

T3BAR LED Smartlight™

by JLC • tech



Next generation green lighting solutions
for suspended ceiling applications



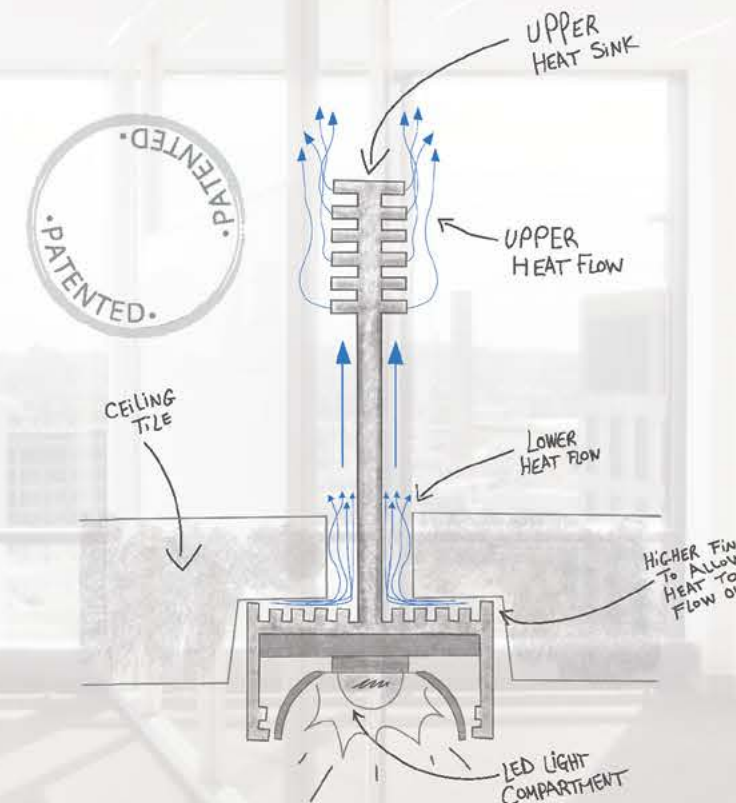
Are you still thinking of using a typical downlight?

LED technology has now saturated the lighting industry creating an enormous change in available lighting products. The market is flooded with LED lighting fixtures that re-create the old 2'x2', 2'x4' troffer and round down lights, resulting in LED designs that look just like the 60 year old florescent lighting models!

JLC-Tech is designing by thinking outside the box!

Our revolutionary approach to creating lighting fixtures with LEDs, was done with one simple concept in mind: Why add more devices when

the LED technology allows us to integrate light into already existing structural elements? With this thought in mind, the T-BAR LED Smartlight™ was born: A minimalistic linear lighting fixture that actually takes the place of a 2' or 4' cross member of the ceiling suspension system, allowing the lighting to become a part of the ceiling assembly, reducing building materials while saving energy. A concept so clear and simple that it is stunning!



The shape of the T-BAR LED Smartlight™ is designed to quickly transfer all the heat generated by the LED away from its surrounding area.

Thanks to our patented technology the junction point temperature of the LED is maintained below the maximum rating allowed by the LED manufacturer insuring product longevity. The T-BAR LED Smartlight™ is a step into the future, changing the way we illuminate our spaces, conserve energy and better the world in which we live, work and play.



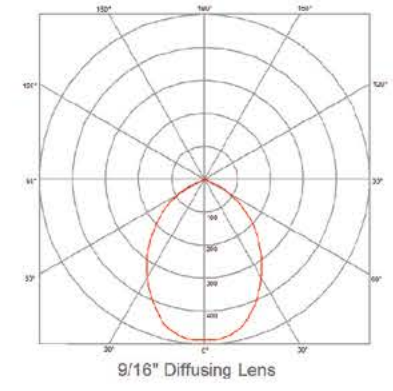
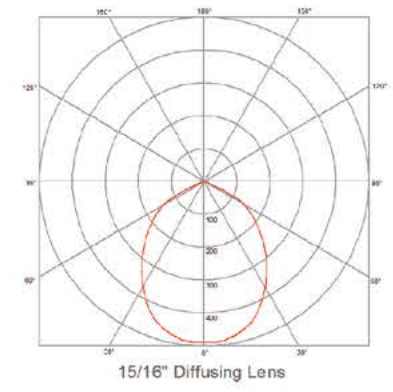
15/16" and 9/16" DIFFUSING LENS

PRODUCT CONCEPT

T-BAR LED Smartlight with diffusing lens for direct lighting is equipped with a 95%-clear micro prismatic lens for a controlled glare. A clever choice for illuminating spaces with a lighting fixture that blends with the architectural design of your ceiling, simultaneously creating an elegantly stunning light effect. Perfect for corporate offices, medical/health, educational facilities and more.

DESCRIPTION

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, high transmitting acrylic lens with micro prisms for an anti-glare effect.



