

# INSTALLATION INSTRUCTIONS

## LUMENLINEAR™

LUMENLINEAR™  
ANOTHER  
LUMENRAIL®  
COMPONENT  
FOR LIFE SAFETY  
AND LIGHT.

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### LIGHTING SAFETY INSTRUCTIONS:

READ THE INSTALLATION INSTRUCTIONS IN THEIR ENTIRETY BEFORE INSTALLING. IT IS IMPORTANT TO LEAVE THESE INSTRUCTIONS WITH THE OWNER OR FACILITY MANAGER OF THE BUILDING FOR FUTURE REFERENCE.



SCAN QR CODE for technical information, downloads, instructions, and system configuration guides

- CAUTION: Installation must be performed by a licensed electrician and all wiring must conform to local, state and national electrical codes
- LED driver: 24VDC, Class 2, configured in a listed system of components
- Mount remote driver(s) in a NEMA rated enclosure
- Systems may be used in a wet location with a suitably rated enclosure and connections
- All electrical components must be grounded and Wagner Architectural recommends connection to GFCI circuit per local codes and/or the NEC
- This product must be installed in a manner consistent with its intended use
- For trouble-shooting, installation questions and replacement component orders, contact Wagner at 888-243-6914

**WARNING:** TO REDUCE RISK OF ELECTRIC SHOCK, TURN OFF THE ELECTRICAL SUPPLY BEFORE INSTALLING OR SERVICING THE LIGHT FIXTURES AND DRIVER. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/OR DAMAGE TO THE COMPONENTS.

### RAILING SAFETY INSTRUCTIONS:

WAGNER ARCHITECTURAL SYSTEMS ARE ENGINEERED TO MEET IBC, ADA AND NFPA WHEN PROPERLY INSTALLED.

- Check and confirm all local railing code requirements
- A structural analysis may be required per local codes and is the responsibility of the customer
- Verify with the railing manufacturer that intended retrofit installations will not degrade the integrity of their railing
- CAUTION: It is highly recommended that a professional railing installer be used for ANY rail system, illuminated or not
- Please contact the factory for field installations: 888-243-6914 or email us: [systems@mailwagner.com](mailto:systems@mailwagner.com)

### LUMENLINEAR SUPPLIED PARTS:



Linear Fixture,  
Length Varies



Installation Kit



Cast Stainless Steel  
Mounting Clips



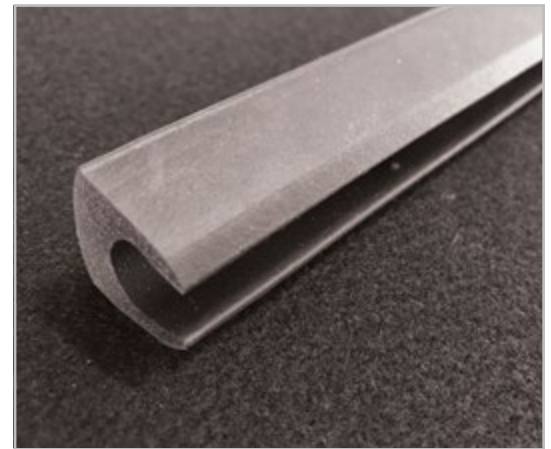
Self-Adhesive  
Spacers



Wet Location Rated  
Wire Nuts



Self-Adhesive  
Insulator Squares



Slot Rail Foam Gasket Insert

# INSTALLATION INSTRUCTIONS

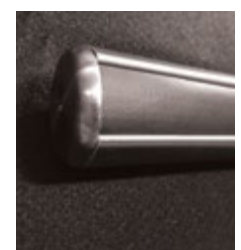
## LUMENLINEAR™

TO REDUCE RISK OF ELECTRIC SHOCK, TURN OFF THE ELECTRICAL SUPPLY BEFORE INSTALLING OR SERVICING

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- Run 24VDC positive (+) and negative (-) conductors (by others) down the handrail to the first fixture. Refer to the Lumenrail® Installation Instructions for conductor gauge/distance recommendations.
- Remove the adhesive backing from the spacers and place them flush with one edge, on the back of Lumenlinear housing. Place one spacer every 10-12" along the length for 1.5" and 1.66" diameter slot rail, to allow the conductors to run along the back on the opposite side when installed. 1.90" diameter slot rail requires a stack of (3) spacers at each location. Short fixtures may only require one spacer (or stack), centered on its length.
- Remove the adhesive backing from the insulator squares and place one across the legs of each of the clips. This prevents the conductors from being damaged by the mounting screw.
- Gently press the fixture into the slot rail at the specified location, leave uniform spacing (at least 3") from the end of the slot. Make sure the conductors are not pinched under the spacers.
- Press the clips into the slot rail, off either end of the fixture, with the mounting tangs facing the end-cap. Ensure the wires are not pinched under the legs. Slide the clips to the fixture so that the mounting tang engages into the end cap slot.
- Tighten the light clips using a 3/16" allen wrench.
- Trim conductors to the shortest working length.
- Using the provided wire nuts, or a similarly rated connector, attach the positive (+) 24VDC lead to the positive (+) red stripe lead from the fixture. Connect the negative (-) 24 VDC lead to the negative (-) white lead from the fixture. Ensure that the polarity of the conductors is maintained throughout the installation.
- Repeat steps 2 through 4 on the remaining Lumenlinear fixtures, using the provided wire nuts or a similarly rated connector. Ensure that the polarity of the conductors is maintained throughout the installation.
- After the system is tested, tuck the wires and connectors into the caprail.
- Carefully cut a piece of the foam gasket insert to completely fill the space between the clip and the next bracket or end cap. A small bead of silicone or RTV sealer should be used to adhere the hidden sides of the gasket into the slot.
- Repeat this process for the remaining mounting locations.
- At the end of each run, ensure that the 24VDC positive (+) and negative (-) conductors from the fixtures are isolated from each other and using the provided wire nuts, or a similarly rated connector, cap them to prevent contact with the rail.



LUMENLINEAR: QUANTITY, DISTANCE & CONDUCTOR SPECIFICATION EXAMPLE					
WIRE GAUGE	18 AWG	16 AWG	14 AWG	12 AWG	10 AWG
REMOTE DISTANCE TO LAST FIXTURE	18'	29'	46'	71'	120'

SUITABLE VALUES FOR 100W, 24VDC @500mA DRIVE CURRENT.  
Actual distances will vary depending on the total load, drive current, wire gauge and fixture spacing.  
Verify all distance calculations with overall design of system. Conductor supply and gauge specification by others.