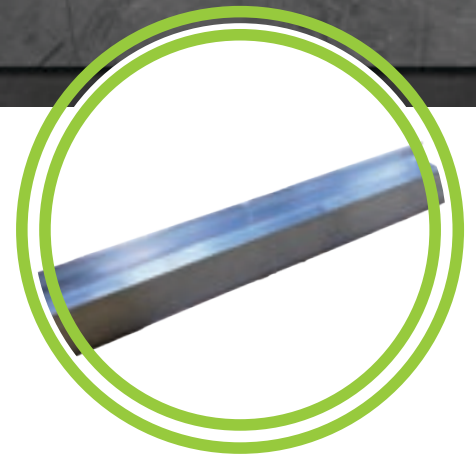


# Versa Stik Install Guide



## Tools Required:

- Saw with a Metal Blade
- Power Drill/ Driver

## Hardware Required:

- Metal Screws
- Wood Screws
- Silicone
- Wire Nuts
- L Bracket
- T Bracket
- Retrofit Adapter (Retrofit Only)

## 1. Cutting the Versa Stik

The Versa Stik comes in a standard length of 8ft. but can be cut down to any size needed. Once the size needed has been determined, measure the distance needed and place a mark on the extrusion. A hand saw with a metal blade, table saw, chop saw, or band saw will all cut the product effectively. If you are measuring for new construction, a site survey is recommended for determining the length needed. If the job is a retrofit from fluorescent lamps and the existing sockets will be used, please determine the general size of the lamps, and refer to the table at the end of this guide to determine the length needed. (Figure 1)



## 2. Placing the Modules in the Extrusion

a. Before placing the modules, it is important to leave enough room at each end of the extrusion to accommodate the mounting hardware. It is recommended to make a mark 1.5" in from the ends to prevent having to pull out and replace the modules later in the process. (Figure 2)



b. Once the marks are in place the next step is to place the modules into the extrusion. Starting with the first module, press one end into the extrusion until it can go no further, then press the remainder of the module into place. (Figure 3 & 4)

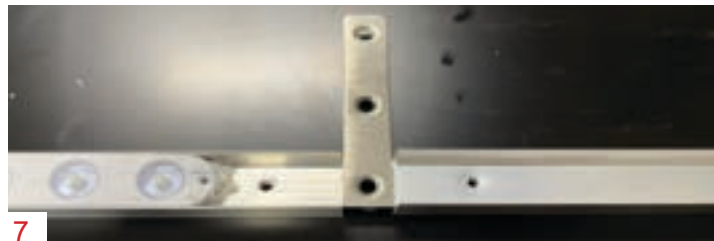
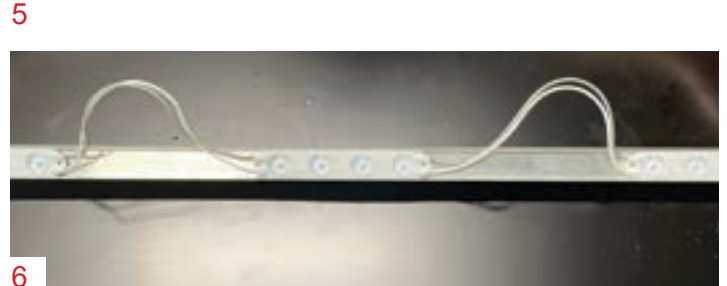
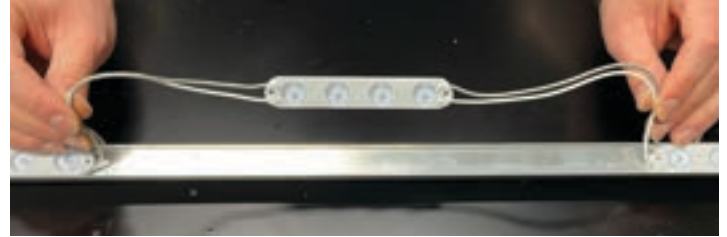


## 2. Placing the Modules in the Extrusion

i. It is recommended that the first and last modules are the first to be put in place. This will ensure even spacing of the modules throughout the final assembly if a fully stretched configuration is not being utilized. (Figure 5 & 6)

ii. Leave wire on one end to wire to the power supply. Terminate the wires on the opposite end at the module and cover the exposed ends with silicone, or leave enough wire to cap with wire nuts.

iii. There are tables available at the end of this guide to help determine spacing for the various modules when used in a fully stretched configuration.

