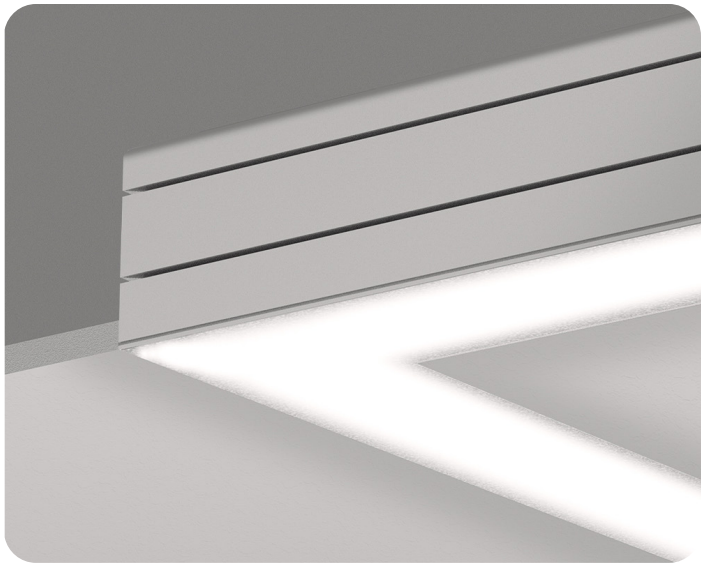
STARTEK
ARCHITECTURAL LIGHTING

| | | | |
|---|---|---|---|
| Rep/Agent | | Type | |
| Project | | | |
| Order No. | | Date | |

# Beam Shape 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.


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

## Ordering Logic

RBEAM-4X6RECT-500-SD-35K-80-PW-TBX-U-1C-1EMB10

| Series | Length[1] | Direct Output[2] | Direct Distribution | CCT | CRI |
|---|---|---|---|---|---|
| RBEAM | | | | | |
| | **_X_RECT -** Rectangle | **250 -** 250 LPF | **SD -** SatinIce Diffuse | **27K -** 2700K | **80 -** 80 CRI |
| | **_X_L -** L-Shape | **500 -** 500 LPF | **WD -** Wide Diffuse | **30K -** 3000K | **90 -** 90 CRI (R9 50 min) |
| | **_X_X_U -** U-Shape | **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[3]** | **TW -** Tunable White[4] (2700K-6500K) | |
| | | | **DLE05 -** 0.5" | | |
| | | | **DLE10 -** 1.0" | | |
| | | | **DLE15 -** 1.5" | | |

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

## Options

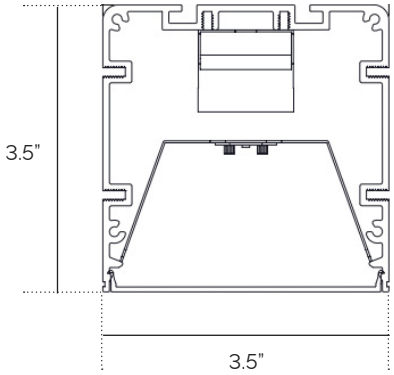
| Specialty Drivers[16] | Sensors | Other |
|---|---|---|
| **DT1 -** eldoLED EcoDrive Dim to 1% (0-10V) | **DMXX% -** Daylight/Motion Sensor (XX%=% Min. Dimming) | **CP -** Chicago Plenum (CCEA) |
| **DTZ -** eldoLED SoloDrive Dim to 0.1% (0-10V) | **VDO -** Lutron Vive Integral Fixture Control (RF w/ Daylight and Occupancy) | **CFW -** Conduit Flex Whip |
| **PSRD -** Philips Sensor Ready (DALI) Driver | **AWNR -** Lutron Athena Wireless Node (RF Only)[20] | **OTD -** Outdoor |
| **LDE1 -** Lutron Hi-Lume EcoSystem LED Driver w/ Soft-on, Fade-to-Black | **AWNS -** Lutron Athena Wireless Node w/ Sensor[20] | **FF3 -** +/-3" Field Fit |
| **TW-A -** Tunable White, 0-10V[17] | **NLA -** Acuity nLight Air[19] | **FF6 -** +/-6" Field Fit |
| **TW-EL -** eldoLED DUALdrive Tunable White (DALI)[17] | **NLW -** Acuity nLight Wired[19] | |
| **LD2 -** Lutron DALI 2 Digital Tunable White Driver w/ 1% Dimming[18] | **WVL -** Cooper Wavelinx[19] | |
| **HD-XX -** HyperDrive Remote Driver[19] | | |

### Ordering Notes

1. Replace underscore (_) with fixture leg length. See page 12.
2. 200 LPF min. output / 1500 LPF max. output.
3. Seamless continuous lens unavailable for Drop Lens options.
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.
20. Athena sensor matches finish for white and black fixtures.


