

TFBAR LED™ by JCC • Cech

Minimize building materials and waste, save energy and reduce installation costs with the T-BAR LED



The only lighting product that is designed, approved, and patented to replace the cross members on a suspended grid ceiling system.



River Point Conference Center - Chicago, IL Eastlake Studio

"Making the simple complicated is commonplace; making the complicated simple, awesomely simple, that's creativity." - Charles Mingus



JLC-Tech is designing simple and elegant lighting that saves you more than just energy!

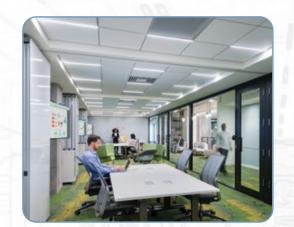
Our revolutionary approach to creating lighting fixtures with LEDs was done with one simple concept in mind: Why add a light fixture when the LED technology allows us to integrate light into already existing structural elements?

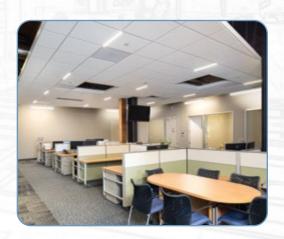
Thanks to our engineering and patented technology, the junction point temperature of the LED is maintained below the maximum rating allowed by the LED manufacturer, insuring product longevity. The T-BAR LED™ is a step into the future, changing the way we illuminate our spaces, and improving the world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

Patent No. 8,177,385. Additional patents are pending.

T-BAR LED KEY BENEFITS









NO PLENUM OCCUPANCY

The minimalistic low profile lighting leaves the space above the ceiling completely unoccupied and facilitates the coordination of placing other ceiling utilities.

IMPROVED ACOUSTICS

The clean modern lights occupy the grid allowing for the use of uninterrupted ceiling panels, creating a uniform ceiling design and optimizing sound absorption and light reflectance.

REDUCE AND SAVE

The installation is a snap and requires little to no tools or field cutting of tiles. Third party studies have found that the cost of building materials and labor are reduced by nearly 50% when using the T-BAR LED in comparison to other lighting.

EVEN FOOT CANDLES

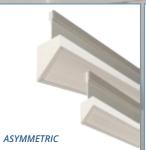
The versatile lighting can be placed in the ceiling where light is needed or desired, resulting in a more even illumination and the ability to achieve the foot candles required.



T-BAR LEDTM A SIMPLE DESIGN FOR AN UNFORGETTABLE ARCHITECTURAL STATEMENT











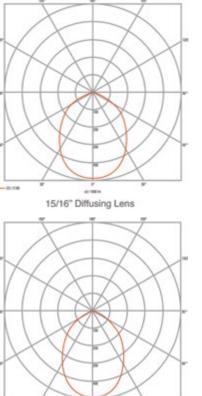
15/16" and 9/16" **DIFFUSING LENS**

PRODUCT CONCEPT

T-BAR LED 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

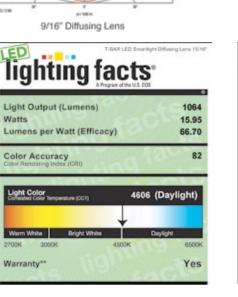
Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, high transmitting acrylic lens with micro prisms for an anti-glare effect.



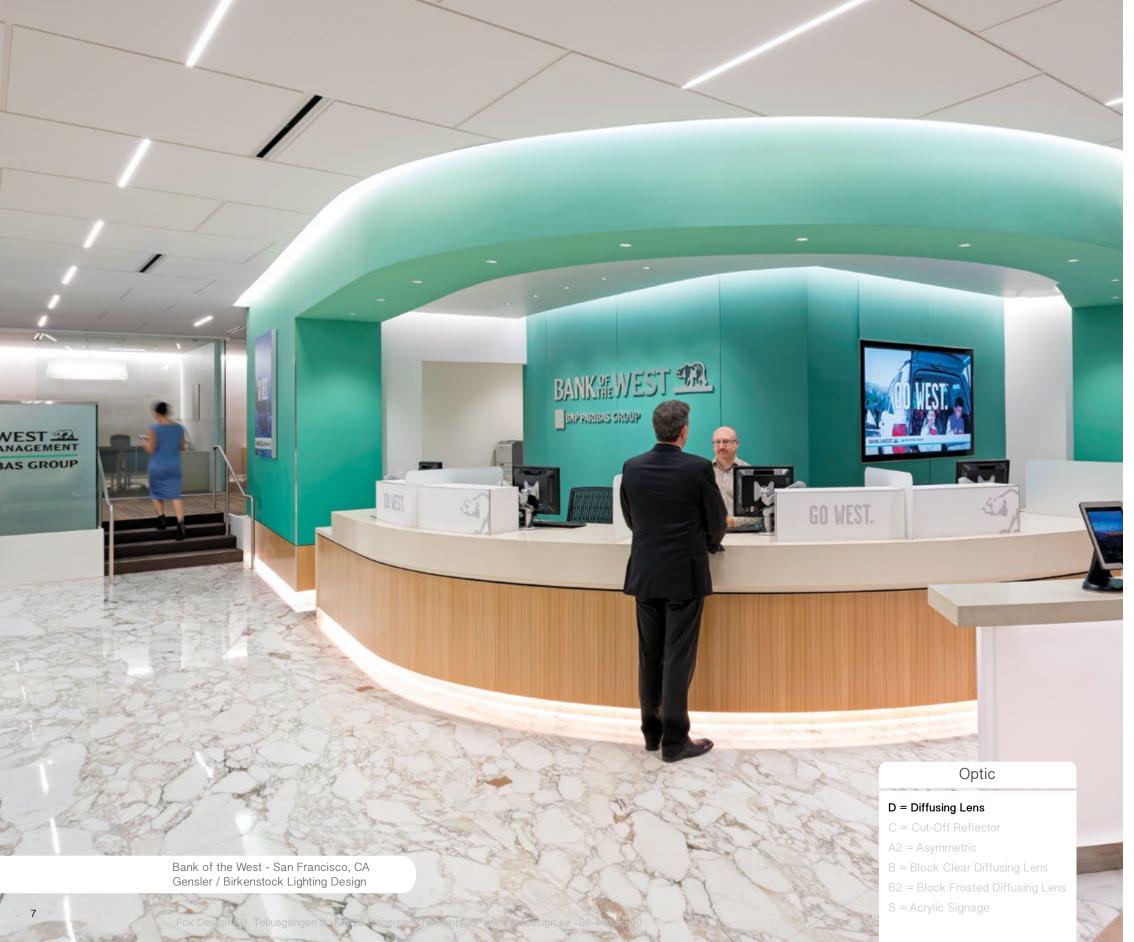
Light Output (Lumens)

