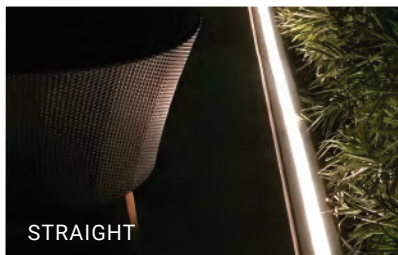




CURVED



STRAIGHT

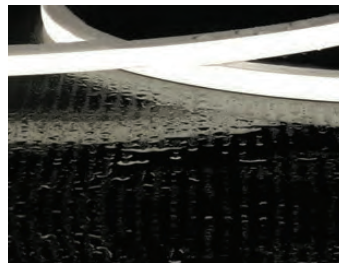


CIRCLE

Overcoming the high cost and limitations of drive-over lines of light is now easy with FortaCast® buriable polymer concrete drive-over lighting. The structural self-supporting fixtures can be installed in roadways, paths or stonework with the ease of installing pavers. Fixtures lock together to form unlimited continuous illuminated diffused straight or curved lines with IP68 submersible sealed LEDs. Encapsulated diffused LEDs are flood and typhoon proof. Walk-over models and drive-over applications supporting 10,000lb psi(4536kg) / 100,000 hours lifetime according to color and output required.

## AQUEON® LED Inside

- UL Listed to 2108-submersible.
- Permanent double molded connections.
- Low Energy -1.83W/ft | RGBW 2.74W/ft (6W/m | RGBW 9W/m)
- Circuit protects each LED individually
- Perfectly diffused illumination
- Continuous runs



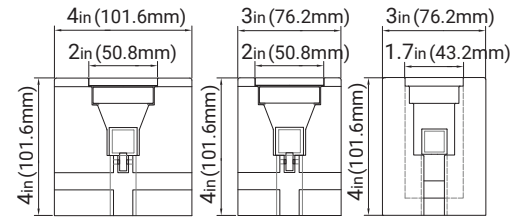
Vibration proof, and capable of withstanding the harshest environments. Aqueon® is a new type of flexible light. Superior standards, new materials, new methods, military grade components and advanced circuit design. Aqueon is flexible enough to slide into the FortaCast® from the beginning of the run where miniature rollers inside the channels guide the lighting strip to the end.

\* Specifications sheets are subject to change without notification. US Patent #11,644,163B2 | international patents pending. Organic Lighting | 12203 Magnolia Ave Suite 1, Riverside, CA 92503 | 626.969.6140 | organiclighting.com | 09/2023 V36

Project
Date

### STANDARD SIZES

\*Contact for Custom Shapes & Sizes.



(Enclosed)

### CONSTRUCTION

Interlocking reinforced Cast Polymer concrete, with drive-over tempered glass lens system with an impact resistant anti-slip surface layer. Suitable for harsh environments. Salt water and chemical resistant.

### MOUNTING

Inground installation in continuous lines, or individual fixtures. Drive-over applications up to 10,000 PSI. Future proof LED arrays of up to 49ft(14.9m) are maintainable and replaceable from one end of the run, without removing lenses.

### LED

Aqueon® 24VDC IP68 flexible continuous LED strip with submersible IP68 molded connectors, specially designed for harsh environments.

### COLOR TEMPERATURES

30K, 35K, 40K, 50K, Red, Blue, Green, Amber, RGB, RGBW, Tunable White; DMX programmable streaming digital pixel models.

### ELECTRICAL

Remote 24V drivers (Dimmable 0-10V). DMX controlled RGB or RGBW. Pixel controlled SPI.



## SPECIFYING FORTACAST DRIVE-OVER LIGHTING

Provide fully dimensional plans, DWG files and detailed drawings.

## INSTALLATION

FortaCast® sections are set in place, connect and lock together. Numbered sections are delivered to site, ready for installation. After the first section is in place, a special sealing compound is brushed to the matching ends and the second and subsequent sections are connected. After all construction and lenses are in place, the Aqueon LED lighting is installed from one end of the run. Miniature rollers guide the LED strip to the end of the run. If choosing to stain or paint, **concrete must cure for 28 days before applying.**



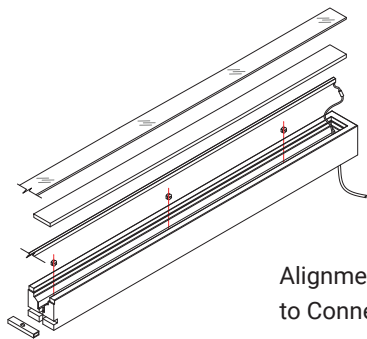
FortaCast® installed directly on paver bedding. FortaCast® can also be installed in existing concrete or bituminous paving using standard paving techniques.



