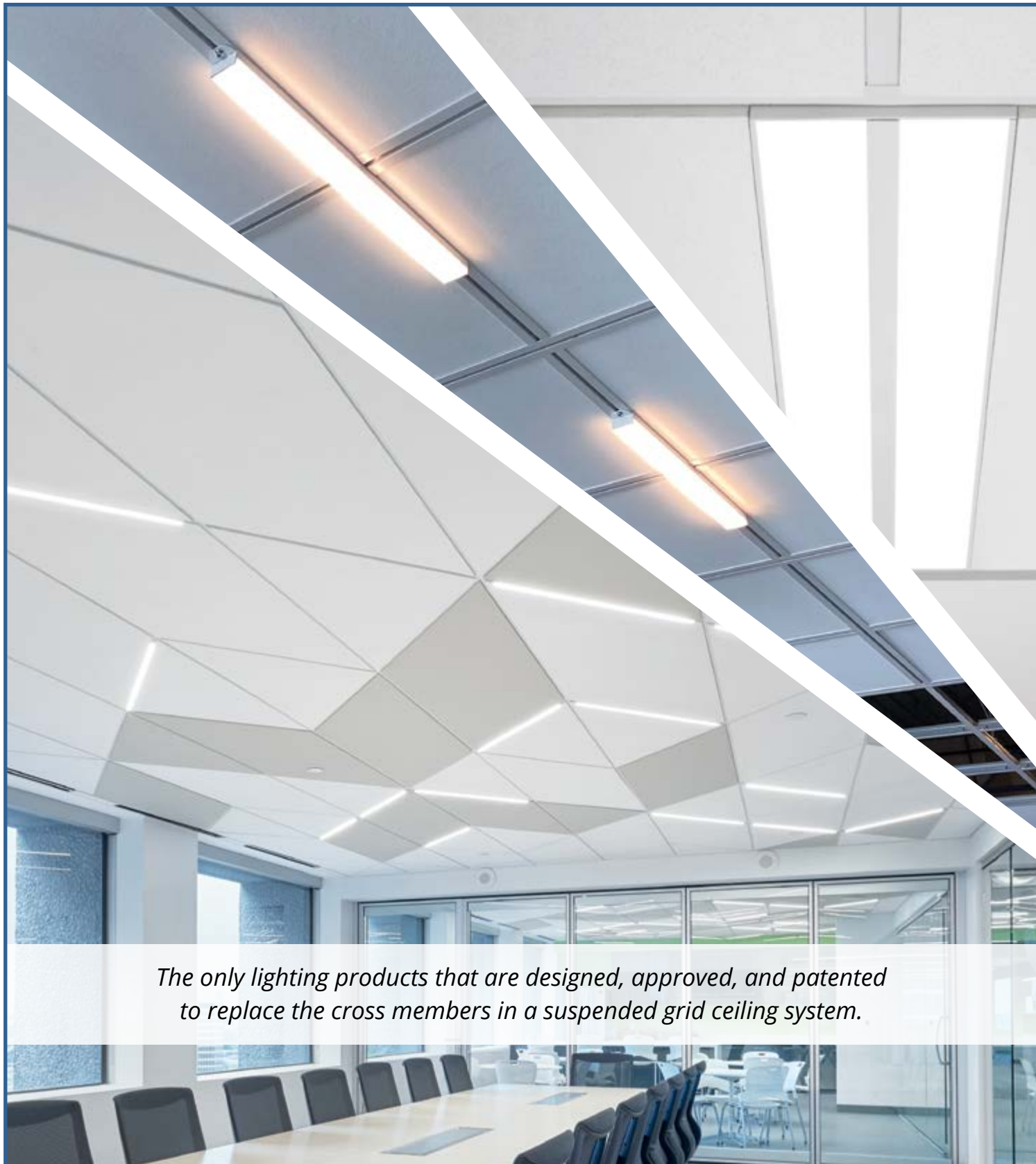


JLC • tech

*Extended Collection of  
Integrated Lighting Products*



*The only lighting products that are designed, approved, and patented  
to replace the cross members in a suspended grid ceiling system.*



# JLC-Tech's Extended Collection of Integrated Lighting Products

JLC-Tech was founded in 2012 with one singular vision: to create unique and useful LED lighting fixtures. Based out of Pembroke, MA – USA, the company is dedicated to maximizing the energy saving qualities of LEDs and marrying them to modern, creative and structurally integrated designs for commercial spaces.

JLC-Tech's flagship product, the T-BAR LED® is a prime example of the company mission and dedication coming to life. The T-BAR LED is designed, approved, and patented to replace the cross members in a suspended grid ceiling system.

Since the creation of the T-BAR LED, JLC-Tech has continued to expand its one-of-a-kind integrated lighting family to include a variety of unique design solutions. This catalog contains JLC-Tech's complete extended collection of integrated lighting products.



Ohio Project – Columbus, OH  
*Styled Pretty, Inc.*



Hourigan Corporate Office – Richmond, VA  
*PSH+*  
*Photo courtesy of Armstrong® World Industries*

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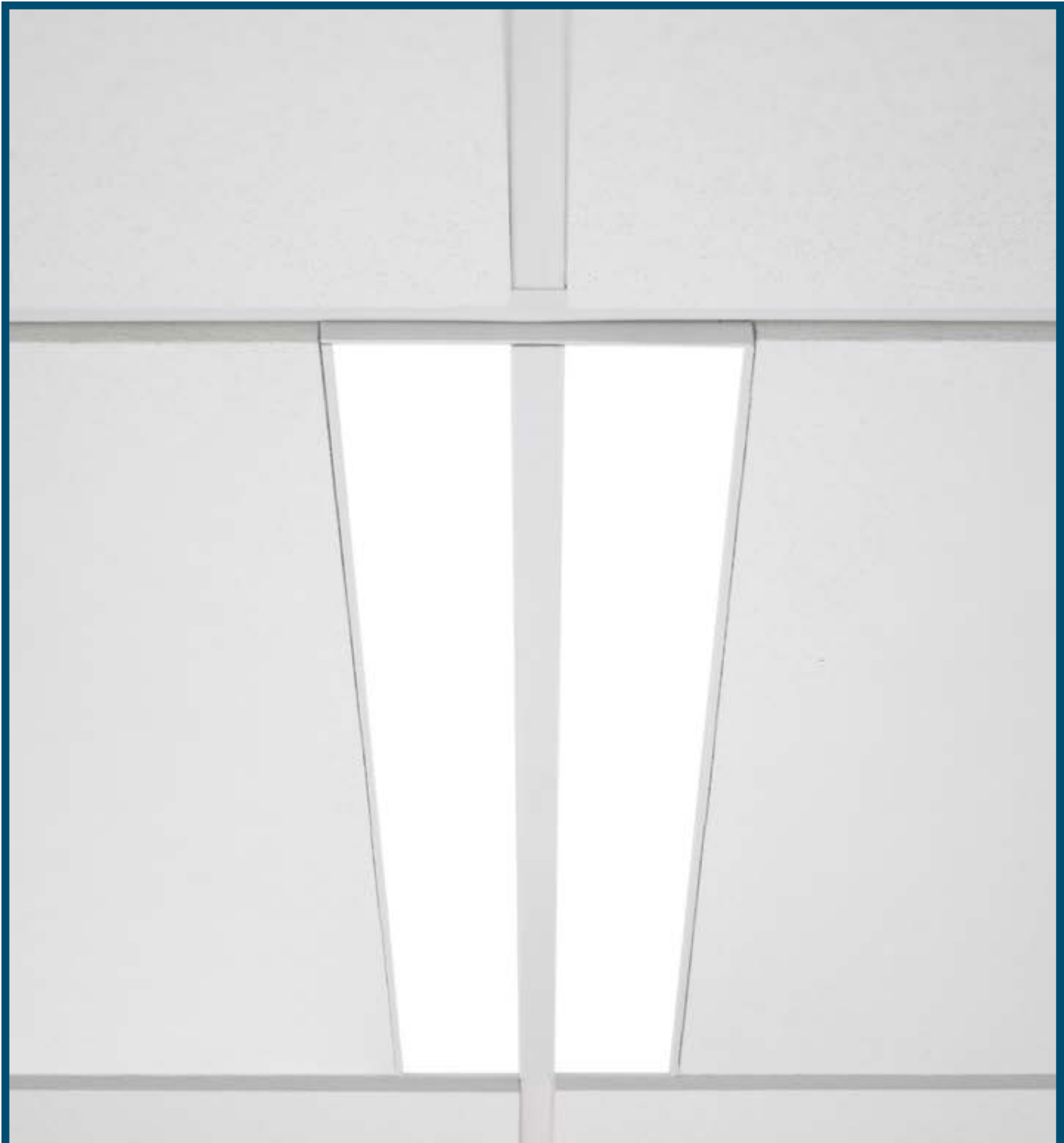
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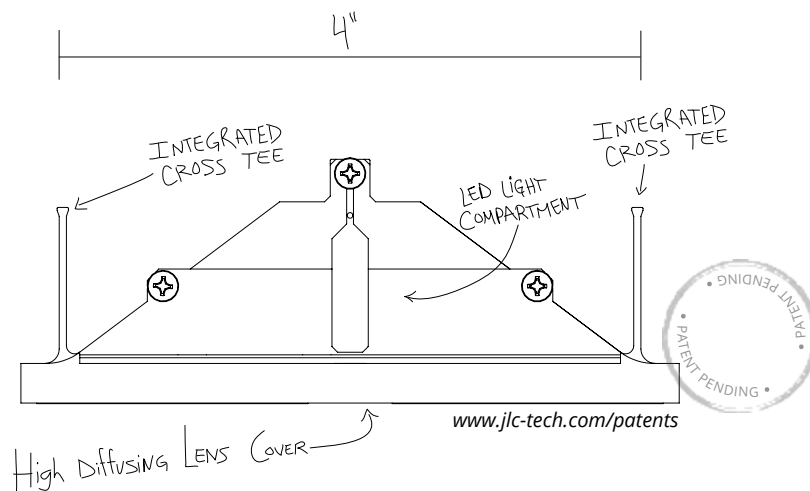


# GÆMINI™

*The only linear slot light that is engineered and patented  
to replace the cross members in a suspended grid ceiling system.*



# GEMINI™ by JLC • tech



The first and only linear slot light to install just like a cross tee in a suspended ceiling. The GEMINI revolutionizes the installation process to achieve linear lighting on-center with the grid by replacing the actual cross tees.