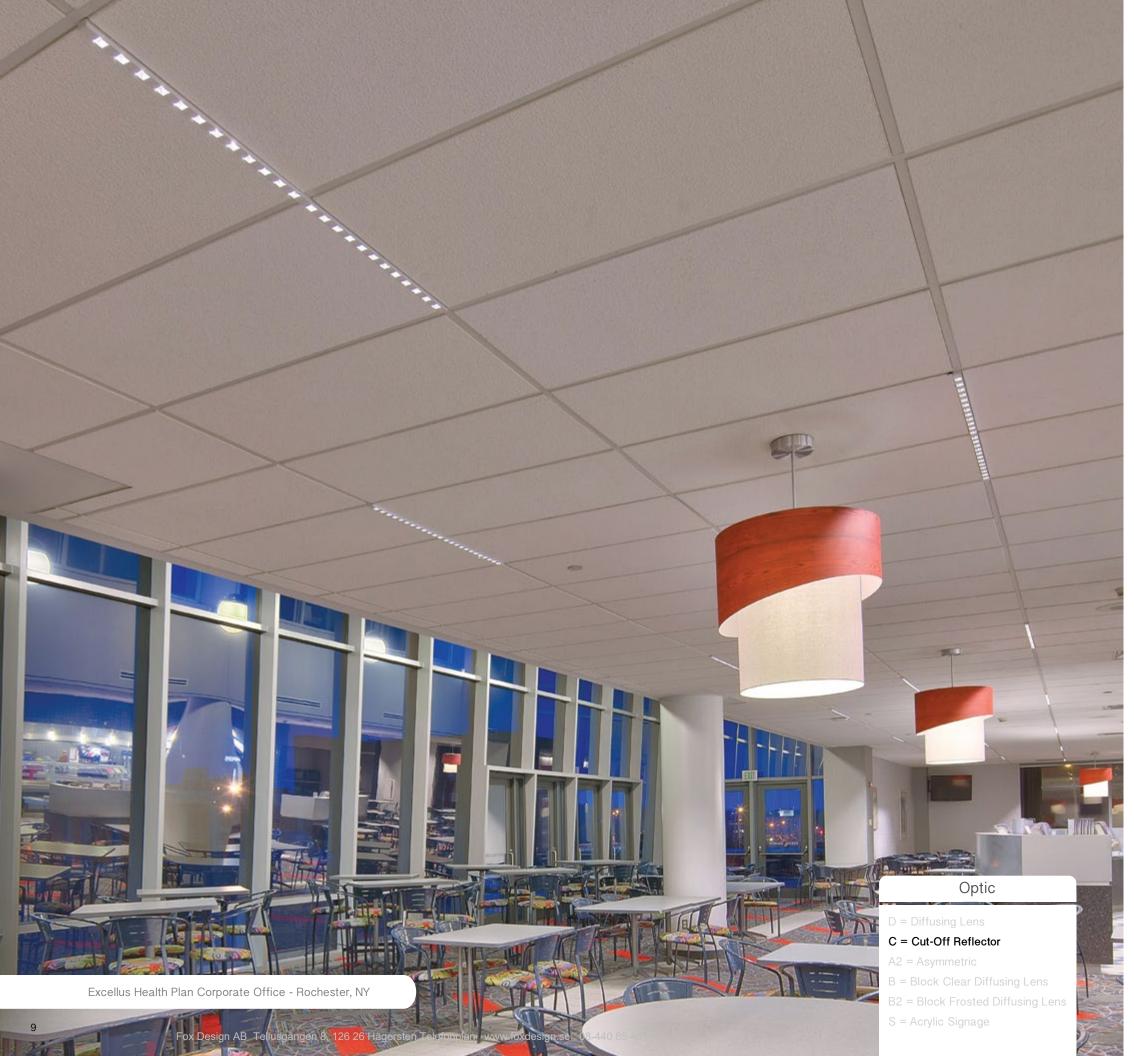
Color Accuracy

Lumens per Watt (Efficacy)









15/16"

CUT-OFF REFLECTOR

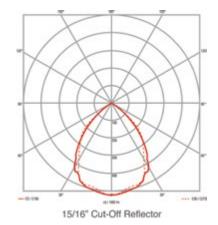
PRODUCT CONCEPT

T-BAR LED 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.







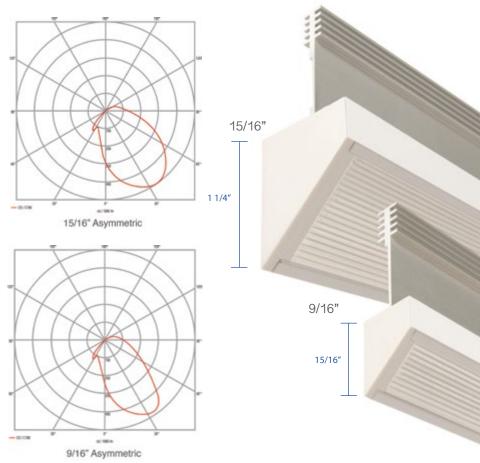
15/16" and 9/16" **ASYMMETRIC**

PRODUCT CONCEPT

T-BAR LED with asymmetric lens is designed with a shielded profile on one side and a micro-ribbed asymmetrical lens that allows for full wall illumination, ceiling to floor. This is a perfect minimalistic solution for achieving the desired wall washing effects without seeing the light source from the opposite side.

