

# OrgaRail® - Illuminated Handrail

ROUND Ø 1.90" Patent Pending



## FEATURES

- Heavy duty stainless steel AISI 316 Satin Brushed.
- Dimensions: 1.9" OD
- Curved handrail (10ft radius or greater) is available upon request Channel for continuous OrgaLED® Top LED strip
- Energy efficient and simply slides into the internal aluminum channel
- Wall and Post Mounts are designed for quick and easy installation
- Available in various colors and luminous intensities
- Made in the USA
- ADA Compliant

## MOUNTING

Wall or post mounted, glass infill option or glass mounting.

\*Glass by others.

## OPTICS

OrgaLED® LED strips available in multiple intensities:

- Low output (Deco 33-39 lm/ft)
- Medium output (Power 113-122 lm/ft)
- High output (Power 227-257 lm/ft)
- Photon (275 -1037 lm/ft)
- Available in 2700K, 300K, 3500K, 4000K, 5000K, Red, Green, Blue, RGB and Wildlife Amber.

## CONNECTING

The maximum unit length of the handrail is 16.4ft and can easily be connected mechanically or by welding. All handrails can be applied indoor and outdoor.

## CURVES & SPIRAL CURVES

2D curved rails create horizontal curved rails. 3D curved rails for spiral stairways require horizontal and vertical bending with special alignment techniques with welded and polished sections according to the spiraling details.

3D Curved Rails for Spiral Stairways



## HOW TO SPECIFY YOUR ENERGY EFFICIENT HANDRAIL

As each lighting project is unique, all the components of the OrgaRail® illuminated Handrail are professionally customized. Therefore, it is of great importance to provide fully dimensioned plans, DWG files and detailed drawings, in addition to the useful nomenclature below.

## ILLUMINATED HANDRAIL TECHNICAL DETAIL

Profile	Length	LED	CCT	Control	Beam	Mount	Lens	Connector	Options
<u>HR2</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____
HR2 1.9"	X Length in feet	D Deco P Power HP High Power P1 Photon 1200 P2 Photon 2000 P3 Photon 3000 P4 Photon 4000	27 2700K 30 3000K 35 3500K 40 4000K 50 5000K RG RGB R Red G Green B Blue A Wildlife Amber	ND Non Dimming D1 0-10V TRI TRIAC	A Asym. S Sym.	P Post W Wall	LC Clear LF Frosted LA Asym.	I Interior (IP40) E Exterior (IP67)	PR Post Return WR Wall Return EC End Cap CV2D Curved 2D CV3D Curved 3D(spiral) FL Flange Base Kit N None

Specifications may be modified or improved without notification.

Project \_\_\_\_\_

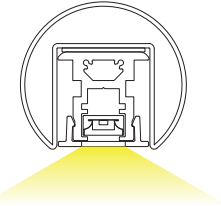
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## AVAILABLE PROFILES

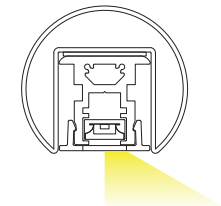
### SLIDE-FED (OrgaLED Top only)

Patent Pending

#### SYMMETRIC

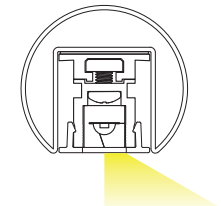


#### ASYMMETRIC

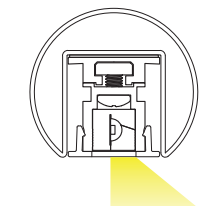


### PUSH-FIT (OrgaLED Side only)

#### STRAIGHT



#### 2D/3D BENDING



## CUSTOM FINISH

Powder Coat \_\_\_\_(RAL #)  
Alloy Composition Coating  
Information available upon request.



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ROUND Ø 1.90"

## MOUNTINGS & ACCESSORIES

Project

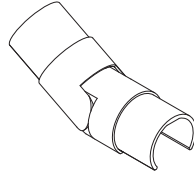
## STANDARD & CUSTOMIZED ANGLES

There are three standard angles for the OrgaRail® Handrails: 90°, Adjustable Up and Adjustable Down angles. Other angles can be customized upon request.

