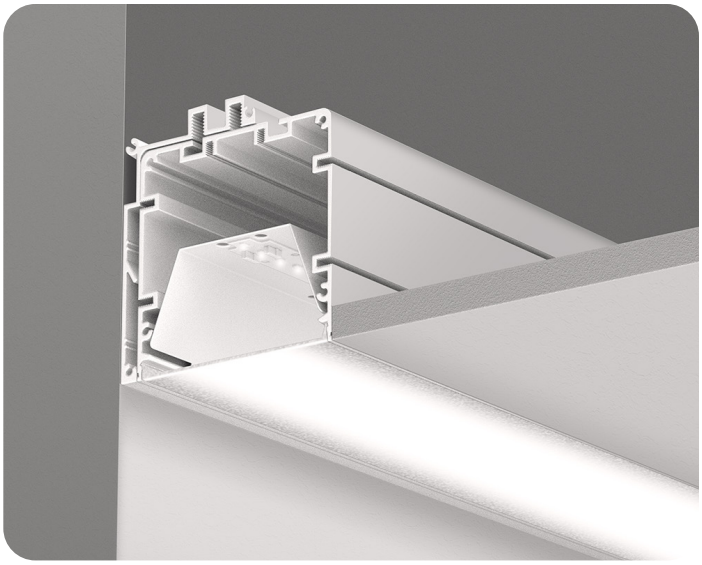
STARTEK
ARCHITECTURAL LIGHTING

Rep/Agent		Type	
Project			
Order No.		Date	

Beam Perimeter



Key Features

- Extruded aluminum single piece housing
- Continuous lensing standard – runs up to 100'
- Suitable for retrofit and new construction
- 1/16" fixture and run lengths increments
- Field Fit available for wall-to-wall applications
- Soft diffuse direct lighting
- 0-10V dimming to 1% is standard
- Efficacy up to 130 lm/W

5 Year Warranty · BABA Compliant · BAA Compliant · Intertek · DLC LISTED · RoHS Compliant · Declare.

Specifications

Construction

- Continuous extruded 6063 T5 aluminum

Dimensions

- Nominal dimensions: 3.5" x 3.5"
- Nominal thickness: 0.075"

Finish

- Powder coated
- Colors: White or Black
- Custom colors available. Consult factory for more information.

Luminaire Length

- Standard individual lengths: 2', 4', 6' or 8'
- Fixture and run lengths are available in $\frac{1}{16}$" increments.
- Using internal joiners, sections can be joined to form longer, continuous rows.
- Field Fit allows for field adjustments up to +/-6" to the overall run lengths

Source

- CCT options: 2700K, 3000K, 3500K, 4000K, or 5000K
- All within 3 MacAdam ellipses
- 90 CRI (R9 50 min) available

Lensing

- 0.060" thick impact resistant acrylic lens
- Snap-in lens and reflector for easy install

Operating Temperature

- -40°C to 45°C (-40°F to 113°F)

Lithium Ion Battery

- Provides up to 720 lm (6W) or up to 1200 lm (10W) for 90 minutes.
- Certifications: UL924 listed, Class 2 compliant, and Title 20 CEC (California Energy Commission) compliant

Dimming (Integral) Driver

- eldoLED OPTOTRONIC (OTi) series is UL Class 2 with tunable output currents.
- Output current: 0-10V, dim to 1%
- Overcurrent protection: 2.5KV ring/wave
- Power factor: >0.90 / THD: <20%
- Max load: 87% efficiency

Generator Transfer Device

- Luminaires with GTD option provides a UL924 shunt relay to bypass normal power, switches, and 0–10V dimming.

Certifications

- Build America Buy America compliant
- Buy American Act compliant
- Intertek cETLus Listed
- DLC listed
- RoHS (Restriction of Hazardous Substances)
- IC rated
- Chicago Plenum available
- JA8 compliant
- Suitable for dry and damp locations

Packaging

- Sustainably manufactured outside cardboard box and biodegradable, protective poly-foam luminaire inserts.

Warranty

- 5-year limited warranty.

The information in this document is subject to change without notice.
Contact STARTEK for most up to date product details.

Ordering Logic

PBEAM-20(FF3)-750-SD-40K-80-PW-TR-FL-U-1C-1EMB10

Series	Length	Direct Output[3]	Direct Distribution	CCT	CRI
PBEAM					
	Linear Run	**250 -** 250 LPF	**SD -** SatinIce Diffuse	**27K -** 2700K	**80 -** 80 CRI
	XX - Run Length	**500 -** 500 LPF	**GRZ -** Wall Graze	**30K -** 3000K	**90 -** 90 CRI (R9 50 min)
	XX(FF3) - Run Length w/ Field Fit (+/- 3")	**750 -** 750 LPF	**ARF -** Asymmetric Room Fill	**35K -** 3500K	
	XX(FF6) - Run Length w/ Field Fit (+/- 6")	**1000 -** 1000 LPF		**40K -** 4000K	
	Corners[1, 2]	**XXX -** Custom LPF		**50K -** 5000K	
	_X_L - L-Shape			**TW -** Tunable White[4] (2700K-6500K)	
	_X_X_U - U-Shape				
	_X_RECT - Rectangle				

Finish[5]	Mounting		Shielding	Voltage	Circuiting
Standard Powder Coat	**T-Grid**	**Cosmetic Bezel[6]**	**FL -** Flush	**U -** 120-277V	**1C -** Single Circuit
PW - White	**TBX -** 9/16" Grid 15/16" Grid 9/16" Screw Slotted Grid 15/16" Prelude	**CB -** Screw/Rod Mount	**R2.5 -** 2.5" Regress	**C -** 347V	**MC -** Multiple Circuits[7, 8]
PB - Black	**TEG9 -** 9/16" Grid (Tegular Tile)	**Spackle Flange**	**R4.0 -** 4.0" Regress		**DL -** Daylight Control[7, 9]
Premium	**TEG15 -** 15/16" Grid (Tegular Tile)	**SF -** Screw/Rod Mount			**NL -** Night Lights[7, 10]
RALXXXX - Powder Coat Gloss Finish	**TBO -** T-Bar Other (Specify T-Bar Type)	**Trimless**			
Custom Powder Coat		**TR -** Screw/Rod Mount			
PO - Powder Other					