LED lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	1014.66
Watts	16.62
Lumens per Watt (Efficacy)	61.04
Color Accuracy Color Rendering Index (CRI)	83
Light Color Correlated Color Temperature (CCT)	4475 (Bright White)
Warranty**	Yes

LED lighting facts®	
A Program of the U.S. DOE	
Light Output (Lumens)	746.15
Watts	16.55
Lumens per Watt (Efficacy)	45.07
Color Accuracy Color Rendering Index (CRI)	83
Light Color Correlated Color Temperature (CCT)	4492 (Bright White)
Warranty**	Yes

Optic

- D = Diffusing Lens
- C = Cut Off Reflector
- A = Asymmetric Lens
- B = Block Diffusing Lens
- S = Acrylic Signage

Bank of the West - San Francisco, CA
Gensler / Birkenstock Lighting Design



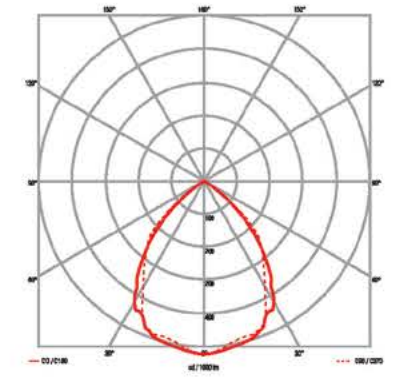
15/16" CUT OFF REFLECTOR

PRODUCT CONCEPT

T-BAR LED Smartlight with full cut-off reflector over each LED combines the best high power LED technology with a sleek architectural design offering zero reflectance glare from the ceiling. A great choice for applications where a concentrated angle of light is desired on task areas or table top surfaces.

DESCRIPTION

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, high reflectance 98% aluminum coated PC reflectors on each LED for an intense direct and dark-light effect.



15/16" Cut Off Reflector

LED lighting facts™	
A Program of the U.S. DOE	
Light Output (Lumens)	1133
Watts	16.54
Lumens per Watt (Efficacy)	68
Color Accuracy Color Rendering Index (CRI)	82
Light Color Correlated Color Temperature (CCT)	4475 (Bright White)

Optic

- D = Diffusing Lens
- C = Cut Off Reflector**
- A = Asymmetric Lens
- B = Block Diffusing Lens
- S = Acrylic Signage



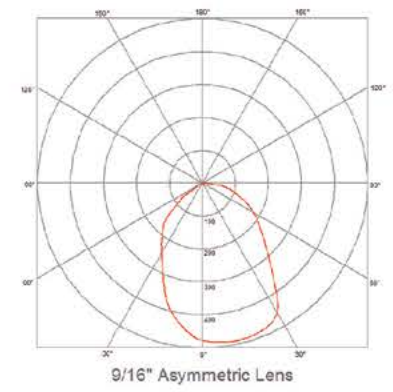
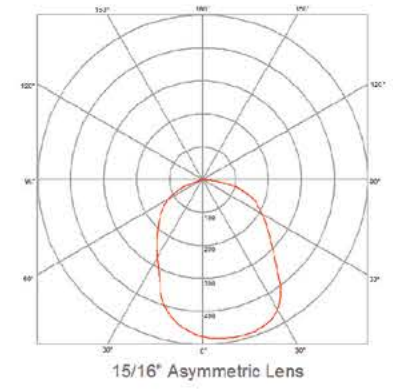
15/16" and 9/16" ASYMMETRIC LENS

PRODUCT CONCEPT

T-BAR LED Smartlight with asymmetric lens is equipped with a micro-ribbed lens that allows for the full wall illumination, ceiling to floor. This is a perfect solution for maintaining a uniform lighting design in your entire space, while achieving desired wall washing effects.

DESCRIPTION

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, high transmitting acrylic lens with asymmetric micro-ribbed lines for wall wash illumination.



Yale University West Campus - Orange, CT
Svigals + Partners

- Optic**
- D = Diffusing Lens
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 - A = Asymmetric Lens**
 - B = Block Diffusing Lens
 - S = Acrylic Signage

LED lighting facts	
A Program of the U.S. DOE	
Light Output (Lumens)	893
Watts	16.52
Lumens per Watt (Efficacy)	54
Color Accuracy Color Rendering Index (CRI)	83
Light Color Correlated Color Temperature (CCT)	4546 (Daylight)
Warranty**	Yes

LED lighting facts	
A Program of the U.S. DOE	
Light Output (Lumens)	833
Watts	16.419
Lumens per Watt (Efficacy)	50
Color Accuracy Color Rendering Index (CRI)	82
Light Color Correlated Color Temperature (CCT)	4496 (Bright White)
Warranty**	Yes