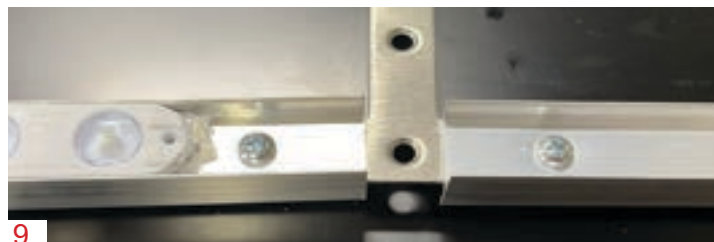


## 3. T Bracket Usage and Installation

a. If the required length needed for the installation exceeds 8ft. or if you want to use previously cut lengths to build out a longer piece, an additional piece of extrusion, along with a T Bracket will be required. It is not recommended to connect more than two pieces.



b. Once the length needed has been determined a cut will likely be required on one of the pieces. Please keep in mind that the T bracket will add 0.617in. to the length and will need to be taken into account when cutting the extrusion. (Figure 7)



c. As with the L bracket, place the bracket on the outside of both pieces of extrusion to mark where the self-tapping screw will need to be placed. (Figure 8)

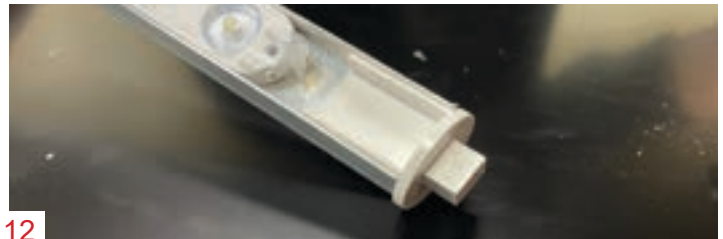
d. Slide the bracket into each piece of extrusion and secure it in place with a self-tapping screw. (Figure 9)

#### 4. Mounting Hardware

a. **For new construction or retrofits where the existing sockets WILL NOT be used:** If there was space left at the ends of the extrusion as indicated in step 2, the L bracket may be placed on top of the extrusion to mark where the mounting hole on the L bracket will be once installed in the gap in the extrusion. This will ensure the self-tapping screw will be placed in the correct place when securing the extrusion to the bracket. (Figure 10 & 11)



i. Once the brackets are secured to the extrusion, the assembly may be placed in the cabinet and secured to the structure using the other side of the L bracket and self-tapping screws.



b. **For retrofits where the existing sockets WILL be used:** take the retrofit end cap adapters and slide them into place on the ends of the extrusion. (Figure 12)

i. Place the assembly into the existing sockets in the sign.

Fluorescent to Versa Stik Length Table					
Length	Fluorescent Length	Cut Length for Versa	Length	Fluorescent Length	Cut Length for Versa
18	15.91	15.104	64	61.91	61.104
24	21.91	21.104	72	69.91	69.104
30	27.91	27.104	84	81.91	81.104
36	33.91	33.104	96	93.91	93.104
42	39.91	39.104	108	105.91	105.104
48	45.91	45.104	117	114.91	114.104
60	57.91	57.104	120	117.91	117.104