Emergency	Options		
BLANK - None	**Specialty Drivers[16]**	**Sensors**	
EC - Emergency Circuit[11]	**DT1 -** eldoLED EcoDrive Dim to 1% (0-10V)	**DMXX% -** Daylight/Motion Sensor (XX%=% Min. Dimming)	
#EMB6 - 6W EM Battery[12, 13]	**DTZ -** eldoLED SoloDrive Dim to 0.1% (0-10V)	**NLA -** Acuity nLight Air[19]	
#EMB10 - 10W EM Battery[12, 13]	**PSRD -** Philips Sensor Ready (DALI) Driver	**NLW -** Acuity nLight Wired[19]	
#FCEMB10 - 10W EM Battery[12, 14]	**LDE1 -** Lutron Hi-Lume EcoSystem LED Driver w/ Soft-on, Fade-to-Black	**WVL -** Cooper Wavelinx[19]	
#FCEMB14 - 14W EM Battery[12, 14]	**TW-A -** Tunable White, 0-10V[17]	**Other**	
#GTD - Generator Transfer Device w/ ALCR[15]	**TW-EL -** eldoLED DUALdrive Tunable White (DALI)[17]	**CP -** Chicago Plenum (CCEA)	
	LD2 - Lutron DALI 2 Digital Tunable White Driver w/ 1% Dimming[18]	**CFW -** Conduit Flex Whip	
	HD-XX - HyperDrive Remote Driver[19]		

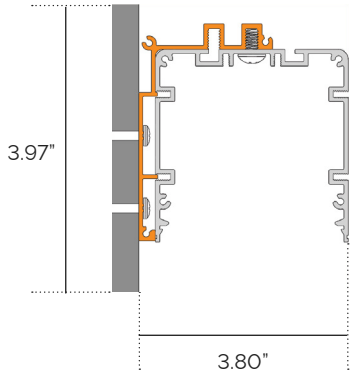
Ordering Notes

1. 'X'=inside corner. Replace 'X' with 'O' to designate outside corner. Example: 18o9L=18' by 9'L with outside corner.
2. Add 'FF3' or 'FF6' after each length for Field Fit +/-3" or +/-6". Example: 15(FF3)=15' with +/-3" Field Fit.
3. 200 LPF min. output / 1500 LPF max. output.
4. Tunable White Driver must be specified in options.
5. See page 3 for standard options.
6. Bezel color will match fixture color unless otherwise specified, consult factory for options.
7. Customer to specify number of zones and locations through factory submittal drawings.
8. Multiple low and line control zones.
9. Multiple low voltage control zones for daylight control.
10. Multiple unswitched wires for night light control zones.
11. Separate power, transfer devices provided by others.
12. '#' indicates number per run.
13. Provided by Iota/Bodine.
14. EM battery is factory choice.
15. Iota EDS-DR Emergency Control Device
16. Standard driver is 0-10V, dim to 1% output current.
17. 75 Watt Max. Dual driver required for higher fixture wattage.
18. 50 Watt Max. Dual driver required for higher fixture wattage.
19. Consult factory.

⚠ Drawing Required With Order Submission. See Page 13.

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Dimensions



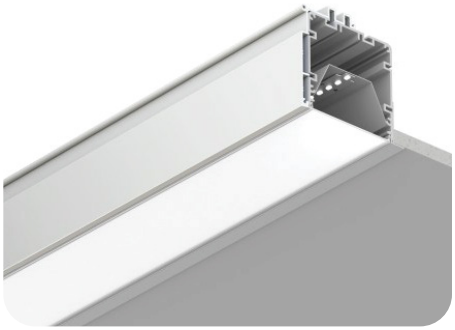
Finishes

Standard

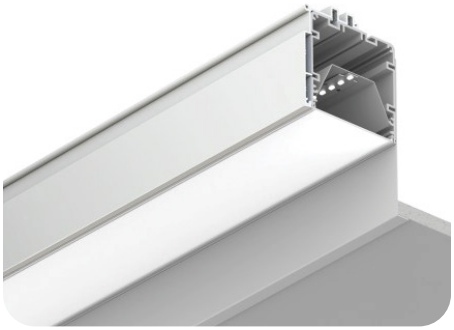
PW: White

PB: Black

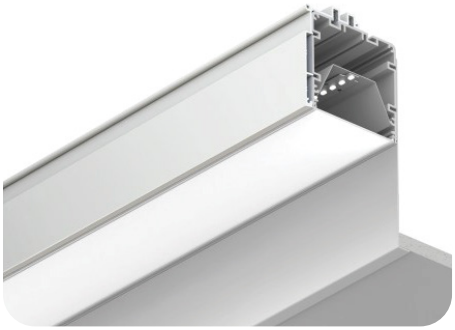
Shielding



FL
Flush

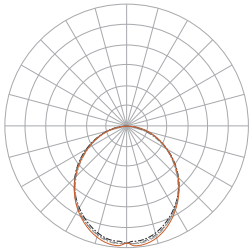


R2.5
2.5" Regress

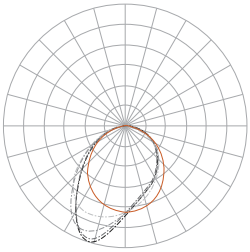


R4.0
4.0" Regress

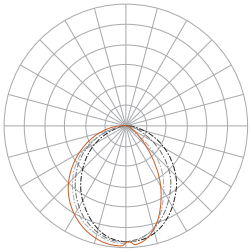
Distribution



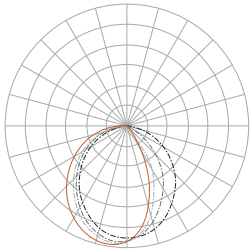
Lens: SatinIce Diffuse (SD)
Shielding: Flush (FL)



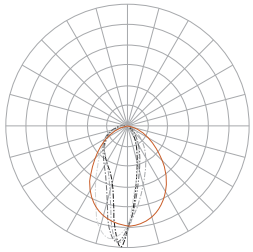
Lens: Asymmetric Room Fill (ARF)
Shielding: Flush (FL)



Lens: SatinIce Diffuse (SD)
Shielding: 2.5" Regress (R2.5)



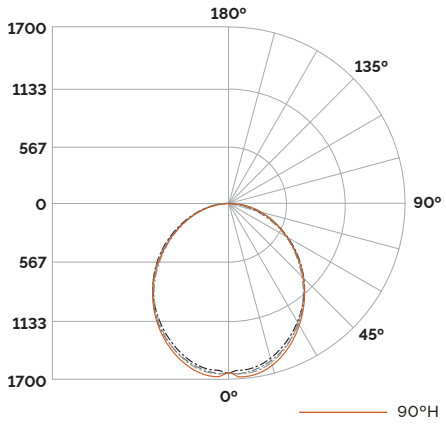
Lens: SatinIce Diffuse (SD)
Shielding: 4.0" Regress (R4.0)



Lens: Wall Graze (GRZ)
Shielding: Flush (FL)

Performance

PBEAM-X-1000-SD-FL (80+ CRI)



CCT	Lumens	Wattage	LPW
3000K	4000	35	115
	8000	67	119
3500K	4000	34	118
	8000	65	122
4000K	4000	33	121
	8000	64	125
5000K	4000	32	126
	8000	62	130

Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45	13876	13721	13842
55	13215	12883	13000
65	12418	11848	12025
75	10892	10380	10677
85	8813	8108	8857

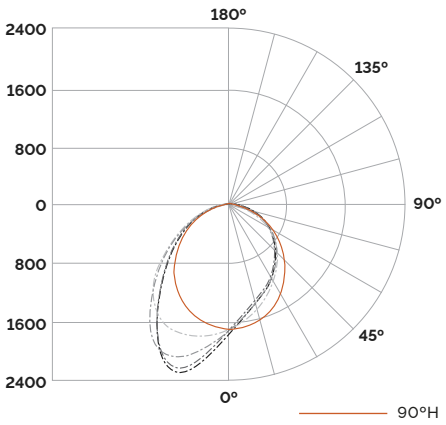
Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1244.3	28.4%
0-40	2011.6	46%
0-60	3472.8	79.4%
60-90	901.8	20.6%
70-100	384.3	8.8%
90-120	0	0%
0-90	4374.6	100%
90-180	0	0%
0-180	4374.6	100%

Candela Table

Vertical Angle	Horizontal Angle 0	22.5	45	67.5	90
0	1626	1626	1626	1626	1626
5	1594	1602	1615	1638	1658
10	1577	1582	1597	1618	1637
15	1543	1543	1557	1576	1592
20	1491	1483	1497	1512	1528
25	1422	1409	1422	1434	1447
30	1337	1322	1335	1344	1352
35	1239	1225	1237	1242	1249
40	1134	1118	1128	1132	1137
45	1022	1003	1010	1014	1019
50	908	885	892	895	900
55	789	766	770	773	777
60	669	644	646	648	653
65	547	520	522	524	529
70	420	396	398	403	406
75	294	274	280	284	288
80	177	161	170	176	178
85	80	67	74	78	80
90	0	0	0	0	0

PBEAM-X-1000-SD-ARF-FL (80+ CRI)



CCT	Lumens	Wattage	LPW
3000K	4000	33	123
	8000	63	127
3500K	4000	32	126
	8000	62	130
4000K	4000	31	129
	8000	60	133
5000K	4000	30	134
	8000	58	138

Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45	11865	11486	14482
55	10987	10642	13102
65	9731	9535	11361
75	8083	8029	9145
85	5987	5598	6204

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1404.8	30.4%
0-40	2268.8	49.1%
0-60	3791.5	82.1%
60-90	825.6	17.9%
70-100	335.7	7.3%
90-120	0	0%
0-90	4617.1	100%
90-180	0	0
0-180	4617.1	100%

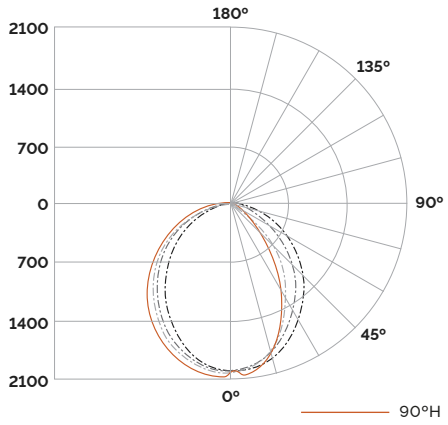
Candela Table

Vertical Angle	Horizontal Angle 0	22.5	45	67.5	90
0	1692	1692	1692	1692	1692
5	1568	1561	1575	1609	1668
10	1452	1446	1471	1533	1647
15	1353	1347	1374	1452	1609
20	1268	1260	1282	1363	1552
25	1185	1175	1192	1266	1474
30	1105	1092	1101	1163	1382
35	1025	1005	1009	1058	1275
40	935	916	914	950	1156
45	843	821	816	841	1028
50	740	720	716	732	894
55	633	616	613	624	755
60	524	508	510	516	617
65	413	401	405	410	482
70	308	299	304	307	355
75	210	202	209	209	238
80	124	117	121	122	135
85	52	46	49	49	54
90	0	0	0	0	0

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Performance

PBEAM-X-1000-SD-R2.5 (80+ CRI)



CCT	Lumens	Wattage	LPW
3000K	4000	37	107
	8000	72	111
3500K	4000	35	114
	8000	68	118
4000K	4000	34	116
	8000	67	120
5000K	4000	34	118
	8000	66	122

Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45	4024	7751	15623
55	0	3468	14153
65	0	0	12658
75	0	0	10148
85	0	0	5384

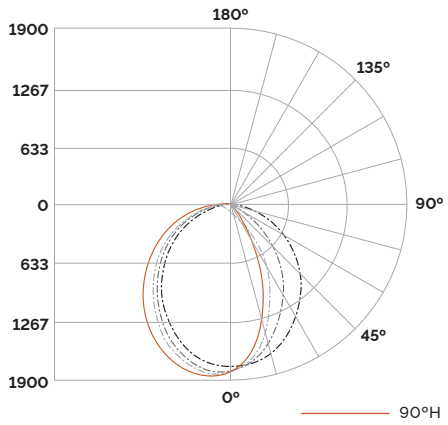
Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1471.3	30.9%
0-40	2303.6	48.4%
0-60	3717.6	78.1%
60-90	923.6	19.4%
70-100	529.4	11.1%
90-120	119.0	2.5%
0-90	4641.2	97.5%
90-180	119.1	2.5%
0-180	4760.4	100%

Candela Table

Vertical Angle	Horizontal Angle 0	22.5	45	67.5	90
0	2011	2011	2011	2011	2011
5	2032	2000	1986	1977	1980
10	1913	1885	1905	1933	1938
15	1745	1725	1776	1848	1873
20	1536	1528	1618	1731	1786
25	1296	1302	1436	1595	1681
30	1034	1058	1234	1442	1565
35	770	808	1022	1278	1437
40	523	569	804	1108	1302
45	307	357	591	933	1164
50	128	175	391	761	1022
55	0	34	215	583	876
60	0	0	70	407	731
65	0	0	0	241	577
70	0	0	0	98	426
75	0	0	0	10	283
80	0	0	0	0	154
85	0	0	0	0	51
90	0	0	0	0	0

PBEAM-X-1000-SD-R4.0 (80+ CRI)



CCT	Lumens	Wattage	LPW
3000K	4000	33	123
	8000	63	127
3500K	4000	32	126
	8000	62	130
4000K	4000	31	129
	8000	60	133
5000K	4000	30	134
	8000	58	138

Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45	0	1978	12596
55	0	400	11975
65	0	377	11014
75	0	357	9344
85	0	0	6577