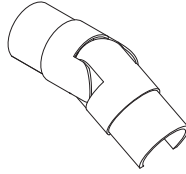
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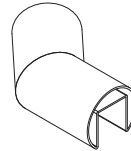
90° Post Return



Adjustable Angle Up



Adjustable Angle Down



Custom Angle

## LENS



Clear Lens



Frosted Lens



Asymmetric Lens

## INFILLS



Glass Bracket  
(glass by others)



Cable Infill



Railing Infill

## ADDER ACCESSORIES

Profile	Infills
HR2	_____
HR2 1.9"	<b>GB</b> Glass Brackets (sizes Ø1/4, Ø5/16, Ø3/8, Ø9/16) <b>RL</b> Railing (sizes Ø1/2, Ø5/8) <b>CL</b> Cable (sizes Ø1/8, Ø5/32, Ø1/4)

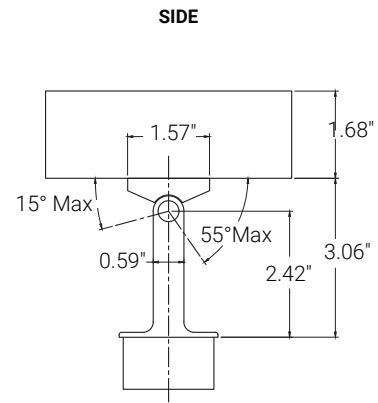
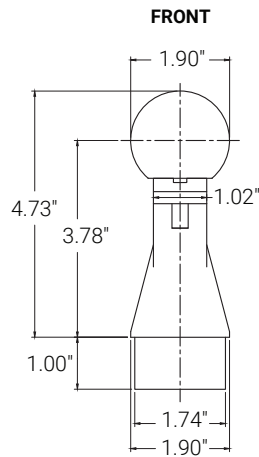
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# OrgaRail® - Illuminated Handrail

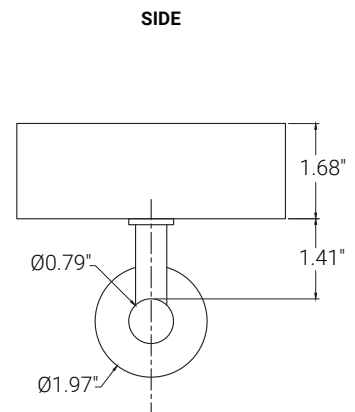
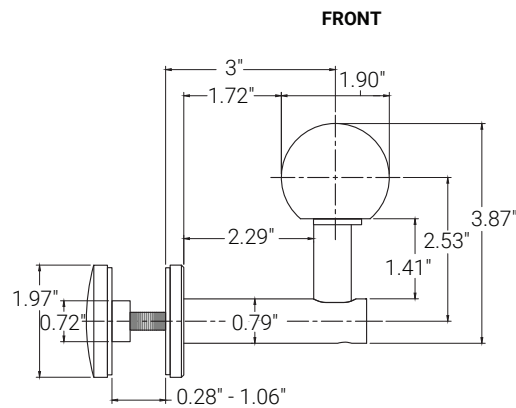
ROUND Ø 1.90"

## DIMENSIONS

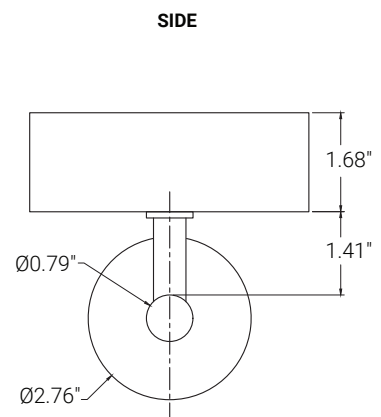
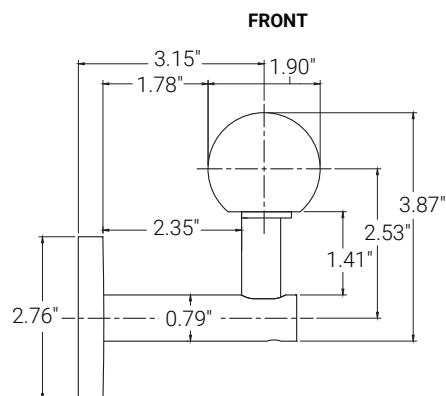
### POST MOUNT



### GLASS MOUNT



### WALL MOUNT



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# OrgaRail® - Illuminated Handrail

ROUND Ø 1.90"

## SYMMETRIC LED STRIPS - 24V

Compatible with Slide-Fed Symmetric applications. Can be made Asymmetric with an Asymmetric lens. Flexible UV/IR protected PVC encapsulated LEDs with a continuous run length of up to 33ft.

