

ORGARAIL[®] Illuminated Handrail INSERT System Patents pending



A unique slide-in Handrail lighting insert that is field adjustable and provides easy installation or replacement with almost no effort and less connections than traditional systems. The INSERT System can be installed into new or existing Round, Square, or Rectangular Handrails 1.5" - 4" ØD. Our patent pending slide-in system speeds up installation, making end-of-life maintenance easy, and converting traditional inserts and pucks into a linear and replaceable system with one connection every 66ft.

Project

Date

Insert Features

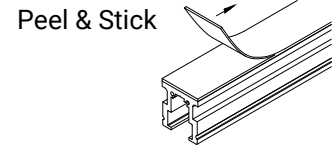
- Retrofit most manufacturers Cap Rails.
- Converts existing illuminated rails to an easily maintainable lighting system.
- Simple and secure Slide-in design.
- Compatible with 1.5" / 1.66" / 1.9" up to 4" ØD guardrails.
- Reduces electrical connections.
- Symmetric or Asymmetric lens.

OrgaLED[®] Features

- MAX LED run length of 66ft with remote power supply.
- Standard color temperatures in 2700K, 3000K, 3500K, 4000K, 5000K.
- Dimmable.
- 94 CRI+.
- 60,000 hour LED life.
- Low voltage 24VDC, Class 2.
- IP40; IP67 wet location.
- Warranty: 5 years.
- Bug Rating: B0-U0-G0.



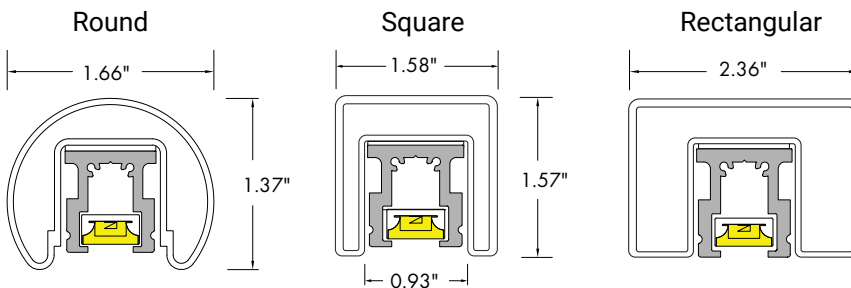
OrgaRail Insert SYSTEM features housing with slide-in OrgaLED LED installation.



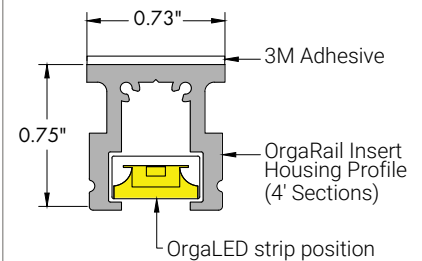
ORGARAIL[®] INSERT System

Patents Pending

Applications



Profile Dimensions



Specifications sheets are subject to change without notification.

ORGARAIL[®] Illuminated Handrail INSERT System

OrgaRail[®] Inserts enable long lengths of up to 66ft of flexible waterproof LED strips to be slid in from the power entry point and replaced just as easily. The insert profiles retain the strip securely without the need for additional lenses. (vandal proof lenses available as an accessory)

CONTINUOUS LONG RUNS:

OrgaRail[®] Post Top or Wall Mounts are designed to enable continuous feeds through the mounting support. When used with other manufacturers systems where the mounting components may block direct run through the insert profiles should be field cut to fit between posts with a one and a half inch gap each side of the posts, which enable the strip to transition from post to post section, by feeding it manually over the connection point.

OrgaRail Handrail Inserts

Designed Exclusively for OrgaLED Top LEDs

Part #	Description
OrgaRail[®] Illuminated Handrail Insert & Lens* (optional)	
012959	OrgaRail Illuminated Handrail Insert
012060	OrgaRail Illuminated Handrail Clear Lens
012060-A	OrgaRail Illuminated Handrail Insert Clear Lens / Asymmetric (0.93" Wide)

*Lenses are optional

OrgaLED Top LED

- Very Flexible (Bend radius >1.2")
- High Efficacy -127 lm/W
- High Density
- 24V DC - Low Voltage, Class 2
- Field Cuttable 1.96in
- 8 LED per cuttable section

PART NUMBER & SPECIFICATIONS

Part #	Color	CRI	lm/ft*	W/ft
OrgaLED[®] Deco Top				
041101	2700K	>94	35.1	0.3
041102	3000K	>94	36	0.3
041103	3500K	>94	36	0.3
041104	4000K	>94	38.1	0.3
041105	5000K	>94	38.1	0.3

