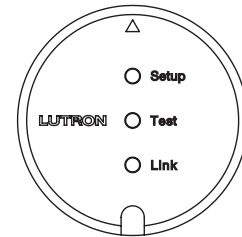


Radio Window sensor (for North America)

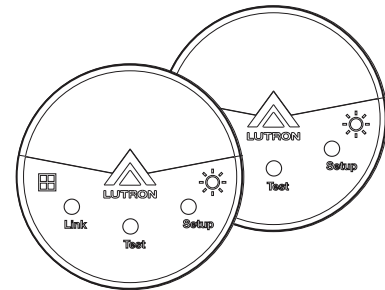
Lutron's Radio Frequency enabled Radio Window sensor enhances the performance of Lutron® shading systems by working at the window level to communicate current exterior light conditions to the system. This enables shades to respond appropriately, improve comfort, and enhance the system's energy saving potential. The sensor maximizes natural daylight, available views, and occupant comfort when shadows are cast as well as when dark cloudy or bright sunny weather conditions prevail. The battery powered sensor features easy installation and low maintenance costs.

Features

- Works in Quantum® systems with Hyperion™ solar-adaptive shading technology, opening shades during cloudy conditions or in response to shadows from neighboring buildings, and lowering them in overly bright conditions
- Operates in HomeWorks® QS systems, allowing for easily programmable light-level thresholds that trigger conditional logic events or system presets to control lights and/or shades
- Maximizes exterior views and occupant comfort
- Simple setup in Quantum® or HomeWorks® QS software
- Software enables the ability to adjust thresholds, timeouts and shade movement frequency
- Light range 0–107,000 Lux (0–10,000 fc)
- Uses Lutron's Clear Connect® technology
- Front accessible buttons make addressing easy
- Small form factor allows it to blend in with surroundings
- 7 - 10 year typical battery life reduces maintenance costs
- RoHS compliant
- Works with tinted and reflective glass surfaces
- Multiple mounting methods available for various surfaces



WINDOW MOUNT



MULLION MOUNT (pair)

Job Name:

Model Numbers:

Job Number:

Specifications

Regulatory

Lutron® Quality Systems Registered to ISO 9001:2008

Standards

LRF2

- FCC certified (USA)
- IC certified (Canada)
- COFETEL (Mexico)

Power/Performance

- Operating voltage: 3 V_{DC}
- Operating current: 7 µA
- Requires one CR 2450 lithium battery (included)
- 10-year power failure memory (settings are stored during power loss)

Environment

- Temperature: 54 °F to 122 °F (12 °C to 50 °C)
- For indoor use only
- Relative humidity: < 90% non-condensing

Communication

- Radio Window sensors communicate to a Quantum® or HomeWorks® QS system only through a QSM
- A QSM can receive signals from any combination of up to 10 Radio Window sensors (window mount counts as 1, mullion mount counts as 2), or Radio Powr Savr™ daylight sensors
- In Quantum® systems, Radio Window sensors only provide data for the control of window shades on the same floor as where the sensors are mounted

Range

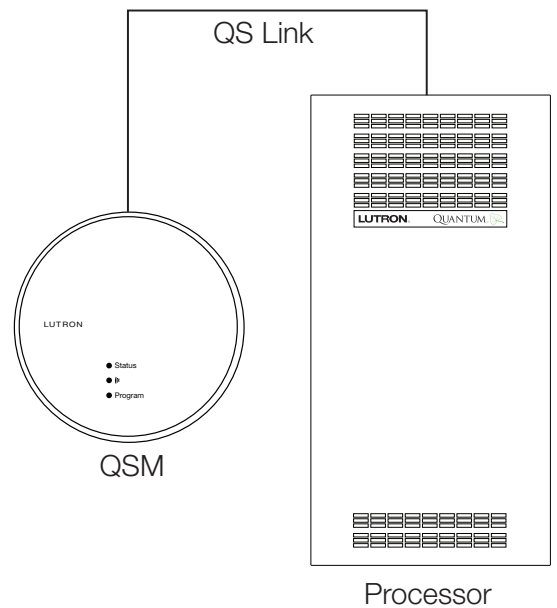
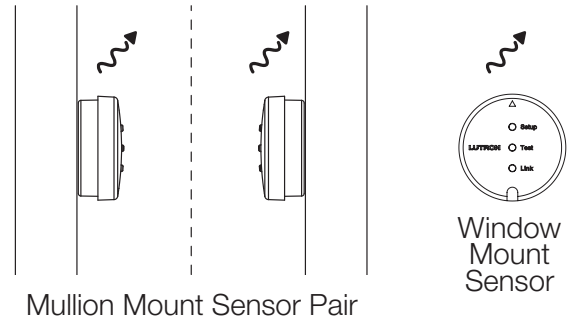
- QSM must be located within 60 ft (18 m) line of sight, or 30 ft (9 m) through walls of a sensor