Typical linear downlights require a custom grid opening to be constructed in order to support the fixture, while the GEMINI has integrated cross-tees to create this on-center opening without additional grid components. This simplifies installation and allows for a more cohesive ceiling aesthetic. Offered with a single wide lens, or a dual lens option that matches the surrounding grid lines, the GEMINI provides a low-glare, simple to install, linear slot light lighting solution while also conserving plenum space.

*JLC-Tech is a pioneer in LED lighting, revolutionizing and challenging the status quo on how we illuminate our spaces.*

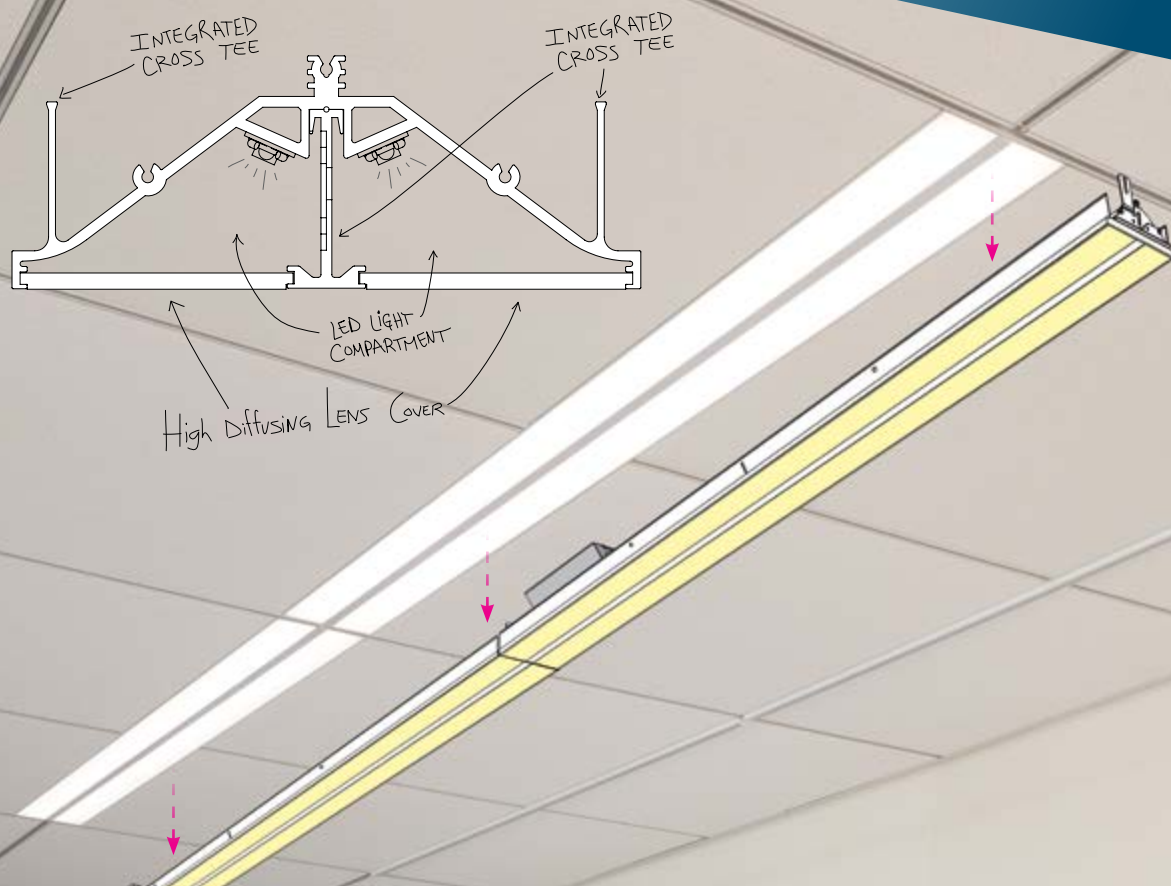


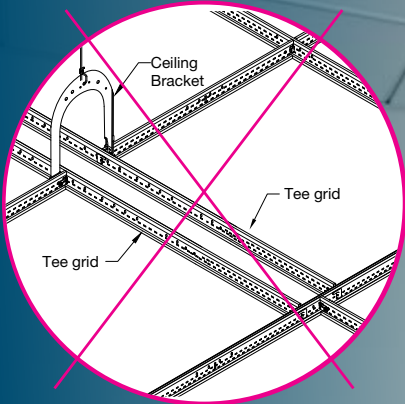
# Why GEMINI™

GEMINI by JLC-Tech is designed with integrated cross tees to provide a 4" or 2" linear light on-center to the suspended ceiling grid. There is no longer a need to build a custom opening or slot for the lighting fixture. Utilizing standard grid ceiling components, the GEMINI installs into the ceiling location typically occupied by a 2ft, 4ft, or 5ft cross tee.

Available with two distinct lens options; a double lens with central spine that matches the surrounding grid width, giving the look of a continuous ceiling grid, (available in GEMINI 4" only) or a single lens option for a more traditional slot fixture aesthetic.

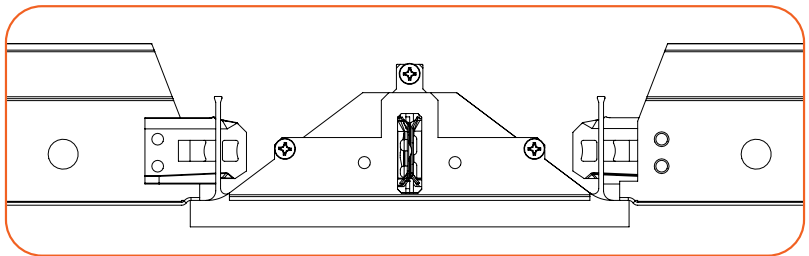
Each lens option is also available with a choice of high performance optics. The Diffuse White (DW) optic utilizes a high efficiency PMMA diffusing lens for a smooth look with no visible LEDs. The DW optic is ideal for a clean look and wide light distribution for even illumination. The Vista Comfort® (VC) optic uses a precision engineered dual-layer optical system to offer the perfect balance of soft diffuse light and glare control for elevated visual comfort. The VC optic is the perfect tool to design towards UGR requirements without sacrificing visual aesthetics.



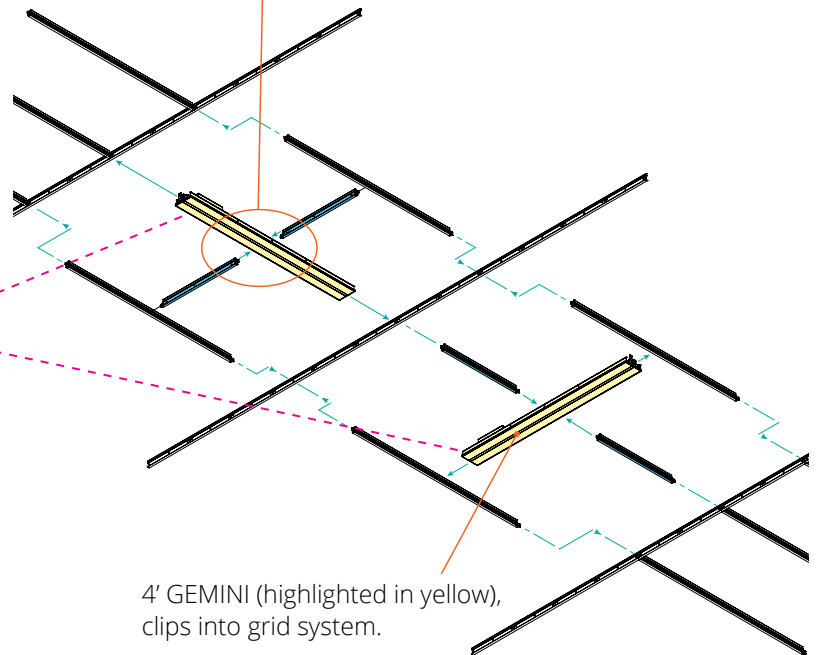
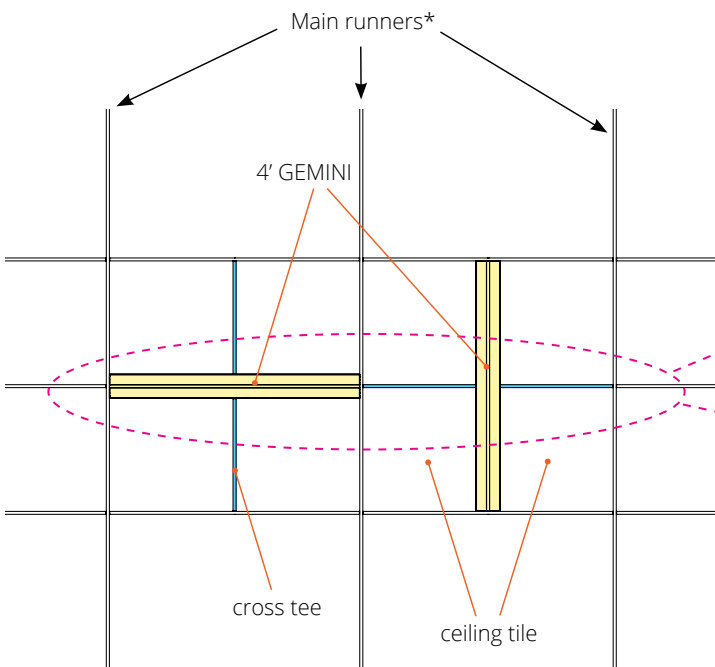


Custom opening not required.

