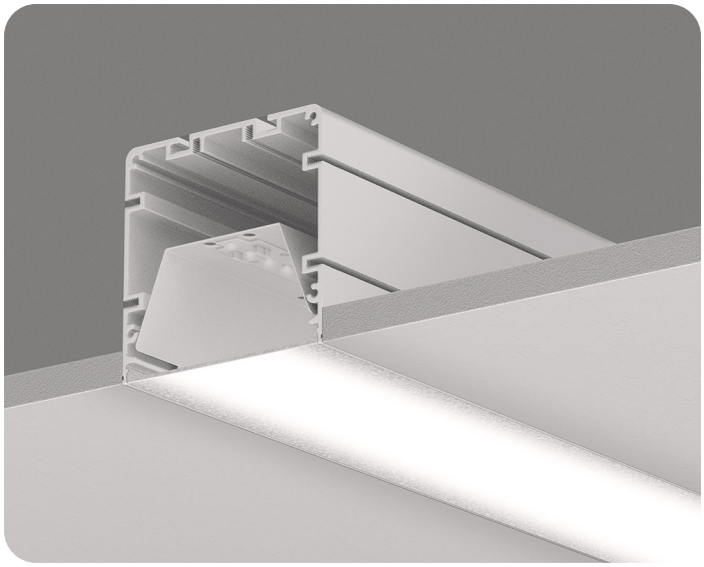
STARTEK
ARCHITECTURAL LIGHTING

Rep/Agent		Type	
Project			
Order No.		Date	

Beam Recessed



Key Features

- Extruded aluminum single piece housing
- Snap-in lens and reflector for easy install
- Continuous lensing standard – runs up to 100'
- 2', 4', 6' and 8' individual units or continuous rows
- Soft diffuse direct lighting
- 0-10V dimming to 1% is standard
- Efficacy up to 130 lm/W
- Consult factory for TM21, TM30, LM79 and LM80

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
- Within 3 MacAdam ellipses, 90 CRI (R9 50 min) available, and L70 > 50,000 hours.

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 780 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.

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Ordering Logic

RBEAM-20-500-SD-35K-80-PW-TBX-U-1C-1EMB10

Series	Length	Direct Output[1]	Direct Distribution	CCT	CRI
RBEAM					
	XX - Run Length	**250 -** 250 LPF	**SD -** SatinIce Diffuse	**27K -** 2700K	**80 -** 80 CRI
		500 - 500 LPF	**WD -** Wide Diffuse	**30K -** 3000K	**90 -** 90 CRI (R9 50 min)
		750 - 750 LPF	**WW -** Wall Wash	**35K -** 3500K	
		1000 - 1000 LPF	**GRZ -** Wall Graze	**40K -** 4000K	
		XXX - Custom LPF	**ARF -** Asymmetric Room Fill	**50K -** 5000K	
			Drop Lens w/ Lit Ends[2]	**TW -** Tunable White[3] (2700K-6500K)	
			DLE05 - 0.5"		
			DLE10 - 1.0"		
			DLE15 - 1.5"		

Finish[4]	Mounting		Voltage	Circuiting	Emergency
Standard Powder Coat	**T-Grid**	**Cosmetic Bezel[5]**	**U -** 120-277V	**1C -** Single Circuit	**BLANK -** None
PW - White	**TBX -** 9/16" Grid 15/16" Grid 9/16" Screw Slotted Grid	**CB -** Screw/Rod Mount	**C -** 347V	**MC -** Multiple Circuits[6, 7]	**EC -** Emergency Circuit[10]
PB - Black		**CBY -** Yoke Mount		**DL -** Daylight Control[6, 8]	**#EMB6 -** 6W EM Battery[11, 12]
Premium	**TEG9 -** 9/16" Grid (Tegular Tile)	**Spackle Flange**		**NL -** Night Lights[6, 9]	**#EMB10 -** 10W EM Battery[11, 12]
RALXXXX - Powder Coat Gloss Finish	**TEG15 -** 15/16" Grid (Tegular Tile)	**SF -** Screw/Rod Mount			**#FCEMB10 -** 10W EM Battery[11, 13]
Custom Powder Coat	**TBO -** T-Bar Other (Specify T-Bar Type)	**SFY -** Yoke Mount			**#FCEMB14 -** 14W EM Battery[11, 13]
PO - Powder Other		**Trimless**			**#GTD -** Generator Transfer Device w/ ALCR[14]
		TR - Screw/Rod Mount			