OrgaLED[®] Power Top

041201	2700K	>94	116.8	1
041202	3000K	>94	120.1	1
041203	3500K	>94	120.1	1
041204	4000K	>94	127	1
041205	5000K	>94	127	1

OrgaLED[®] High Power Top

041301	2700K	>94	198.6	1.7
041302	3000K	>94	204.2	1.7
041303	3500K	>94	204.2	1.7
041304	4000K	>94	215.9	1.7
041305	5000K	>94	215.9	1.7

*Data based on PCB without housing

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Organic Lighting[®] | 12203 Magnolia Ave Suite 1, Riverside, CA 92503 | 626.969.6140 | organiclighting.com | 02/2023 V21



Project

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LED ACCESSORIES



Straight Connector Cable 16ft
IP40 / IP67
#041002



L-Connector Cable 16ft
IP40 / IP67
#041003



Jumper Cable 8in
IP40 / IP67
#041004



Top End Cap | IP40 / IP67
#041001



L-Splice Connector
IP40 / IP67
#041005



Inline Connector
IP40 / IP67
#041006



IP67 Waterproofing Kit
#011511

CABLE REQUIREMENT

The OrgaLED[®] LED strips need a minimum voltage at the beginning of the LED strip to function according to the specifications. The table below gives an indication of the maximum cable length based on the cable thickness. The standard OrgaLED[®] starter cable (20 AWG) has a cable length of 16ft.

In case the required length is longer than the length mentioned in this cable, it is recommended to cut the starter cable down to 1ft and splice a larger gauge cable. Please contact your distributor for a detailed cable calculation.

Cable X Information	LED Strip	Max. Cable Length
		24 V
20 AWG x 2	3.28 ft	303 ft
	16.4 ft	57 ft
	32.8 ft	36 ft
	49.2 ft	20 ft
	65.6 ft	16 ft
18 AWG x 2	3.28 ft	457 ft
	16.4 ft	86 ft
	32.8 ft	56 ft
	49.2 ft	35 ft
	65.6 ft	25 ft
16 AWG x 2	3.28 ft	914 ft
	16.4 ft	172 ft
	32.8 ft	90 ft
	49.2 ft	60 ft
	65.6 ft	40 ft
14 AWG x 2	3.28 ft	1521 ft
	16.4 ft	287 ft
	32.8 ft	140 ft
	49.2 ft	96 ft
	65.6 ft	70 ft

POWER SUPPLIES - 24V

Forward Phase, Reverse Phase, & 0-10V Dimming Drivers. Remote enclosures available.

PART NUMBER & SPECIFICATIONS

Part #	Ingress	Voltage	Wattage	Dimensions (inches)	Description
POWER SUPPLIES - 24V					
045001	IP67	100-305V	20W	7.6 x 1.18 x 0.79	Dimmable LED Driver
045002	IP67	100-305V	40W	5.83 x 1.57 x 0.87	Dimmable LED Driver
045003	IP67	120-277V	60W	6.3 x 2.24 x 1.5	Dimmable LED Driver
045004	IP67	120-277V	75W	6.3 x 2.24 x 1.5	Dimmable LED Driver
045005	IP67	120-277V	96W	7.6 x 2.24 x 1.5	Dimmable LED Driver
045006	IP67	120-277V	200W	10.1 x 3.03 x 1.8	Dimmable LED Driver
045007	IP67	120-277V	300W	11.9 x 3.03 x 1.8	Dimmable LED Driver

Part #	Ingress	Dimensions (inches)	Description
ENCLOSURES			
045008	IP67	9.4 x 2.6 x 1.9	20W Enclosure
045009	IP67	11.02 x 4.05 x 2.2	40W Enclosure
045010	IP67	11.02 x 4.05 x 2.2	60W Enclosure
045011	IP67	11.02 x 4.05 x 2.2	75W Enclosure
045012	IP67	11.02 x 4.05 x 2.2	96W Enclosure
045013	IP67	16.7 x 9.8 x 2.3	200W Enclosure
045014	IP67	16.7 x 9.8 x 2.3	300W Enclosure

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ORGARAIL. Illuminated Handrail INSERT System

REPLACING INDIVIDUAL LIGHTING FIXTURES: (other manufacturers rails)