*GEMINI is the first and only linear slot light for grid ceilings that installs without the need to build a custom opening in the grid system to support the fixture for on-center linear lighting.*



Cross section showing how perpendicular cross tees simply snap into GEMINI integrated cross tees.



4' GEMINI (highlighted in yellow), clips into grid system.

\* Main runners can run perpendicular or parallel to the GEMINI.

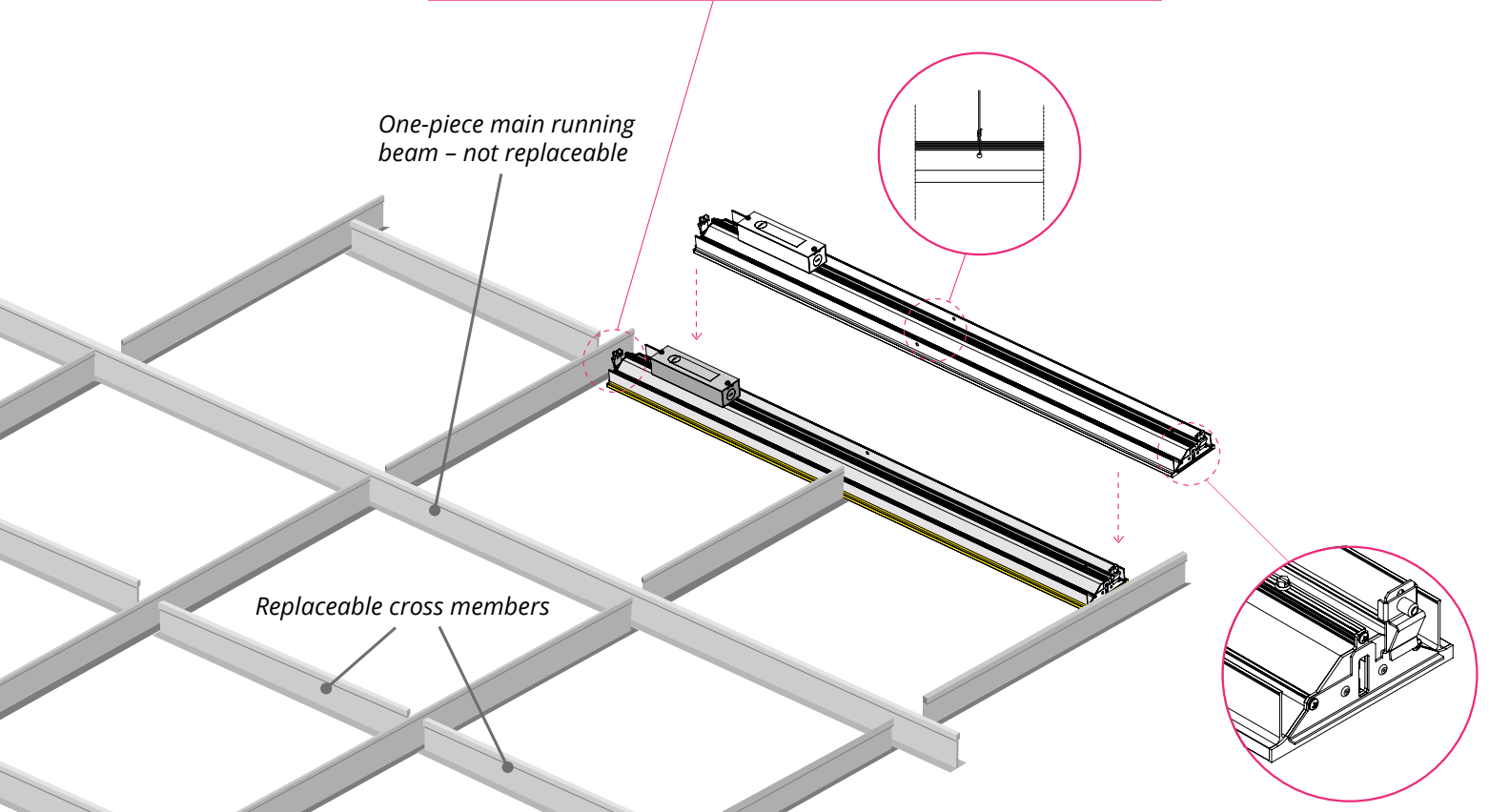
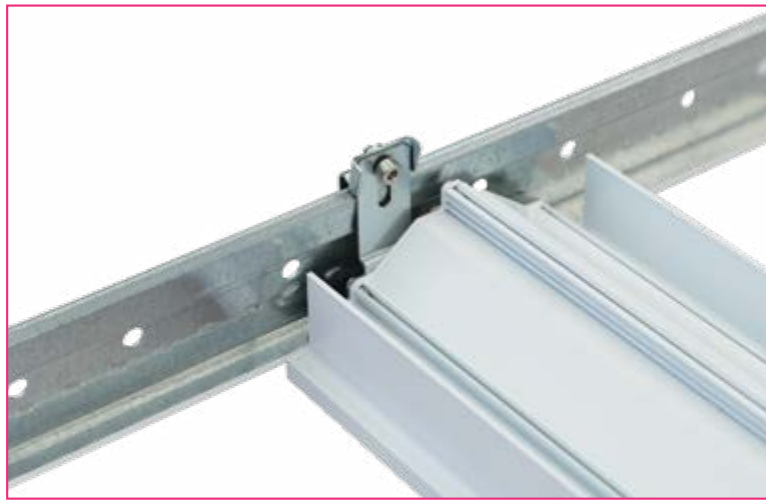


## How to install the GEMINI™

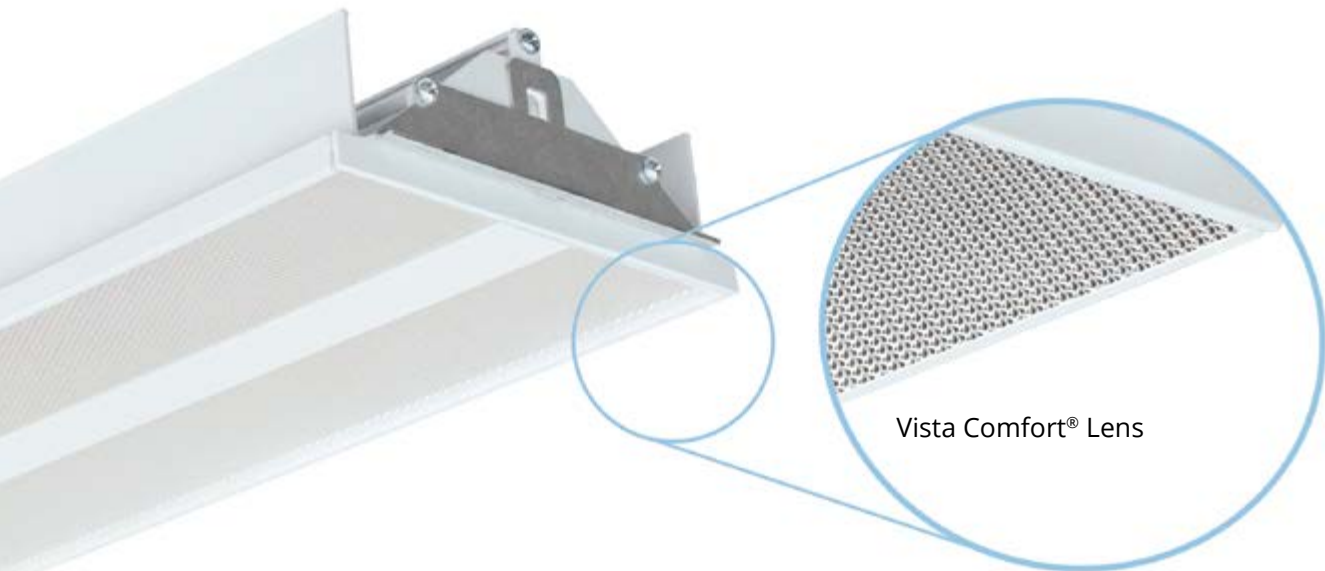
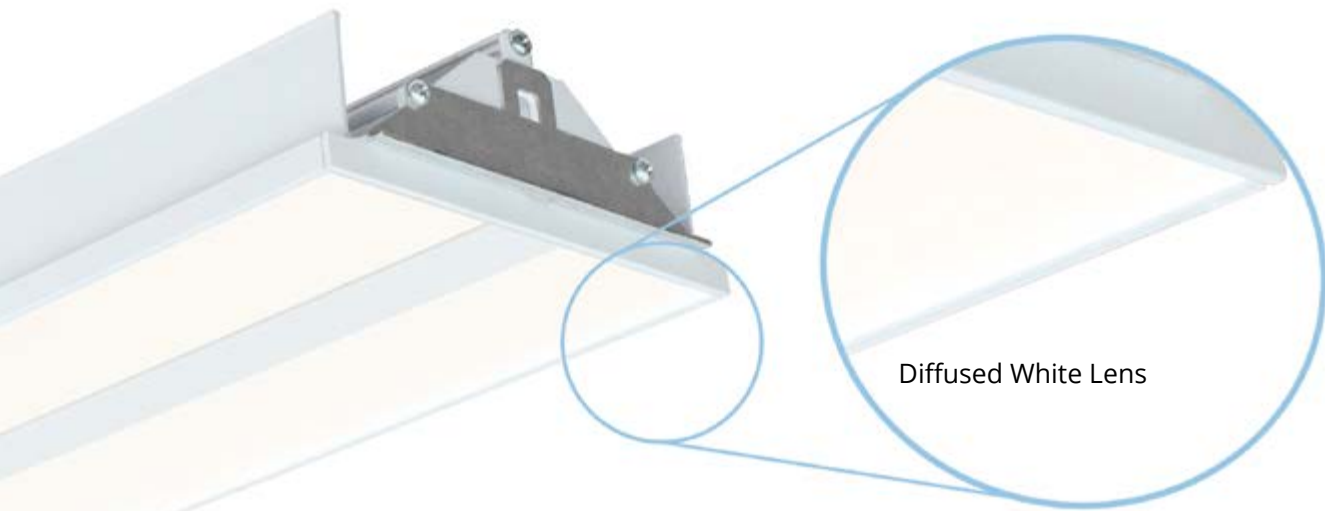
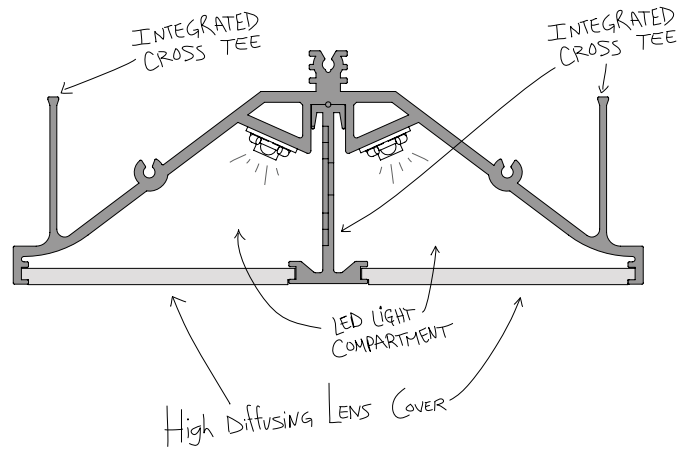
### Universally Compatible Clip