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1200.7	30%
0-40	1842.9	46%
0-60	2977.4	74.4%
60-90	868.1	21.7%
70-100	529.7	13.2%
90-120	152.2	3.8%
0-90	3845.5	96%
90-180	158.9	4%
0-180	4004.4	100%

Candela Table

Vertical Angle	Horizontal Angle 0	22.5	45	67.5	90
0	1708	1709	1708	1708	1708
5	1680	1655	1664	1674	1674
10	1496	1482	1539	1617	1653
15	1253	1256	1373	1517	1602
20	960	988	1173	1396	1533
25	660	711	952	1255	1451
30	398	454	725	1102	1355
35	191	249	504	940	1251
40	37	87	316	777	1141
45	0	13	161	609	1027
50	0	11	45	445	910
55	0	10	26	294	792
60	0	9	22	164	666
65	0	7	18	63	537
70	0	0	14	40	405
75	0	0	11	27	279
80	0	0	7	16	162
85	0	0	0	8	66
90	0	0	0	0	0

The information in this document is subject to change without notice.
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Row Configurations

XX (Run Length)

The standard construction of run lengths follows the logic of the table below. Consult factory for additional information. Run lengths always start with the longest fixture and receives the power feed.

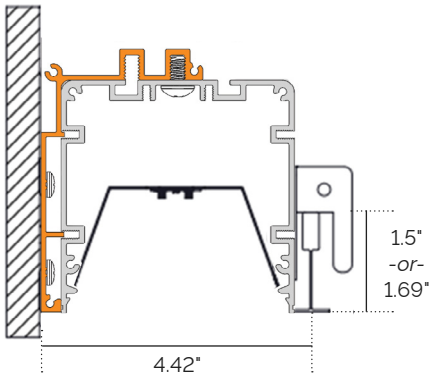
NOTE: Fixtures in continuous runs are available in 6" increments. Consult factory for smaller increments.

Total Length (Feet)	# of Sections						
	2	3	4	5	6	7	8
2	1						
3		1					
4			1				
5				1			
6					1		
7						1	
8							1
9			1	1			
10			1		1		
11		1					1
12			1				1
13				1			1
14					1		1
15						1	1
16							2
17			1	1			1
18			1		1		1
19		1					2
20			1				2
21				1			2
22					1		2
23						1	2
24							3
25			1	1			2
26			1		1		2
27		1					3
28			1				3
29				1			3
30					1		3
31						1	3
32							4
33			1	1			3
34			1		1		3
35		1					4
36			1				4
37				1			4
38					1		4
39						1	4
40							5

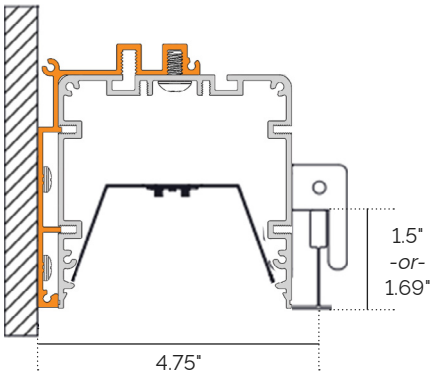
The information in this document is subject to change without notice.
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Mounting

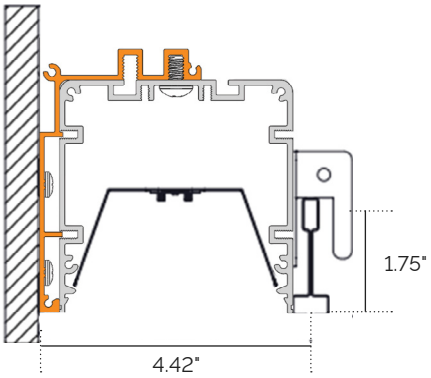
TBX (T-Grid)



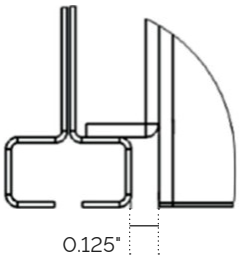
9/16" T-Bar
Flush / Tegular



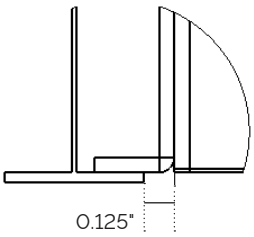
15/16" T-Bar
Flush / Tegular



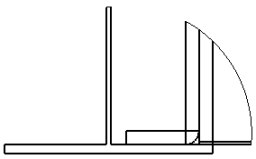
9/16" T-Bar
Bolt Slotted



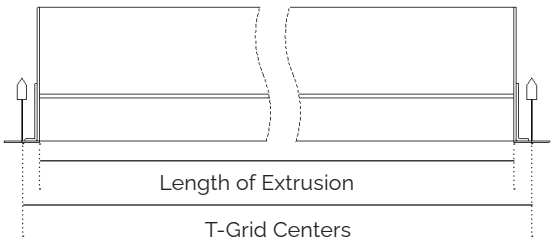
9/16" Screw Slot
Detailed View



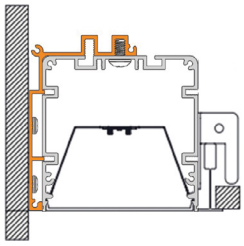
9/16" T-Bar
Detailed View



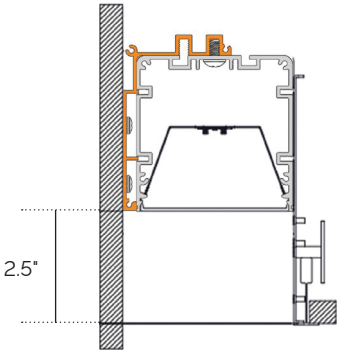
15/16" T-Bar
Detailed View



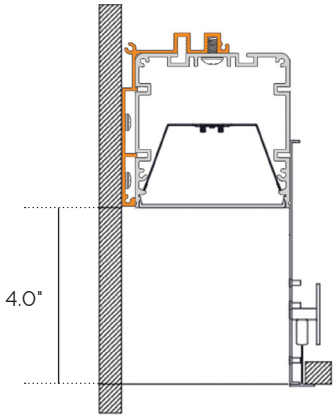
Shielding Details (TBX)