### PART NUMBER & SPECIFICATIONS- SYMMETRIC

Part #	Color	CRI	Lm/ft	W/ft
<b>OrgaLED® Deco Top</b>				
041101	2700K	>94	41.4	0.3
041102	3000K	>94	42.6	0.3
041103	3500K	>94	42.6	0.3
041104	4000K	>94	45	0.3
041105	5000K	>94	45	0.3
<b>OrgaLED® Power Top</b>				
041201	2700K	>94	116.84	1
041202	3000K	>94	120.14	1
041203	3500K	>94	120.14	1
041204	4000K	>94	127	1
041205	5000K	>94	127	1
<b>OrgaLED® High Power Top</b>				
041301	2700K	>94	198.63	1.7
041302	3000K	>94	204.24	1.7
041303	3500K	>94	204.24	1.7
041304	4000K	>94	215.9	1.7
041305	5000K	>94	215.9	1.7
<b>OrgaLED® RGB Top</b>				
011602	RGB 160	>80	42	1.5
011597	RGB240	>80	71	2.2
<b>OrgaLED® Photon 1200 Top</b>				
051101	2700K	>94	275.4	1.8
051102	3000K	>94	291.6	1.8
051104	4000K	>94	324	1.8
051105	5000K	>94	315.9	1.8
051106	6500K	>94	311	1.8
<b>OrgaLED® Photon 2000 Top</b>				
051201	2700K	>94	459	3
051202	3000K	>94	486	3
051204	4000K	>94	540	3
051205	5000K	>94	526	3
051206	6500K	>94	518.4	3
<b>OrgaLED® Photon 3000 Top</b>				
051301	2700K	>94	703.8	4.6
051302	3000K	>94	745.2	4.6
051304	4000K	>94	828	4.6
051305	5000K	>94	807.3	4.6
051306	6500K	>94	794.9	4.6
<b>OrgaLED® Photon 4000 Top</b>				
051401	2700K	>94	918	6
051402	3000K	>94	972	6
051404	4000K	>94	1080	6
051405	5000K	>94	1053	6
051406	6500K	>94	1036.8	6

Specifications may be modified or improved without notification.

Project

Date

### ORGALED® TOP ACCESSORIES



**Straight Connector Cable 16ft**  
IP40 / IP67  
#041002



**L-Connector Cable 16ft**  
IP40 / IP67  
#041003



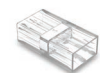
**Jumper Cable 8in**  
IP40 / IP67  
#041004



**Top End Cap | IP40 / IP67**  
#041001



**L-Splice Connector**  
IP40 / IP67  
#041005



**Inline Connector**  
IP40 / IP67  
#041006



**IP67 Waterproofing Kit**  
#011511

# OrgaRail® - Illuminated Handrail

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## ASYMMETRIC LED STRIPS - 24V

Push-fit LEDs. Designed for 2D/ 3D Bending and Asymmetric applications. Flexible UV/IR protected PVC encapsulated LEDs with a continuous run length of up to 33ft.