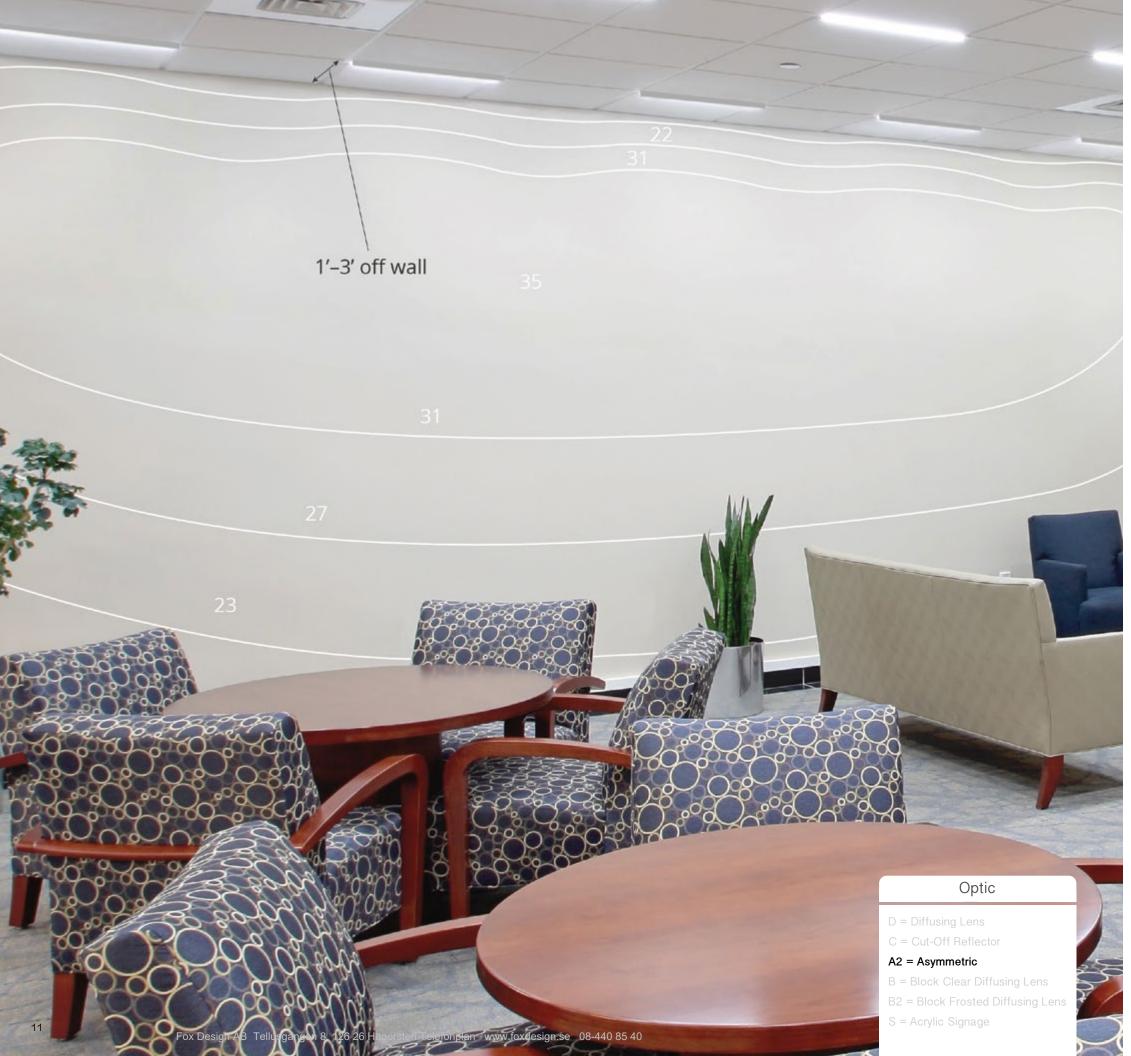
DESCRIPTION

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.









15/16" and 9/16"

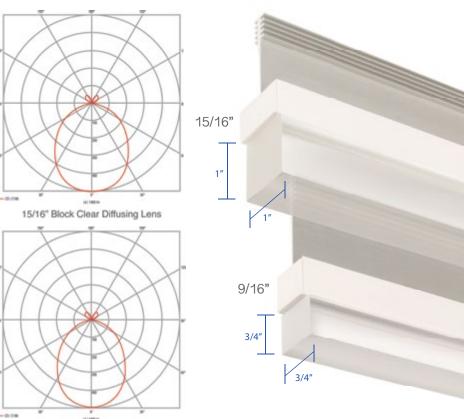
BLOCK CLEAR DIFFUSING LENS

PRODUCT CONCEPT

T-BAR LED with acrylic 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, acrylic block diffusing lens, satin edges and clear sides, to allow the light to diffuse for a direct and indirect lighting combination.

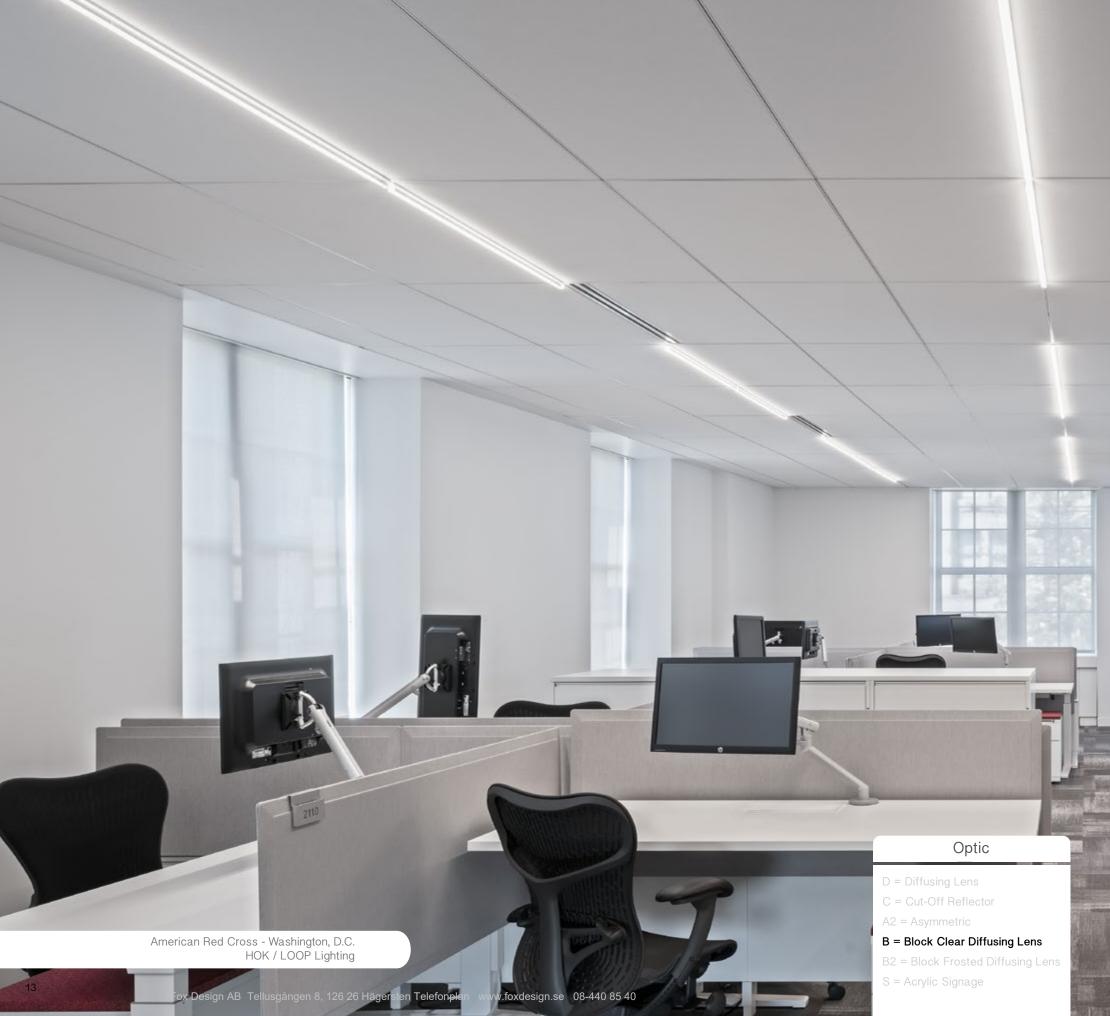




9/16" Block Clear Diffusing Lens

Light Color Correlated Color Temperature (ροτη 4585 (Daylight)
Warm White Brig	ght White Daylight
700K 3000K	4500K 6500







15/16" and 9/16"

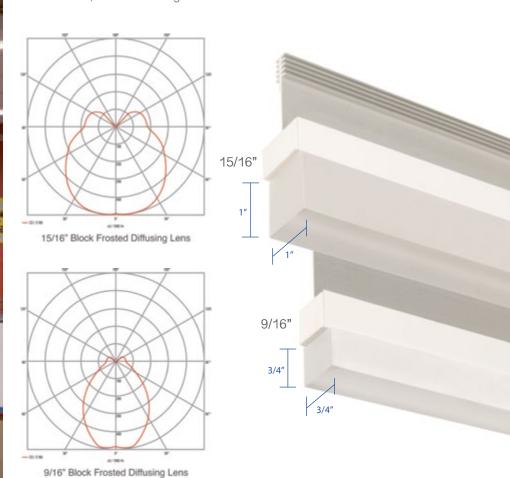
BLOCK FROSTED DIFFUSING LENS

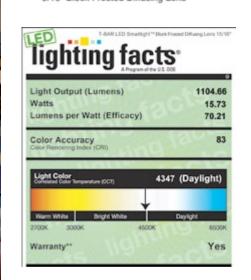
PRODUCT CONCEPT

T-BAR LED with white frosted block lens is designed with all white frosted edges and sides. This model creates an elegant even glow of light with a 180 degree light distribution.