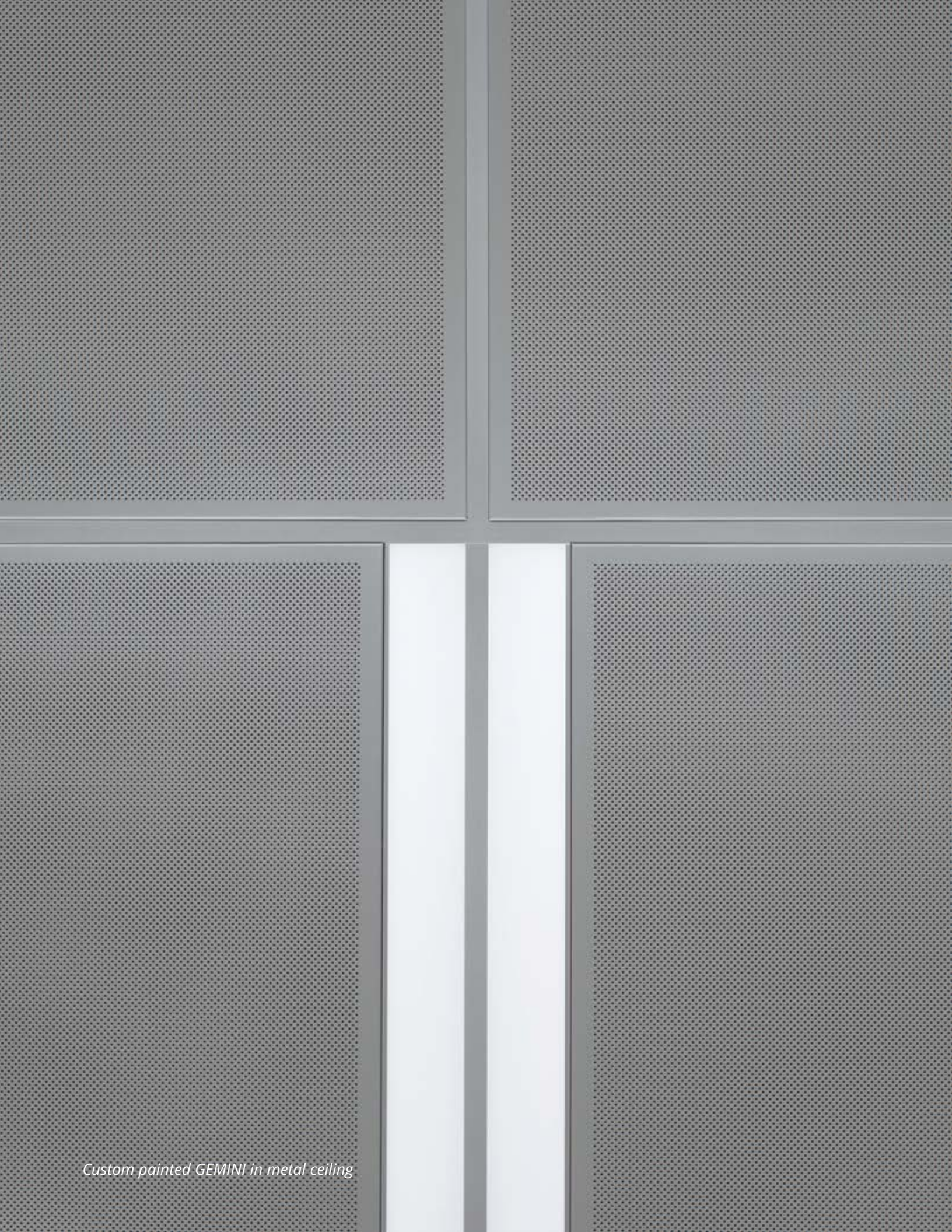
Specially designed brackets are mounted at each end of the fixture for easy installation into most manufacturers' standard 15/16" and 9/16" ceiling suspension systems.





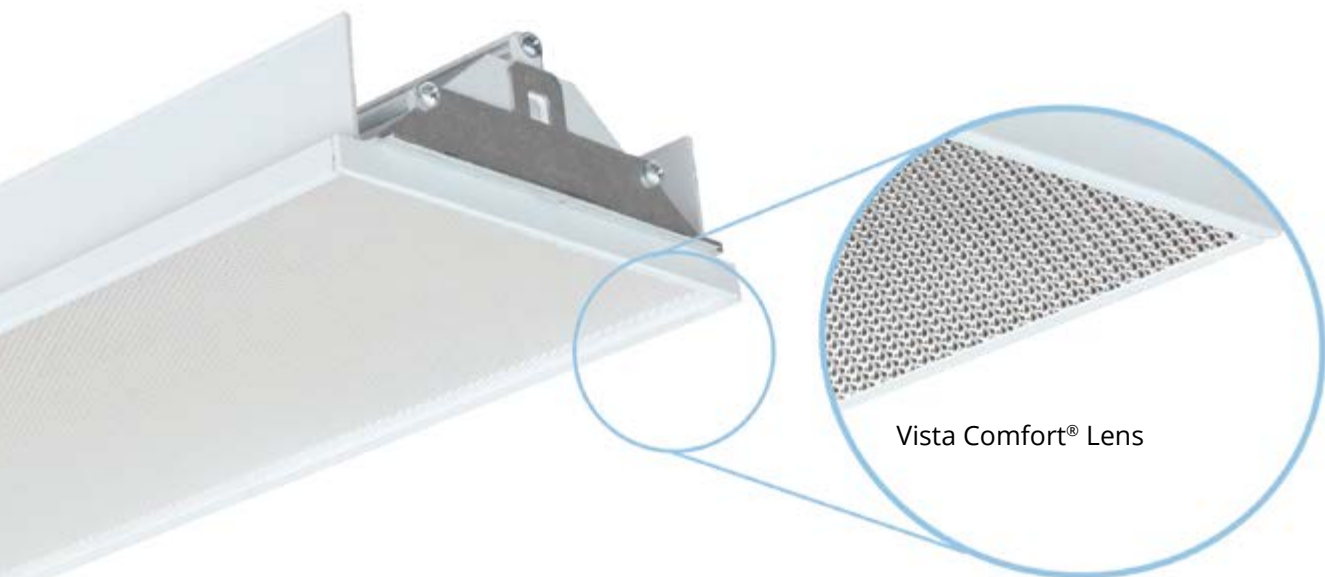
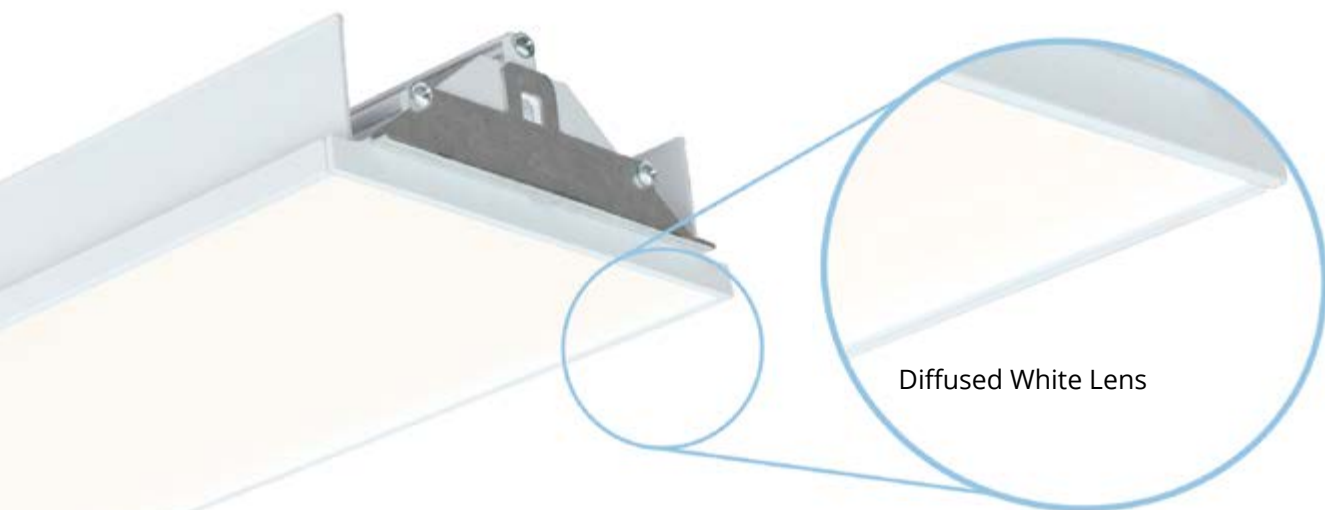
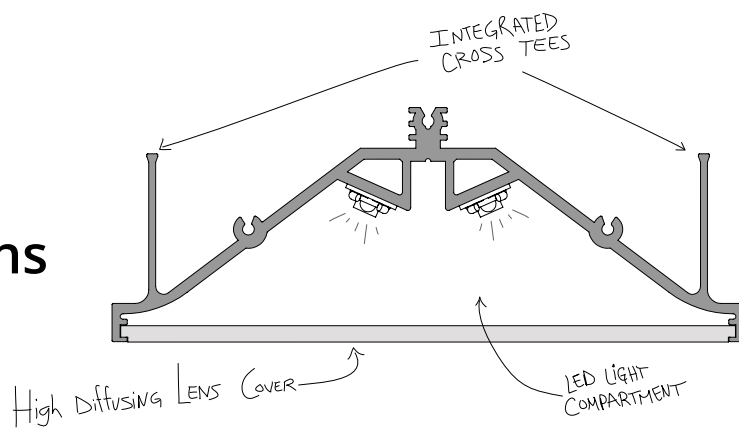
# GEMINI™ Double Lens