## Module Spacing Guides:

<b>QM1 Single Sided</b>										
Mod Length: 1.4		Watts per Mod: 0.4		Lumens per Mod: 47.2		Mods/ ft. 2.5		Wire Gap: 3.4		O.C. 4.800
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 60W	SS/ 120W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/Ft.
15.91	3	142	107	1.20	50.00	100.00	2.4375	3.418	4.8125	2.49
21.91	4	189	103	1.60	37.00	74.00	3.0625	3.395	4.8125	2.49
27.91	6	283	122	2.40	25.00	50.00	1.2500	3.402	4.8125	2.49
33.91	7	330	117	2.80	21.00	42.00	1.8750	3.393	4.8125	2.49
39.91	8	378	114	3.20	18.00	36.00	2.4375	3.405	4.8125	2.49
45.91	9	425	111	3.60	16.00	32.00	3.0625	3.398	4.8125	2.49
57.91	12	566	117	4.80	12.00	24.00	1.8750	3.396	4.8125	2.49
61.91	13	614	119	5.20	11.00	22.00	1.4375	3.403	4.8125	2.49
69.91	14	661	113	5.60	10.00	20.00	3.0625	3.399	4.8125	2.49
81.91	17	802	118	6.80	8.00	16.00	1.8750	3.398	4.8125	2.49
93.91	19	897	115	7.60	7.00	14.00	3.0625	3.399	4.8125	2.49
105.91	22	1038	118	8.80	6.00	12.00	1.8750	3.398	4.8125	2.49
114.91	24	1133	118	9.60	6.00	12.00	1.5625	3.399	4.8125	2.49
117.91	24	1133	115	9.60	6.00	12.00	3.0625	3.399	4.8125	2.49

<b>QM1 Double Sided</b>										
Mod Length: 1.4		Watts per Mod: 0.4		Lumens per Mod: 47.2		Mods/ ft. 2.5		Wire Gap: 3.4		O.C. 4.800
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 60W	DS/ 120W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/Ft.
15.91	6	283	214	2.40	25.00	50.00	2.4375	3.418	4.8125	2.49
21.91	8	378	207	3.20	18.00	36.00	3.0625	3.395	4.8125	2.49
27.91	12	566	244	4.80	12.00	24.00	1.2500	3.402	4.8125	2.49
33.91	14	661	234	5.60	10.00	20.00	1.8750	3.393	4.8125	2.49
39.91	16	755	227	6.40	9.00	18.00	2.4375	3.405	4.8125	2.49
45.91	18	850	222	7.20	8.00	16.00	3.0625	3.398	4.8125	2.49
57.91	24	1133	235	9.60	6.00	12.00	1.8750	3.396	4.8125	2.49
61.91	26	1227	238	10.40	5.00	10.00	1.4375	3.403	4.8125	2.49
69.91	28	1322	227	11.20	5.00	10.00	3.0625	3.399	4.8125	2.49
81.91	34	1605	235	13.60	4.00	8.00	1.8750	3.398	4.8125	2.49
93.91	38	1794	229	15.20	3.00	6.00	3.0625	3.399	4.8125	2.49
105.91	44	2077	235	17.60	3.00	6.00	1.8750	3.398	4.8125	2.49
114.91	48	2266	237	19.20	3.00	6.00	1.5625	3.399	4.8125	2.49
117.91	48	2266	231	19.20	3.00	6.00	3.0625	3.399	4.8125	2.49



**QM2 Single Sided**

Mod Length: 2.2		Watts per Mod: 0.8		Lumens per Mod: 94.1		Mods/ ft. 1.7		Wire Gap: 4.858823529		O.C. 7.059
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 60W	SS/ 120W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	2	188	142	1.60	37.00	74.00	3.3125	4.885	7.0625	1.70
21.91	3	282	155	2.40	25.00	50.00	2.8125	4.843	7.0625	1.70
27.91	4	376	162	3.20	18.00	36.00	2.2500	4.870	7.0625	1.70
33.91	5	471	166	4.00	15.00	30.00	1.7500	4.853	7.0625	1.70
39.91	5	471	141	4.00	15.00	30.00	4.7500	4.853	7.0625	1.70
45.91	6	565	148	4.80	12.00	24.00	4.1875	4.867	7.0625	1.70
57.91	8	753	156	6.40	9.00	18.00	3.1250	4.866	7.0625	1.70
61.91	9	847	164	7.20	8.00	16.00	1.6250	4.858	7.0625	1.70
69.91	10	941	162	8.00	7.00	14.00	2.0625	4.865	7.0625	1.70
81.91	11	1035	152	8.80	6.00	12.00	4.5625	4.859	7.0625	1.70
93.91	13	1223	156	10.40	5.00	10.00	3.5000	4.859	7.0625	1.70
105.91	15	1412	160	12.00	5.00	10.00	2.4375	4.860	7.0625	1.70
114.91	16	1506	157	12.80	4.00	8.00	3.4375	4.856	7.0625	1.70
117.91	17	1600	163	13.60	4.00	8.00	1.3750	4.860	7.0625	1.70