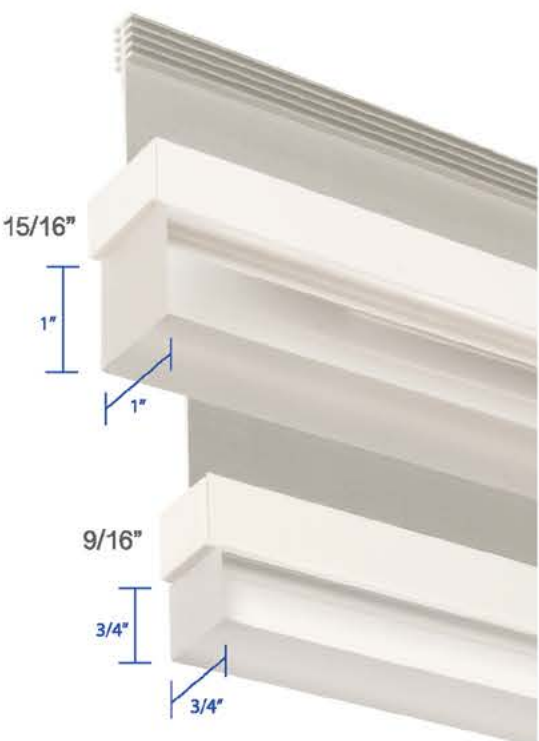
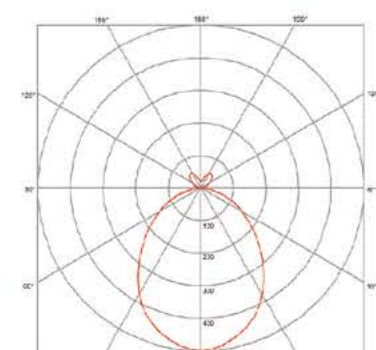
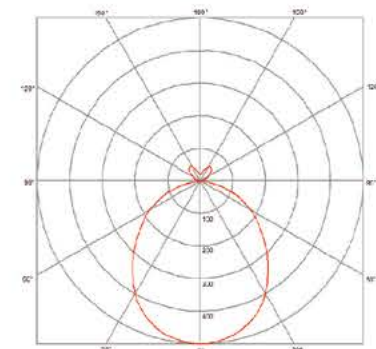
15/16" and 9/16" BLOCK DIFFUSING LENS

PRODUCT CONCEPT

T-BAR LED Smartlight with block diffuser has an added unique combination of direct and indirect illumination. Designed with satin edges and clear sides this model creates a particular architectural statement while enlarging the lumen spread over the entire space. Create an array of linear geometrical light patterns or use this as an accent light for special decorative projects.

DESCRIPTION

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, solid block acrylic diffusing lens, satin edges and clear sides, to allow the light to diffuse for a direct and indirect lighting combination.



LED lighting facts®	
A Program of the U.S. DCE	
Light Output (Lumens)	1215
Watts	16.83
Lumens per Watt (Efficacy)	72.20
Color Accuracy Color Rendering Index (CRI)	82.6
Light Color Correlated Color Temperature (CCT)	4447 (Bright White)
Warranty**	Yes

LED lighting facts®	
A Program of the U.S. DCE	
Light Output (Lumens)	869
Watts	16.58
Lumens per Watt (Efficacy)	52.41
Color Accuracy Color Rendering Index (CRI)	82.1
Light Color Correlated Color Temperature (CCT)	4481 (Bright White)
Warranty**	Yes

Optic

- D = Diffusing Lens
- C = Cut Off Reflector
- A = Asymmetric Lens
- B = Block Diffusing Lens**
- S = Acrylic Signage



T-BAR LED Smartlight™

15/16" and 9/16"
T-BAR LED WITH DIRECTIONAL SIGN

PRODUCT CONCEPT

The T-BAR LED Directional Sign is made with a full piece of PMMA acrylic with diffusing edges to allow for the double function of lighting device and signage. This is a great solution for customized signage that can also maintain a modern uniform lighting design throughout the architectural space.

DESCRIPTION

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, solid block acrylic, satin edges and clear sides, to allow the light to diffuse. Laser etched letters or logos as per customer request. Custom sizes and colors available upon request.



Bob Swope Ford Dealership - Elizabethtown, KY
 Engineered Lighting Sales, Inc.

- Optic**
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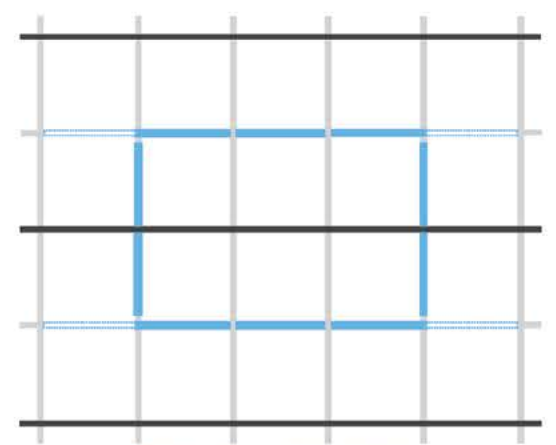
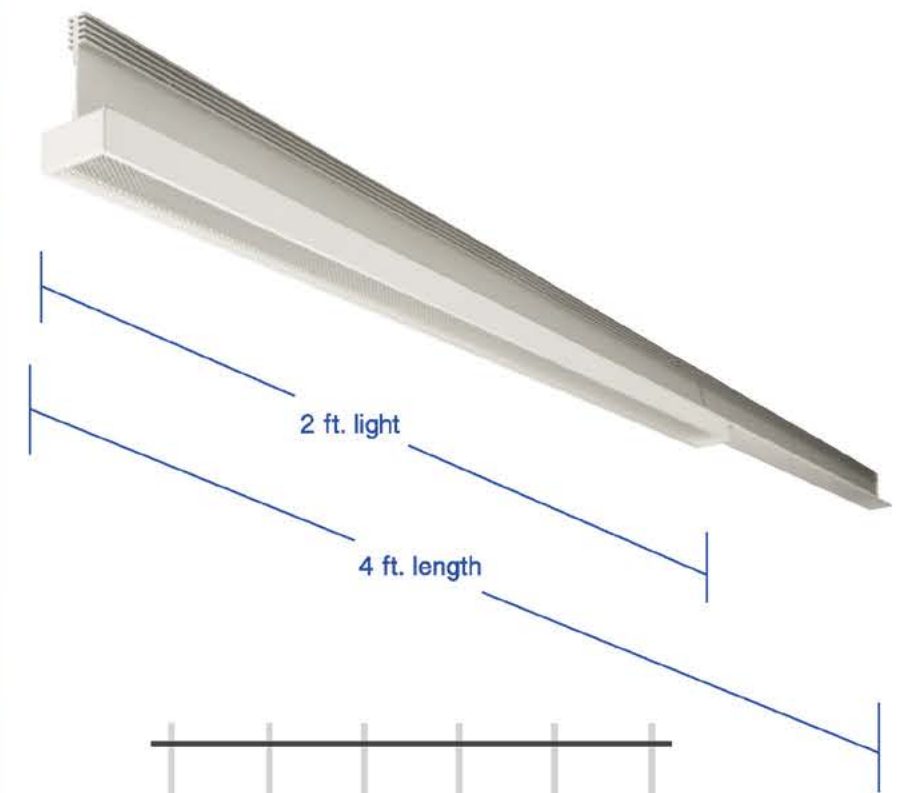
Mounting Configuration 4L Model

