

**INSTALLER and INSPECTOR QUICK-REFERENCE:  
2022 NRCA-PRC-15-F  
Fume Hood Automatic Sash Closure System**

**Purpose and Scope of the Test**

Verify that the manual and automated controls of the fume hood and sash operate in compliance with the Energy Code and the ENFORCEMENT AGENCY approved design.

**Test Trigger**

Newly constructed laboratory fume hoods with vertical only sashes, located in fume hood intensive laboratories, as defined in the Energy Code.

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

Title 24, Part 6 of the California Building Code, Building Energy Efficiency Standards (Energy Code) sections 140.9(c)4; NA7.17; NRCC-PRC-E Table O.

**Who Can Perform the Test**

There are no restrictions. The test is typically performed by the startup technician responsible for programming the setpoints in the control system.

*Note: The contractor can complete the test, and ATTCP certification is not required for this test at this time.*

**Required Tools**

- Scale small enough to be placed in the path of the closing sash capable of measuring a 10 lbs. force.

**Estimated Time to Complete Test**

Construction Inspection: 0.25 hours per hood

Functional testing: 5 minutes per hood

**Potential Issues and Cautions**

None.

**Inspection Enforcement**

- The fume hood sash zone presence sensor has a valid factory calibration certificate.
- Each fume hood sash obstruction sensor has a valid factory calibration certificate.
- Presence sensor has been located and adjusted to minimize false signals, and the pattern does not enter adjacent zones.
- Sash obstruction sensor has been installed per manufacturer instructions.
- Presence sensor has been installed per manufacturer instructions.

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**Acceptance Criteria**

The fume hood automatic sash closure system passes if found to satisfy all of the following:

- The automatic sash closure system shall have a dedicated zone presence sensor that detects people in the area near the fume hood sash and automatically closes the sash within 5 minutes of no detection.
- The automatic closing force of the sash must not exceed 10 lbs.
- The automatic sash closure system shall be equipped with an obstruction sensor that prevents the sash from automatic closing with obstructions in the sash opening. Obstruction sensor shall be capable of sensing transparent materials such as laboratory glassware.
- The automatic sash closure system shall be capable of being configured in a manual open mode where once the sash is closed, detection of people in the area near the fume hood by the zone presence sensor does not open the fume hood sash.