FL
Flush



R2.5
2.5" Regress

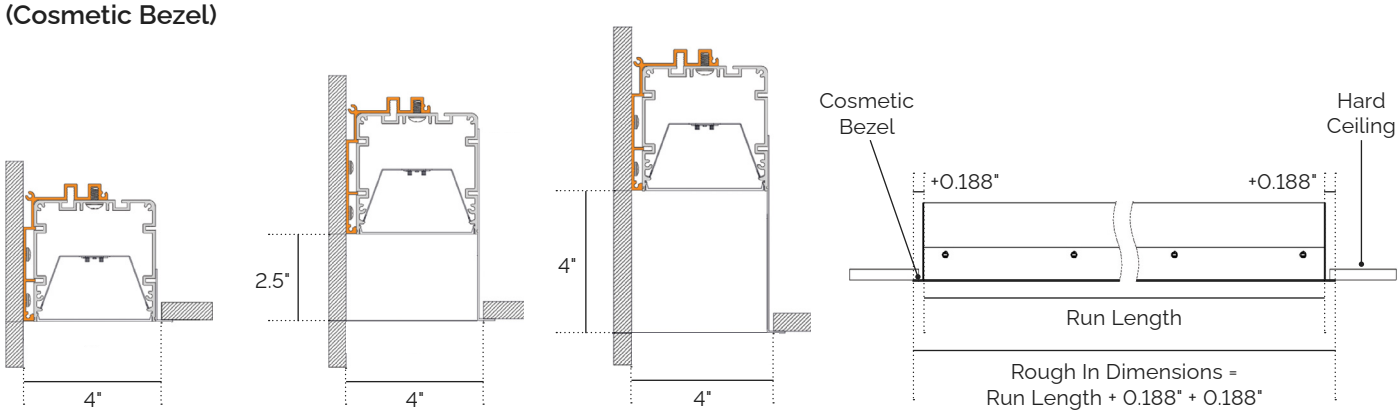


R4.0
4.0" Regress

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Mounting

CB (Cosmetic Bezel)

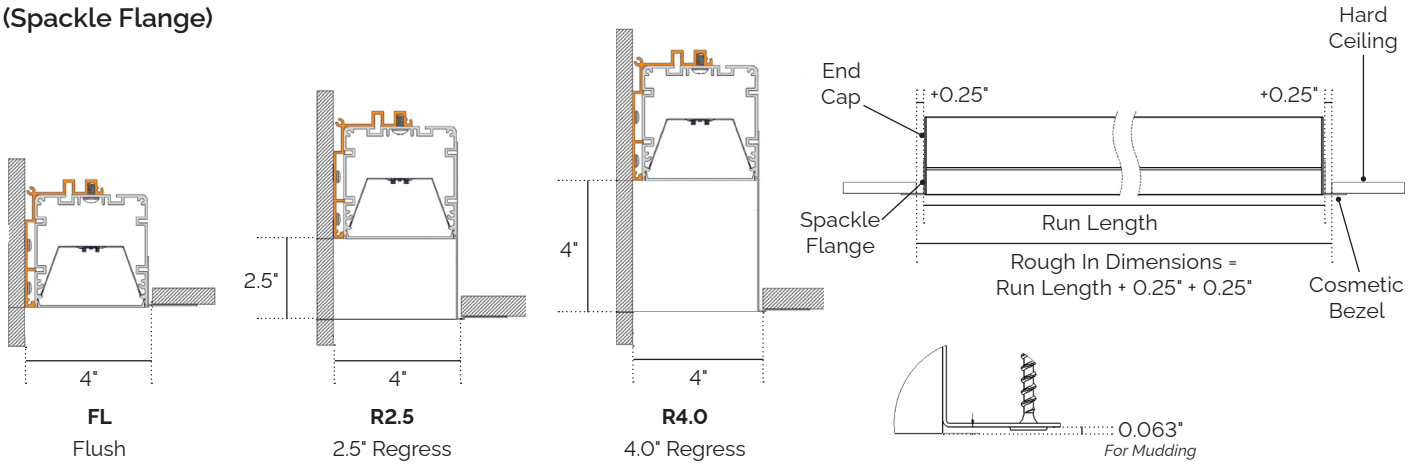


FL
Flush

R2.5
2.5" Regress

R4.0
4.0" Regress

SF (Spackle Flange)

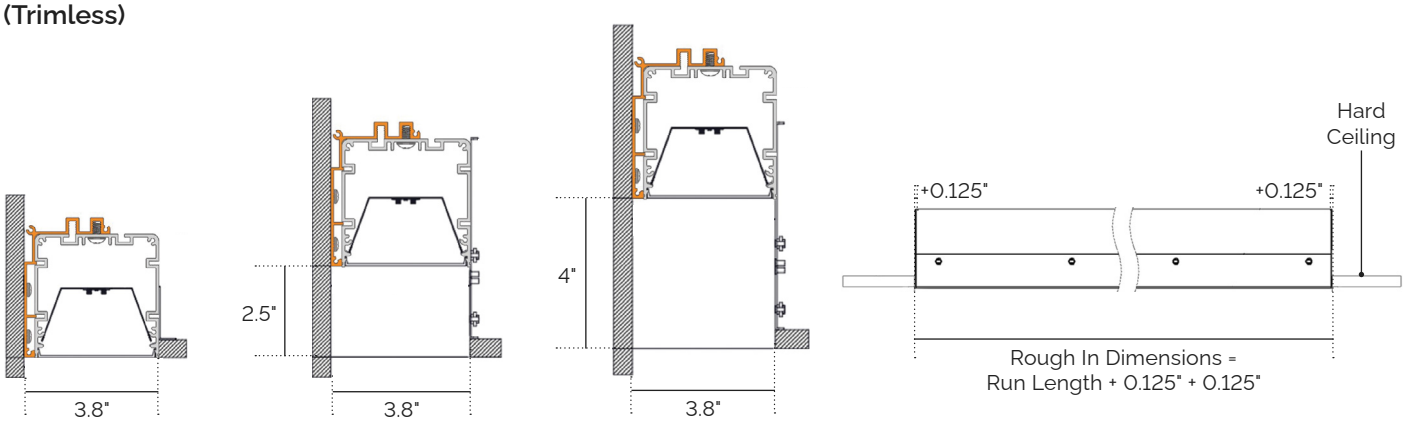


FL
Flush

R2.5
2.5" Regress

R4.0
4.0" Regress

TR (Trimless)