PRODUCT CONCEPT

T-BAR LED Smartlight can be installed in a rectangular, square or geometric trail of light now, thanks to the T-BAR LED 4L model. The perfect solution for installing linear lighting at 90 degrees above conference tables, desks, in a waiting area or the contour of a room. Create geometric linear patterns of light for special general lighting or decorative projects. Available with all optic options and grid types.

DESCRIPTION

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps. This model is illuminated on only two feet of its length, while the other two feet are machined flat to replicate a standard cross tee.



Configuration as shown in photo

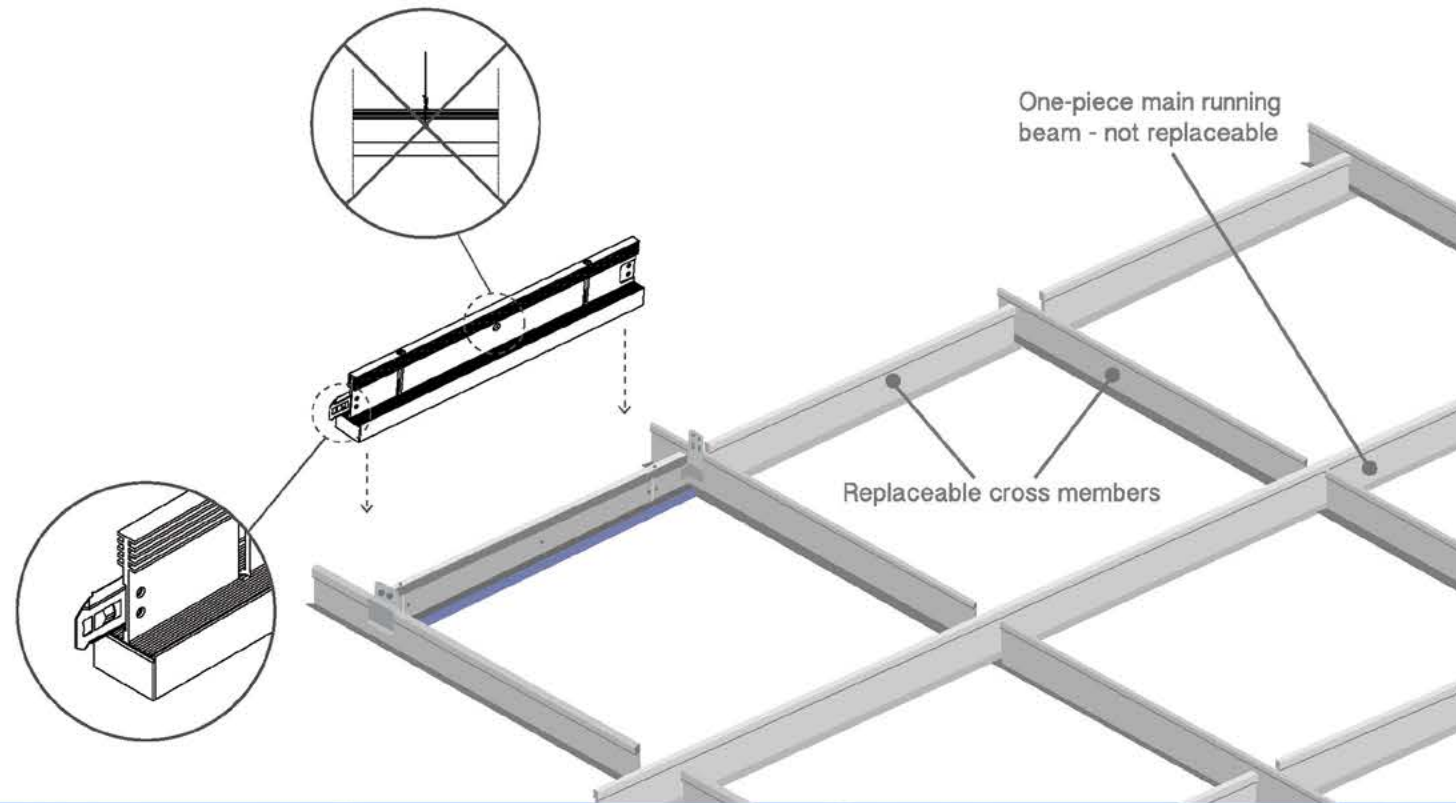
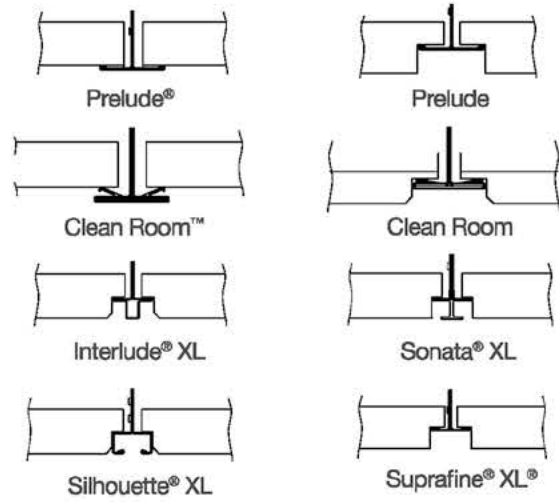
- 4L Model
- 2 foot light
- One-piece main runner