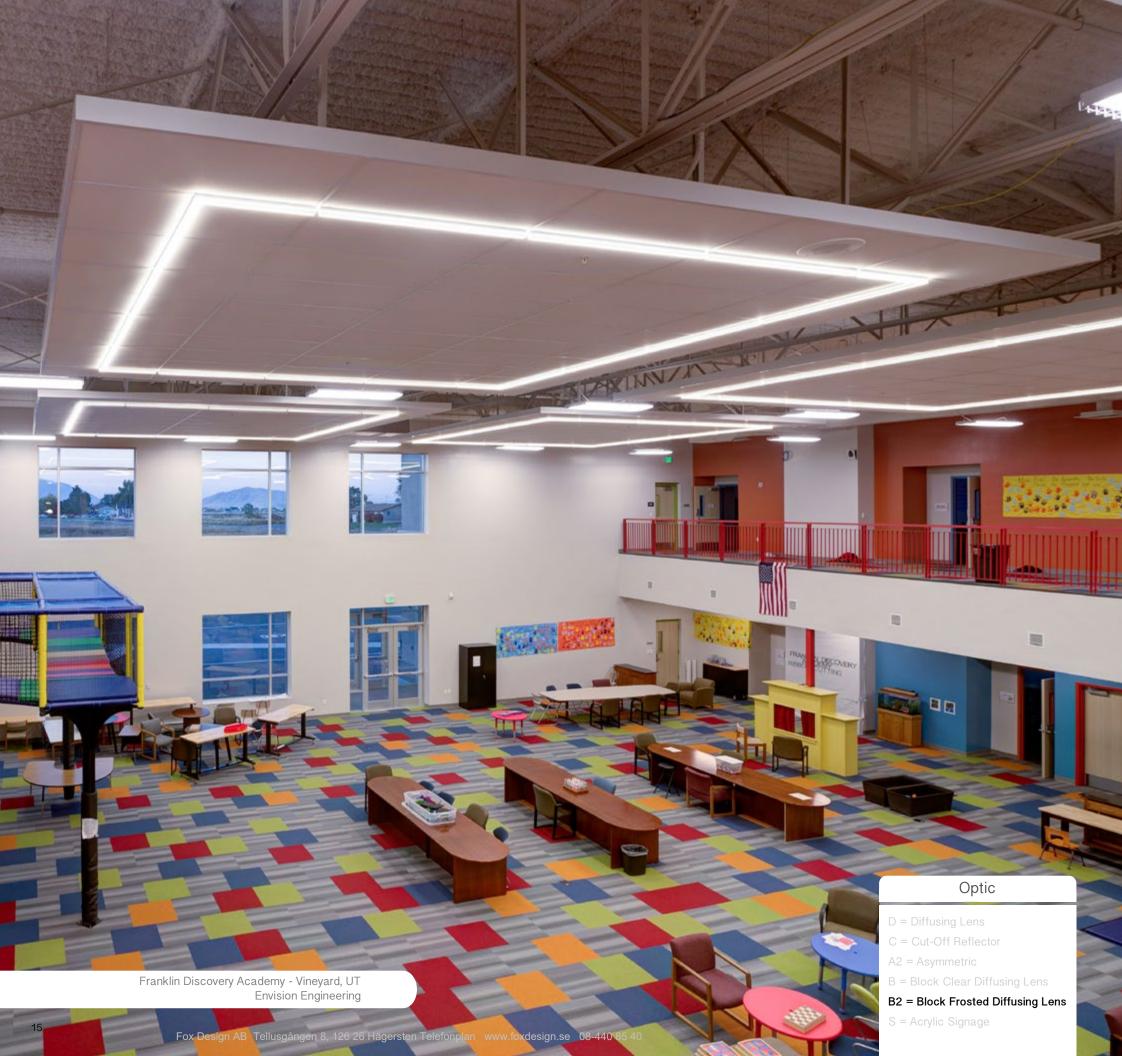
DESCRIPTION

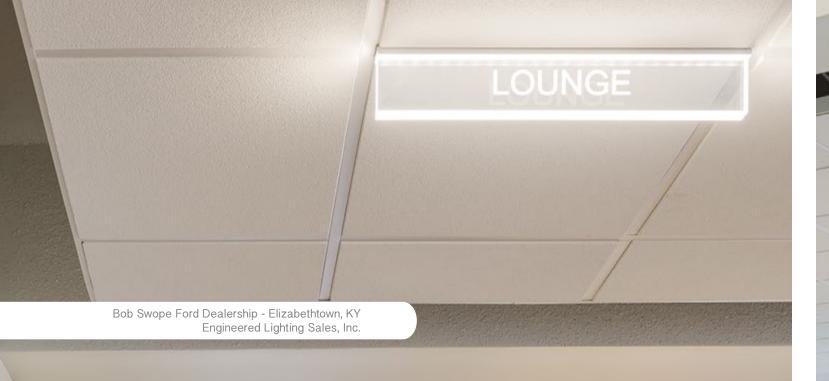
Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, acrylic block diffusing lens, white frosted edges and sides, to allow the light to diffuse in all directions.