NOTE: The 2 signals from a mullion mount sensor pair must be assigned to the same QSM

Compatible Systems

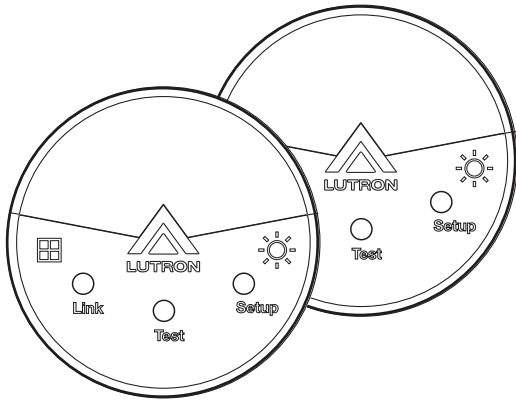
- For use with Quantum® or HomeWorks® QS systems only
- Contact Lutron at www.lutron.com for frequency or channel code compatibility with your particular geographic region, and for integrating with other Lutron shade and lighting products

Configuration



Job Name:	Model Numbers:
Job Number:	

MULLION MOUNT (pair)



Model Number

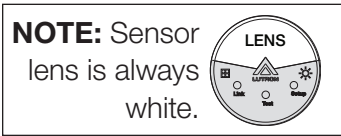
LRF2 - SSM -XX
 _____ Color Code
 _____ Frequency/Channel Code

Frequency/Channel Codes

2 = 431.0–437.0 MHz (US, Canada, Mexico)

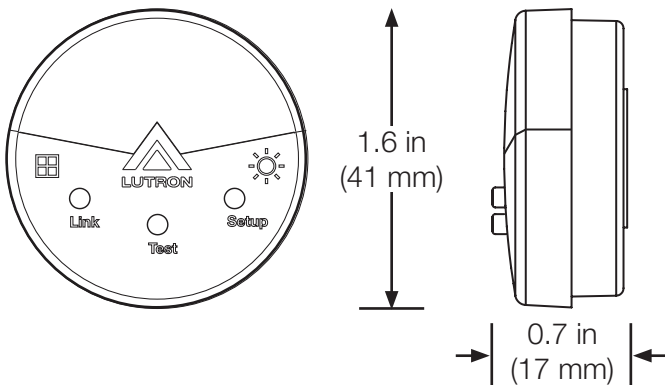
Color Code

- WH** = White
- BL** = Black
- BZ** = Bronze
- CLA** = Gray

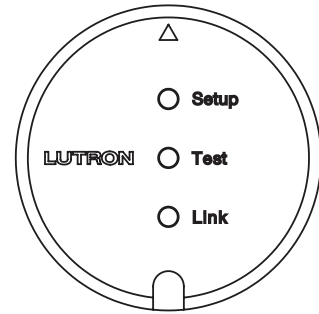


Custom colors are available and may result in additional lead time and cost.

Dimensions



WINDOW MOUNT



Model Number

LRFX - SSW -XX
 _____ Color Code
 _____ Frequency/Channel Code

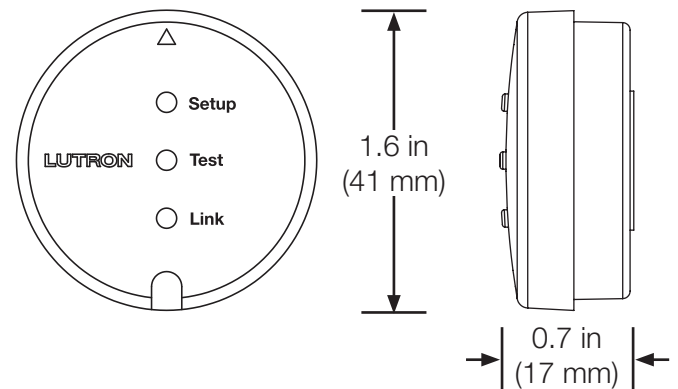
Frequency/Channel Codes

2 = 431.0–437.0 MHz (US, Canada, Mexico)

