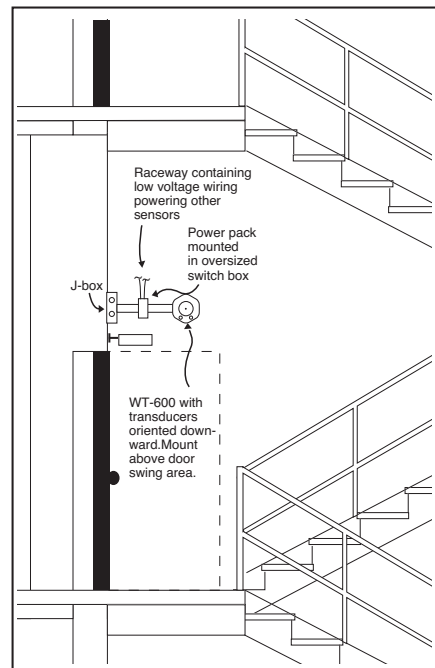
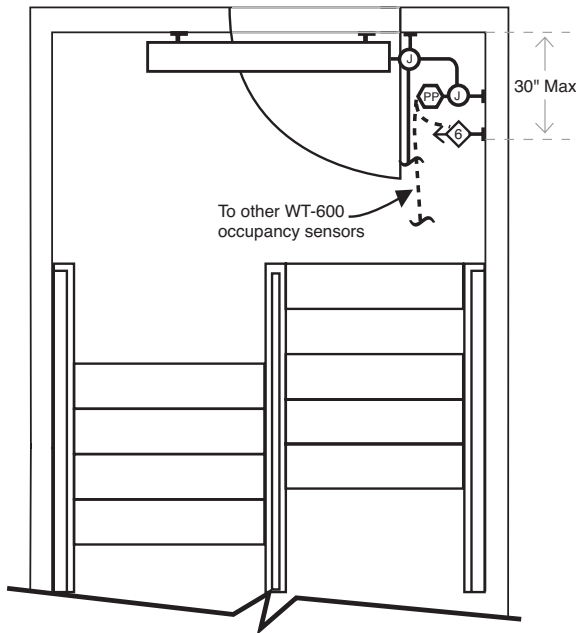


OF-S1.0 Stairwell: occupancy sensing

Control Needs	Solution	Application Description
Automatically turn lights ON/OFF based on occupancy	Ceiling mounted ultrasonic occupancy sensor (WT-600)	Space use: Emergency egress, general circulation Dimensions: 7' x 22' Ceiling height: 12' Windows: None Window blinds: None
Lights remain ON during power failure	Isolated relay in occupancy sensor	Lighting Wall mounted indirect/direct luminaires using 2 F32T8 lamps and 277 volt electronic ballasts. Emergency lighting is on an independent emergency circuit.
Egress safety	Normally closed power pack and isolated relay in occupancy sensor	

Design Considerations

The WT ultrasonic occupancy sensor is used to automatically turn lights on and off based on occupancy. The sensor is commonly located on the wall, instead of beneath the stair landing, because there is typically less vibration at the wall. Because the luminaire is mounted on the wall above the door, the sensor is mounted on the stairwell wall, above the door swing area (on the wall perpendicular to the door location). The occupancy sensor detects the motion of the stairwell door opening, and turns the lighting on. Because all wiring is surface mounted, the sensor is mounted to an outlet box using screw mounts, rather than the threaded nipple, and the power pack is mounted in an oversized switch box. Emergency lighting is supplied by a separate emergency lighting circuit.