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## Dimensions



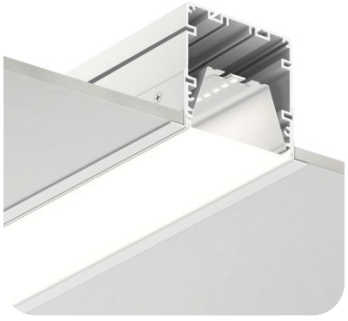

## Finishes

### Standard

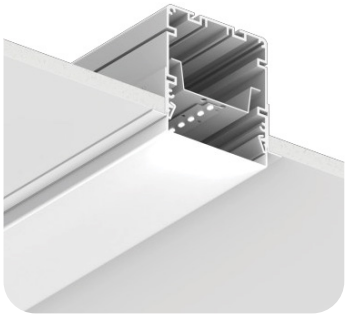
**PW:** White

**PB:** Black

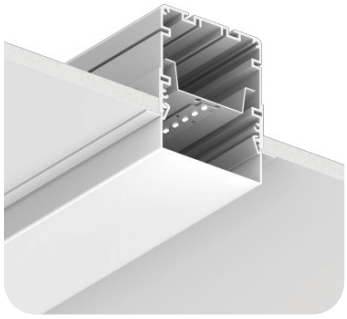
## Diffusing



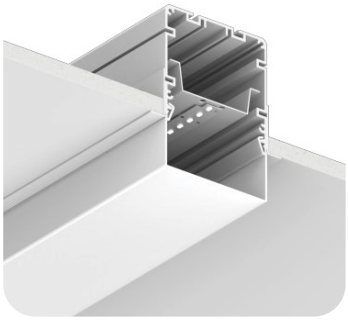
**Flush**
3.5" Height



**DLE05**
4.0" Height

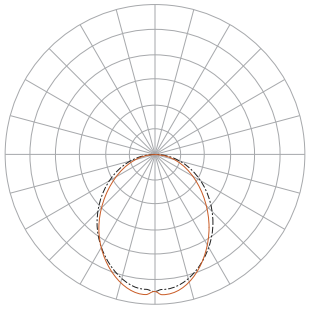


**DLE10**
4.5" Height

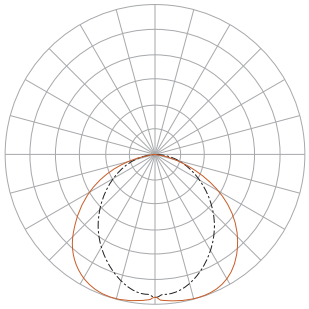


**DLE15**
5.0" Height

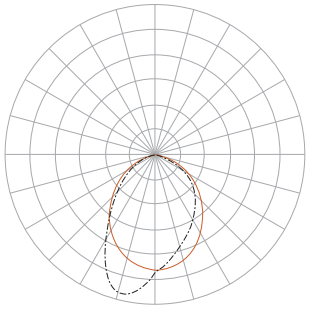
## Distribution



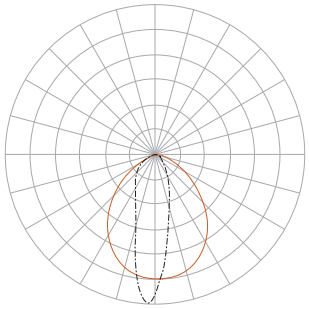
**Direct:** SatinIce Diffuse (SD)