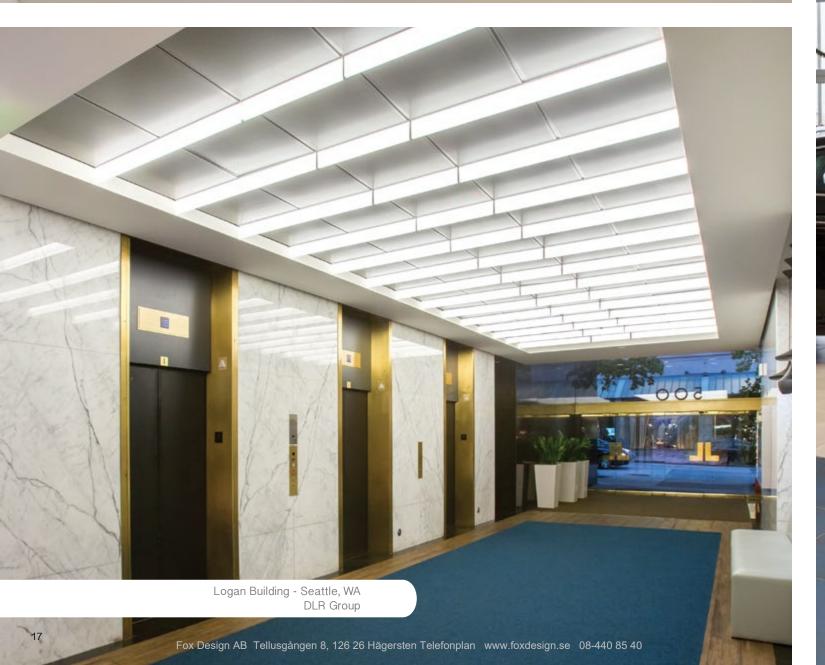














15/16" and 9/16"

T-BAR LED WITH DIRECTIONAL SIGN

PRODUCT CONCEPT

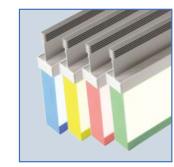
The T-BAR LED Directional Sign is made with a full piece of PMMA acrylic with diffusing edges to allow for the double function of lighting device and signage. This is a great solution for customized signage that also maintains a modern uniform lighting design throughout the architectural space.

DESCRIPTION

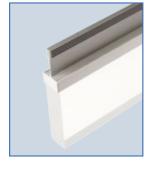
Anodized and painted aluminum extrusion body, steel mounting clips, white PC end caps, acrylic block, satin edges and clear sides, to allow the light to diffuse. Laser etched letters or logos as per customer request. Custom sizes and colors available upon request.



COLORED AFFECTS with applied filter

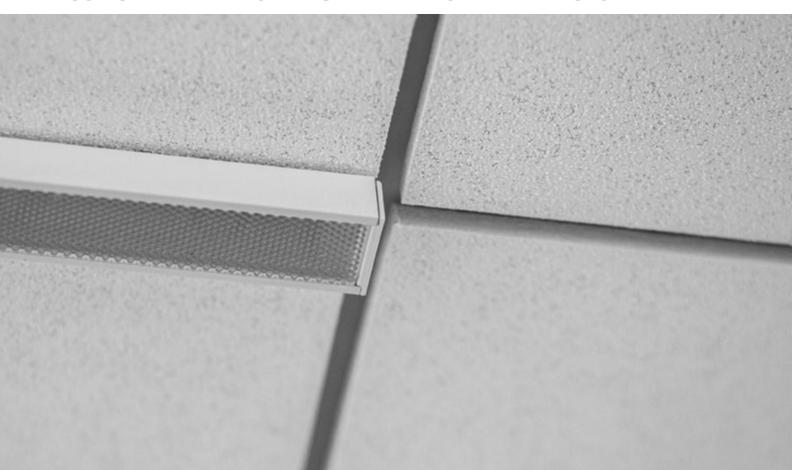


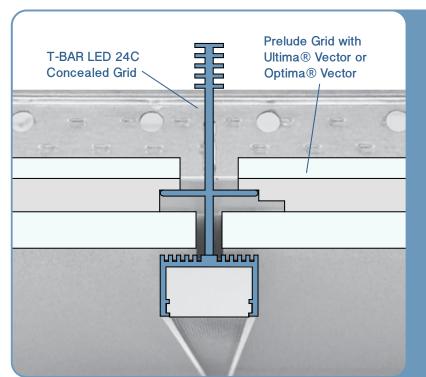
WHITE FROSTED ACRYLIC all sides satin frosted



For custom sizes and colors, consult factory

CONCEALED PRELUDE® GRID WITH ULTIMA® VECTOR®





The T-BAR LED for concealed grid systems is a new extrusion design by JLC-Tech. This product was especially designed to be compatible with the Armstrong Ceiling Optima Vector and Ultima Vector product lines. The elongated spine on the extrusion allows for the installation of the special tiles that conceal the grid from view. The elegance of the T-BAR LED is now available for use with these particular ceiling types where it is normally difficult to install linear lighting. Available in all

(Some mounting configuration limitations apply - consult factory.)