Options

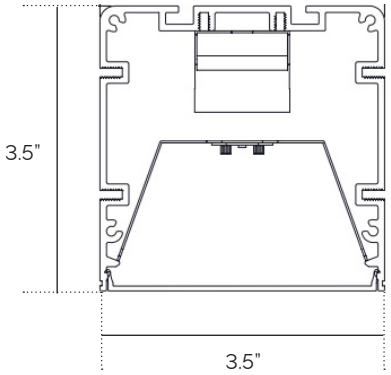
Specialty Drivers[15]	Sensors	Other
DT1 - eldoLED EcoDrive Dim to 1% (0-10V)	**DMXX% -** Daylight/Motion Sensor (XX%=% Min. Dimming)	**CP -** Chicago Plenum (CCEA)
DTZ - eldoLED SoloDrive Dim to 0.1% (0-10V)	**VDO -** Lutron Vive Integral Fixture Control (RF w/ Daylight and Occupancy)	**CFW -** Conduit Flex Whip
PSRD - Philips Sensor Ready (DALI) Driver	**AWNR -** Lutron Athena Wireless Node (RF Only)[19]	**OTD -** Outdoor
LDE1 - Lutron Hi-Lume EcoSystem LED Driver w/ Soft-on, Fade-to-Black	**AWNS -** Lutron Athena Wireless Node w/ Sensor[19]	**FF3 -** +/-3" Field Fit
TW-A - Tunable White, 0-10V[16]	**NLA -** Acuity nLight Air[18]	**FF6 -** +/-6" Field Fit
TW-EL - eldoLED DUALdrive Tunable White (DALI)[16]	**NLW -** Acuity nLight Wired[18]	
LD2 - Lutron DALI 2 Digital Tunable White Driver w/ 1% Dimming[17]	**WVL -** Cooper Wavelinx[18]	
HD-XX - HyperDrive Remote Driver[18]		

Ordering Notes

1. 200 LPF min. output / 1500 LPF max. output.
2. Seamless continuous lens unavailable for Drop Lens options.
3. Tunable White Driver must be specified in options.
4. See page 3 for standard options.
5. Bezel color will match fixture color unless otherwise specified, consult factory for options.
6. Customer to specify number of zones and locations through factory submittal drawings.
7. Multiple low and line control zones.
8. Multiple low voltage control zones for daylight control.
9. Multiple unswitched wires for night light control zones.
10. Separate power, transfer devices provided by others.
11. '#' indicates number per run.
12. Provided by Iota/Bodine.
13. EM battery is factory choice.
14. Iota EDS-DR Emergency Control Device
15. Standard driver is 0-10V, dim to 1% output current.
16. 75 Watt Max. Dual driver required for higher fixture wattage.
17. 50 Watt Max. Dual driver required for higher fixture wattage.
18. Consult factory.
19. Athena sensor matches finish for white and black fixtures.

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Dimensions



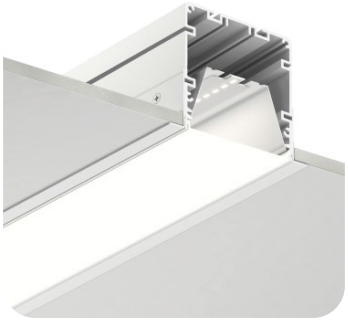
Finishes

Standard

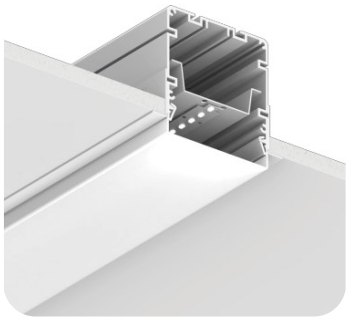
PW: White

PB: Black

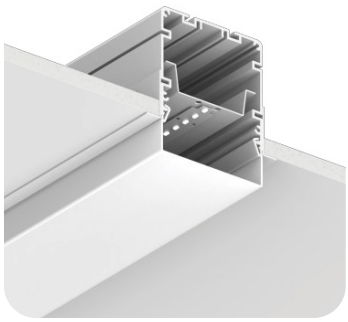
Diffusing



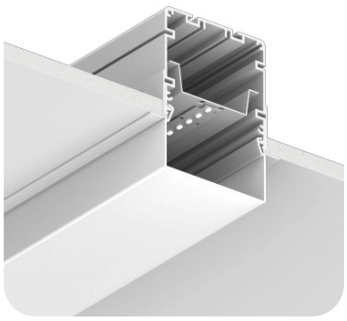
Flush
3.5" Height



DLE05
4.0" Height

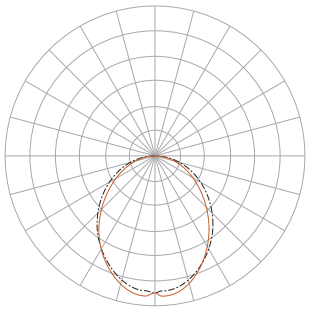


DLE10
4.5" Height

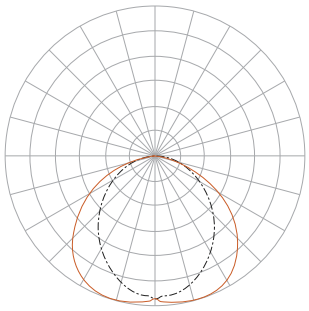


DLE15
5.0" Height

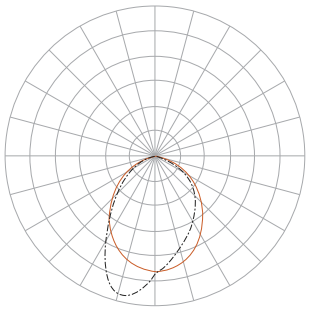
Distribution



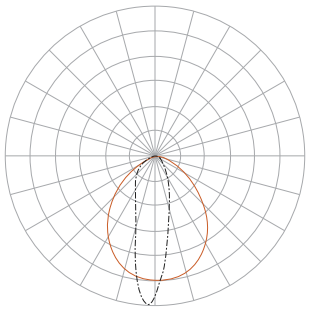
Direct: SatinIce Diffuse (SD)



Direct: Wide Diffuse (WD)



Direct: Wall Wash (WW)



Direct: Wall Graze (GRZ)

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Performance

Power

Direct LPF	Total Lumens	Satin Diffuse (SD)		Wide Diffuse (WD)		Wall Wash (WW)	
		LPW	W/ft.	LPW	W/ft.	LPW	W/ft.
300	2800	130	3	124	3	125	3
500	4000	130	4	124	4	125	4
750	6000	130	6	124	6	125	6
1000	8000	130	8	124	8	125	8

NOTE: Based on 8' lengths at 35K CCT and 80 CRI modules. All wattage values are rounded up. Delivered lumens may vary +/- 5%. Actual wattage may vary +/- 5%.