Size	
2	= 2 foot
4	= 4 foot
4L	= 4 foot L
6	= 60 cm
12	= 120 cm
12L	= 120 cm L

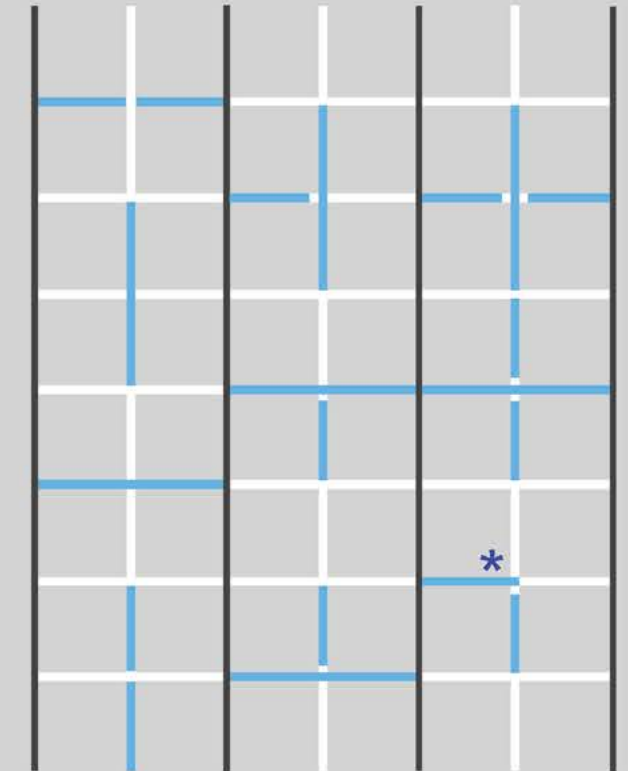
Easy Installation for **Armstrong** Suspension Ceiling Systems

Specifically designed by Armstrong for JLC-Tech, this new XLED clip is mounted at each end for easy installation into Armstrong 15/16" or 9/16" ceiling suspension system allowing the fixture to become a part of the certified ceiling assembly eliminating the use of support wires. T-BAR LED Smartlight replaces selected cross tees of the grid ceiling suspension system where light is desired. (See Armstrong Compatible Clip installation instruction for more details.)

ARMSTRONG SUSPENSION SYSTEMS

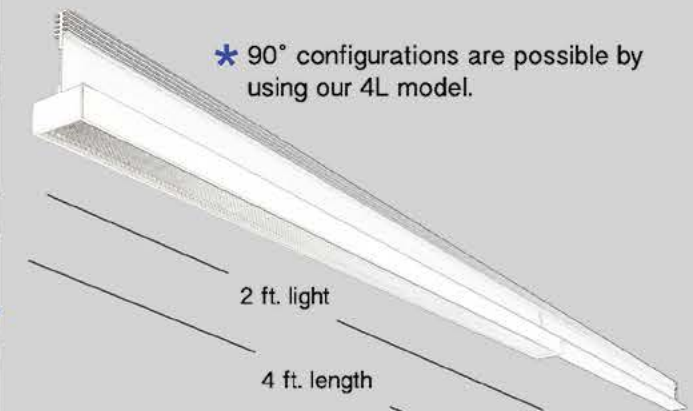


T-BAR LED can be installed in many configurations by replacing any 2' or 4' cross tee of the grid assembly.



- Examples of array of T-BAR LED light modules
- Possible positions for T-BAR LED light modules
- One-piece main runner cannot be replaced by light modules

* 90° configurations are possible by using our 4L model.



Mounting Clip

A = Armstrong

By selecting the 4L model you will be able to create shapes and patterns that include a 90° lighted connection.