Air and vapor barrier supplied for connected joints.

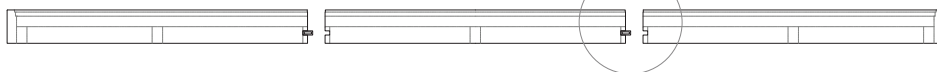
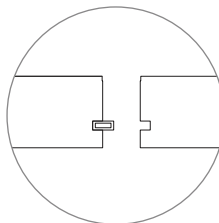


Adhesion Promoter for Lens



Interlocking sealing sections with inbuilt drainage. Self supporting - no secondary installation required

Alignment Interlocks to Connect Sections



### CONCRETE PAINT OPTIONS



## STEP 1 CHOOSE SERIES / SIZE / LENS / CCT / FINISH

STYLE	SIZE (WxHxL*)	LENS	CCT	FINISH
FCS FORTACAST STRAIGHT	3x4xL 3in x 4in x L (76.2mm x 101.6mm x L)	2 2in (50.8mm)	30 30K 35 35K 40 40K 50 50K	WH WHITE (blanco smooth) CU CUSTOM
FCC FORTACAST CURVED	4x4xL 4in x 4in x L (101.6mm x 101.6mm x L)	1 1.7in (43.2mm)	RGB RGB RGBW30 RGBW30K RGBW40 RGBW40K	
FCCR FORTACAST CIRCLE	CU Custom		TW TUNABLE WHITE RGBP RGB PIXEL RGBW30P RGBW30K PIXEL RGBW40P RGBW40K PIXEL	
	*(L=Specify in ft & inches)			

### BLANCO SMOOTH



Blanco Smooth is an extra fine stock finish. Upper trim edges can be colored to match pavers with permanent finishes, which are widely available and easily applied on site during installation. Bespoke Textures and a selection of custom concrete colors are available.

**Step 2** Choose your Power Supply.

**Step 3** Choose your DMX Controller (color changing only).

## Aqueon Diffuse Mono

Color	Max Length	LEDs/ft	LEDs/m	Lm/ft	Lm/m	W/ft	W/m
3000K	49.2ft / 15m	32	105	64	210	1.83	6
3500K	49.2ft / 15m	32	105	73.2	240.2	1.83	6
4000K	49.2ft / 15m	32	105	73.2	240.2	1.83	6
5000K	49.2ft / 15m	32	105	64	210	1.83	6

## Aqueon Diffuse RGB & RGBW

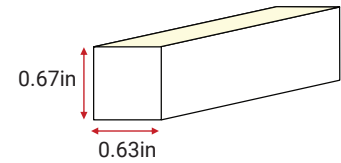
Color	Max Length	LEDs/ft	LEDs/m	Lm/ft	Lm/m	W/ft	W/m
RGB	49.2ft / 15m	22	72.2	45.7	150	1.83	6
RGBW-30K	33ft / 10.1m	25	82	74.7	245.1	2.74	9
RGBW-40K	33ft / 10.1m	25	82	74.7	245.1	2.74	9

## Aqueon Diffuse Tubable White

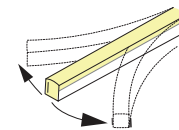
Color	Max Length	LEDs/ft	LEDs/m	Lm/ft	Lm/m	W/ft	W/m
2200-5700K	49.2ft / 15m	44	144.4	55	180.5	1.83	6

## Aqueon Diffuse Pixel RGB & RGBW - Color Chasing

Color	Max Length	LEDs/ft	LEDs/m	Lm/ft	Lm/m	W/ft	W/m
RGB	49.2ft	25	82	45.7	150	2.44	8
RGBW-30K	49.2ft	25	82	74.7	245.1	3.66	12
RGBW-40K	49.2ft	25	82	74.7	245.1	3.66	12