Wattage Multiplier

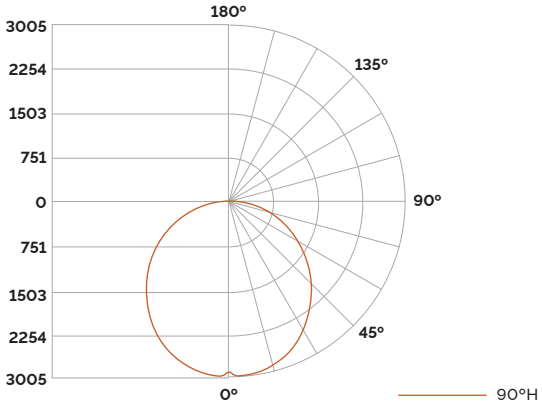
CRI	CCT	4' Length	8' Length
80 CRI	3000K	1.11	1.05
	3500K	1.05	1.00
	4000K	1.03	0.98
	5000K	1.02	0.97
90 CRI	3000K	1.17	1.11
	3500K	1.11	1.05
	4000K	1.08	1.03
	5000K	1.07	1.02

Multiplier How-To

To determine CRI/CCT configuration wattage:
Choose wattage from Power matrix for desired optic and lumen output for 8' fixture length.

Wattage x Multiplier = New Configuration Wattage

RBEAM-8-1000-SD-35K-80



Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45°	10,586	10,610	10,819
55°	10,136	10,045	10,256
65°	9,464	9,278	9,548
75°	8,153	8,214	8,591
85°	6,139	6,705	7,191

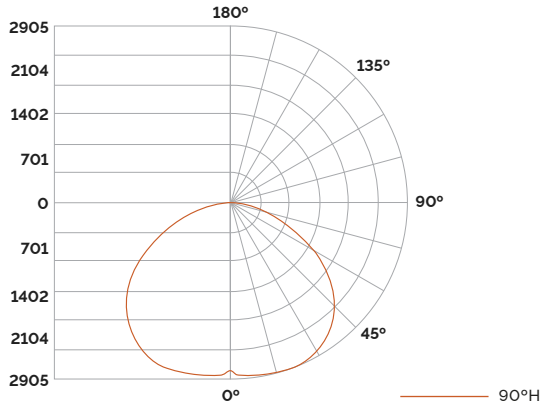
Candela Table

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	2955	2955	2955	2955	2955
5	2922	2910	2927	2961	2993
10	2877	2859	2878	2912	2945
15	2800	2778	2797	2831	2864
20	2692	2669	2690	2722	2753
25	2555	2533	2560	2587	2616
30	2396	2376	2404	2430	2457
35	2218	2202	2231	2253	2277
40	2032	2014	2042	2062	2085
45	1838	1818	1842	1858	1878
50	1640	1613	1633	1647	1644
55	1427	1400	1414	1430	1444
60	1210	1179	1190	1204	1218
65	982	954	963	978	991
70	746	727	738	753	765
75	518	504	522	537	546
80	307	300	321	336	341
85	131	126	143	149	154
90	0	0	0	0	0

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Performance

RBEAM-8-1000-WD-35K-80



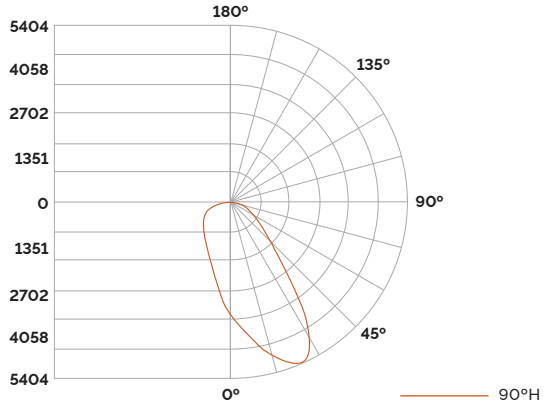
Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45°	10,149	13,009	14,522
55°	9,349	12,588	13,771
65°	8,460	11,631	12,333
75°	7,128	9,857	10,097
85°	4,894	6,673	6,869

Candela Table

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	2698	2698	2698	2698	2698
5	2668	2662	2682	2719	2757
10	2626	2625	2669	2730	2780
15	2541	2554	2649	2741	2802
20	2425	2461	2602	2729	2801
25	2281	2342	2535	2696	2769
30	2115	2204	2442	2615	2698
35	1933	2044	2317	2503	2587
40	1743	1867	2164	2350	2423
45	1548	1679	1984	2157	2215
50	1354	1477	1781	1931	1973
55	1157	1272	1558	1680	1704
60	966	1057	1313	1408	1416
65	771	841	1060	1130	1124
70	577	630	800	846	836
75	398	427	550	575	564
80	228	244	317	330	324
85	92	94	125	131	129
90	0	0	0	0	0