**QM2 Double Sided**

Mod Length: 2.2		Watts per Mod: 0.8		Lumens per Mod: 94.1		Mods/ ft. 1.7		Wire Gap: 4.858823529		O.C. 7.059
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 60W	DS/ 120W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	4	376	284	3.20	18.00	36.00	3.3125	4.885	7.0625	1.70
21.91	6	565	309	4.80	12.00	24.00	2.8125	4.843	7.0625	1.70
27.91	8	753	324	6.40	9.00	18.00	2.2500	4.870	7.0625	1.70
33.91	10	941	333	8.00	7.00	14.00	1.7500	4.853	7.0625	1.70
39.91	10	941	283	8.00	7.00	14.00	4.7500	4.853	7.0625	1.70
45.91	12	1129	295	9.60	6.00	12.00	4.1875	4.867	7.0625	1.70
57.91	16	1506	312	12.80	4.00	8.00	3.1250	4.866	7.0625	1.70
61.91	18	1694	328	14.40	4.00	8.00	1.6250	4.858	7.0625	1.70
69.91	20	1882	323	16.00	3.00	6.00	2.0625	4.865	7.0625	1.70
81.91	22	2070	303	17.60	3.00	6.00	4.5625	4.859	7.0625	1.70
93.91	26	2447	313	20.80	2.00	4.00	3.5000	4.859	7.0625	1.70
105.91	30	2823	320	24.00	2.00	4.00	2.4375	4.860	7.0625	1.70
114.91	32	3011	314	25.60	2.00	4.00	3.4375	4.856	7.0625	1.70
117.91	34	3199	326	27.20	2.00	4.00	1.3750	4.860	7.0625	1.70

## Module Spacing Guides:

<b>QM3 Single Sided</b>										
Mod Length: 3.14		Watts per Mod: 1.2		Lumens per Mod: 136.7		Mods/ ft. 1.5		Wire Gap: 4.86		O.C. 8.000
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 60W	SS/ 120W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/Ft.
15.91	2	273	206	2.40	25.00	50.00	2.3750	4.880	8.0000	1.50
21.91	3	410	225	3.60	16.00	32.00	1.3750	4.870	8.0000	1.50
27.91	3	410	176	3.60	16.00	32.00	4.3750	4.870	8.0000	1.50
33.91	4	547	194	4.80	12.00	24.00	3.3750	4.867	8.0000	1.50
39.91	5	684	206	6.00	10.00	20.00	2.3750	4.865	8.0000	1.50
45.91	6	820	214	7.20	8.00	16.00	1.3750	4.864	8.0000	1.50
57.91	7	957	198	8.40	7.00	14.00	3.3750	4.863	8.0000	1.50
61.91	8	1094	212	9.60	6.00	12.00	1.3750	4.863	8.0000	1.50
69.91	9	1230	211	10.80	5.00	10.00	1.3750	4.863	8.0000	1.50
81.91	10	1367	200	12.00	5.00	10.00	3.3750	4.862	8.0000	1.50
93.91	12	1640	210	14.40	4.00	8.00	1.3750	4.862	8.0000	1.50
105.91	13	1777	201	15.60	3.00	6.00	3.3750	4.862	8.0000	1.50
114.91	14	1914	200	16.80	3.00	6.00	3.8750	4.862	8.0000	1.50
117.91	15	2051	209	18.00	3.00	6.00	1.3750	4.861	8.0000	1.50