Horizontal Bending Model



## STEP 2 CHOOSE YOUR POWER SUPPLY

### Power Supplies - 24V

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

Part #	Ingress	Voltage	Wattage	Dimensions (inches / mm)	Description
045001	IP67	100-305V	20W	7.6 x 1.18 x 0.79 / 193 x 30 x 20.1	Dimmable LED Driver
045002	IP67	100-305V	40W	5.83 x 1.57 x 0.87/148.1 x 39.9 x 22.1	Dimmable LED Driver
045003	IP67	120-277V	60W	6.3 x 2.24 x 1.5/160 x 56.9 x 38.1	Dimmable LED Driver
045004	IP67	120-277V	75W	6.3 x 2.24 x 1.5/160 x 56.9 x 38.1	Dimmable LED Driver
045005	IP67	120-277V	96W	7.6 x 2.24 x 1.5/193 x 56.9 x 38.1	Dimmable LED Driver
045006	IP67	120-277V	200W	10.1 x 3.03 x 1.8/256.5 x 77 x 45.7	Dimmable LED Driver
045007	IP67	120-277V	300W	11.9 x 3.03 x 1.8/302.3 x 77 x 45.7	Dimmable LED Driver

75W Dimmable Driver



300W Dimmable Driver



### Enclosures

Part #	Ingress	Dimensions (inches / mm)	Description
045008	IP67	9.4 x 2.6 x 1.9 / 238.8 x 66 x 48.3	20W Enclosure
045009	IP67	11.02 x 4.05 x 2.2 / 279.9 x 102.9 x 55.9	40W Enclosure
045010	IP67	11.02 x 4.05 x 2.2 / 279.9 x 102.9 x 55.9	60W Enclosure
045011	IP67	11.02 x 4.05 x 2.2 / 279.9 x 102.9 x 55.9	75W Enclosure
045012	IP67	11.02 x 4.05 x 2.2 / 279.9 x 102.9 x 55.9	96W Enclosure
045013	IP67	16.7 x 9.8 x 2.3 / 424.2 x 248.9 x 58.4	200W Enclosure
045014	IP67	16.7 x 9.8 x 2.3 / 424.2 x 248.9 x 58.4	300W Enclosure

## STEP 3 CHOOSE YOUR DMX CONTROLLER (color changing only)

Part #	Description
050205	DMX512 SPI Converter Decoder - For Pixel
050203	LT-200 SPI Controller - For Pixel
011343	100W Digital Controller
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

Digital Controller (100W, 180W, 720W)



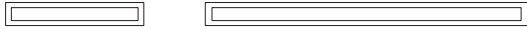
Nicolaude DE3 DMX 512 Controller



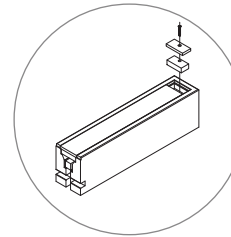
## FORTACAST APPLICATIONS

Apply FortaCast sections in limitless design possibilities. Custom lengths and radius available.

### STAND ALONES (Enclosed)

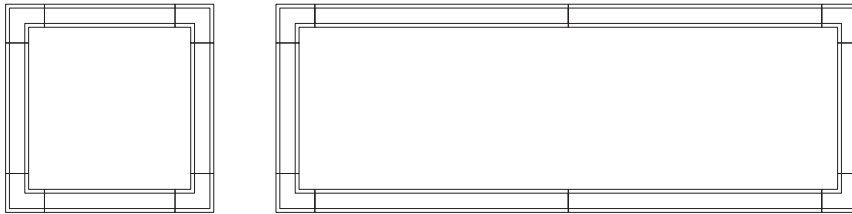


### LINES - STRAIGHT SECTIONS WITH ENDCAPS



Future proof; Easy LED strip replacement without removing lenses. Simply slide out the old LED and slide in the new!