RBEAM-8-1000-WW-35K-80



Luminance Data (cd/sq.m)

Angles	Avg. 0°	Avg. 45°	Avg. 90°
45°	5,250	10,930	11,206
55°	3,258	6,363	9,613
65°	2,098	3,674	7,896
75°	1,078	1,854	5,864
85°	235	387	2,659

Candela Table

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	3379	3379	3379	3379	3379
5	3913	3894	3703	3487	3278
10	4475	4392	4035	3615	3211
15	4991	4840	4383	3731	3100
20	5306	5105	4614	3826	2939
25	5392	5177	4708	3849	2742
30	4632	4647	4675	3767	2518
35	3262	3510	4350	3597	2277
40	2192	2449	3696	3361	2034
45	1602	1748	2889	3042	1771
50	1232	1317	2169	2651	1511
55	979	1021	1612	2209	1251
60	784	797	1183	1763	1004
65	602	606	861	1326	776
70	438	434	605	933	563
75	285	277	387	599	372
80	150	145	208	319	205
85	55	45	68	108	71
90	0	0	0	0	0

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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.

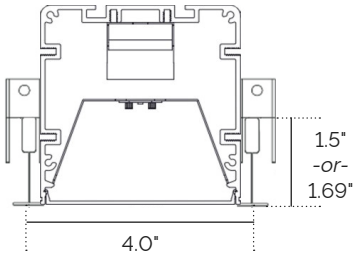
NOTE: Fixtures in continuous runs are available in 6" increments. Consult factory for smaller increments.

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

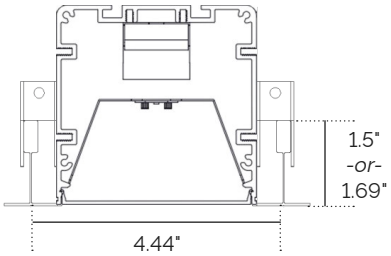
Mounting

T-Bar / T-Grid

TBX

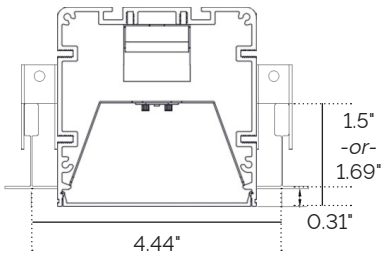


9/16" T-Bar
Flush

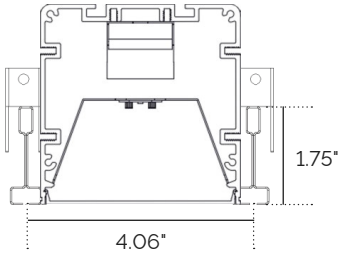


15/16" T-Bar
Flush

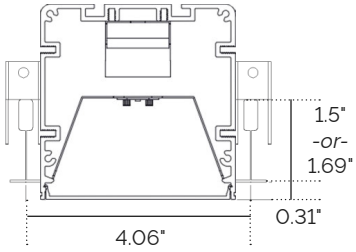
TEG15



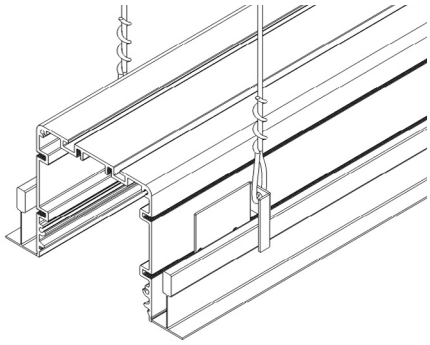
9/16" T-Bar
Bolt Slotted



9/16" T-Bar
Tegular



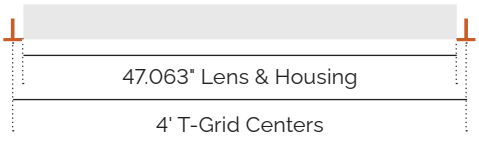
15/16" T-Bar
Tegular



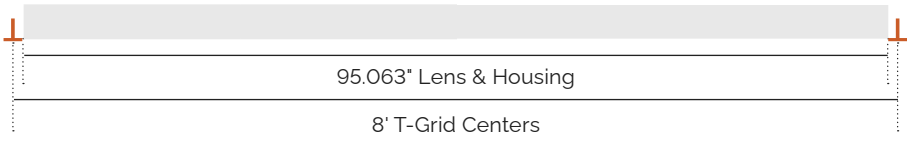
TBX & TEGXX

Examples of the standard construction of TBX and TBA configurations are as follows:

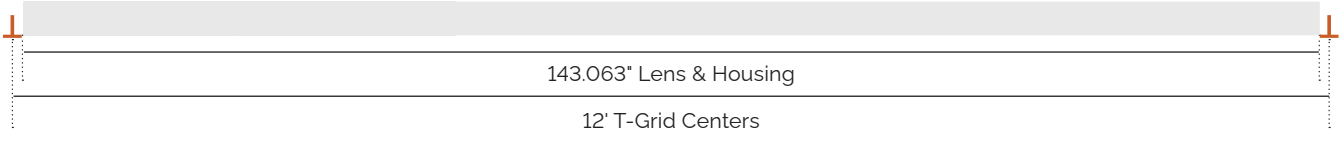
4' Fixture



8' Fixture



12' Fixture

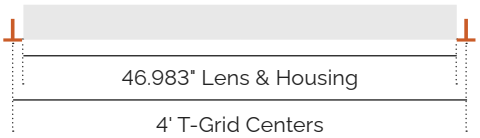


Mounting

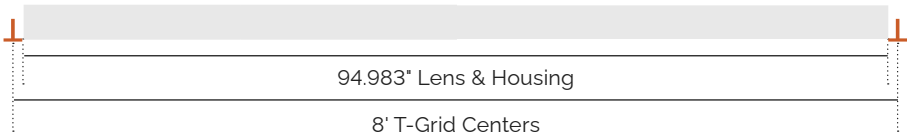
TEG15

Examples of the standard construction of TBX and TBA configurations are as follows:

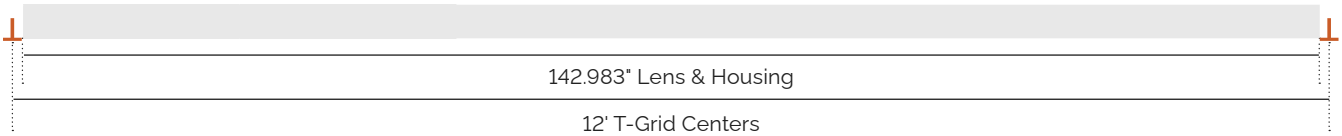
4' Fixture

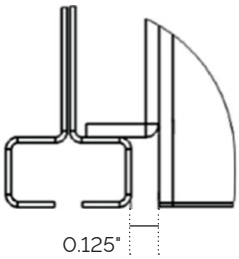


8' Fixture

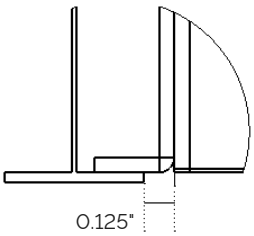


12' Fixture

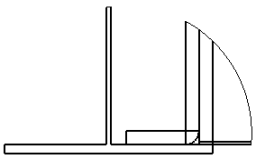




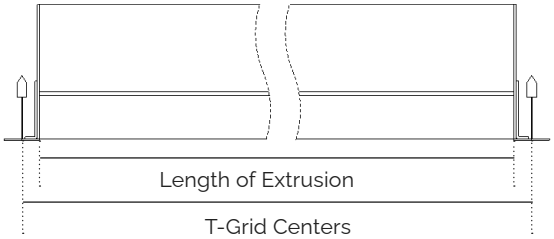
9/16" Screw Slot
Detailed View



9/16" T-Bar
Detailed View

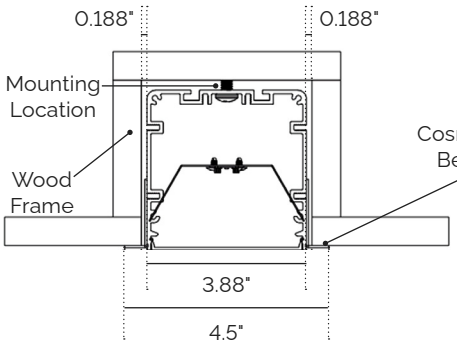


15/16" T-Bar
Detailed View

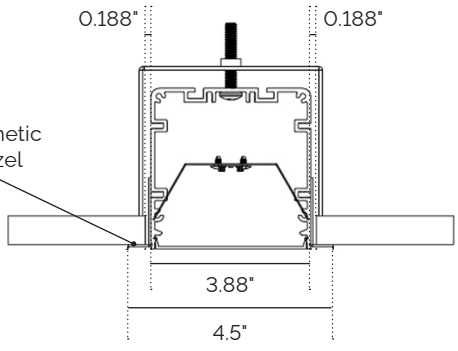


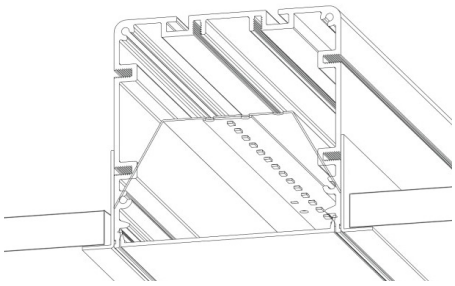
Cosmetic Bezel

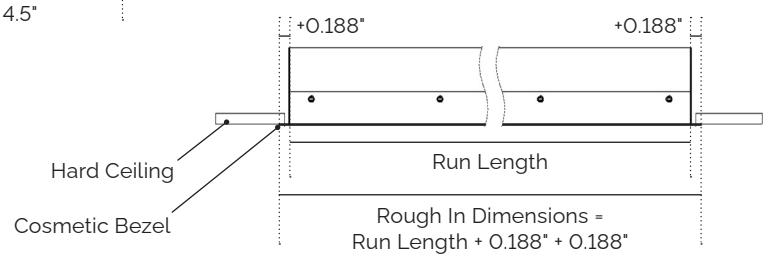
CB (Screw / Rod Mount)