<b>QM3 Double Sided</b>										
Mod Length: 3.14		Watts per Mod: 1.2		Lumens per Mod: 136.7		Mods/ ft. 1.5		Wire Gap: 4.86		O.C. 8.000
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 60W	DS/ 120W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/Ft.
15.91	4	547	412	4.80	12.00	24.00	2.3750	4.880	8.0000	1.50
21.91	6	820	449	7.20	8.00	16.00	1.3750	4.870	8.0000	1.50
27.91	6	820	353	7.20	8.00	16.00	4.3750	4.870	8.0000	1.50
33.91	8	1094	387	9.60	6.00	12.00	3.3750	4.867	8.0000	1.50
39.91	10	1367	411	12.00	5.00	10.00	2.3750	4.865	8.0000	1.50
45.91	12	1640	429	14.40	4.00	8.00	1.3750	4.864	8.0000	1.50
57.91	14	1914	397	16.80	3.00	6.00	3.3750	4.863	8.0000	1.50
61.91	16	2187	424	19.20	3.00	6.00	1.3750	4.863	8.0000	1.50
69.91	18	2461	422	21.60	2.00	4.00	1.3750	4.863	8.0000	1.50
81.91	20	2734	401	24.00	2.00	4.00	3.3750	4.862	8.0000	1.50
93.91	24	3281	419	28.80	2.00	4.00	1.3750	4.862	8.0000	1.50
105.91	26	3554	403	31.20	1.00	2.00	3.3750	4.862	8.0000	1.50
114.91	28	3828	400	33.60	1.00	2.00	3.8750	4.862	8.0000	1.50
117.91	30	4101	417	36.00	1.00	2.00	1.3750	4.861	8.0000	1.50

### Patriot Small Single Sided

Mod Length: 1.4		Watts per Mod: 0.4		Lumens per Mod: 48		Mods/ ft. 2.5	Wire Gap: 3.4		O.C. 4.800
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	3	144	109	1.20	80.00	2.4375	3.418	4.8125	2.49
21.91	4	192	105	1.60	60.00	3.0625	3.395	4.8125	2.49
27.91	5	240	103	2.00	48.00	3.6250	3.415	4.8125	2.49
33.91	7	336	119	2.80	34.00	1.8750	3.393	4.8125	2.49
39.91	8	384	115	3.20	30.00	2.4375	3.405	4.8125	2.49
45.91	9	432	113	3.60	26.00	3.0625	3.398	4.8125	2.49
57.91	12	576	119	4.80	20.00	1.8750	3.396	4.8125	2.49
61.91	13	624	121	5.20	18.00	1.4375	3.403	4.8125	2.49
69.91	14	672	115	5.60	17.00	3.0625	3.399	4.8125	2.49
81.91	17	816	120	6.80	14.00	1.8750	3.398	4.8125	2.49
93.91	19	912	117	7.60	12.00	3.0625	3.399	4.8125	2.49
105.91	22	1056	120	8.80	10.00	1.8750	3.398	4.8125	2.49
114.91	24	1152	120	9.60	10.00	1.5625	3.399	4.8125	2.49
117.91	24	1152	117	9.60	10.00	3.0625	3.399	4.8125	2.49

### Patriot Small Double Sided

Mod Length: 1.4		Watts per Mod: 0.4		Lumens per Mod: 48		Mods/ ft. 2.5	Wire Gap: 3.4		O.C. 4.800
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	6	288	217	2.40	40.00	2.4375	3.418	4.8125	2.49
21.91	8	384	210	3.20	30.00	3.0625	3.395	4.8125	2.49
27.91	10	480	206	4.00	24.00	3.6250	3.415	4.8125	2.49
33.91	14	672	238	5.60	17.00	1.8750	3.393	4.8125	2.49
39.91	16	768	231	6.40	15.00	2.4375	3.405	4.8125	2.49
45.91	18	864	226	7.20	13.00	3.0625	3.398	4.8125	2.49
57.91	24	1152	239	9.60	10.00	1.8750	3.396	4.8125	2.49
61.91	26	1248	242	10.40	9.00	1.4375	3.403	4.8125	2.49
69.91	28	1344	231	11.20	8.00	3.0625	3.399	4.8125	2.49
81.91	34	1632	239	13.60	7.00	1.8750	3.398	4.8125	2.49
93.91	38	1824	233	15.20	6.00	3.0625	3.399	4.8125	2.49
105.91	44	2112	239	17.60	5.00	1.8750	3.398	4.8125	2.49
114.91	48	2304	241	19.20	5.00	1.5625	3.399	4.8125	2.49
117.91	48	2304	234	19.20	5.00	3.0625	3.399	4.8125	2.49