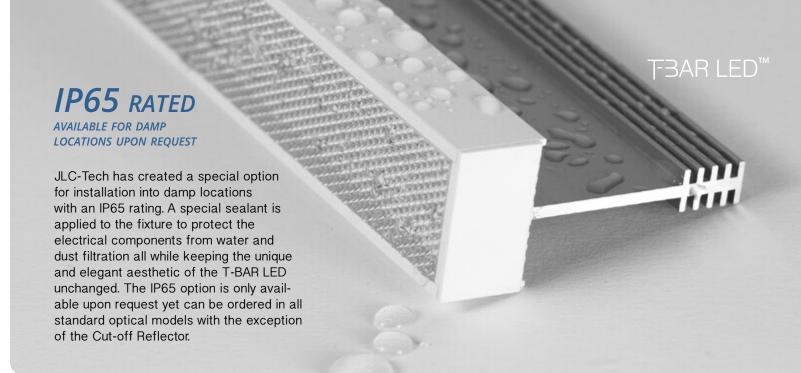


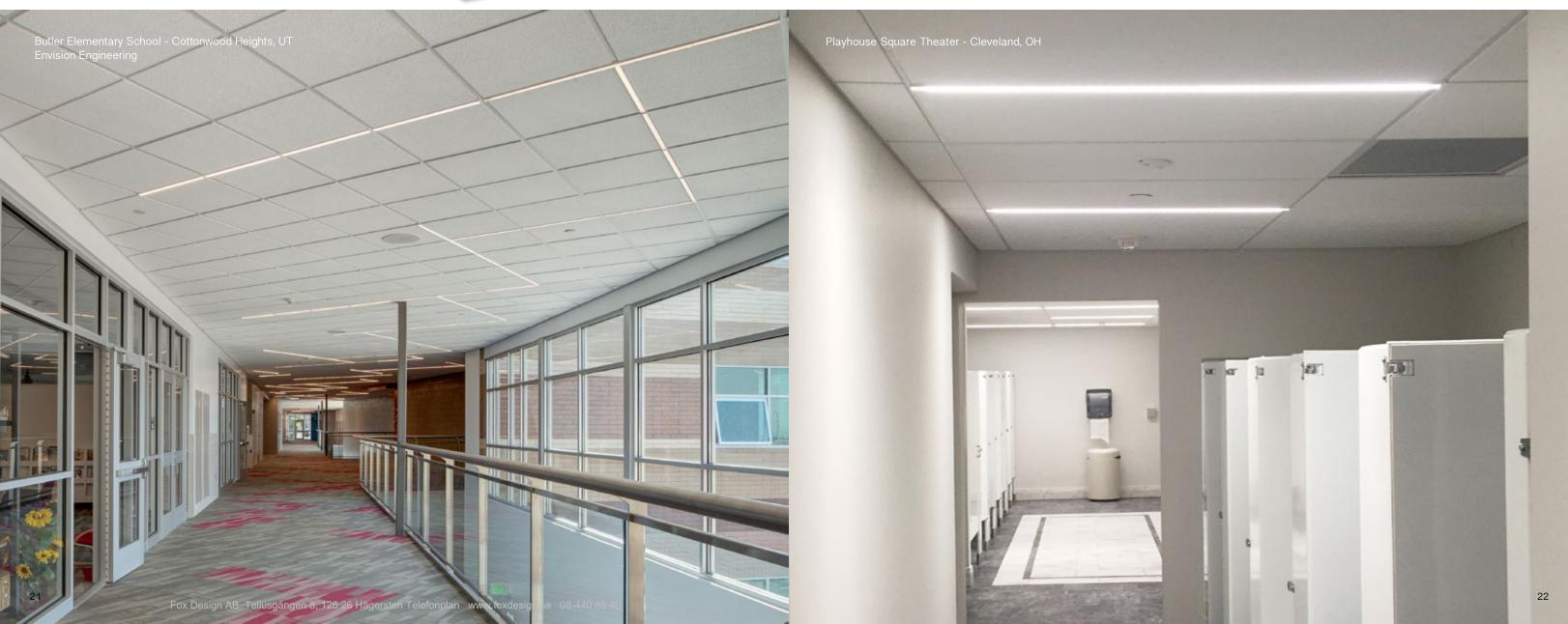
IC RATED FOR ADDITIONAL INSULATION

T-BAR LED models.

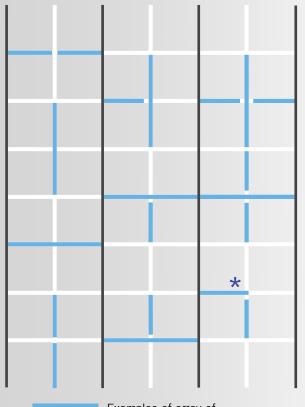
Now more than ever, the T-BAR LED is the solution for designer's plenum challenges. The T-BAR LED is IC rated and UL approved for installation in suspended ceilings that require additional insulation materials either by code or design requirement. This certification is for all standard







T-BAR LED can be installed in many configurations by replacing any of the cross tees between the main runners of the grid ceiling assembly.



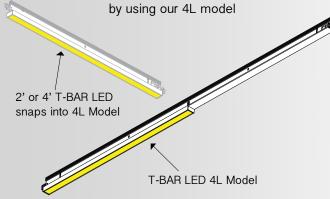
Examples of array of T-BAR LED light modules

Possible positions for T-BAR LED light modules

One-piece main runner cannot be replaced by light modules

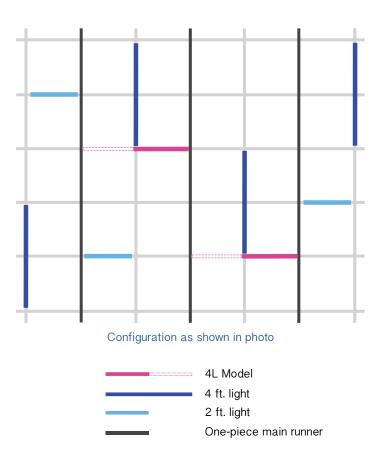
*4L Model

90° configurations are possible by using our 4L model



This model is illuminated on only two feet of its length, while the other two feet are machined flat to replicate a standard flat cross tee. By selecting the 4L Model you will be able to create shapes and patterns that include a 90° lighted connection.



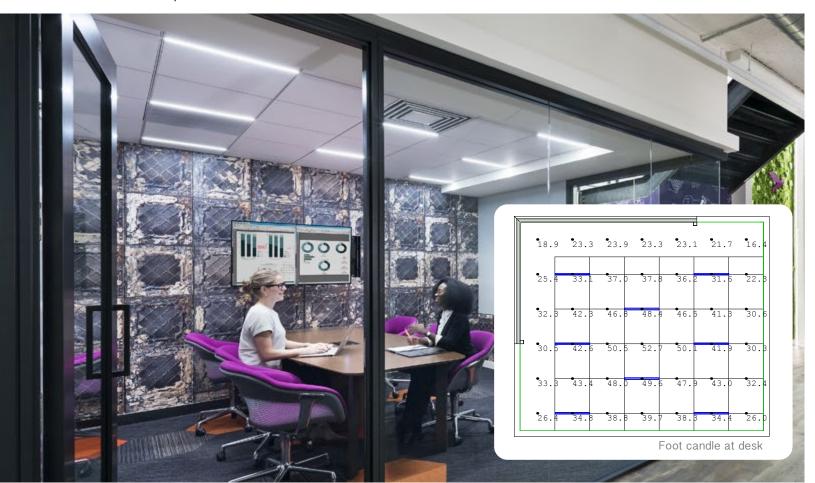




LIGHTING LAYOUTS

With the T-BAR LED, lighting can now be placed where the designer needs and wants illumination. No longer do we need to work with high lumen output from one 2'x2' or 2'x4' light source in a room. Like a beacon, these sources of light waste precious lumens in one area while leaving others completely in the dark.

The T-BAR LED can be placed over desks or evenly installed down hall ways. The lighting can be staggered in a room to obtain a harmonious illumination or in a continuous row to create a long linear layout. Whatever the purpose for the space, the designer can now match the designated area with the required foot candles.

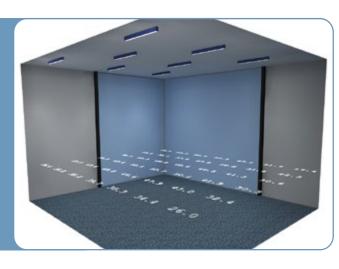


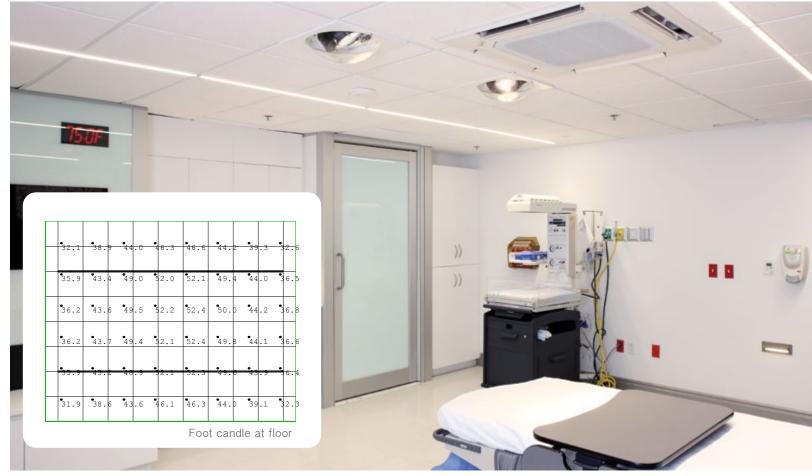
AARP Renovation Project - Washington, D.C. OPX Design Consultancy

Room dimensions: 13.46 x 12.21 feet 9 feet ceiling height

Quantity of product: 8 pcs - TBSL-MW-2-15-D-U-W T-BAR LED 2' Diffusing Lens 9/16" (3,500K)

