# INSTALLER and INSPECTOR QUICK-REFERENCE: 2022 NRCA-MCH-18-A

## **Energy Management Control System Acceptance**

## Purpose and Scope of the Test

The purpose of this acceptance test is to ensure that when an energy management control system (EMCS) is installed for the purpose of compliance with the Building Energy Code, it is properly installed, operational, and in compliance with the relevant requirements in the Energy Code.

## Test trigger

Newly Constructed and Additions/Alterations: Non-Residential Spaces with Energy Management Control Systems to address the requirements for multi-level lighting controls, automatic lighting shut-off controls, automatic daylighting controls, lighting demand response controls, or cooling tower water quality controls.

The NRCA-MCH-11 (Automatic Demand Shed Control) must be completed prior to performing this test.

#### **Relevant Energy Code References and Required Compliance Documents**

Title 24, Part 6 of the California Building Code, Building Energy Efficiency Standards (Energy Code) sections 110.2(e), 120.2(h), 120.5(a)17, 130.1(b), 130.1(c), 130.1(d), 130.1(f), 130.4(b), 130.5; NA7.7.2; and NRCC-MCH-E Table I.

#### Who Can Perform the Test

This test must be performed by an acceptance test technician certified by a CECapproved Acceptance Test Technician Certification Provider, using compliance document NRCA-MCH-18-A.

#### **Required Tools**

No additional instrumentation required for testing.

## **Estimated Time to Complete Test**

Construction Inspection: 2 hours

## **Potential Issues and Cautions**

IF the EMCS is used as a fault management application for an anemometer failure detection on an exhaust fan system serving a laboratory or factory greater than 10,000 CFM, THEN verify that NRCA-PRC-14-F is completed.

IF the EMCS is used as a fault management application for a contaminant sensor failure detection on an exhaust fan system serving a laboratory or factory greater than 10,000 CFM, THEN verify that NRCA-PRC-14-F is completed.

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## **Inspection Enforcement**

#### Required:

- Verify that the room (or zone) is installed with an occupancy sensor that is tied into both the lighting controls (section 130.1(c)) and HVAC controls (section 120.2(e)3). Refer to the ENFORCEMENT AGENCY approved designs, Compliance Documentation NRCC..., NRCI....
- Verify that the occupancy sensor is placed so that it can detect occupants in the room (or zone) without obstruction.
- Confirm that the mechanical system is served by an independent signal than the lighting controls.
- Verify that the room (or zone) is designated as eligible to shut-off ventilation while in occupied-standby mode for ventilation on Table 120.1-A (indicated by an "F" on the Table).

#### Acceptance Criteria

• The room (or zone) must pass the functional tests outlined on the NRCA-MCH-18-A.