Color Code

- WH** = White

Dimensions



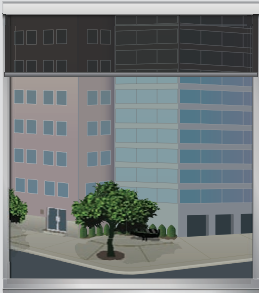
Job Name:	Model Numbers:
Job Number:	

Planning Sensor Layout Based on Conditions

When determining sensor layout, **each floor of each facade must be individually evaluated and planned.** No single sensor layout approach will work for every building, and many buildings will require different sensor layouts for different façades on different floors. The following guidelines will help you plan sensor layout for each facade on each floor of your building.

Plan **ONE sensor*** per façade, per floor where either of the following conditions prevails:

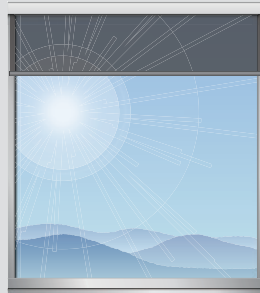
No exposure to direct or reflected sunlight...



Examples:

- Lower floors in a dense cityscape
- Windows with awnings, overhangs or side-blinds designed to eliminate all direct sunlight

No exposure to shadows...



Examples:

- Upper floors of a tall building
- Façades with no neighboring construction or shadow-casting objects

See *Façades with ONE Sensor* under **Planning Shade Alignment and Grouping** on the following page.

Plan **MULTIPLE sensors*** per façade, per floor where there is exposure to both direct sunlight and shadows:

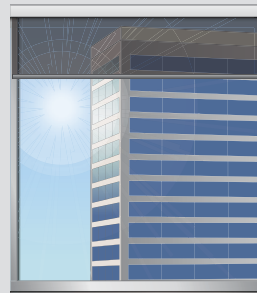
How many sensors are needed?

This is a performance decision. Sunlight and shadow conditions can vary greatly from building to building, floor to floor, and façade to façade. The information here is offered as a general guideline.

Fewer sensors ←————→ More sensors

For Typical Performance

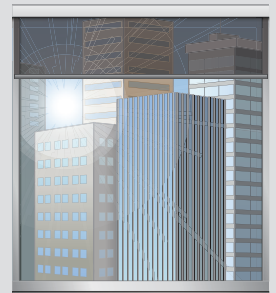
Place **one sensor*** every 30 linear feet of façade, or every 1-2 shade groups



Example: A single neighboring building of comparable size casts one wide shadow on this floor of this façade

For Highest Performance

Place **one sensor*** every 10 linear feet of façade, or every 1-2 windows



Example: Several neighboring buildings of various sizes cast shadows on this floor of this façade

See *Façades with MULTIPLE Sensors* under **Planning Shade Alignment and Grouping** on the following page.

*Sensor refers to a window-mount sensor or a mullion-mount sensor pair

NOTE: If more specific sensor placement assistance is needed, contact Lutron Shading Quotes for information about the availability of a shadow study.

Job Name:	Model Numbers:
Job Number:	

Planning Shade Alignment and Grouping

Façades with **ONE sensor:**



Alignment method: **Always Aligned**

What is it?

Shades in the same façade will all use the data from one sensor to always maintain alignment



Façades with **MULTIPLE sensors:**



Alignment option 1: **Smart Adaptive (recommended)**

What is it?

Exclusive Lutron® technology which enables shades in the same façade to share sensor data and intelligently adapt grouping to achieve the best possible balance of daylight autonomy and hembar alignment

Why choose it?

To achieve the best balance of daylight autonomy and exterior aesthetic



Alignment option 2: **Always Aligned**

What is it?

Shades in the same façade will share sensor data to always maintain alignment

Why choose it?

To prioritize exterior aesthetic above all else



Alignment option 3: **Independent**

What is it?

Shades in the same façade operate independently in response to individual sensor data

Why choose it?