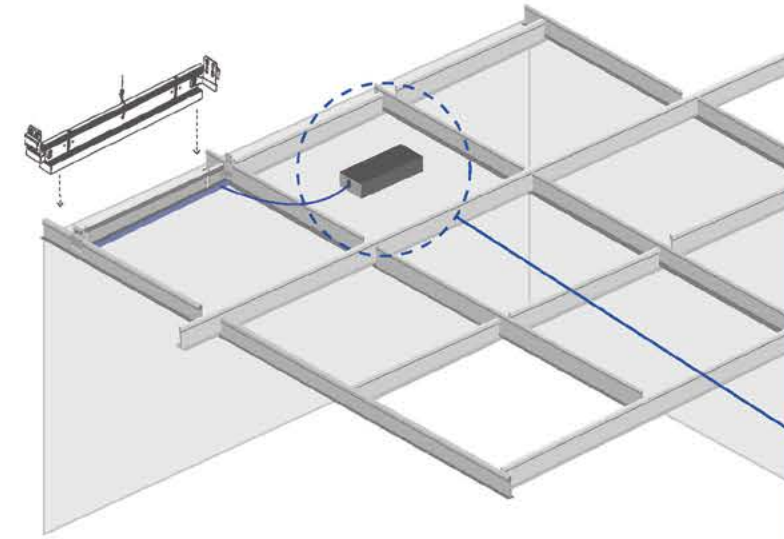
Two Easy Ways to Electrify the Product

T-BAR LED Power Supply 24VDC LED Driver



96W max single output class II power supply, universal input voltage 100-277vac output 24VDC.

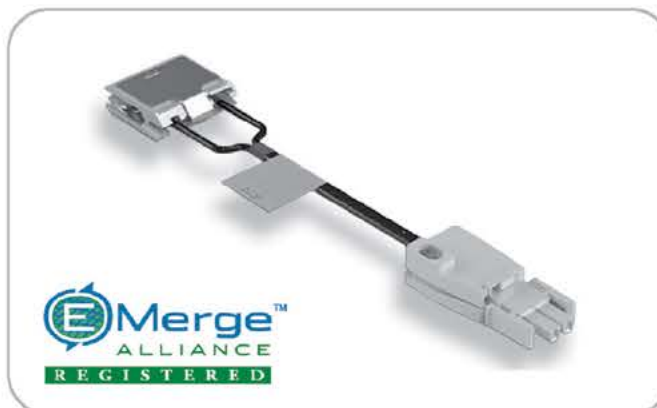
This power supply includes a JB compartment for AC input direct wiring with metal conduit. Available also with dimming option low voltage 0-10V.



Secure LED driver to a remote location without the need of a NEMA box.

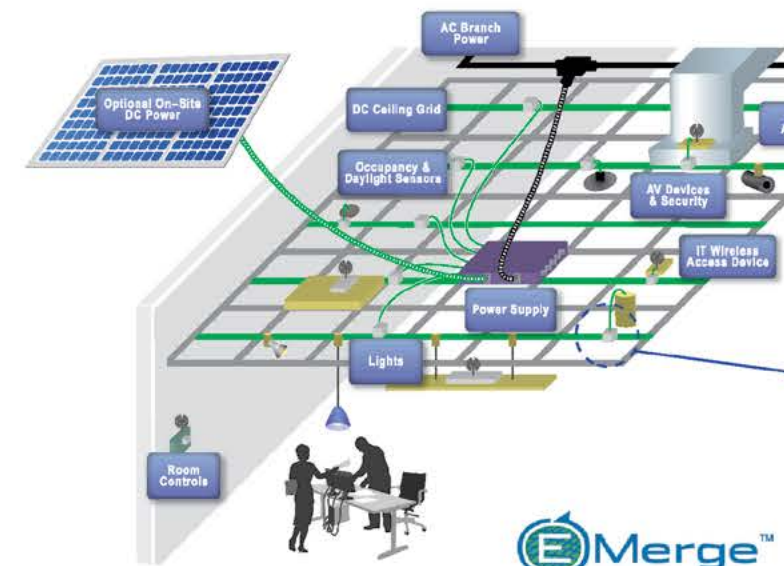


T-BAR LED FlexZone kit Armstrong® DC FlexZone™ Suspension System

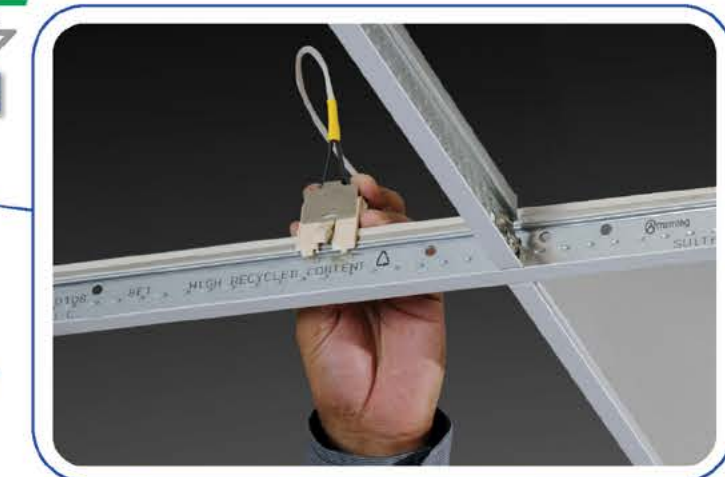


5' cable Kit for connecting the T-BAR LED Smartlight used along with the Flexzone Kit is an EMerge Alliance registered product.