## Module Spacing Guides:

<b>Patriot Medium Single Sided</b>										
Mod Length: 1.4		Watts per Mod: 0.8		Lumens per Mod: 96		Mods/ ft. 1.67		Wire Gap: 5.785629		O.C. 7.186
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.	
15.91	2	192	145	1.60	60.00	3.6875	5.735	7.1250	1.68	
21.91	3	288	158	2.40	40.00	3.0625	5.793	7.1875	1.67	
27.91	4	384	165	3.20	30.00	2.5000	5.770	7.1875	1.67	
33.91	5	480	170	4.00	24.00	1.8750	5.790	7.1875	1.67	
39.91	6	576	173	4.80	20.00	1.3125	5.777	7.1875	1.67	
45.91	6	576	151	4.80	20.00	4.3125	5.777	7.1875	1.67	
57.91	8	768	159	6.40	15.00	3.1250	5.780	7.1875	1.67	
61.91	9	864	167	7.20	13.00	1.5000	5.789	7.1875	1.67	
69.91	10	960	165	8.00	12.00	1.9375	5.782	7.1875	1.67	
81.91	11	1056	155	8.80	10.00	4.3125	5.789	7.1875	1.67	
93.91	13	1248	159	10.40	9.00	3.1250	5.788	7.1875	1.67	
105.91	15	1440	163	12.00	8.00	1.9375	5.788	7.1875	1.67	
114.91	16	1536	160	12.80	7.00	2.8750	5.784	7.1875	1.67	
117.91	16	1536	156	12.80	7.00	4.3750	5.784	7.1875	1.67	

<b>Patriot Medium Double Sided</b>										
Mod Length: 1.4		Watts per Mod: 0.8		Lumens per Mod: 96		Mods/ ft. 1.67		Wire Gap: 5.785629		O.C. 7.186
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.	
15.91	4	384	290	3.20	30.00	3.6875	5.735	7.1250	1.68	
21.91	6	576	315	4.80	20.00	3.0625	5.793	7.1875	1.67	
27.91	8	768	330	6.40	15.00	2.5000	5.770	7.1875	1.67	
33.91	10	960	340	8.00	12.00	1.8750	5.790	7.1875	1.67	
39.91	12	1152	346	9.60	10.00	1.3125	5.777	7.1875	1.67	
45.91	12	1152	301	9.60	10.00	4.3125	5.777	7.1875	1.67	
57.91	16	1536	318	12.80	7.00	3.1250	5.780	7.1875	1.67	
61.91	18	1728	335	14.40	6.00	1.5000	5.789	7.1875	1.67	
69.91	20	1920	330	16.00	6.00	1.9375	5.782	7.1875	1.67	
81.91	22	2112	309	17.60	5.00	4.3125	5.789	7.1875	1.67	
93.91	26	2496	319	20.80	4.00	3.1250	5.788	7.1875	1.67	
105.91	30	2880	326	24.00	4.00	1.9375	5.788	7.1875	1.67	
114.91	32	3072	321	25.60	3.00	2.8750	5.784	7.1875	1.67	
117.91	32	3072	313	25.60	3.00	4.3750	5.784	7.1875	1.67	



<b>Patriot Large Single Sided</b>									
Mod Length: 1.4		Watts per Mod: 1.07		Lumens per Mod: 120		Mods/ ft. 1.67	Wire Gap: 5.785629		O.C. 7.186
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	2	240	181	2.14	44.00	3.6875	5.735	7.1250	1.68
21.91	3	360	197	3.21	29.00	3.0625	5.793	7.1875	1.67
27.91	4	480	206	4.28	22.00	2.5000	5.770	7.1875	1.67
33.91	5	600	212	5.35	17.00	1.8750	5.790	7.1875	1.67
39.91	6	720	216	6.42	14.00	1.3125	5.777	7.1875	1.67
45.91	6	720	188	6.42	14.00	4.3125	5.777	7.1875	1.67
57.91	8	960	199	8.56	11.00	3.1250	5.780	7.1875	1.67
61.91	9	1080	209	9.63	9.00	1.5000	5.789	7.1875	1.67
69.91	10	1200	206	10.70	8.00	1.9375	5.782	7.1875	1.67
81.91	11	1320	193	11.77	8.00	4.3125	5.789	7.1875	1.67
93.91	13	1560	199	13.91	6.00	3.1250	5.788	7.1875	1.67
105.91	15	1800	204	16.05	5.00	1.9375	5.788	7.1875	1.67
114.91	16	1920	201	17.12	5.00	2.8750	5.784	7.1875	1.67
117.91	16	1920	195	17.12	5.00	4.3750	5.784	7.1875	1.67