**Direct:** Wide Diffuse (WD)



**Direct:** Wall Wash (WW)



**Direct:** Wall Graze (GRZ)

# 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

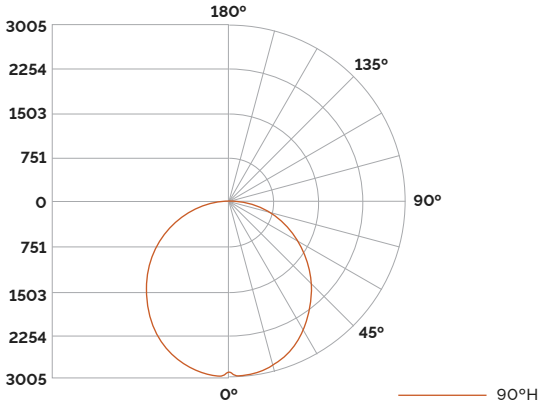
| CRI | CCT | 4' Length | 8' Length |
|---|---|---|---|
| 80 CRI | 3000K | 1.11 | 1.05 |
| | 3500K | 1.05 | 1.00 |
| | 4000K | 1.03 | 0.98 |
| | 5000K | 1.02 | 0.97 |
| 90 CRI | 3000K | 1.17 | 1.11 |
| | 3500K | 1.11 | 1.05 |
| | 4000K | 1.08 | 1.03 |
| | 5000K | 1.07 | 1.02 |

## 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 |

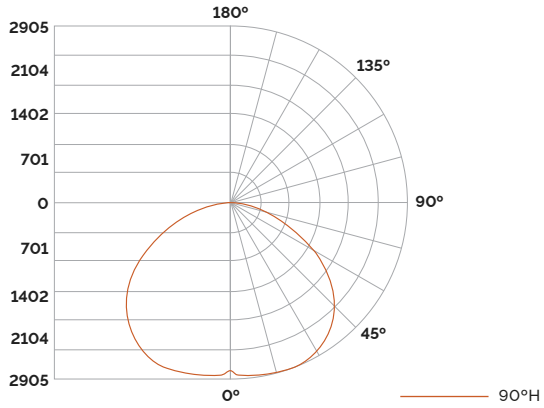
## Candela Table

| 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



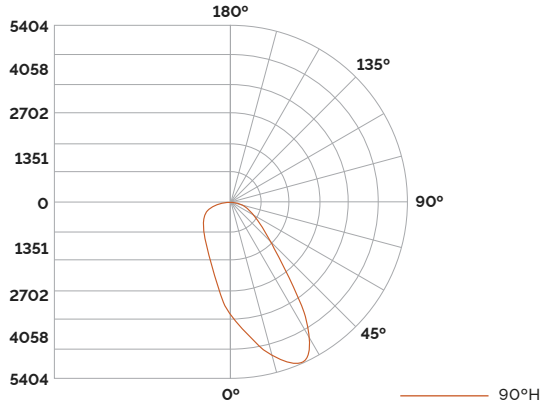

### Luminance Data (cd/sq.m)

| 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 |

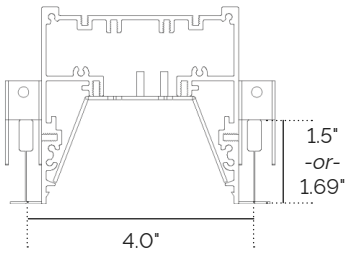
# Mounting

## T-Bar / T-Grid

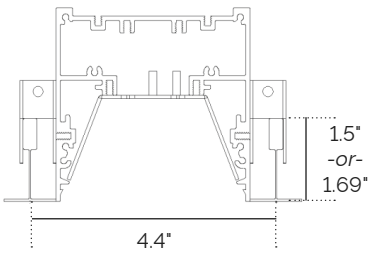
The lengths of individual fixtures and run lengths specified in the ordering logic is the distance between the centers of the T-Grids (See Page 2). The actual length of the fixtures and the lens will be shorter from that specified length. In a run, the last fixture compensates for the T-Grid.

**NOTE:** The mounting option will affect total run length. If a different configuration is needed to meet an aesthetic requirement, please indicate this on your P.O. when placing your order.