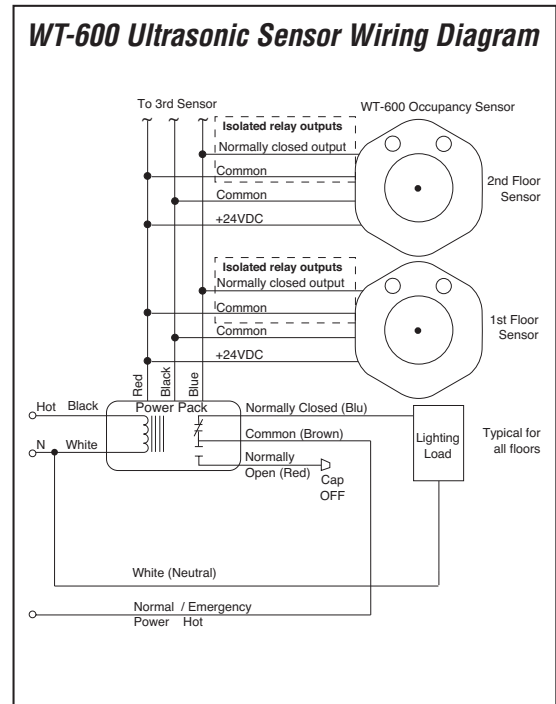
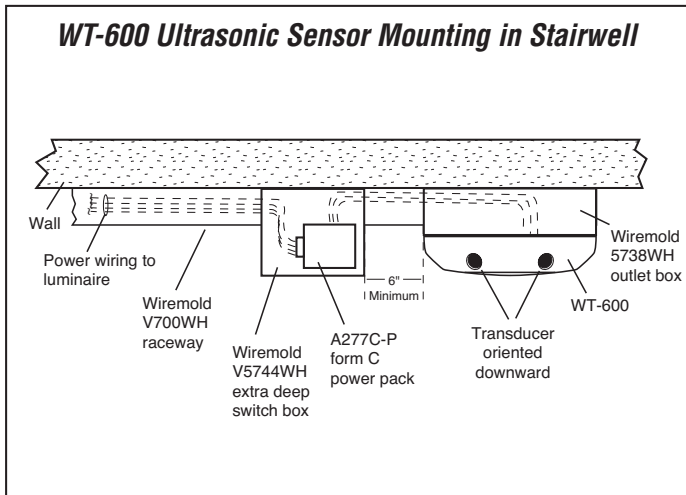


LEGEND	
	WT-600 ultrasonic occupancy sensor (wall mounted)
	A277C-P power pack
	Junction box (wall mounted)
	Wall mounted indirect/direct luminaire
	Low voltage wiring
	Line voltage wiring



OF-S1.0 Installation Notes

1. Mount the WT-600 sensor on a rigid, vibration-free surface, at least six inches from the power pack.
2. Mount sensor to Wiremold box V5738WH using the sensor's two screw slots.
3. Mount power pack in an over-sized switch box (Wiremold V5744) at least 6 inches from the outlet box and occupancy sensor. Each power pack can control a maximum of 4 WT-600 occupancy sensors. Wire all low voltage in parallel.
4. Mount the WT-600 so that it detects the door motion, and orient the transducers so that they are facing downward.
5. The WT-600 sensor is shipped with a factory preset time delay of 16 minutes and sensitivity set to 50%, both recommended for stairwells. Refer to installation instructions if adjustments are necessary.
6. Use a minimum of 22 gauge wire for low voltage wiring. See Technical Bulletin TB-124 on Voltage Loss at www.wattstopper.com.
7. Confirm night light/egress lighting requirements with local code officials.
8. Use the normally closed contact on the form C power pack and the normally closed contact in the WT-600 for fail-on operation.



Equipment Schedule

Catalog No.	Qty	Description
WT-600	1 per doorway	Ultrasonic occupancy sensor, 600 sq ft, 180° coverage, isolated relay
A277C-P	1 for every 4 sensors	Form C Power pack, 277 VAC, 60 Hz, normally closed and normally open contacts
V-5738WH	as needed	Oversized outlet box (by Wiremold)
V-5744WH	as needed	Extra deep switch box, white (by Wiremold)
V700WH	as needed	Raceway (by Wiremold)