CBY (Yoke Mount)





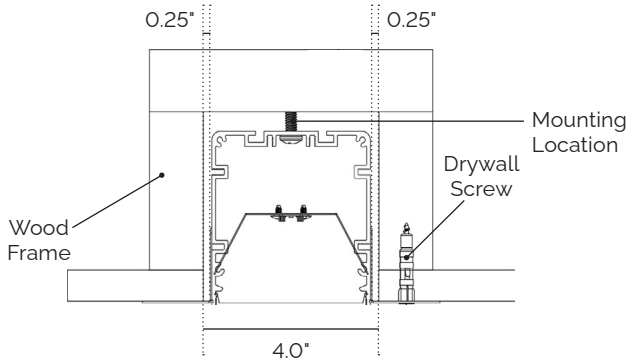


NOTE: Hole size at mounting location is Ø 0.266" for 0.25" rod or screw (provided by others).

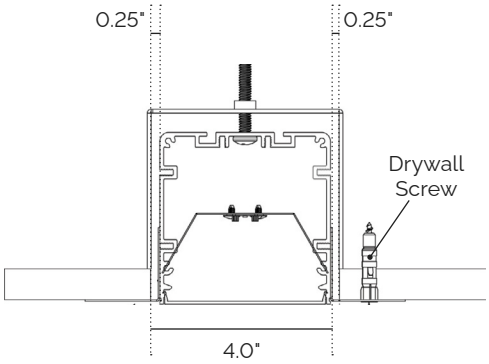
Mounting

Spackle Flange

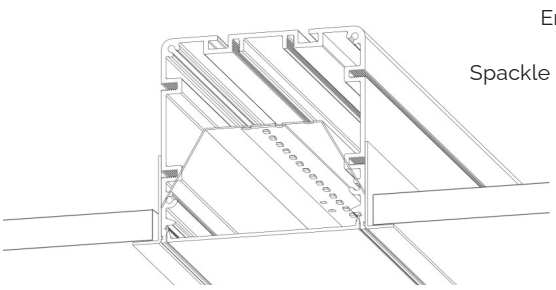
SF (Screw / Rod Mount)

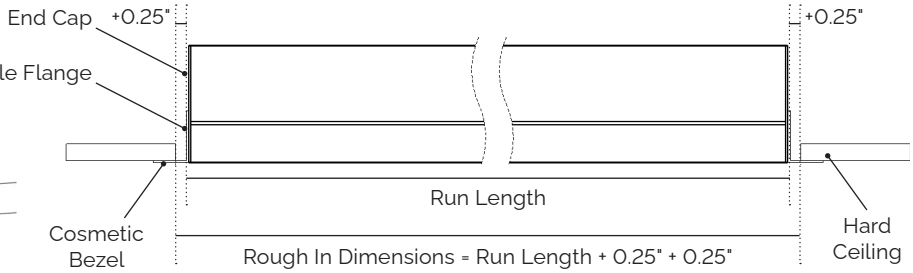


SFY (Yoke Mount)



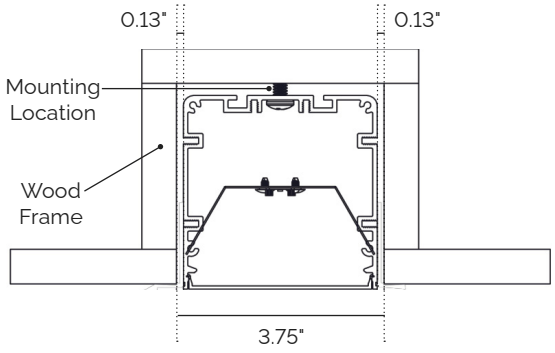
NOTE: Hole size at mounting location is Ø 0.266" for 0.25" rod or screw (provided by others).

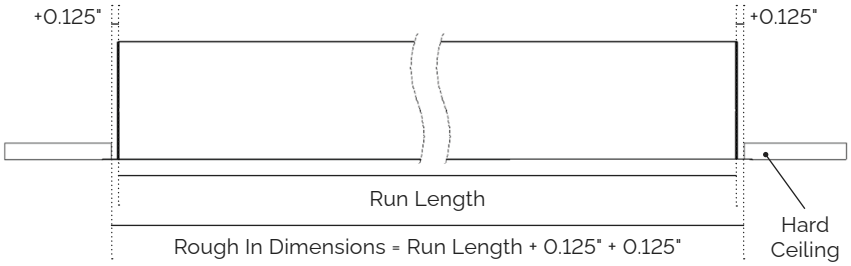




Trimless

TR (Screw / Rod Mount)





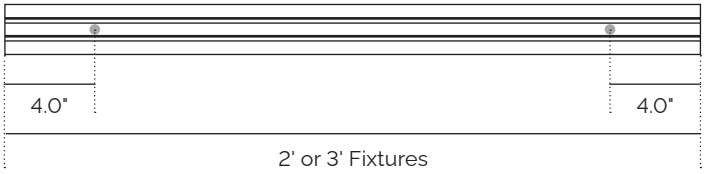
NOTE: Hole size at mounting location is Ø 0.266" for 0.25" rod or screw (provided by others).