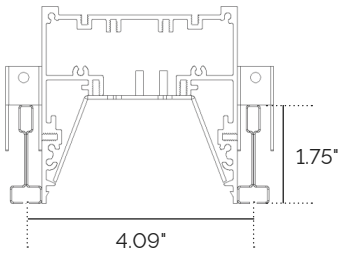
### TBX



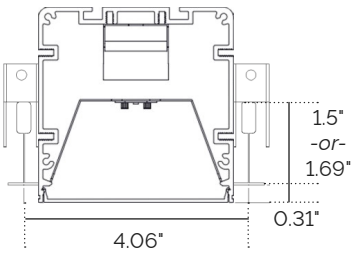

**9/16" T-Bar**
Flush




**15/16" T-Bar**
Flush

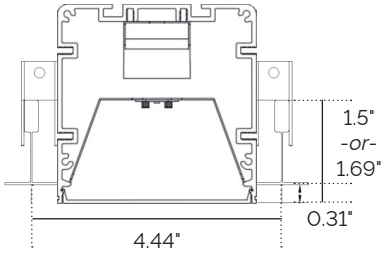



**9/16" T-Bar**
Bolt Slotted

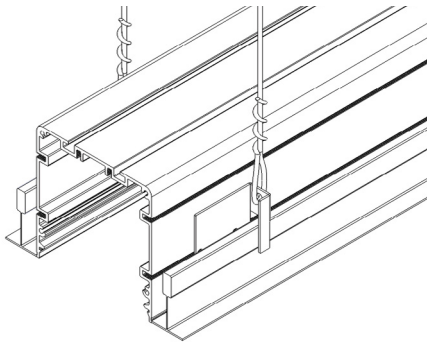



**9/16" T-Bar**
Tegular

### TEG15

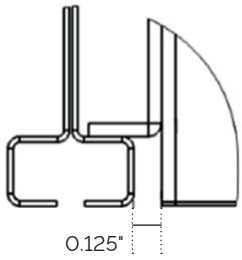



**15/16" T-Bar**
Tegular

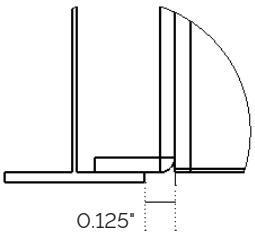


### TEG15

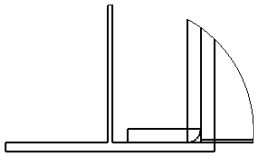
Examples of the standard construction of TBX and TBA configurations are as follows:




**9/16" Screw Slot**
Detailed View




**9/16" T-Bar**
Detailed View

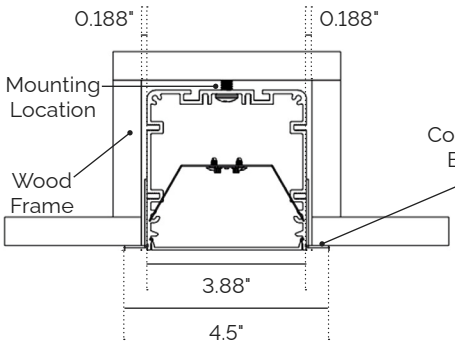


**15/16" T-Bar**
Detailed View

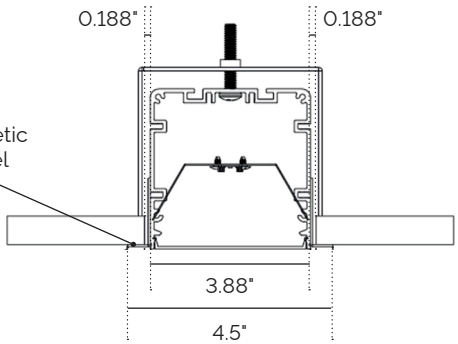
# Mounting

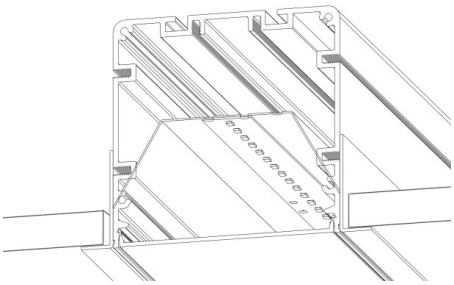
## Cosmetic Bezel

### CB (Screw / Rod Mount)




### CBY (Yoke Mount)

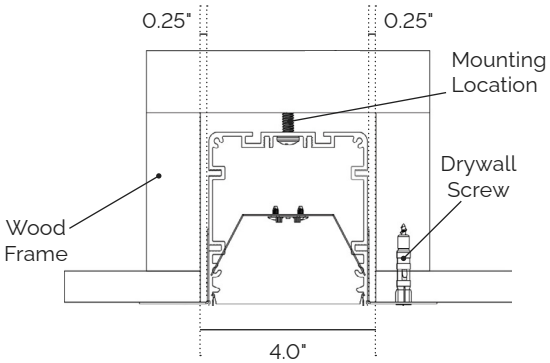


**NOTE:** Hole size at mounting location is Ø 0.266" for 0.25" rod or screw (provided by others).

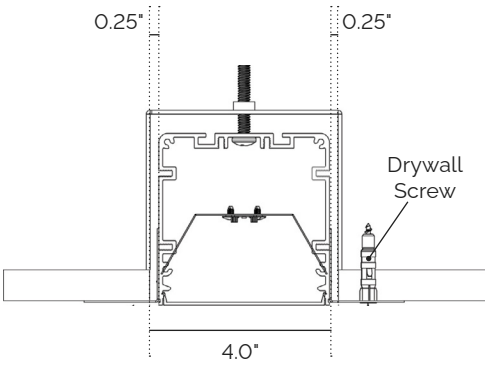
## Spackle Flange

### SF (Screw / Rod Mount)




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

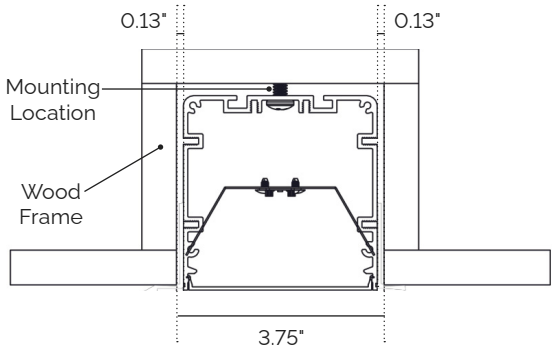
### SFY (Yoke Mount)

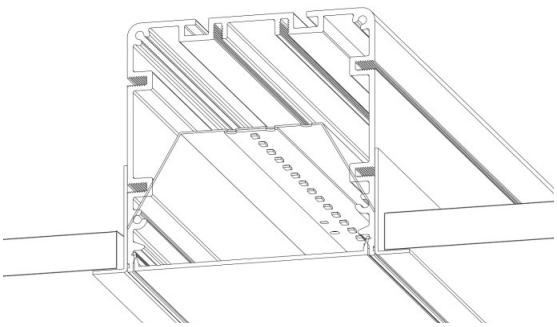



**NOTE:** Hole size at mounting location is Ø 0.266" for 0.25" rod or screw (provided by others).

## Trimless

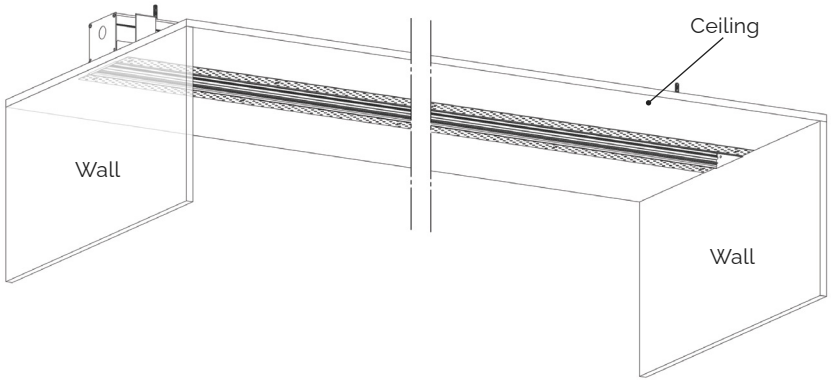
### TR (Screw / Rod Mount)

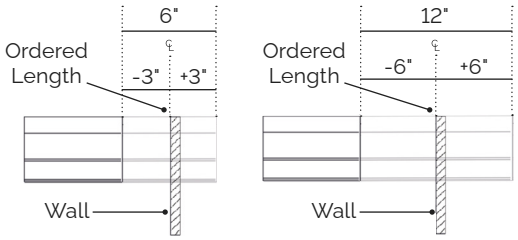


## FF (Field Fit)

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.