FL
Flush

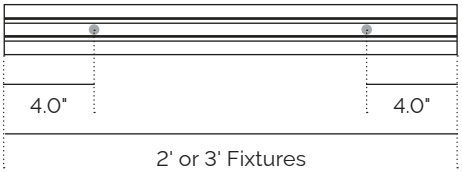
R2.5
2.5" Regress

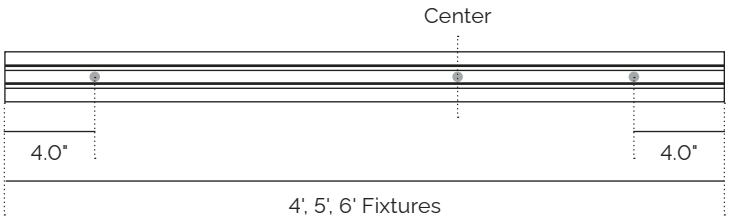
R4.0
4.0" Regress

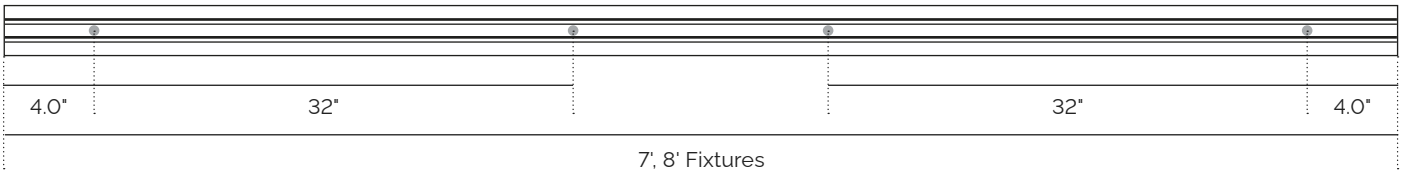
⚠ Luminaire Must Be Installed Before Ceiling Drywall

Mounting Locations

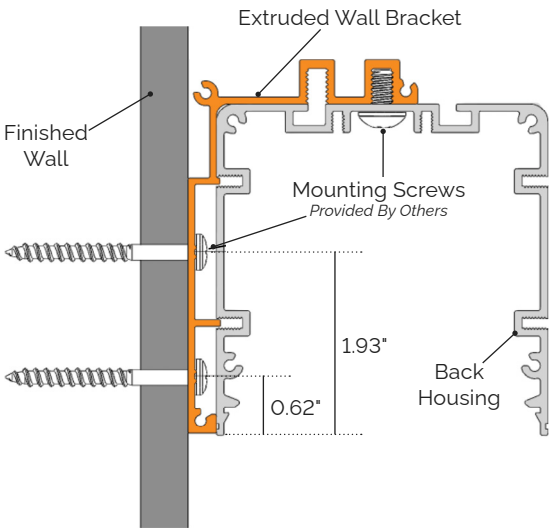
Number of mounting locations (●) vary based on fixture length. Views below show top of fixtures and example placement of provided mounting brackets. These brackets can be slid along the length of the fixture as necessary as long as the correct number of mounts are used.



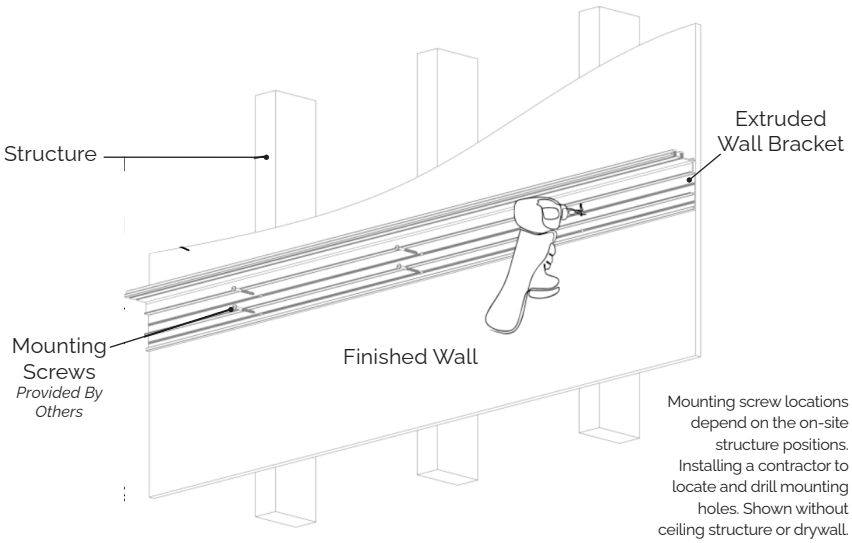




Extruded Wall Bracket



Extruded Wall Bracket
Detailed View



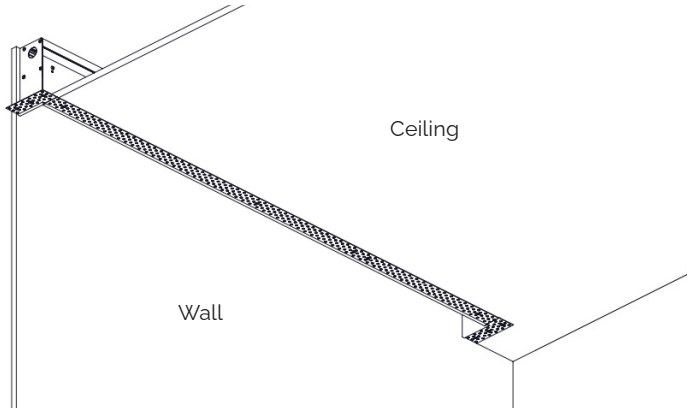
Extruded Wall Bracket Mounting
Detailed View

Fixed Run Length

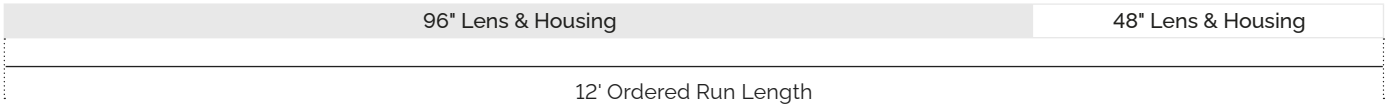
Ordered fixture length is equal to the length of extrusion. The total fixture length is length of extrusion plus the end caps.

Example: 96" (ordered length) + 0.125" + 0.125" = 96.25" total length of assembled fixture.

NOTE: Not recommended for wall-to-wall applications.



Example: 12' Fixed Run Fixture



FF (Field Fit)

Field Fit is +/- 3.0", or +/- 6.0". The end fixture can be cut back to match onsite requirements.

Example: 12' Field Fit Run (FF3)

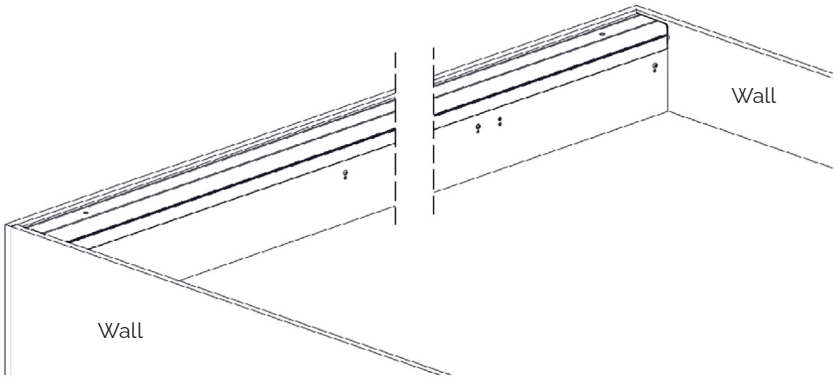


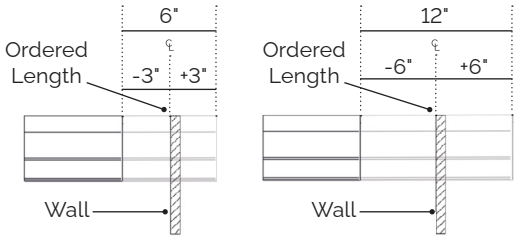
Example: 12' Field Fit Run (FF6)



XX(FF_) - Field Fit

This option allows for flexibility in wall-to-wall recessed applications. When ordered, the total run length allows for ± 3.0" or ± 6.0". Housing must be cut in the field with a miter saw based on required dimensions.