To prioritize daylight autonomy above all else



Job Name:

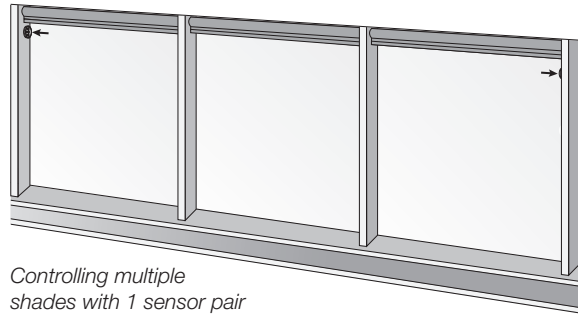
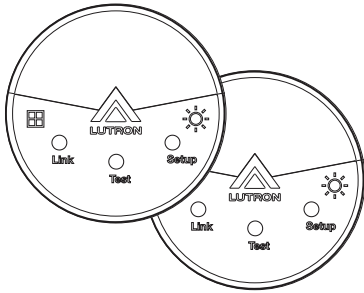
Model Numbers:

Job Number:

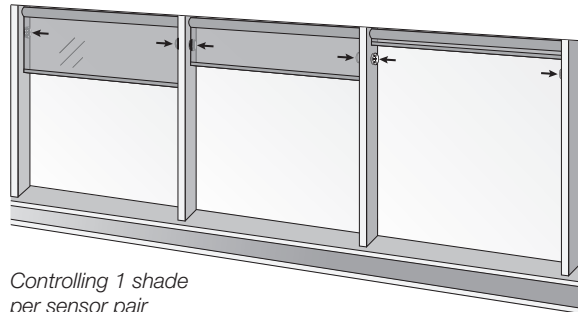
Sensor Options

Mullion Mount:

- Discreet mounting
- Sold as a pair
- Available in white, black, bronze, and gray



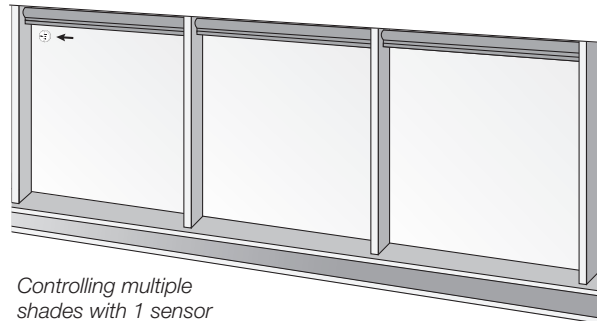
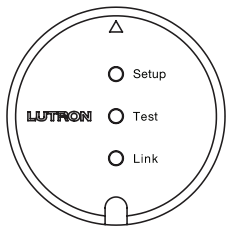
Controlling multiple shades with 1 sensor pair



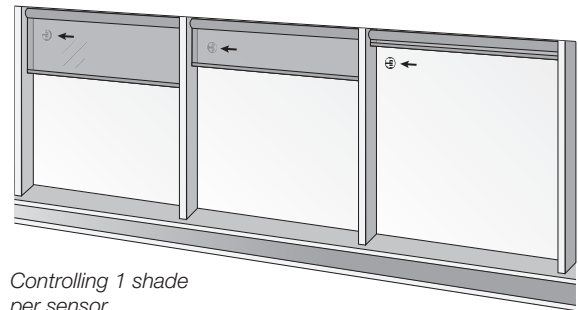
Controlling 1 shade per sensor pair

Window Mount:

- Mounts directly to window
- May be relocated to optimize shadow detection
- Sold individually
- Available in white



Controlling multiple shades with 1 sensor

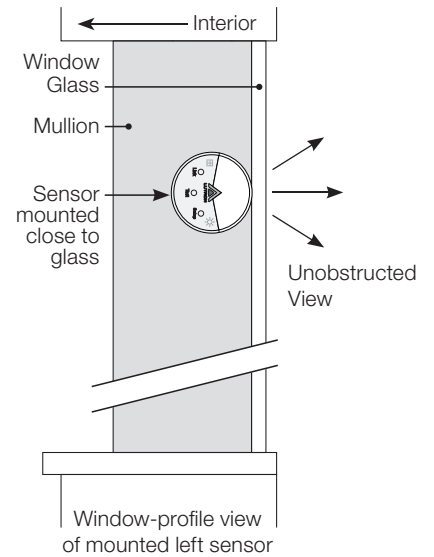


Controlling 1 shade per sensor

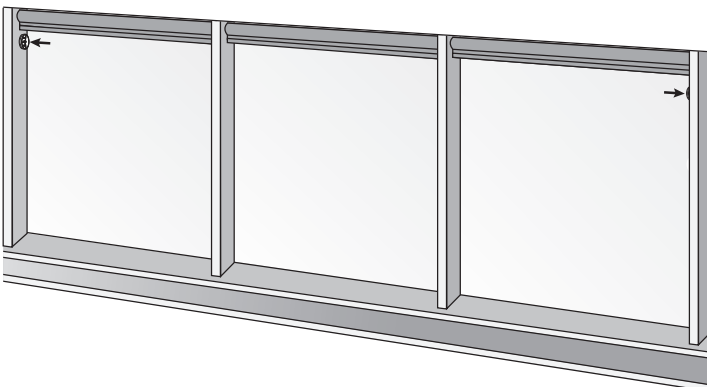
Job Name:	Model Numbers:
Job Number:	