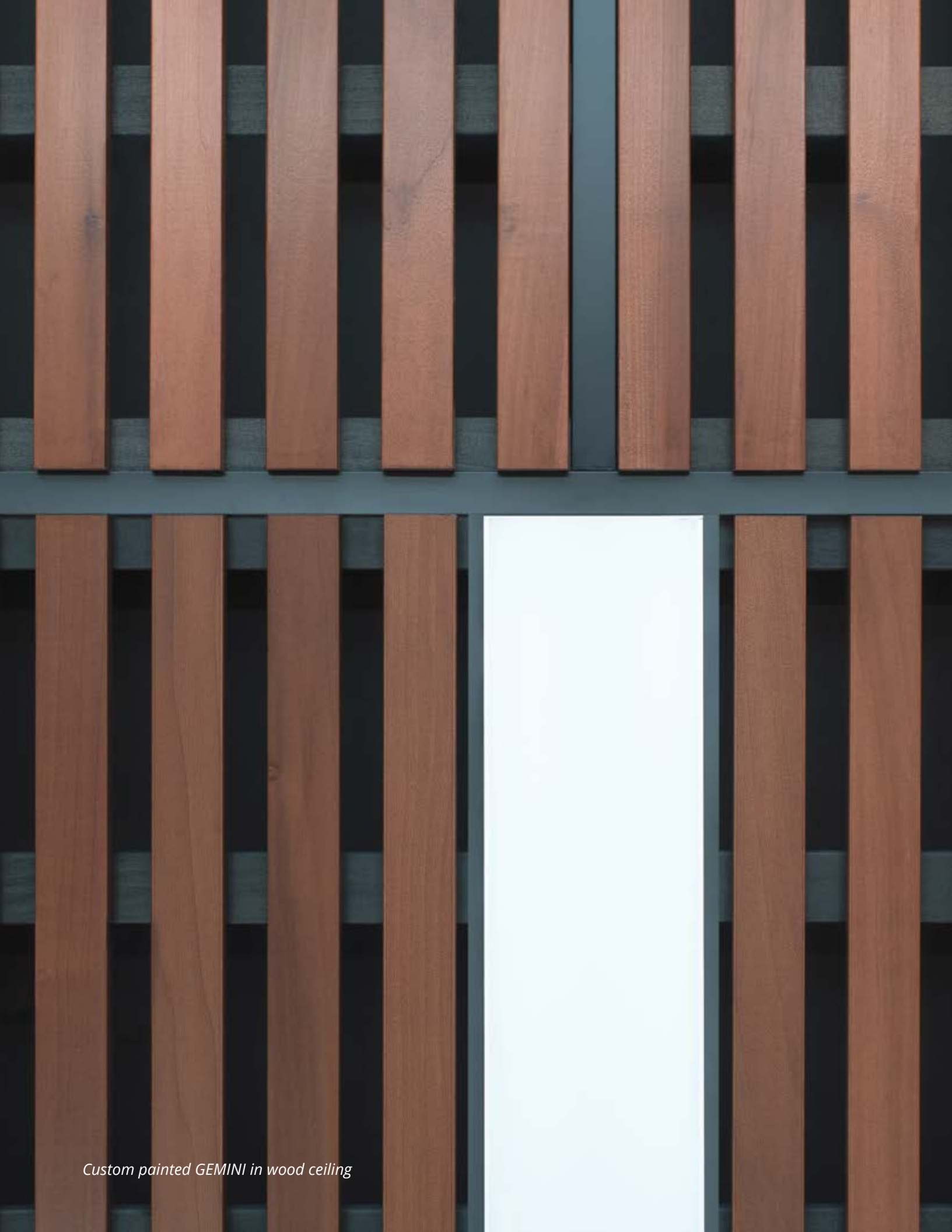




*Custom painted GEMINI in metal ceiling*

# GEMINI™ Single Lens





*Custom painted GEMINI in wood ceiling*



Product Name	LED/K Color	Light Output	Grid Size	Grid Type	Optic	Mounting Clips	Color	Driver	Options
<b>GEMD</b> = GEMINI 4" Double Lens	<b>HW</b> = 3000K	<b>LO</b> = Low	<b>2</b> = 2 ft	<b>24</b> = 15/16"	<b>DW</b> = Diffused White	<b>U</b> = Universal	<b>W</b> = White	<b>UNV</b> = 120-277 Vac 0-10V dimming	<b>CP</b> = Chicago Plenum
<b>GEMS</b> = GEMINI 4" Single Lens	<b>MW</b> = 3500K	<b>MO</b> = Medium	<b>4</b> = 4 ft	<b>15</b> = 9/16"	<b>VC</b> = Vista Comfort®	<b>A</b> = Armstrong	<b>B</b> = Black	<b>POE</b> = Power over Ethernet*	
	<b>MN</b> = 4000K	<b>HO</b> = High	<b>5</b> = 5 ft	<b>15B</b> = 9/16" Bolt Slot		<b>W</b> = Specialty Wood	<b>C</b> = Custom		
	<b>HN</b> = 4500K		<b>Metric</b>						
	<b>CN</b> = 5000K		<b>6</b> = 60 cm						
	90 CRI available, on request.	Custom lumen outputs available, consult factory.	<b>12</b> = 120 cm						Optional EM Battery Kit available (sold separately).

www.jlc-tech.com/patents

\*For PoE, consult factory

Single Lens Diffused White (DW)



Double Lens Diffused White (DW)



Single Lens Vista Comfort (VC)



Double Lens Vista Comfort (VC)



**NOTES:**

GEMINI 4" is designed to provide a 4" linear slot light on-center to the grid with integrated cross tees, by replacing standard cross members in a suspended ceiling; without the need to build a custom opening in the grid ceiling.

**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 clips for easy installation with Armstrong 15/16" or 9/16" suspension systems or standard 15/16" or 9/16" T-bars of most manufacturers ceiling suspension systems. Compatible with tegular and lay-in tiles. Mounting Clips "W" for grille and plank specialty wood ceilings, consult factory for wood ceiling specific shop drawings details.

**MATERIALS & OPTICS:**

Powder coated aluminum extruded body, steel mounting clips, and powder coated steel end caps. "DW" optic uses high efficiency frosted acrylic PMMA lens for even illumination, "VC" optic uses precision engineered PMMA prismatic lens with internal PET film layer providing diffuse glare free illumination to help design to UGR requirements.

**ELECTRIC:**

Universal input voltage of 120 – 277VAC. Junction box installed on fixture with integral driver and wire nuts inside for connection to branch circuit and 0-10V dimming system, (dimming to 1%). Fixture must be installed in accordance with local electrical codes. For EM Battery Kit order separately. PoE options available, consult factory.

**WARRANTY:**

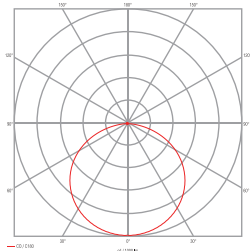
5 years

**LISTINGS:**

ETL/cETLus CE RoHS. Indoor use only. IC Rated. IP 40.

Photometrics CRI = >82

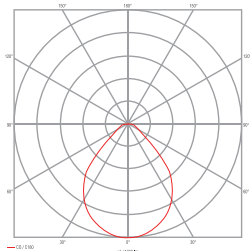
$L_{80} > 60K$  hrs



9/16" Diffused White Double Lens 4000K

Diffused White Double Lens

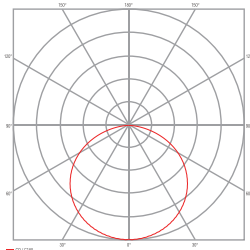
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
<b>LO</b> = Low	487	4.6	105.9
<b>MO</b> = Medium	731	7.2	101.5
<b>HO</b> = High	975	9.4	103.7



9/16" Vista Comfort® Double Lens 4000K

Vista Comfort Double Lens

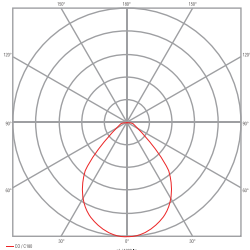
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
<b>LO</b> = Low	453	4.6	98.5
<b>MO</b> = Medium	680	7.2	94.4
<b>HO</b> = High	908	9.4	96.6



9/16" Diffused White Single Lens 4000K

Diffused White Single Lens

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
<b>LO</b> = Low	542	4.6	117.8
<b>MO</b> = Medium	813	7.2	112.9
<b>HO</b> = High	1085	9.4	115.4



