storage systems be installed?		NRCA-MCH-15-A	
	Air Supply Temperature reset Controls – Will a space-conditioning systems supplying heated or cooled air to multiple zones will be installed?		NRCA-MCH-16-A	
	Condenser Water Temperature reset Controls – Will new condenser water temperature reset controls be installed on new or existing systems?		NRCA-MCH-17-A	
	Energy Management Control Systems – Will an energy management control system be installed?		NRCA-MCH-18-F	
Envelope	Fenestration – Will site-built windows be installed?		NRCA-ENV-02-F	
Indoor Lighting	Lighting Controls – Will luminaire addition, alteration, skylights, modifications in-place (>40 fixtures), lighting wiring alterations and illuminated signs be installed?		NRCA-LTI-02-A	
	Automatic Daylighting Controls – Will a luminaire addition be installed?		NRCA-LTI-03-A	
	Demand Response Lighting Controls – Will luminaire addition/alteration take place and is the building larger than 10,000 sf?		NRCA-LTI-04-A	
	Institutional Tuning Power Adjustment Factor – Did the lighting calculations claim an institutional power adjustment factor?		NRCA-LTI-05-A	
Outdoor Lighting	Outdoor Lighting Controls – Does the scope include replacing 10% or more luminaires, incandescent luminaire >100 watts, luminaire rated >150 watts, sales frontage lighting, sales lots and canopies, façade lighting, hardscape lighting, additional lighting power allowance or sign lighting?		NRCA-LTO-02-A	
Process	Compressed Air Systems – Are compressed air systems being installed?		NRCA-PRC-01-F	
	Kitchen Exhaust Systems – Will kitchen exhaust systems be installed?		NRCA-PRC-02-F	
	Garage Exhaust Systems – Are enclosed parking garages in the scoped?		NRCA-PRC-03-F	
	Evaporator Fan Motor Controls – Will new fan-powered evaporators used in coolers and freezers be installed?		NRCA-PRC-04-F	
	Evaporator Condenser Controls – Will new fan-powered evaporative-cooled condensers on new refrigeration systems be installed?		NRCA-PRC-05-F	
	Air Cooled Condenser Controls – Will new fan-powered air-cooled condensers on new refrigeration systems be installed?		NRCA-PRC-06-F	
	Variable Speed Compressor – Are compressor systems utilized in refrigerated warehouses being installed?		NRCA-PRC-07-F	
	Electric Resistance Under Slab Heating System – Will electric resistance under slab heating will be installed?		NRCA-PRC-08-F	
	Elevator Lighting and Ventilation Controls – Will an elevator cab be installed?		NRCA-PRC-07-F	
	Escalator and Moving Walkways Speed Control – Will an escalator or moving walkway be installed?		NRCA-PRC-07-F	