Mounting on Mullion (LRFX-SSM-XX)

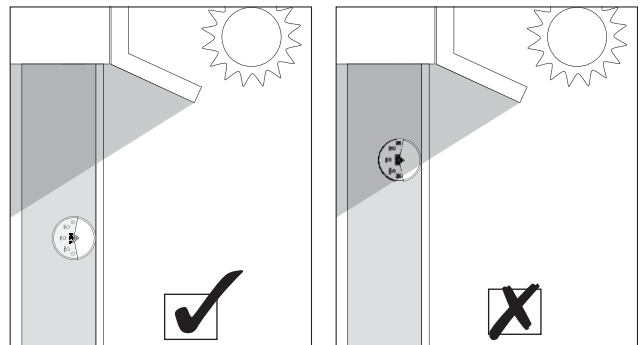
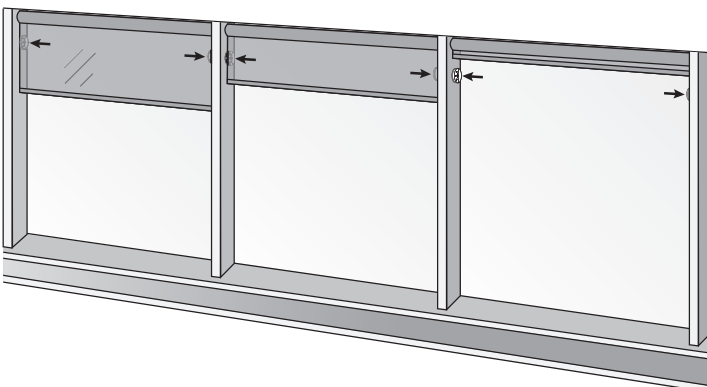
- Flush mount to window mullion near top of window, as close to the glass as possible, ensuring the exterior view is not obstructed
- Ensure the shade fabric does not come between the sensor and the window, and does not physically interfere with the sensor
- Mount to mullion using included double-sided adhesive (aluminum mullions only), or fasten to other mullion surface material using a #4 flat-head screw of appropriate length for the material thickness
- Mount sensors on opposite mullions of each shade group
- Ensure the arrow points directly toward the window glass
- Do not position the Radio Window sensor on a skylight, near an indirect lighting fixture, or below any object casting a shadow on the sensor
- Position the Radio Window sensor at a height that is accessible using a typical step ladder, (10 ft / 3 m or lower), in a location where it is unlikely to be touched, moved, or interfered with by the building's occupants
- Operating and performance specifications are based on mounting sensors on mullions at 90° to the window glass; contact Lutron prior to mounting on mullions at angles other than 90°



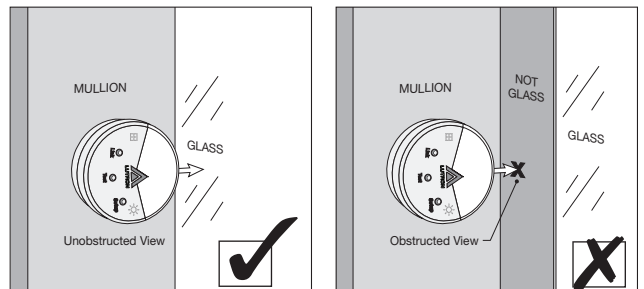
Controlling multiple shades with 1 sensor pair



Controlling 1 shade per sensor pair



Choose mounting locations where the exterior view is unobstructed, and fixed building features, window louvers, etc., do not cast persistent shadows

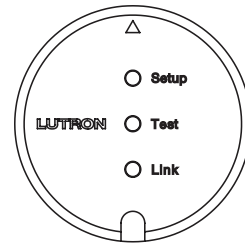


Sensors must have an unobstructed view through the window glass; in locations where there is framing between the mullion and the glass, mullion-mount sensors cannot be used