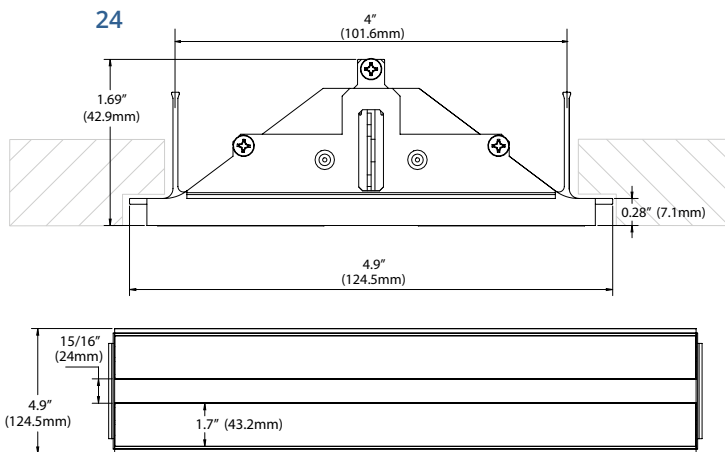
9/16" Vista Comfort® Single Lens 4000K

Vista Comfort Single Lens

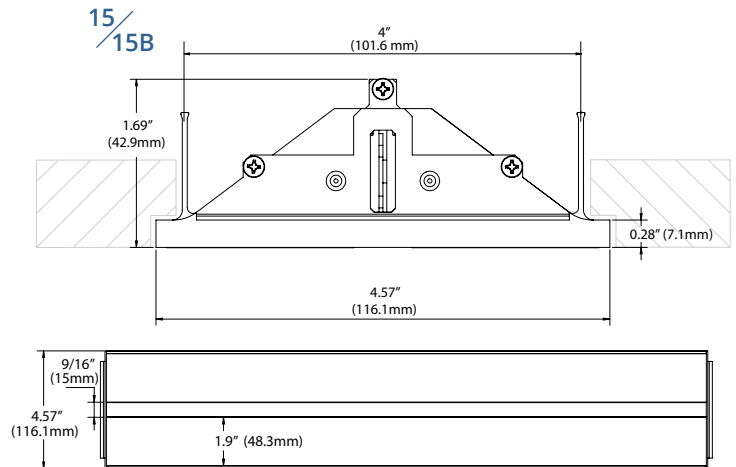
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
<b>LO</b> = Low	558	4.6	121.4
<b>MO</b> = Medium	837	7.2	116.3
<b>HO</b> = High	1117	9.4	118.9

\*Complete photometric info and IES files are available for download at [www.jlc-tech.com](http://www.jlc-tech.com)

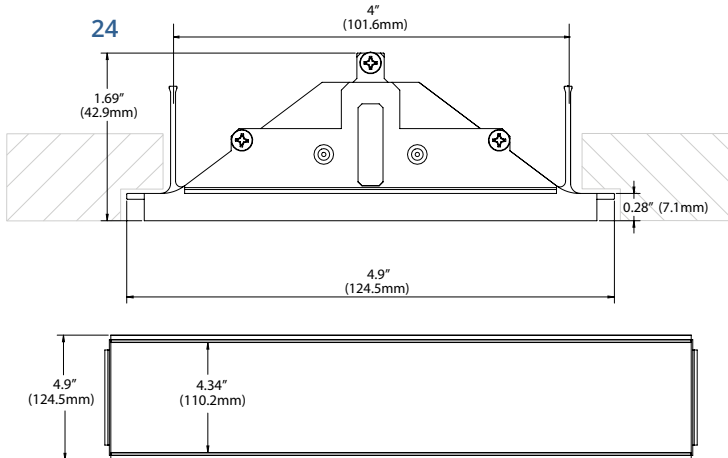
Dimensions (Compatible with Tegular and Lay-in tiles)



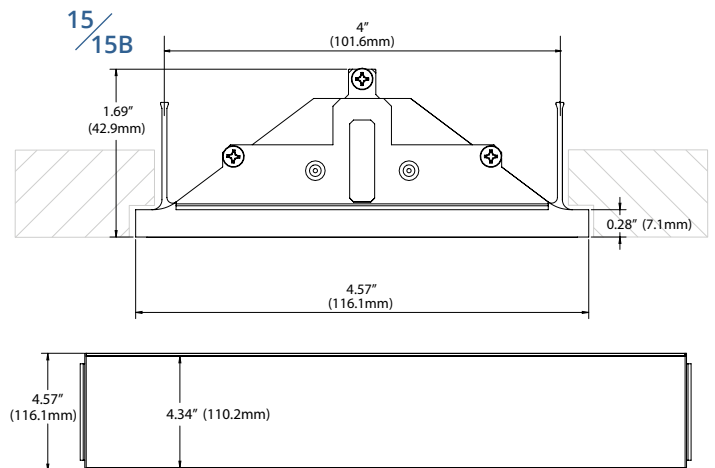
15/16" GEMINI Double Lens  
GEMD-XX-X-X-24-XX-X-W-UNV



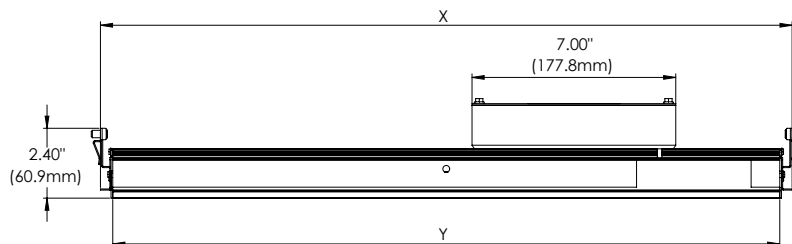
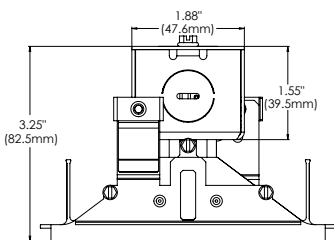
9/16" GEMINI Double Lens  
GEMD-XX-X-X-15/15B-XX-X-W-UNV



15/16" GEMINI Single Lens  
GEMS-XX-X-X-24-XX-X-W-UNV



9/16" GEMINI Single Lens  
GEMS-XX-X-X-15/15B-XX-X-W-UNV



Size	Grid Type	X	Y
2 = 2ft	15/15B = 9/16"	24"	23.4"
4 = 4ft	15/15B = 9/16"	48"	47.4"
5 = 5ft	15/15B = 9/16"	60"	59.4"

Size	Grid Type	X	Y
2 = 2ft	24 = 15/16"	24"	23"
4 = 4ft	24 = 15/16"	48"	47"
5 = 5ft	24 = 15/16"	60"	59"



Product Name	LED/K Color	Light Output	Grid Size	Grid Type	Optic	Mounting Clips	Color	Driver	Options
GEM2 = GEMINI 2" Single Lens	HW = 3000K	LO = Low	2 = 2 ft	24 = 15/16"	DW = Diffused White	U = Universal	W = White	UNV = 120-277 Vac 0-10V dimming	CP = Chicago Plenum
	MW = 3500K	MO = Medium	4 = 4 ft	15 = 9/16"	VC = Vista Comfort®	A = Armstrong	B = Black	POE = Power over Ethernet*	Optional EM Battery Kit available (sold separately).
	MN = 4000K	HO = High	5 = 5 ft	15B = 9/16" Bolt Slot		W = Specialty Wood	C = Custom		
	HN = 4500K		Metric						
	CN = 5000K		6 = 60 cm						
90 CRI available, on request.	Custom lumen outputs available, consult factory.	12 = 120 cm							

www.jlc-tech.com/patents

\*For PoE, consult factory

Single Lens Diffused White (DW)



Single Lens Vista Comfort (VC)



**NOTES:**

GEMINI 2" is designed to provide a 2" linear slot light on-center to the grid with integrated cross tees, by replacing standard cross members in a suspended ceiling; without the need to build a custom opening in the grid ceiling.

**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 clips for easy installation with Armstrong 15/16" or 9/16" suspension systems or standard 15/16" or 9/16" T-bars of most manufacturers ceiling suspension systems. Compatible with tegular and lay-in tiles. Mounting Clips "W" for grille and plank specialty wood ceilings, consult factory for wood ceiling specific shop drawings details.

**MATERIALS & OPTICS:**

Powder coated aluminum extruded body, steel mounting clips, and powder coated steel end caps. "DW" optic uses high efficiency frosted acrylic PMMA lens for even illumination, "VC" optic uses precision engineered PMMA prismatic lens with internal PET film layer providing diffuse glare free illumination to help design to UGR requirements.

**ELECTRIC:**

Universal input voltage of 120 – 277VAC. Junction box installed on fixture with integral driver and wire nuts inside for connection to branch circuit and 0-10V dimming system, (dimming to 1%). Fixture must be installed in accordance with local electrical codes. For EM Battery Kit order separately. PoE options available, consult factory.

**WARRANTY:**

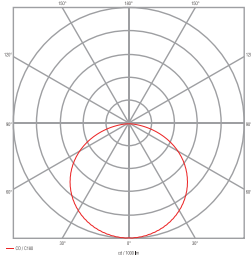
5 years

**LISTINGS:**

ETL/cETLus CE RoHS. Indoor use only. IC Rated. IP 40.