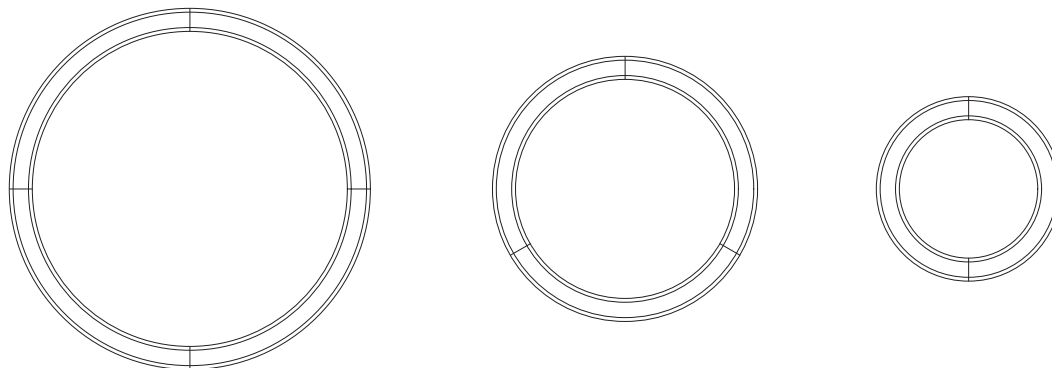
### SQUARES AND RECTANGLES - STRAIGHT SECTIONS WITH JUNCTIONS



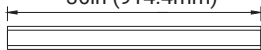
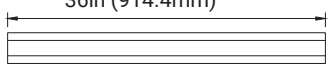
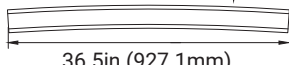


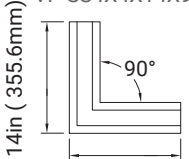



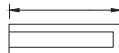
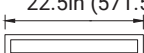
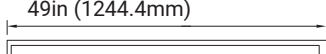
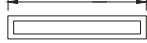
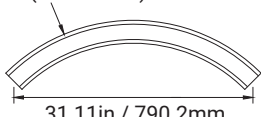
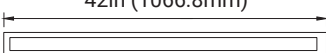
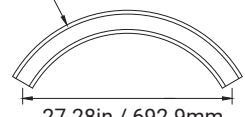
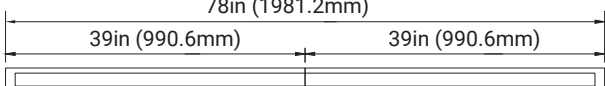
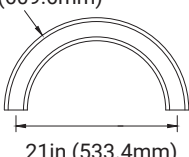
### RIPPLES - CURVED SECTIONS WITH ENDCAPS



### CIRCLES - CURVED SECTIONS



FORTACAST STANDARD SIZES AVAILABLE

W x H + Lens Width	Length	W x H + Lens Width	Length
<b>3" x 4" (2" Lens)</b> 76.2mm x 101.6mm (20.8mm Lens)	VP-SS4X3X36ST 36in (914.4mm) 	<b>4" x 4" (2" Lens)</b> 101.6mm x 101.6mm (20.8mm Lens)	VP-SS4X4X41.375ST 36in (914.4mm) 
	VP-SS4X3X36.5R284 R285.5in (R7251.7mm) 		VP-SS4X4X14.5STEC 14.5in (368.3mm)  End Unit
	VP-SS4X3X35.5R71 R72.5in (R1841.5mm) 		VP-SS4X4X14X90DST 14in (355.6mm) 
	VP-SS4X3X-J3 5.05in (128.27mm) 		
	VP-SS4X3X-J4 9.45in (240.03mm) 		
	VP-SS4X3X-J5 9.45in (240.03mm) 		
	VP-SS4X3X14.5STEC 14.5in (368.3mm)  End Unit		
		<b>4" x 4" (2" Lens) - ENCLOSED UNITS</b>	
		101.6mm x 101.6mm (20.8mm Lens)	VP-SS4X4X225STENC 22.5in (571.5mm) 
			VP-SS4X3X49STENC 49in (1244.4mm) 
W x H + Lens Width	Length	W x H + Lens Width	Length and Radius
<b>STANDARD CIRCLES 2FT / 3FT / 4FT (.61M/.91M/1.22M)</b>			
<b>3" x 4" (1.7" Lens) - ENCLOSED UNITS</b> 76.2mm x 101.6mm (43.2mm Lens)	VP-SS4X3X18STENC 18in (457.2mm) 	<b>3" x 4" (2" Lens)</b> 76.2mm x 101.6mm (50.8mm Lens)	VP-SS4X3X31.11R22 Ø47.0in (1193.8mm) 
	VP-SS4X3X42STENC 42in (1066.8mm) 		VP-SS4X3X27.28R15.75 Ø34.5in (876.3mm) 
	VP-SS4X3X39STEC 78in (1981.2mm) 		VP-SS4X3X21R10.5 Ø24.0in (609.6mm) 

\* Specifications sheets are subject to change without notification. US Patent #11,644,163B2 | international patents pending.  
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