Average foot candle achieved at desk: 35.64 FT





Springhill Medical Center - Mobile, AL AMA Lighting

Room dimensions: 16 x 20 feet 9 feet ceiling height

Quantity of product:

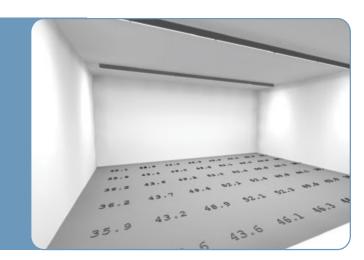
6 pcs - TBSL-MW-2-24-D-U-W

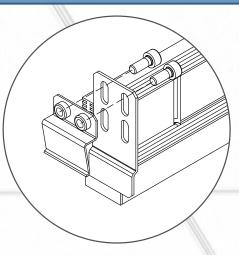
T-BAR LED 2' Diffusing Lens 15/16" (3,500K)

6 pcs - TBSL-MW-4-24-D-U-W

T-BAR LED 4' Diffusing Lens 15/16" (3,500K)

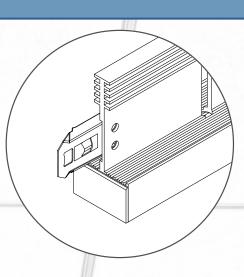
Average foot candle achieved at floor: 38.8 FT





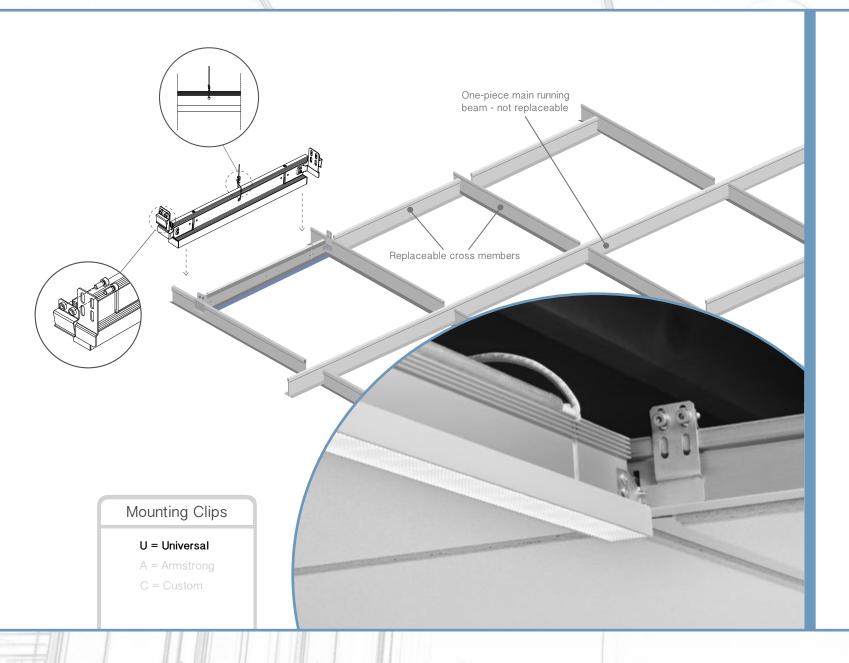
UNIVERSALLY COMPATIBLE CLIP

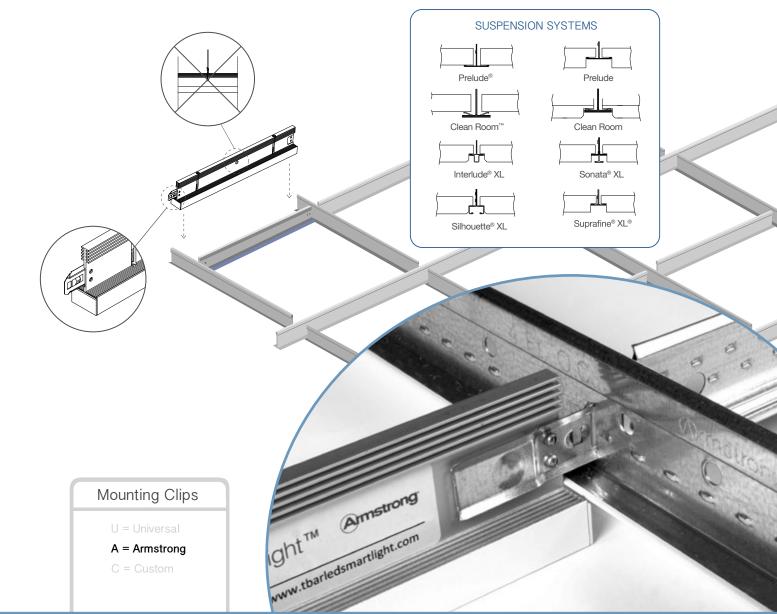
Brackets at each end of the fixture for easy installation to standard 15/16" or 9/16" T-Bars of most manufacturer ceiling suspension systems. T-BAR LED replaces selected cross tees of the grid ceiling suspension system where light is desired. (See Universal Clip installation instruction for more details.)



Armstrong° COMPATIBLE CLIP

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





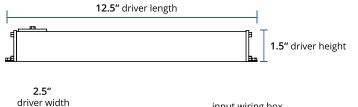
The T-BAR LED runs as a class II installation on 24V DC power with only one remote nominal 100W driver required to illuminate up to 12 linear feet of product. Multiple fixtures are easily daisy chained together with factory ready quick connectors at each end of the product. This simplified power system uses fewer and less exspensive electrical materials for installation resulting in a lower cost as well as reduced energy loss.

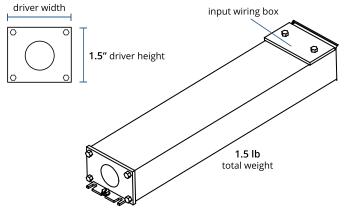
In addition to offering a single nominal 100W remote driver, JLC-Tech has gone one step further to simplify field installations by offering a 4-pack-factory pre-assembled driver solution. This nominal 400W remote driver package can power up to 48 feet of T-BAR LED. JLC-Tech is truly revolutionizing the way designers integrate light with suspended grid ceilings!

Lutron dimmable driver options available.

24VDC LED Driver 96W Power Supply

dimmable and non dimmable





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.

Notes:

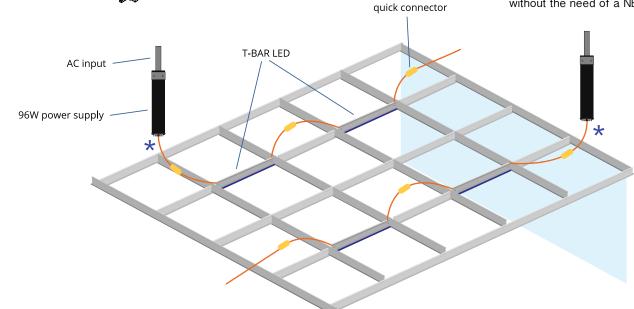
T-BAR LED modules can be parallel connected up to 12 linear feet max per power supply.