Photometrics CRI = >82

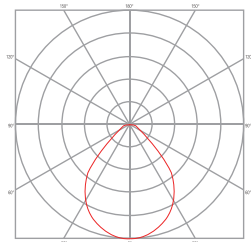
$L_{80} > 60K$  hrs



9/16" Diffused White Single Lens 4000K

Diffused White Single Lens

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
<b>LO</b> = Low	522	4.1	127
<b>MO</b> = Medium	760	6.1	124.5
<b>HO</b> = High	1005	7.9	127



9/16" Vista Comfort® Single Lens 4000K

Vista Comfort Single Lens

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
<b>LO</b> = Low	527	4.1	128.5
<b>MO</b> = Medium	768	6.1	125.9
<b>HO</b> = High	1016	7.9	128.6

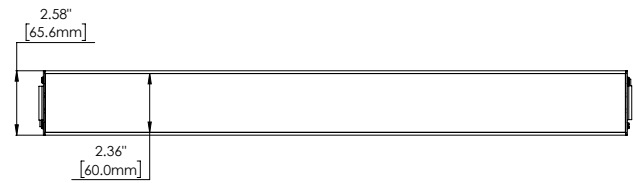
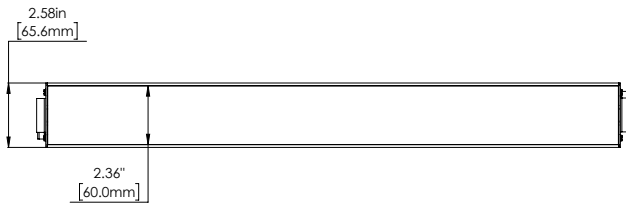
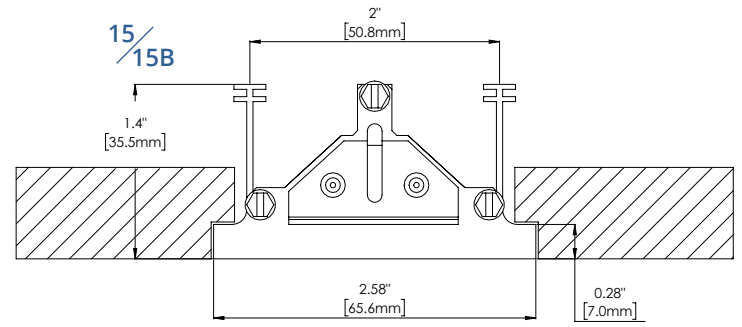
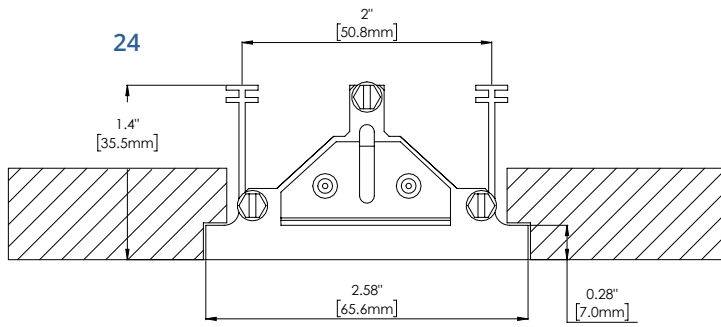
\*Complete photometric info and IES files are available for download at [www.jlc-tech.com](http://www.jlc-tech.com)

JLC-Tech LLC | Pembroke, MA - USA | [info@jlc-tech.com](mailto:info@jlc-tech.com) | [www.jlc-tech.com](http://www.jlc-tech.com)



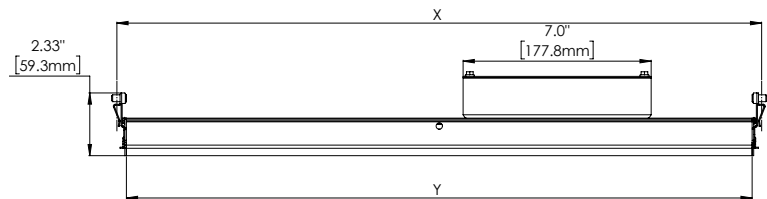
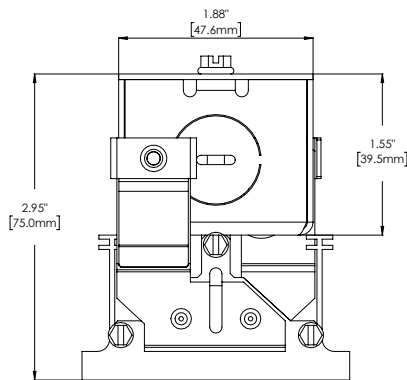
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Dimensions (Compatible with Tegular and Lay-in tiles)



15/16" GEMINI Single Lens  
GEM2-XX-X-X-24-XX-X-W-UNV

9/16" GEMINI Single Lens  
GEM2-XX-X-X-15/15B-XX-X-W-UNV



Size	Grid Type	X	Y
2 = 2ft	15/15B = 9/16"	24"	23.4"
4 = 4ft	15/15B = 9/16"	48"	47.4"
5 = 5ft	15/15B = 9/16"	60"	59.4"

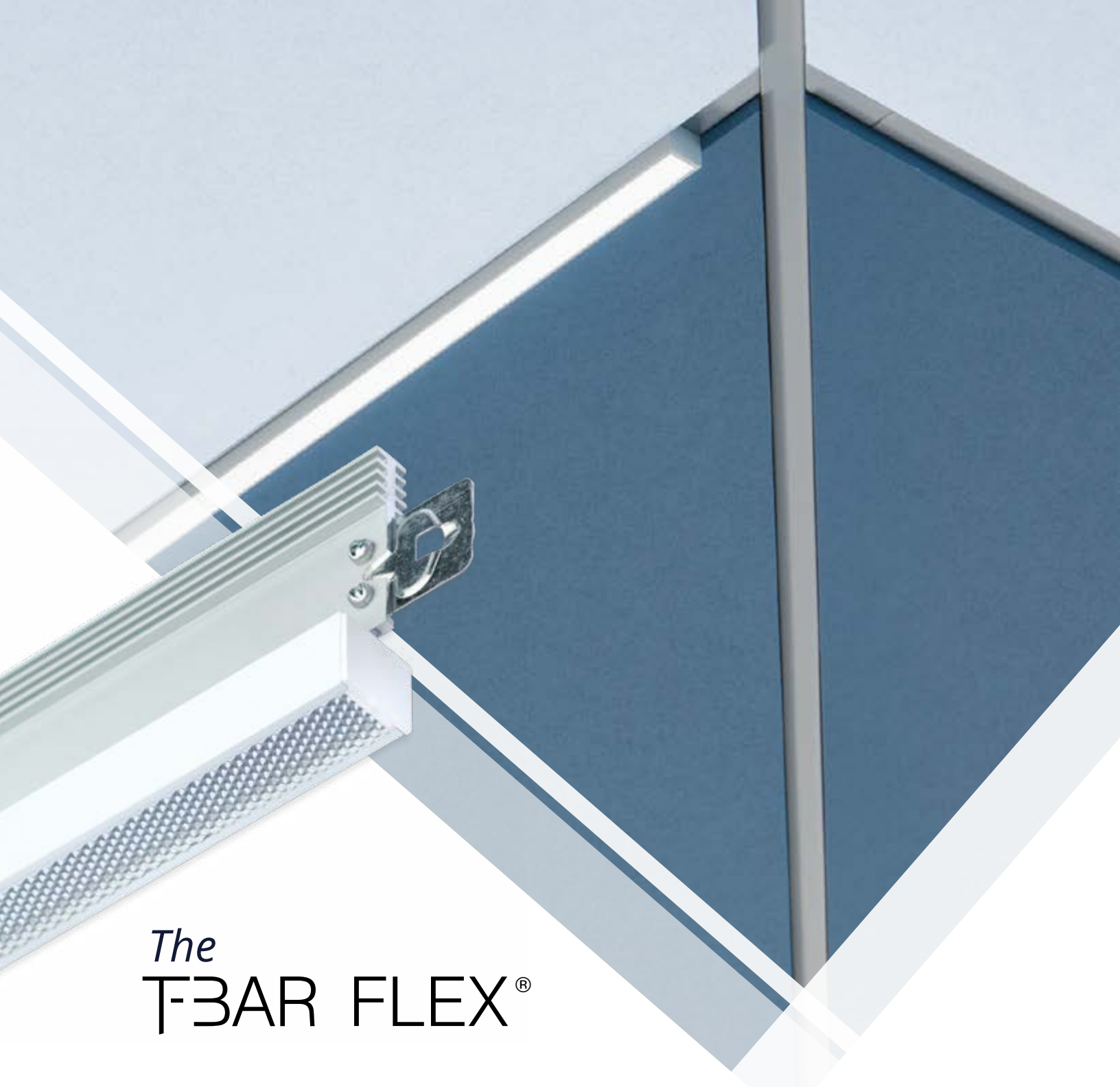
Size	Grid Type	X	Y
2 = 2ft	24 = 15/16"	24"	23"
4 = 4ft	24 = 15/16"	48"	47"
5 = 5ft	24 = 15/16"	60"	59"





# T-BAR FLEX®

*Innovative lighting engineered for seamless integration into  
the DESIGNFlex® Ceiling System by Armstrong®.*



## *The* T-BAR FLEX<sup>®</sup>

JLC-Tech, a pioneer for architecturally integrated LED lighting solutions, in partnership with Armstrong<sup>®</sup>, brings to you a new way to reinvent your ceiling with shapes and light.

Introducing the T-BAR FLEX<sup>®</sup>, a truly integrated lighting solution for the DESIGNFlex<sup>®</sup> Ceiling System. Utilizing JLC-Tech's patented technology of replacing the cross tees in a suspended ceiling, you can create lighting layouts like never before: From zig-zag linear patterns, to geometric shapes, the possibilities are endless.

**JLC-Tech – “It takes a genius to make it simple.”**

JLC • tech *in partnership with*

**Armstrong<sup>®</sup>**  
World Industries

# Installation with **Armstrong®** is tool-free

World Industries

The XM clip, specifically designed for JLC-Tech, is mounted at each end of the T-BAR FLEX for easy installation into the DESIGNFlex® Ceiling System by Armstrong® Ceilings. It allows the fixture to become a part of the certified ceiling assembly, eliminating the need for support wires. T-BAR FLEX replaces selected cross tees of the 9/16" suspension system where light is desired. (See installation instruction for more details.)

T-BAR FLEX® clips into DESIGNFlex® Ceiling System

## T-BAR FLEX® key benefits

### no plenum occupancy

The minimalistic low profile lighting leaves the space above the ceiling completely unoccupied and facilitates the placement of 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

Installation is a snap and requires no tools.