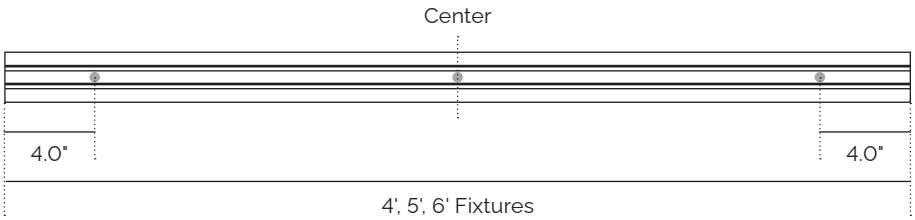
The information in this document is subject to change without notice.
Contact STARTEK for most up to date product details.

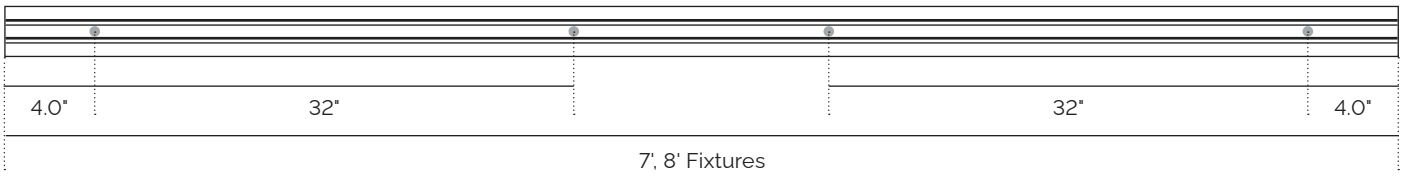
Mounting Locations

Spackle Flange (SF), Cosmetic Bezel (BZ), Trimless (TR)

Mounting locations (●) will vary depending on fixture length. See below for individual fixtures and runs view, showing the top of fixtures.

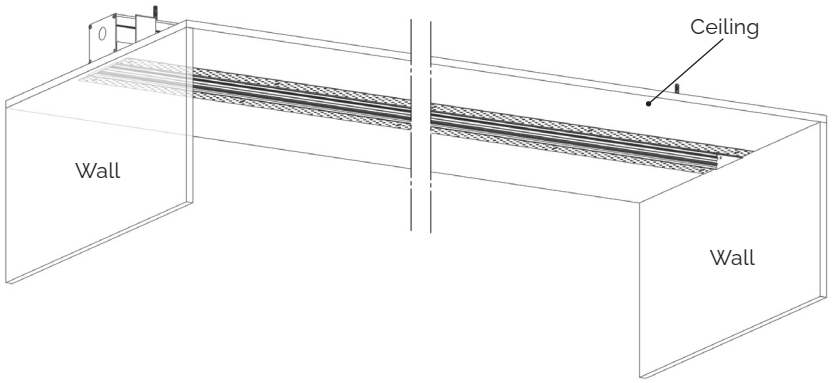


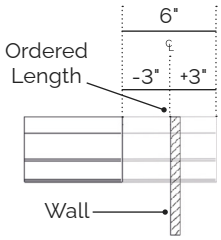




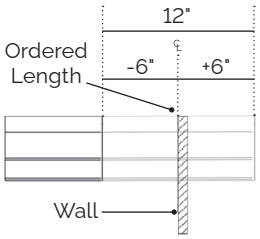
FF (Field Fit)

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.





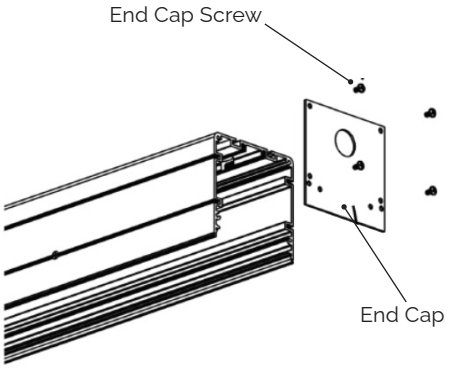
FF3
3" Field Fit



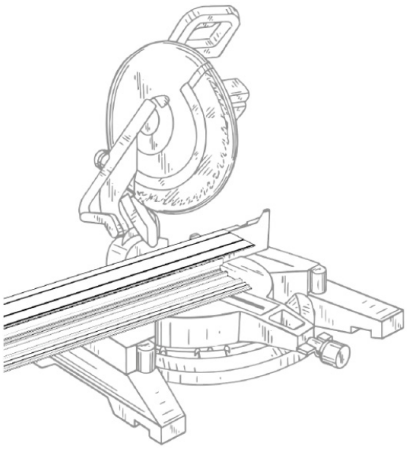
FF6
6" Field Fit

Field Fit Cutting Details

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

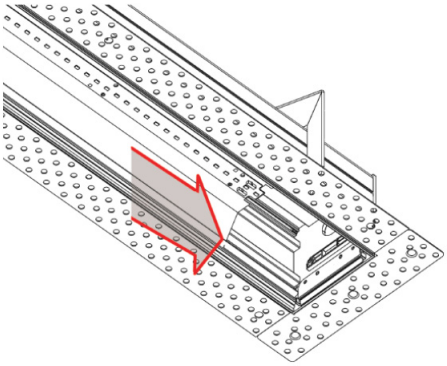


Step 2: Cut back the extrusion. Cut all trim accordingly.