The T-BAR LED Flexzone Kit is used in place of our 24VDC LED Driver. The cable connects the T-BAR LED Smartlight to the 24VDC current running through the Armstrong DC Flexzone grid.



To be used only with Armstrong's electrified DC FlexZone ceiling system.



To learn more visit www.emergealliance.org

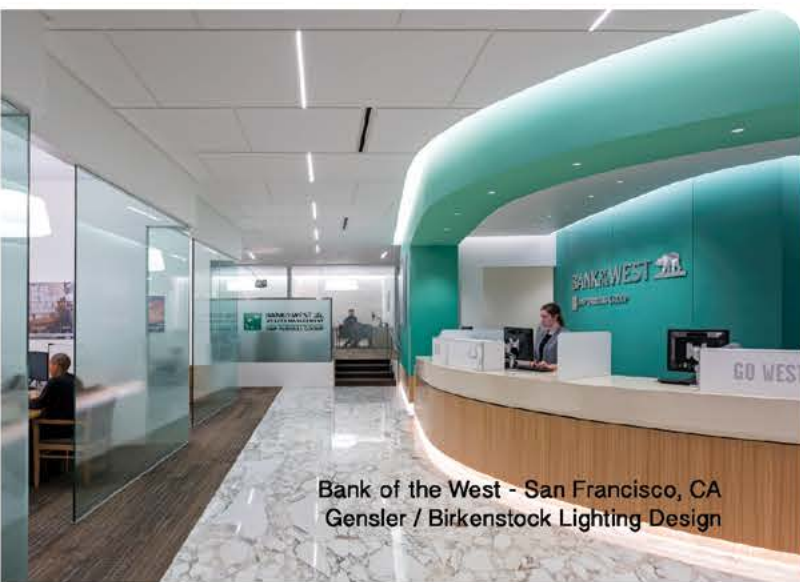


T3BAR LED Smartlight™ Key Benefits

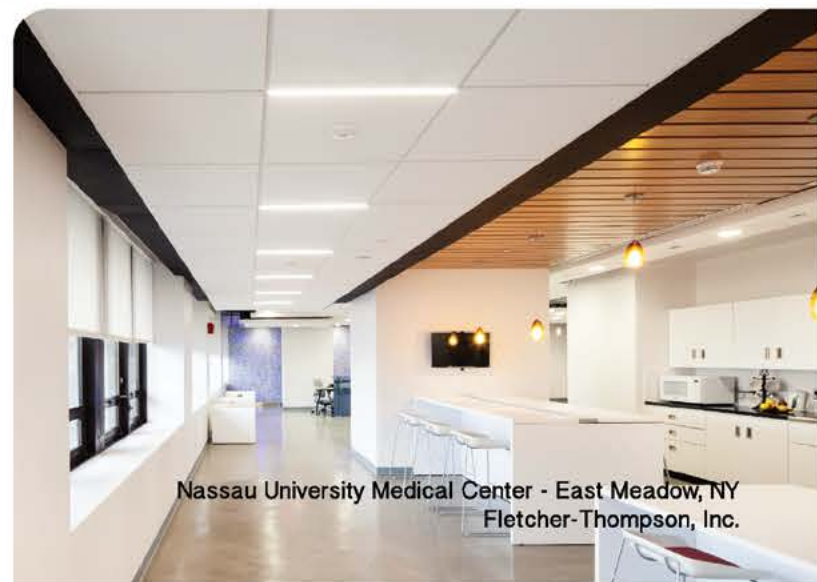
- **Simple**
Easy installation that can be conveniently repositioned when space is repurposed.
- **Clean**
Uninterrupted use of ceiling panels for a uniform ceiling design, better acoustics and better ceiling light reflectance.
- **Green**
Mercury free non toxic product with no yearly waste that saves energy with 50K hour LED life span.
- **Effective**
Compatible with intelligent building control systems and DC power sources that help designers meet green building requirements.
- **Saving**
Up to 50% energy compared to traditional fluorescent lighting & contractor billing hours, with no maintenance and simplified installation.
- **Minimalistic**
Low profile lighting that fully integrates into the ceiling system leaving the plenum space above unoccupied.
- **Smooth**
Lighting can be dispersed around a space to achieve even foot candles and desired light levels exactly where they are needed.
- **Stunning**
A modern linear fixture used for elegant general lighting leaving an unforgettable architectural statement.



Springhill Medical Center - Mobile, AL
AMA Lighting



Bank of the West - San Francisco, CA
Gensler / Birkenstock Lighting Design



Nassau University Medical Center - East Meadow, NY
Fletcher-Thompson, Inc.