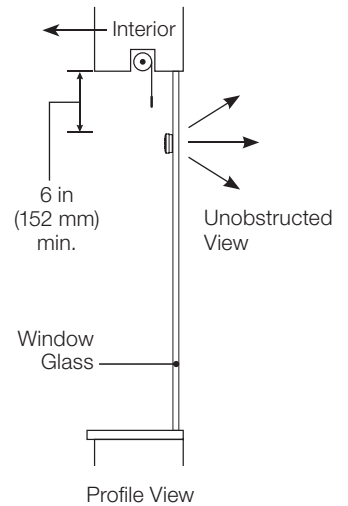
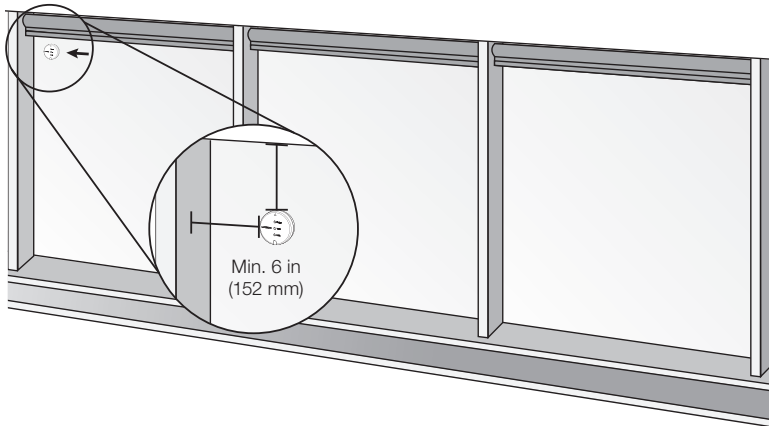
Job Name:	Model Numbers:
Job Number:	

Mounting on Window (LRFX-SSW-XX)

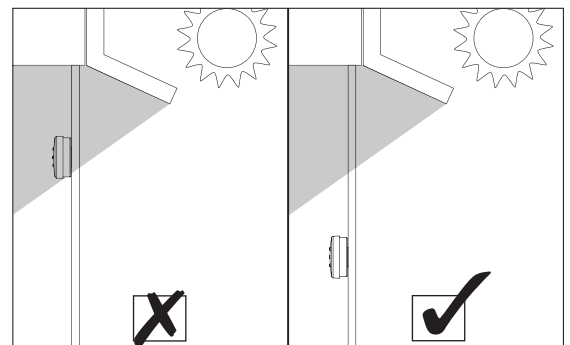
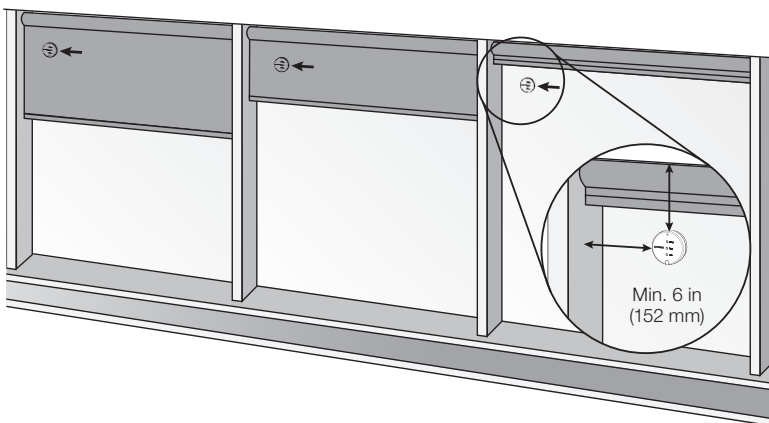
- Flush mount to window glass near top of window, ensuring the exterior view is not obstructed
- Ensure the shade fabric does not physically interfere with the sensor
- Mount at least 6 in (152 mm) away from large metal surfaces (e.g. metal window frames); metal objects will affect RF performance
- The arrow on the Radio Window sensor points up
- Do not position the Radio Window sensor on a skylight or above indirect lighting fixtures
- Position the Radio Window sensor at a height that is accessible using a typical step ladder, (10 ft / 3 m or lower), in a location where it is unlikely to be touched, moved, or interfered with by the building's occupants



Controlling multiple shades with 1 sensor



Controlling 1 shade per sensor



Choose mounting locations where the exterior view is unobstructed, and fixed building features, window louvers, etc., do not cast persistent shadows

Job Name:	Model Numbers:
Job Number:	