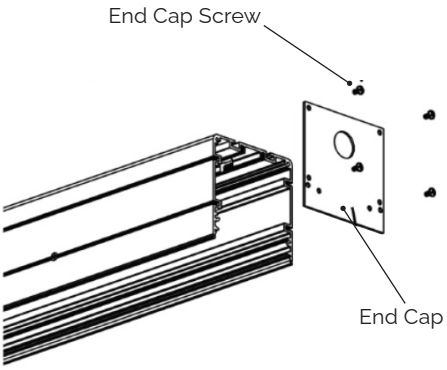




**FF3**
3" Field Fit

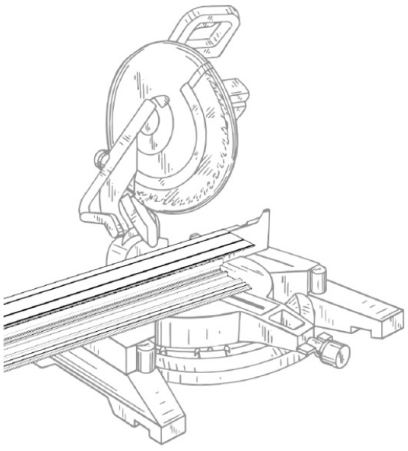
**FF6**
6" Field Fit

## Field Fit Cutting Details

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

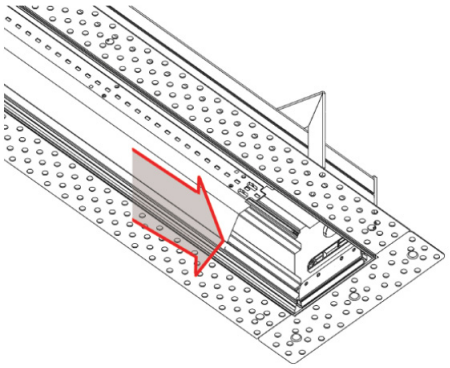



**Step 2:** Cut back the extrusion. Cut all trim accordingly.



**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.

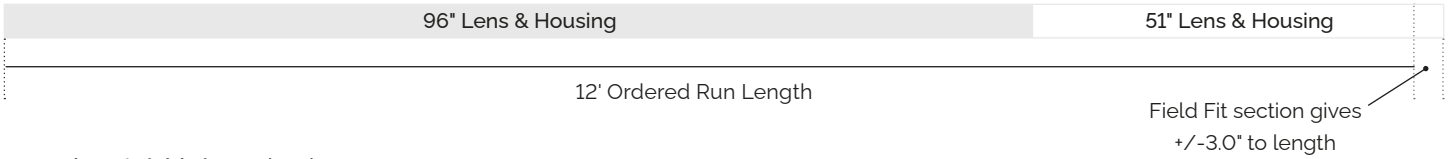



The information in this document is subject to change without notice.
Contact STARTEK for most up to date product details.

## 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)**



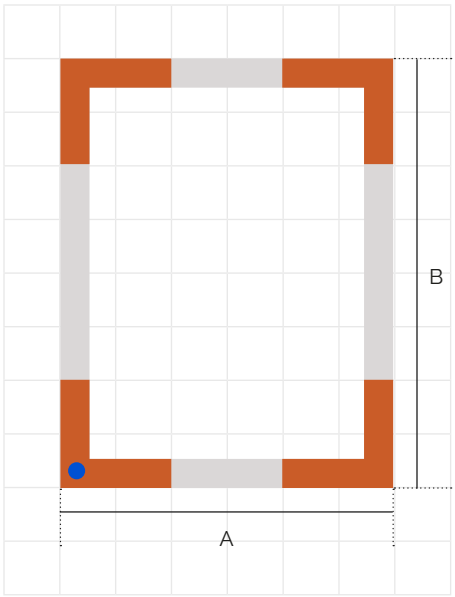

## Shape Configuration

### Joint Shape Configuration with Miter Cuts

Example: Standard 24" x 24" joint configurations are provided as a single piece per image below.