Order Specification Guide

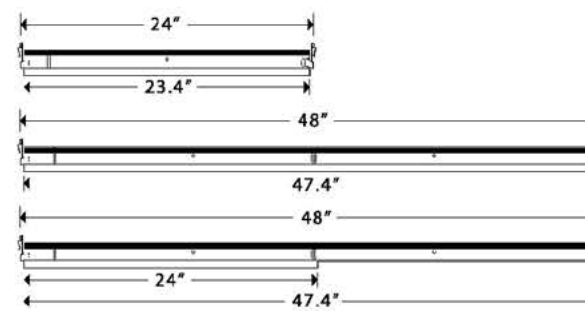
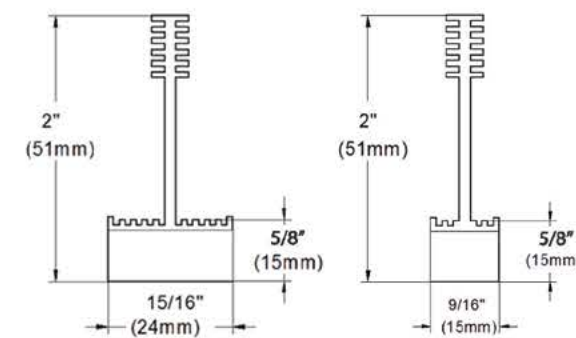
T-BAR LED Smartlight™

Product Name	Type of LED/K Color	Size	Grid Type	Optic	Mounting Clips	Color
TBSL = T-BARLED Smartlight	HW = Warm White 3000K MW = Medium Warm 3500K MN = Medium Neutral 4000K HN = Neutral White 4500K	2 = 2 foot 4 = 4 foot 4L = 4 foot L 6 = 60 cm 12 = 120 cm 12L = 120 cm L	24 = 15/16" 15 = 9/16" 15B = 9/16" Bolt Slot	D = Diffusing Lens C = Cut Off Reflector* A = Asymmetric Lens B = Block Diffusing Lens S = Acrylic Signage	A = Armstrong	W = White C = Custom

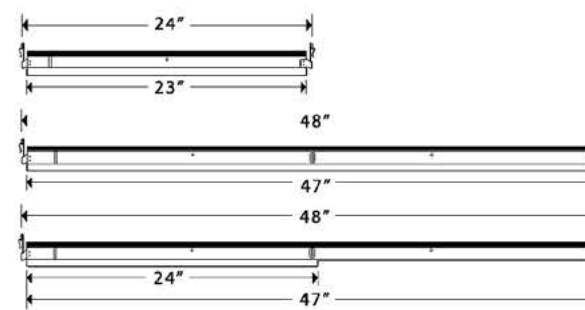
Product Name	Driver Type	Power	Wattage	Voltage
TBSL = T-BARLED Power Supply	PS = Non Dimmable DIM = Dimmable	HP = High Power	100W = 96W 400W = 384W	UNV = Universal 100-277V

FlexZone Kit Item Number (Only to be used with Armstrong's electrified DC FlexZone ceiling system)

TBSL-DC-FLEXZONEKIT-5 Cable Kit for Armstrong® DC FlexZone™ ceiling suspension system - 5 feet



9/16" Length Sizes



15/16" Length Sizes

CRI = >82

Notes:

T-BAR LED modules can be parallel connected up to 12 linear feet max per power supply.

Remote power supply includes JB compartment for AC input direct wiring with metal conduit. Max distance from power supply to fixtures is 30 feet with 18 WGA wire. Longer distance achievable if using higher gauge wire.

*Cut-off Reflector available in 15/16" model only.

Applications:

Executive, Medical, Health, Educational, Retail, Hotels, Airport, Hospitality and any open space areas that require a unique and elegant architectural lighting design.

Mounting:

Armstrong compatible mounting clips for installation with Armstrong 15/16" Prelude® and Clean Room™, 9/16" Suprafine®, Silhouette®, Sonata®, Interlude®, and DC FlexZone™ suspension systems.

Materials:

Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, high transmitting acrylic PMMA lens (diffusing, asymmetric, block diffusing lens), or high reflectance 98% aluminum coated PC reflectors on each LED for a dark light effect.

Electric:

High output LED consume 16W total (2 foot) or 32W total (4 foot). Power supply consumption not included. Input voltage 24VDC. Class II plenum rated cables at each end equipped with quick connectors to allow multiple modules to be easily connected together (max 12 linear feet of product). Use solid copper wire or wire ferrules to fit into quick connectors.

Light Output:

Diffusing/Asymmetrical models = between 1014lm (15/16" 2 foot) and 746lm (9/16" 2 foot) or 2028lm (15/16" 4 foot) and 1492lm (9/16" 4 foot).

Block Diffusing = 1215lm (15/16" 2 foot) and 869lm (9/16" 2 foot) or 2430lm (15/16" 4 foot) and 1738lm (9/16" 4 foot)

Cut Off Reflector = 1133lm (15/16" 2 foot) or 2266lm (15/16" 4 foot).

Warranty:

5 years

Listings:

ETL/cETLus CE RoHS Indoor use only.





Diffusing Lens

T-BAR LED Smartlight 15/16" and 9/16"



Cut Off Reflector

T-BAR LED Smartlight 15/16"



Asymmetric Lens

T-BAR LED Smartlight 15/16" and 9/16"



Directional Sign

T-BAR LED Smartlight 15/16" and 9/16"



Block Diffusing Lens

T-BAR LED Smartlight 15/16" and 9/16"



4L Model

T-BAR LED Smartlight 15/16" and 9/16"



TBAR LED Power Supply

24VDC LED Driver - dimmable and non dimmable



TBAR LED FlexZone Kit

Armstrong DC FlexZone™ Suspension System