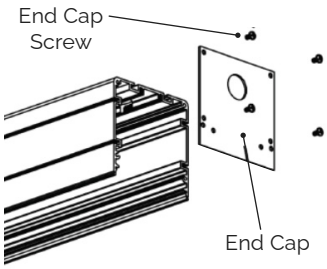
FF3
3" Field Fit

FF6
6" Field Fit

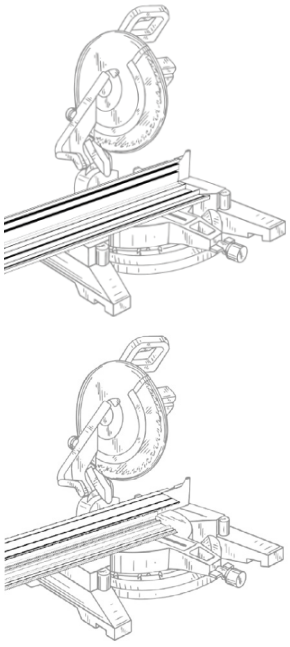
Field Fit Cutting Details

This option allows for flexibility in wall-to-wall perimeter applications. When ordered, the total run length allows for ± 3.0" or ± 6.0" . Housing must be cut in the field with a miter saw based on required dimensions.

Step 1: Remove the end cap before cutting the back extrusion.

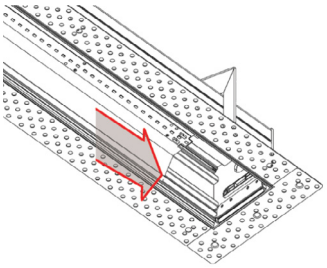


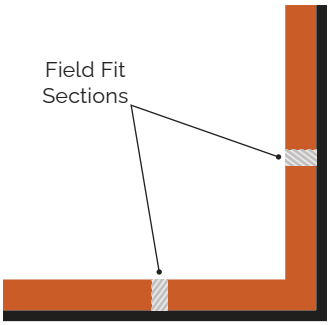
Step 2: Cut back extrusion and extruded wall bracket. Cut all trim accordingly.



NOTE: Back housing recommended to fill extrusion with scrap wood for cleaner cut.

Step 3: Reinstall the end cap and the telescoping lighting assembly and slide to the end.

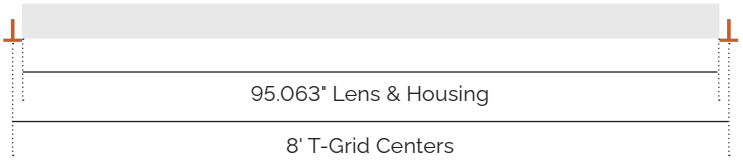


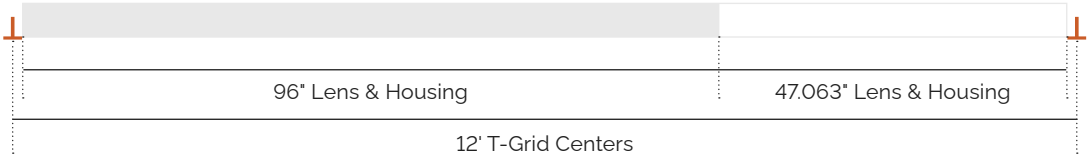


Individual & Continuous Run (T-Grid)

The lengths of individual fixtures and run lengths specified in the ordering logic is the distance between the centers of the T-Grids (See Page 2). The actual length of the fixtures and the lens will be shorter from that specified length. In a run, the last fixture compensates for the T-Grid. If a different configuration is needed to meet an aesthetic requirement, please indicate this on your P.O. when placing your order.

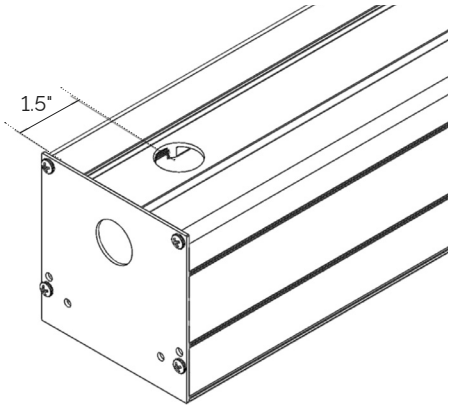
Examples of the standard construction of T-Grid configurations are as follows:





Power Location

The standard power location is out the top on the fixture. If a different configuration is needed to meet an aesthetic or placement requirement, please consult the factory.



Wiring Diagram

Wiring configurations are dependent on the options chosen. Below are a few examples of our standard wiring that is used to power the fixture.

This wiring diagram is showing a standard set of wires for a basic fixture.

Wiring		
High Voltage	Low Voltage	Hot (Black)
18 GA		Neutral (White)
H = Hot	+D(V) = +Dimming	Ground (Green)
N = Neutral	-D(G) = -Dimming	+Dimming (Violet)
GND = Ground	2864	-Dimming (Pink)

This wiring diagram is showing a set of wires for a fixture with a emergency battery.

Wiring		
High Voltage	Low Voltage	Switched (Black)
18 GA		Neutral (White)
H = Hot	+D(V) = +Dimming	Ground (Green)
N = Neutral	-D(G) = -Dimming	Unswitched (Red)
U = Unswitched	-	+Dimming (Violet)
GND = Ground	-	-Dimming (Pink)

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STARTEK
ARCHITECTURAL LIGHTING

Beam Perimeter

Submit With Order

Pattern Specification Guide

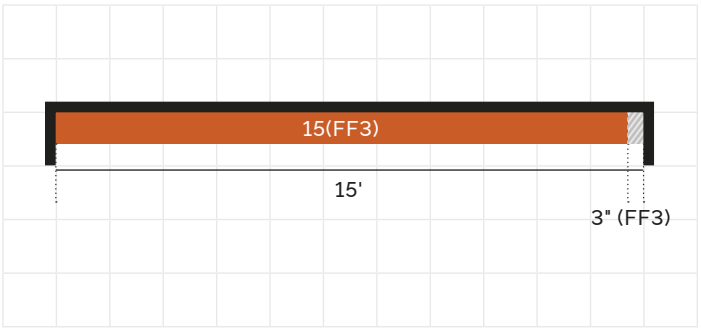
Complete the order matrix as required and provide a rough fixture layout using the grid below.