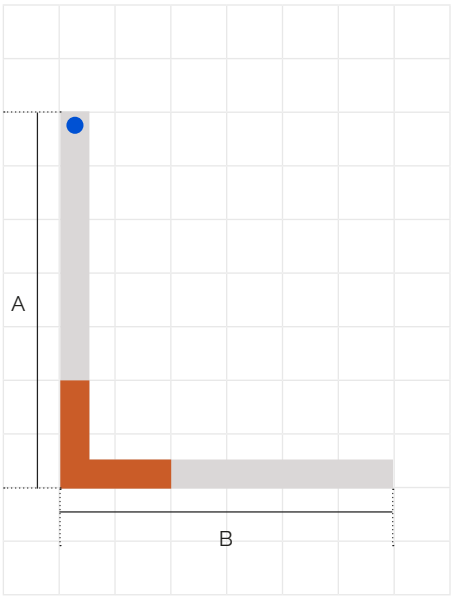
**Rectangle (_X_RECT)**

Provide AxB dimensions



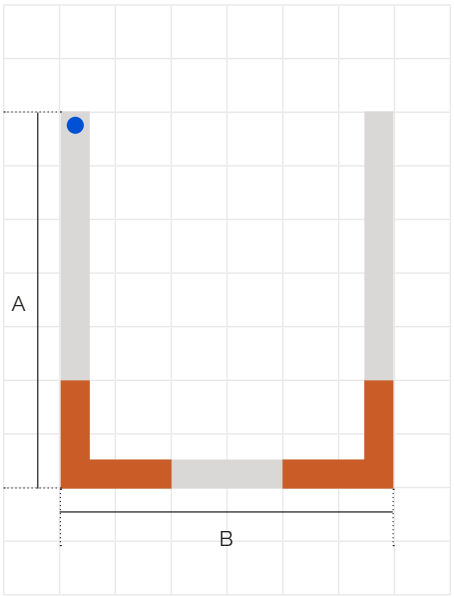

**L-Shape (_X_L)**

Provide AxB dimensions




**U-Shape (_X_X_U)**

Provide AxB dimensions

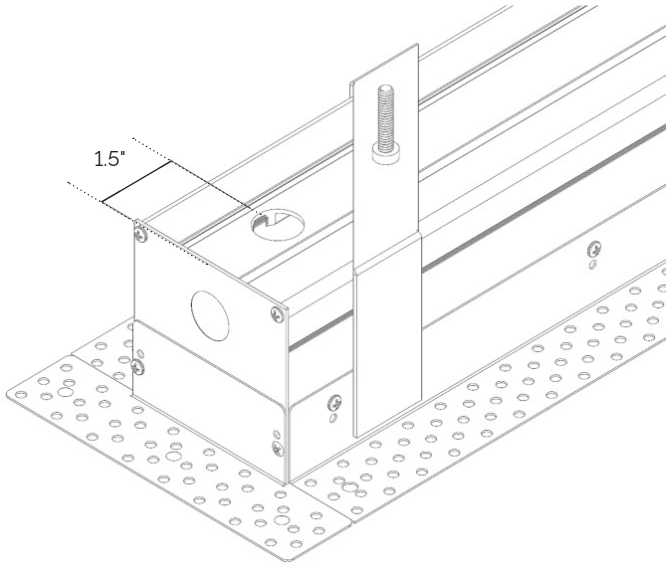



● Power Location

L 2' x 2' Corner

## Power Location

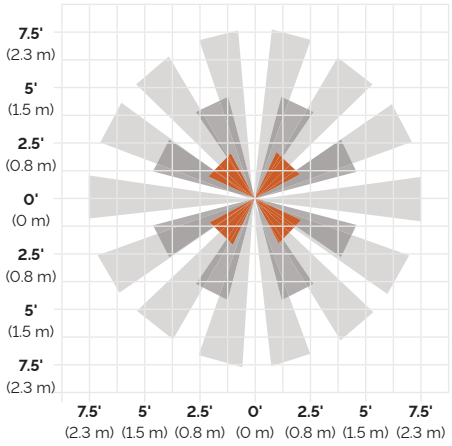
The standard power location is out the top on the fixture. If a different configuration is needed to meet an aesthetic or placement requirement, please consult the factory.

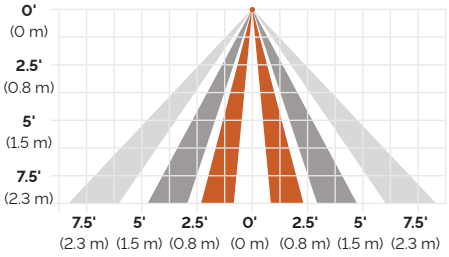



## Controls

### 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