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

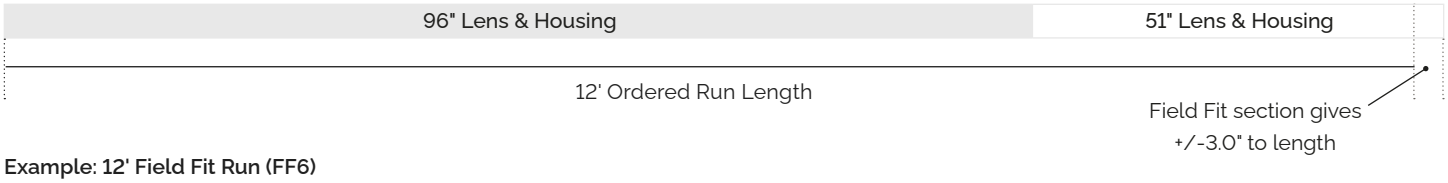
Step 3: Reinstall the end cap and the telescoping lighting assembly and slide to the end.



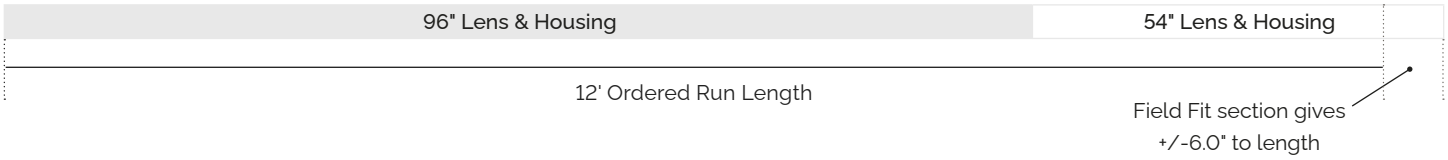
FF (Field Fit)

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)



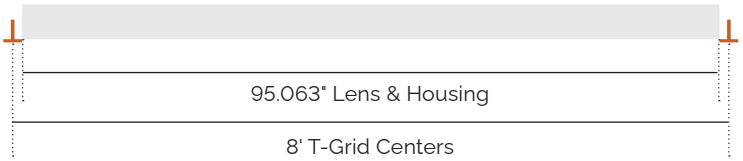
Example: 12' Field Fit Run (FF6)

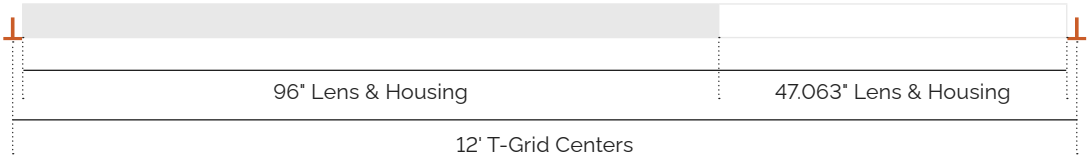


Individual & Continuous Run (T-Grid)

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.

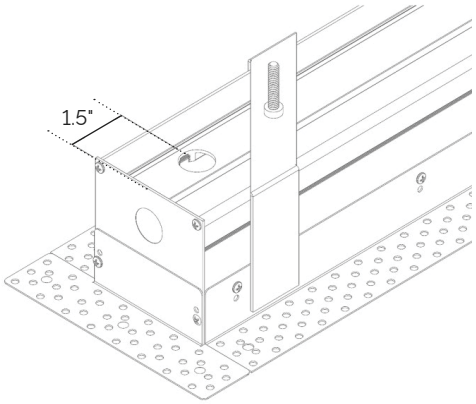
Examples of the standard construction of T-Grid configurations are as follows:





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)

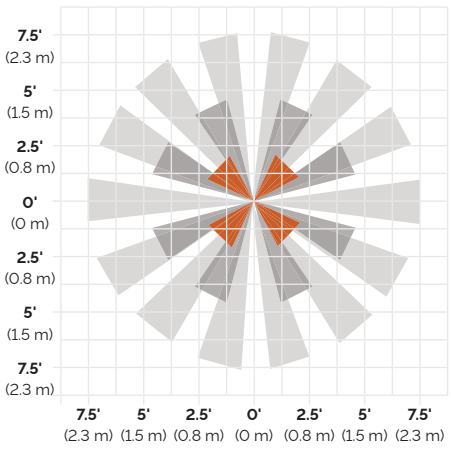
This wiring diagram is showing a set of wires for a fixture with a emergency battery.

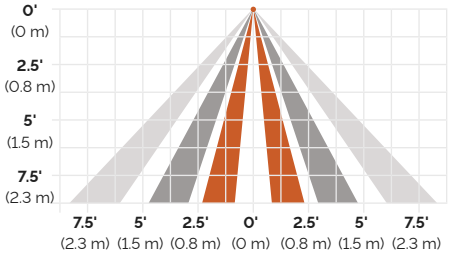
Wiring		
High Voltage	Low Voltage	Switched (Black)
18 GA		Neutral (White)
H = Hot	+D(V) = +Dimming	Ground (Green)
N = Neutral	-D(G) = -Dimming	Unswitched (Red)
U = Unswitched	-	+Dimming (Violet)
GND = Ground	-	-Dimming (Pink)

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).







Wireless Node