Submit this worksheet along with your order.

Example Key

- Wall
- +/- 3" Field Fit
- +/- 6" Field Fit

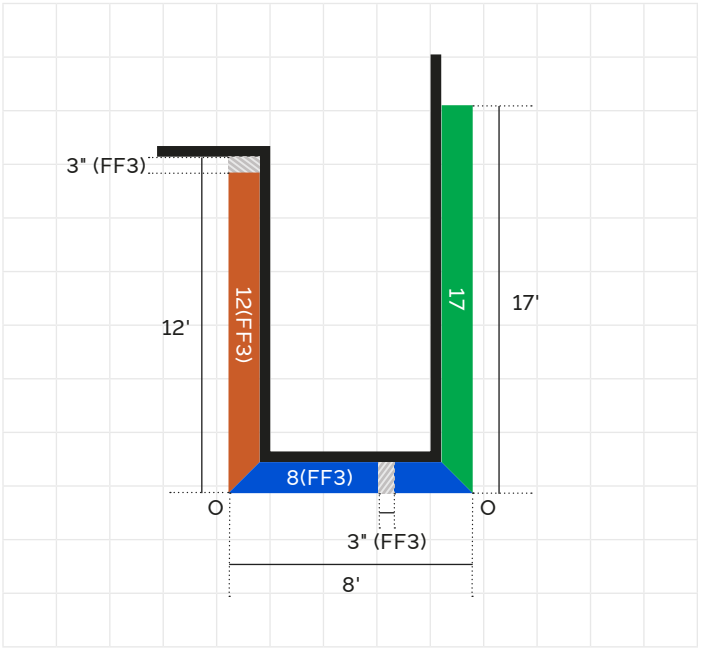
Example: PBEAM-15(FF3)



NOTE: Not all boxes need to be filled.

Fixture 1	Field Fit	Corner	Fixture 2	Field Fit	Corner	Fixture 3
15	FF3					
XX - Run Length	**FF3 -** Field Fit (+/- 3") **FF6 -** Field Fit (+/- 6")	**X -** Inside Corner **O -** Outside Corner	**XX -** Run Length	**FF3 -** Field Fit (+/- 3") **FF6 -** Field Fit (+/- 6")	**X -** Inside Corner **O -** Outside Corner	**XX -** Run Length

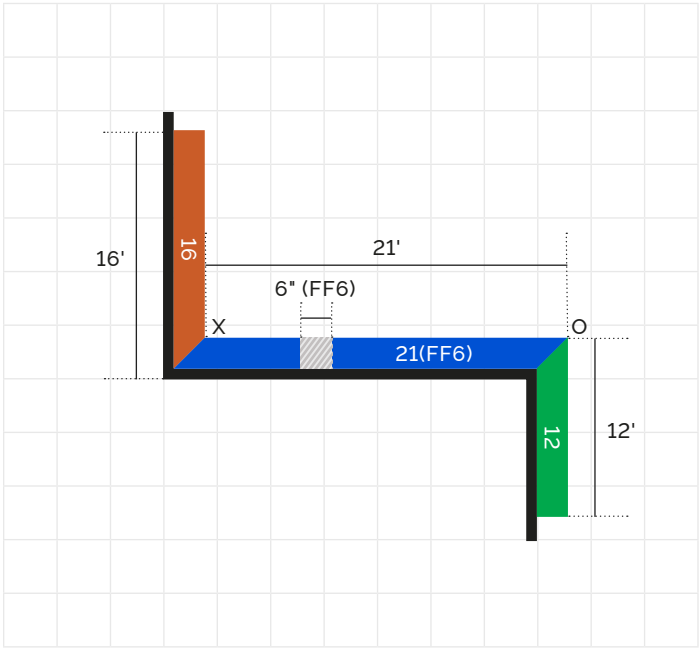
Example: PBEAM-12(FF3)-O-8(FF3)-O-17



NOTE: Not all boxes need to be filled.

Fixture 1	Field Fit	Corner	Fixture 2	Field Fit	Corner	Fixture 3
12	FF3	O	8	FF3	O	17
XX - Run Length	**FF3 -** Field Fit (+/- 3") **FF6 -** Field Fit (+/- 6")	**X -** Inside Corner **O -** Outside Corner	**XX -** Run Length	**FF3 -** Field Fit (+/- 3") **FF6 -** Field Fit (+/- 6")	**X -** Inside Corner **O -** Outside Corner	**XX -** Run Length

Example: PBEAM-16-X-21(FF6)-O-12



NOTE: Not all boxes need to be filled.

Fixture 1	Field Fit	Corner	Fixture 2	Field Fit	Corner	Fixture 3
16		X	21	FF6	O	12
XX - Run Length	**FF3 -** Field Fit (+/- 3") **FF6 -** Field Fit (+/- 6")	**X -** Inside Corner **O -** Outside Corner	**XX -** Run Length	**FF3 -** Field Fit (+/- 3") **FF6 -** Field Fit (+/- 6")	**X -** Inside Corner **O -** Outside Corner	**XX -** Run Length

STARTEK Architectural Lighting
899 E. Park Avenue, Libertyville, Illinois 60048
877-782-7835

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Submit With Order

Pattern Specification Guide

NOTE: Not all boxes need to be filled.

Fixture 1	Field Fit	Corner	Fixture 2	Field Fit	Corner	Fixture 3	Field Fit	Corner	Fixture 4	Field Fit	Corner
XX - Run Length	**FF3 -** Field Fit (+/- 3")	**X -** Inside Corner	**XX -** Run Length	**FF3 -** Field Fit (+/- 3")	**X -** Inside Corner	**XX -** Run Length	**FF3 -** Field Fit (+/- 3")	**X -** Inside Corner	**XX -** Run Length	**FF3 -** Field Fit (+/- 3")	**X -** Inside Corner
	FF6 - Field Fit (+/- 6")	**O -** Outside Corner		**FF6 -** Field Fit (+/- 6")	**O -** Outside Corner		**FF6 -** Field Fit (+/- 6")	**O -** Outside Corner		**FF6 -** Field Fit (+/- 6")	**O -** Outside Corner

Controls

Sensor

Wattstopper FS-205 V2 Low Voltage PIR. Integrated photosensor for hold-off daylighting control. 24VDC operating voltage. Adjustable time delay (30 seconds to 30 minutes).