<b>Patriot Large Double Sided</b>									
Mod Length: 1.4		Watts per Mod: 1.07		Lumens per Mod: 120		Mods/ ft. 1.67	Wire Gap: 5.785629		O.C. 7.186
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	4	480	362	4.28	22.00	3.6875	5.735	7.1250	1.68
21.91	6	720	394	6.42	14.00	3.0625	5.793	7.1875	1.67
27.91	8	960	413	8.56	11.00	2.5000	5.770	7.1875	1.67
33.91	10	1200	425	10.70	8.00	1.8750	5.790	7.1875	1.67
39.91	12	1440	433	12.84	7.00	1.3125	5.777	7.1875	1.67
45.91	12	1440	376	12.84	7.00	4.3125	5.777	7.1875	1.67
57.91	16	1920	398	17.12	5.00	3.1250	5.780	7.1875	1.67
61.91	18	2160	419	19.26	4.00	1.5000	5.789	7.1875	1.67
69.91	20	2400	412	21.40	4.00	1.9375	5.782	7.1875	1.67
81.91	22	2640	387	23.54	4.00	4.3125	5.789	7.1875	1.67
93.91	26	3120	399	27.82	3.00	3.1250	5.788	7.1875	1.67
105.91	30	3600	408	32.10	2.00	1.9375	5.788	7.1875	1.67
114.91	32	3840	401	34.24	2.00	2.8750	5.784	7.1875	1.67
117.91	32	3840	391	34.24	2.00	4.3750	5.784	7.1875	1.67

## Module Spacing Guides:

<b>Patriot XL Single Sided</b>										
Mod Length: 1.4		Watts per Mod: 1.33		Lumens per Mod: 144		Mods/ ft. 1.67		Wire Gap: 5.785629		O.C. 7.186
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.	
15.91	2	288	217	2.66	36.00	3.6875	5.735	7.1250	1.68	
21.91	3	432	237	3.99	24.00	3.0625	5.793	7.1875	1.67	
27.91	4	576	248	5.32	18.00	2.5000	5.770	7.1875	1.67	
33.91	5	720	255	6.65	14.00	1.8750	5.790	7.1875	1.67	
39.91	6	864	260	7.98	12.00	1.3125	5.777	7.1875	1.67	
45.91	6	864	226	7.98	12.00	4.3125	5.777	7.1875	1.67	
57.91	8	1152	239	10.64	9.00	3.1250	5.780	7.1875	1.67	
61.91	9	1296	251	11.97	8.00	1.5000	5.789	7.1875	1.67	
69.91	10	1440	247	13.30	7.00	1.9375	5.782	7.1875	1.67	
81.91	11	1584	232	14.63	6.00	4.3125	5.789	7.1875	1.67	
93.91	13	1872	239	17.29	5.00	3.1250	5.788	7.1875	1.67	
105.91	15	2160	245	19.95	4.00	1.9375	5.788	7.1875	1.67	
114.91	16	2304	241	21.28	4.00	2.8750	5.784	7.1875	1.67	
117.91	16	2304	234	21.28	4.00	4.3750	5.784	7.1875	1.67	

<b>Patriot XL Double Sided</b>										
Mod Length: 1.4		Watts per Mod: 1.33		Lumens per Mod: 144		Mods/ ft. 1.67		Wire Gap: 5.785629		O.C. 7.186
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.	
15.91	4	576	434	5.32	18.00	3.6875	5.735	7.1250	1.68	
21.91	6	864	473	7.98	12.00	3.0625	5.793	7.1875	1.67	
27.91	8	1152	495	10.64	9.00	2.5000	5.770	7.1875	1.67	
33.91	10	1440	510	13.30	7.00	1.8750	5.790	7.1875	1.67	
39.91	12	1728	520	15.96	6.00	1.3125	5.777	7.1875	1.67	
45.91	12	1728	452	15.96	6.00	4.3125	5.777	7.1875	1.67	
57.91	16	2304	477	21.28	4.00	3.1250	5.780	7.1875	1.67	
61.91	18	2592	502	23.94	4.00	1.5000	5.789	7.1875	1.67	
69.91	20	2880	494	26.60	3.00	1.9375	5.782	7.1875	1.67	
81.91	22	3168	464	29.26	3.00	4.3125	5.789	7.1875	1.67	
93.91	26	3744	478	34.58	2.00	3.1250	5.788	7.1875	1.67	
105.91	30	4320	489	39.90	2.00	1.9375	5.788	7.1875	1.67	
114.91	32	4608	481	42.56	2.00	2.8750	5.784	7.1875	1.67	
117.91	32	4608	469	42.56	2.00	4.3750	5.784	7.1875	1.67	