### PART NUMBER & SPECIFICATIONS

Part #	Color	CRI	lm/ft	W/ft
<b>OrgaLED® Deco Side</b>				
042101	2700K	>94	33.8	0.4
042102	3000K	>94	34.7	0.4
042103	3500K	>94	34.7	0.4
042104	4000K	>94	36.7	0.4
042105	5000K	>94	36.7	0.4
<b>OrgaLED® Power Side</b>				
042201	2700K	>94	101.3	1.2
042202	3000K	>94	104.1	1.2
042203	3500K	>94	104.1	1.2
042204	4000K	>94	110.1	1.2
042205	5000K	>94	110.1	1.2
<b>OrgaLED® High Power Side</b>				
042301	2700K	>94	194.1	2.3
042302	3000K	>94	199.6	2.3
042303	3500K	>94	199.6	2.3
042304	4000K	>94	211	2.3
042305	5000K	>94	211	2.3
<b>OrgaLED® RGB Side</b>				
011760	RGB 160	>80	30	1.5
011869	RGB240	>80	51	2.2

Project

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### ORGALED® PHOTON ACCESSORIES



**White Starter Cable 16ft**  
IP40 / IP67  
#051002



**Jumper Connector**  
IP40 / IP67  
#051004



**Top End Cap**  
IP40 / IP67  
#051001

### ORGALED® SIDE ACCESSORIES



**Side Starter Cable 16ft**  
IP40 | IP67  
#042002



**Side White Jumper Cable 8"**  
IP40 | IP67  
#042004



**Side End Cap | IP40**  
#042001

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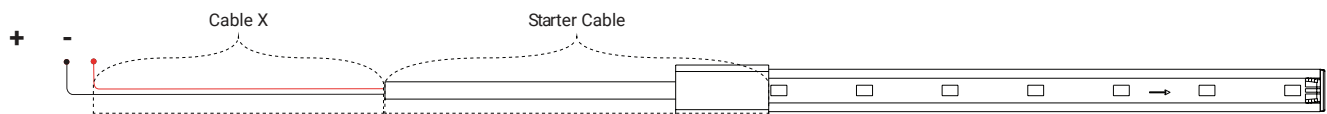
ROUND Ø 1.90"

## 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 and power supply voltage. The connection between the cable and LED strip is with an OrgaLED® Top starter cable with a cable length of 16ft.

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In case the required length is larger than the length mentioned in this cable, the supply voltage is different or if a detailed wire plan with branches is planned, please contact your distributor for a detailed cable calculation.



Cable X Information	LED Strip	Max. Cable Length
		24V
Standard 20 AWG x 2	3.28 ft	303 ft
	16.4 ft	57 ft
	32.8 ft	26 ft
18 AWG x 2	3.28 ft	457 ft
	16.4 ft	86 ft
	32.8 ft	40 ft
16 AWG x 2	3.28 ft	914 ft
	16.4 ft	172 ft
	32.8 ft	80 ft
14 AWG x 2	3.28 ft	1521 ft
	16.4 ft	287 ft
	32.8 ft	133 ft

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## POWER SUPPLIES, ENCLOSURES & CONTROLLERS

### PART NUMBER & SPECIFICATIONS

Part #	Ingress	Voltage	Wattage	Dimensions (inches)	Description
<b>POWER SUPPLIES - 24V</b>					
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

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

Part #	Ingress	Dimensions (inches)	Description
<b>ENCLOSURES</b>			
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

Part #	Description
<b>CONTROLLERS</b>	
011344	180W Digital Controller
011345	720W Digital Controller
011341	Digital Controller & Power Supply Combination
011420	Nicolaude DE3 DMX 512 Controller
011403	Nicolaude DINA-DR1 DMX 512 Controller
011396	Switchex 40W Wall Mount Dimmable Power Supply
011397	Switchex 100W Wall Mount Dimmable Power Supply



Project

Date



20W Dimmable Driver



75W Dimmable Driver



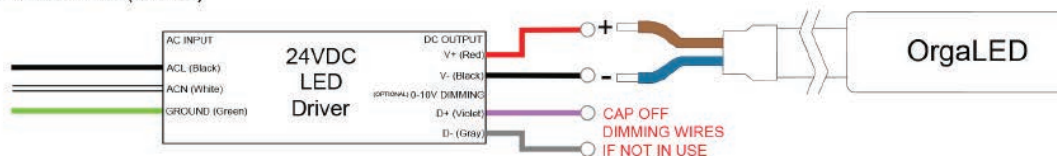
Digital Controller (180W, 720W)



Nicolaude DE3 DMX 512 Controller

## ELECTRICAL DETAILS

\*Regular Connection (Mono)



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