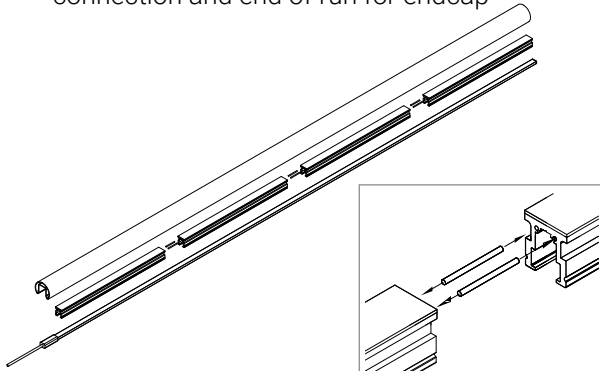
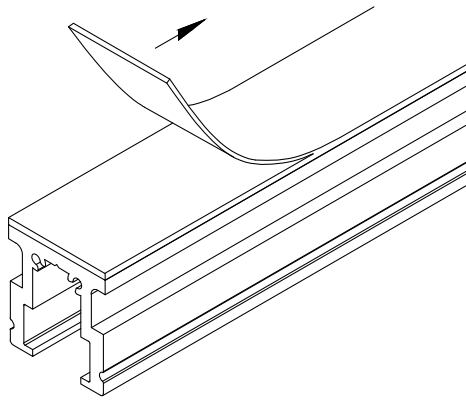
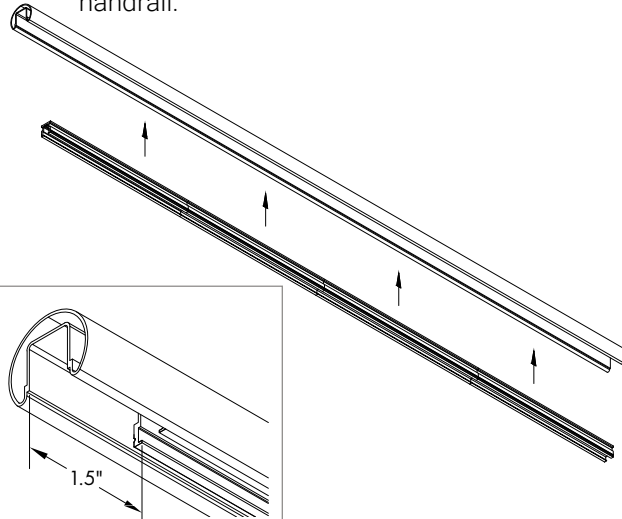
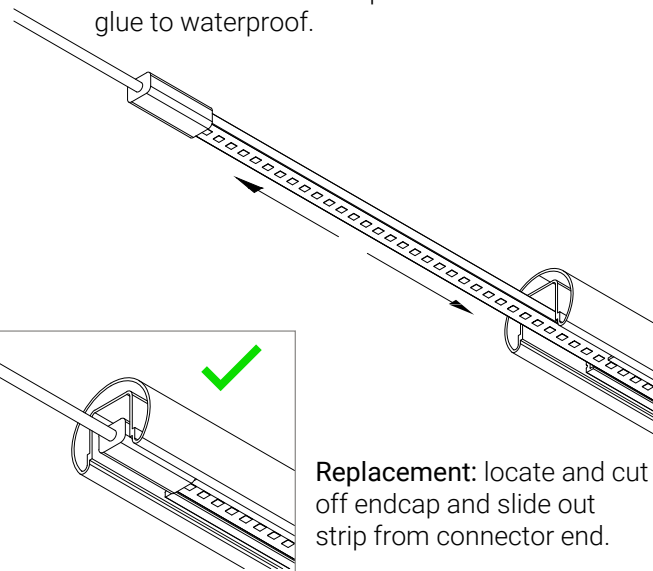
Where an existing illuminated railing light with individual light fixtures between posts or wall mounts is being replaced, the insert profile and strips can be cut to length and connected to existing through wiring connections.

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Installation Guide

VHB tape is provided but alternative methods such as drilling and screws may be preferable on retrofits according to the existing railing installation. Consult with Organic Lighting if in doubt.

<p>1</p> <ol style="list-style-type: none"> 1. Field cut and connect OrgaRail inserts to match the full length of the handrail or section and insert dowel pins provided before removing VHB tape. (Alternative installation - drill insert and tap rail.) 2. Measure to leave 1.5" gaps for power feed connection and end of run for endcap 	<p>2</p> <ol style="list-style-type: none"> 1. Take off 3M VHB adhesive backing. 
<p>3</p> <ol style="list-style-type: none"> 1. Leave 1.5" gap for all power feed connections and at end of run for endcap. 2. Firmly press directly in the center of the handrail. 	<p>4</p> <ol style="list-style-type: none"> 1. Slide OrgaLED strip into the OrgaRail Insert and attach endcap with silicone glue to waterproof.  <p>Replacement: locate and cut off endcap and slide out strip from connector end.</p>