<b>Pinnacle 24V Single Sided</b>									
Mod Length: 4.05		Watts per Mod: 1.32		Lumens per Mod: 227		Mods/ ft. 1.1	Wire Gap: 6.859091		O.C. 10.909
Length	Mods/ SS Stik	Lumens/ SS Stik	Lumens/ Ft. (SS)	Power/ SS Stik	SS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	2	454	342	2.64	36.00	1.5000	4.810	8.8600	1.35
21.91	2	454	249	2.64	36.00	3.4755	6.859	10.9091	1.10
27.91	2	454	195	2.64	36.00	6.4755	6.859	10.9091	1.10
33.91	3	681	241	3.96	24.00	4.0209	6.859	10.9091	1.10
39.91	4	908	273	5.28	18.00	1.5664	6.859	10.9091	1.10
45.91	4	908	237	5.28	18.00	4.5664	6.859	10.9091	1.10
57.91	5	1135	235	6.60	14.00	5.1118	6.859	10.9091	1.10
61.91	6	1362	264	7.92	12.00	1.6573	6.859	10.9091	1.10
69.91	6	1362	234	7.92	12.00	5.6573	6.859	10.9091	1.10
81.91	7	1589	233	9.24	10.00	6.2027	6.859	10.9091	1.10
93.91	9	2043	261	11.88	8.00	1.2936	6.859	10.9091	1.10
105.91	10	2270	257	13.20	7.00	1.8391	6.859	10.9091	1.10
114.91	10	2270	237	13.20	7.00	6.3391	6.859	10.9091	1.10
117.91	11	2497	254	14.52	6.00	2.3845	6.859	10.9091	1.10

<b>Pinnacle 24V Double Sided</b>									
Mod Length: 4.05		Watts per Mod: 1.32		Lumens per Mod: 227		Mods/ ft. 1.1	Wire Gap: 6.859091		O.C. 10.909
Length	Mods/ DS Stik	Lumens/ DS Stik	Lumens/ Ft. (DS)	Power/ DS Stik	DS/ 96W	End of Stik to Module Clearnace	Wire Gap	O.C. Spacing	Mods/ Ft.
15.91	4	908	685	5.28	18.00	1.5000	4.810	8.8600	1.35
21.91	4	908	497	5.28	18.00	3.4755	6.859	10.9091	1.10
27.91	4	908	390	5.28	18.00	6.4755	6.859	10.9091	1.10
33.91	6	1362	482	7.92	12.00	4.0209	6.859	10.9091	1.10
39.91	8	1816	546	10.56	9.00	1.5664	6.859	10.9091	1.10
45.91	8	1816	475	10.56	9.00	4.5664	6.859	10.9091	1.10
57.91	10	2270	470	13.20	7.00	5.1118	6.859	10.9091	1.10
61.91	12	2724	528	15.84	6.00	1.6573	6.859	10.9091	1.10
69.91	12	2724	468	15.84	6.00	5.6573	6.859	10.9091	1.10
81.91	14	3178	466	18.48	5.00	6.2027	6.859	10.9091	1.10
93.91	18	4086	522	23.76	4.00	1.2936	6.859	10.9091	1.10
105.91	20	4540	514	26.40	3.00	1.8391	6.859	10.9091	1.10
114.91	20	4540	474	26.40	3.00	6.3391	6.859	10.9091	1.10
117.91	22	4994	508	29.04	3.00	2.3845	6.859	10.9091	1.10