Wiring Chart:

Gauge		Length		
	18 (0.75 mm²)	30ft (9m) maximum		
	16 (1.5 mm²)	45ft (14m) maximum		
	14 (2.0 mm²)	70ft (21m) maximum		

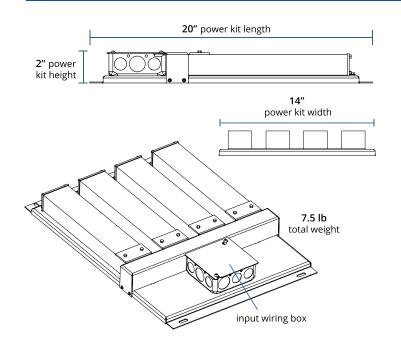
* Extra cables for longer distances, by others

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



24VDC LED Driver 384W Power Supply

dimmable and non dimmable



The 384W unit is a pre-assembled power kit using four of our standard class II power supplies, creating a unit capable of powering 48 feet of product. The electrical characteristics of each class II channel are the same as our individual 100W power supply. Available also with dimming option low voltage 0-10V.

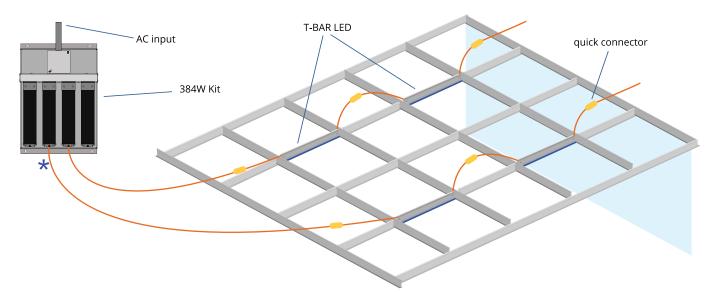
Notes:

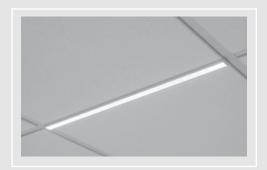
T-BAR LED modules can be parallel connected up to 12 linear feet max per channel totaling 48 linear feet of illuminated product.

Wiring Chart:

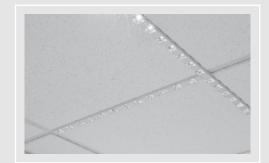
Gauge	Length		
18 (0.75 mm²)	30ft (9m) maximum		
16 (1.5 mm²)	45ft (14m) maximum		
14 (2.0 mm²)	70ft (21m) maximum		

*Extra cables for longer distances, by others





Diffusing Lens T-BAR LED 15/16" and 9/16"



Cut-Off Reflector Lens T-BAR LED 15/16"



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



Directional Sign T-BAR LED 15/16" and 9/16"



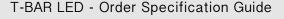
Block Clear Diffusing Lens T-BAR LED 15/16" and 9/16"



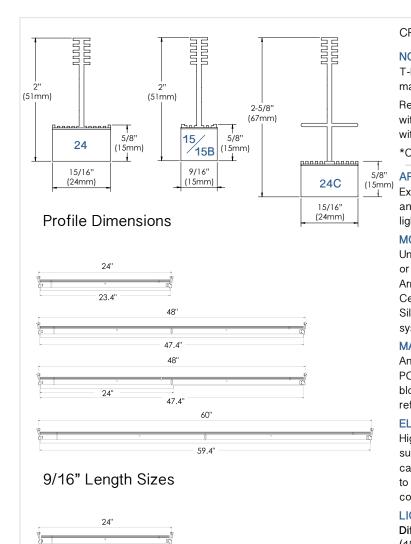
Block Frosted Diffusing Lens T-BAR LED 15/16" and 9/16"



4L Model T-BAR LED 15/16" and 9/16"







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 AWG wire. Longer distance achievable if using higher gauge wire.

*Cut-off Reflector available in 15/16" models 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:

Universal mounting brackets are for easy installation to standard 15/16" or 9/16" T-Bars of most manufacturer ceiling suspension systems.

Armstrong compatible mounting clips for installation with Armstrong Ceiling 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 = 1118lm (15/16" 2 foot) and 766lm (9/16" 2 foot) or 2236lm (15/16" 4 foot) and 1532lm (9/16" 4 foot).

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

Asymmetric = 1118 (15/16" 2 foot) and 875 (9/16" 2 foot)

or 2237 (15/16" 4 foot) and 1750 (9/16" 4 foot).

Block Clear Diffusing = 1026lm (15/16" 2 foot) and 830lm (9/16" 2 foot) or 2052lm (15/16" 4 foot) and 1660lm (9/16" 4 foot).

Block Frosted Diffusing = 1104 (15/16" 2 foot) and 931 (9/16" 2 foot) or 2209 (15/16" 4 foot) and 1862 (9/16" foot).

WARRANTY:

5 years

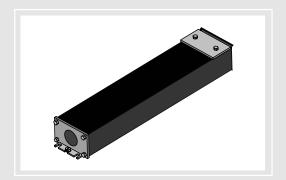
LISTINGS:

ETL/cETLus CE RoHS Indoor use only.



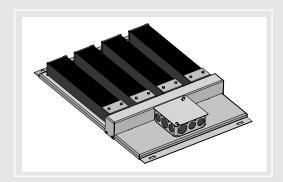
TF3AR LED™

T-BAR LED Power Supply Options



24VDC LED Driver 96W Power Supply 0-10 VDC dimmable and non dimmable

T-BAR LED modules can be parallel connected up to 12 linear feet max per power supply. Power supply includes JB compartment for AC input direct wiring with metal conduit.



24VDC LED Driver 384W Power Supply 0-10 VDC dimmable and non dimmable

T-BAR LED modules can be parallel connected up to 12 linear feet max per channel totaling 48 linear feet of illuminated product. Power kit includes JB for AC input direct wiring with metal conduit.

LUTRON Power Supply Options



40W HI-LUME® 1.0% Ecosystem™ or 3-wire

T-BAR LED modules can be parallel connected up to 4 linear feet per 40W Hi-Lume driver. Lutron's 40W HI-LUME® driver provides smooth, flicker free dimming from 100% to 0.1%. UL-Listed for remote use.



96W HI-LUME® Premier 0.1% Ecosystem™ or 3-wire

T-BAR LED modules can be parallel connected up to 12 linear feet max per 96W Hi-Lume driver. Lutron's 96W HI-LUME® driver provides smooth, flicker free dimming from 100% to 0.1%. UL-Listed for remote use.

Remote Drivers - Order Specification Guide



	Product Name	Driver Type	Power	Wattage	Voltage		
	TBSL = T-BAR LED Power Supp	ly PS = Non Dimmable DIM = Dimmable 0-10 VDC	HP = High Power	100W = 96W 400W = 384W	UNV = Universal 100-277V		
	Lutron Item Number	umber Description					
	TBSL-L3DA4U1UKL-CV240	-L3DA4U1UKL-CV240 40W HI-LUME® 1.0% EcoSystem™ or 3-wire / 24Vdc Driver / Universal 100-277V					