### even foot candles

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



example lighting layout of 60° triangle

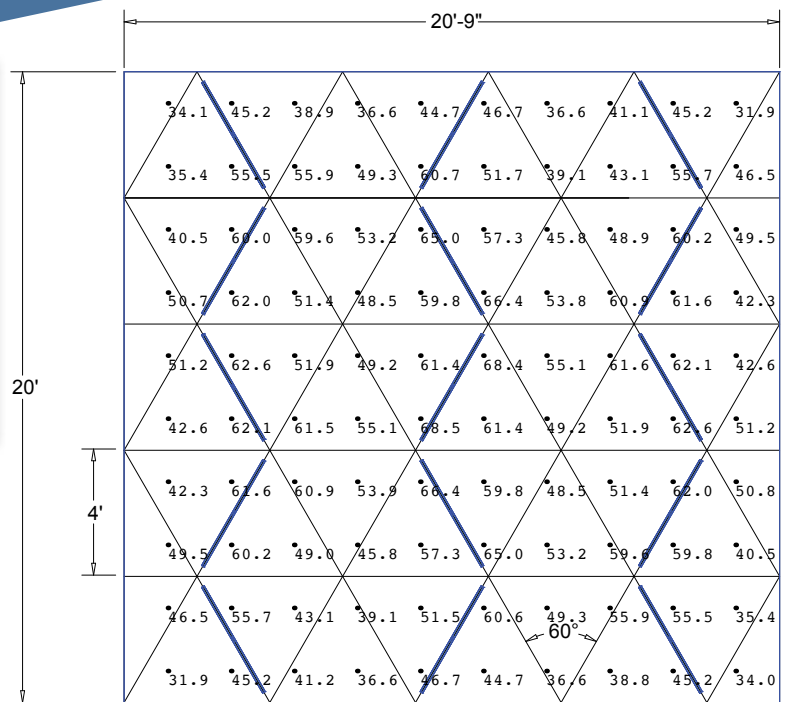
#### Room dimensions:

20' 9" X 20'  
ceiling height – 9ft

#### Quantity of product:

15 pcs – TBFL-MN-49-15-D-A-W  
T-BAR FLEX 48" OC, 60° 9/16" (4000K)

Average foot candle achieved at desk: 51.15 FC



Product Name	LED/K Color	Light Output	Grid Size	Grid Type	Optic	Mounting Clips	Color	Driver	Options
TBFL = T-BAR FLEX	HW = 3000K	LO = Low	16 = 75° 24" MBS	15 = 9/16"	D = Diffusing Lens	A = Armstrong® DesignFlex® Ceilings	W = White B = Black C = Custom	UNV = Universal 120-277V 0-10V dimming POE = Power over Ethernet*	CP = Chicago Plenum  Optional EM Battery Kit available (sold separately).
	MW = 3500K	MO = Medium	22 = 60° 24" MBS		DW = Diffused White Lens				
	MN = 4000K	HO = High	30 = 45° 24" MBS		B = Block Clear Diffusing Lens				
	HN = 4500K		41 = 75° 48" MBS		B2 = Block Frosted Diffusing Lens				
	CN = 5000K		49 = 60° 48" MBS						
	90 CRI available, on request.	Custom lumen outputs available, consult factory.	64 = 45° 48" MBS (MBS = Main Beam Spacing)						

www.jlc-tech.com/patents

\*For PoE, consult factory

Optional Accessory	Grid Size	Color
TBFL-PA = T-BAR FLEX Perimeter Accessory**	15 = 9/16"	W = White B = Black C = Custom

\*\*See page 26 for additional info

Diffusing Lens (D)



Diffused White Lens (DW)



Block Clear Diffusing Lens (B)



Block Frosted Diffusing Lens (B2)



**NOTES:**

T-BAR FLEX is designed for seamless integration into DESIGNFlex® Ceiling Systems by Armstrong® Ceilings. Create unique shapes and patterns beyond the traditional ceiling layout. Armstrong Ceiling clips allow for easy installation, just as you would install a typical XM cross tee.

**APPLICATIONS:**

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

**MOUNTING:**

Integrates with Armstrong Ceilings DESIGNFlex 9/16" SupraFine® Suspension Systems. Compatible with Tegular and Lay-in tiles.

**MATERIALS:**

Anodized and painted aluminum extruded body, steel mounting clips, PC end caps, high transmitting acrylic PMMA lens.

**ELECTRIC:**

Universal input voltage of 120V – 277VAC. Junction box installed on fixture with integral driver and wire nuts inside for connection to line voltage and 0-10VDC dimming system. Fixture must be installed in accordance with local electrical codes. For EM Battery Kit order separately. PoE options available, consult factory.

**WARRANTY:**

5 years limited warranty. For complete warranty terms, please visit our website.

**LISTINGS:**

ETL/cETLus CE RoHS Indoor use only.



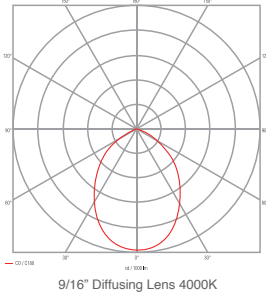
The T-BAR FLEX® is specifically designed for DESIGNFlex® Ceiling Systems by Armstrong®. To learn more about this ceiling system visit [www.armstrongceilings.com/designflex](http://www.armstrongceilings.com/designflex)



Photometrics CRI = >82

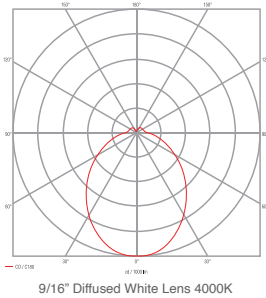
L<sub>80</sub> > 60K hrs

Diffusing Lens - Grid Type: 15



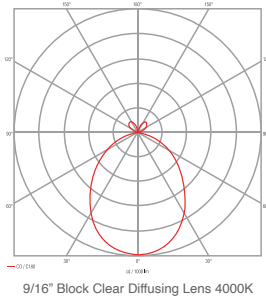
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	354	4.2	84
MO = Medium	472	5.5	86
HO = High	902	10.6	85

Diffused White Lens - Grid Type: 15



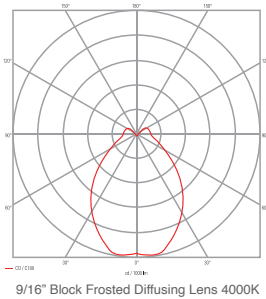
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	255	4.2	61
MO = Medium	340	5.5	62
HO = High	650	10.6	61

Block Clear Diffusing Lens - Grid Type: 15



Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	351	4.2	84
MO = Medium	468	5.5	85
HO = High	893	10.6	84

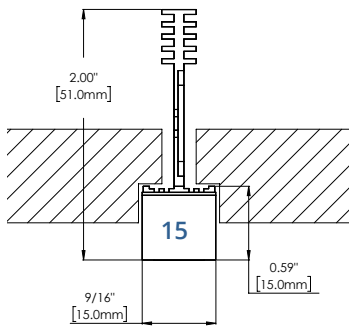
Block Frosted Diffusing Lens - Grid Type: 15



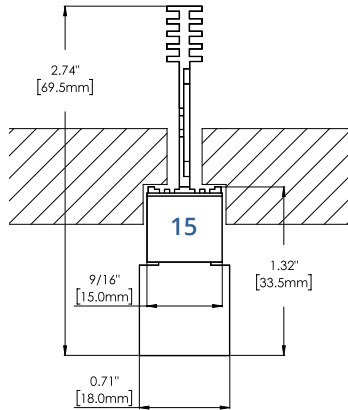
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	358	4.2	85
MO = Medium	477	5.5	87
HO = High	911	10.6	86

Above photometric data based on 30" T-BAR FLEX model, refer to IES files for more specific information.

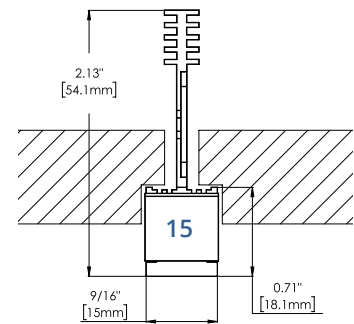
Profile Dimensions (Compatible with DESIGNFlex Ceiling Tiles)



9/16" Diffusing Lens  
TBFL-XX-X-15-D-A-X-X



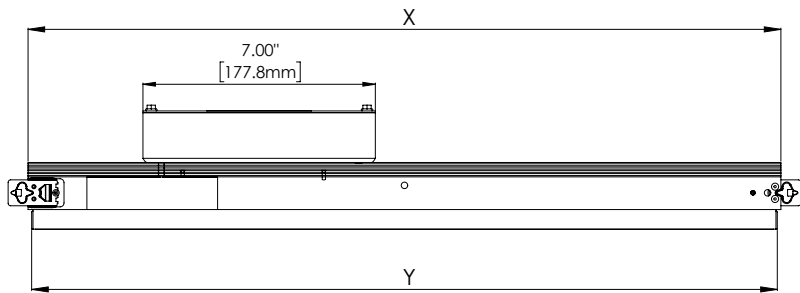
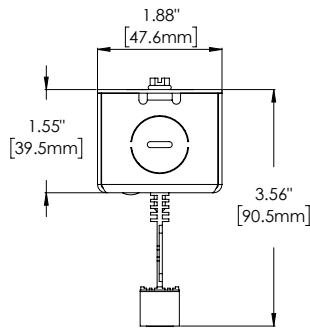
9/16" Block Lens  
TBFL-XX-X-15-B/B2-A-X-X



9/16" Diffuse White  
TBFL-XX-X-15-DW-A-X-X

Clear block and frosted block variable heights 1/2" - 4" available, consult factory.

Length Dimensions



Grid Size	Description	Grid Type	Replaces DESIGNFlex® ceiling T code	X	Y
16	75° 24" MBS	9/16"	XM757524	16.92"	16.67"
22	60° 24" MBS	9/16"	XM756024	22.68"	22.42"
30	45° 24" MBS	9/16"	XM754524	30.43"	30.17"
41	75° 48" MBS	9/16"	XM757548	41.66"	41.41"
49	60° 48" MBS	9/16"	XM756048	49.51"	49.25"
64	45° 48" MBS	9/16"	XM754548	64.37"	64.11"

\* Diffusing Lens 4000K

MBS = Main Beam Spacing

For DESIGNFlex square and rectangle patterns please refer to T-BAR LED® product line at [www.jlc-tech.com](http://www.jlc-tech.com)

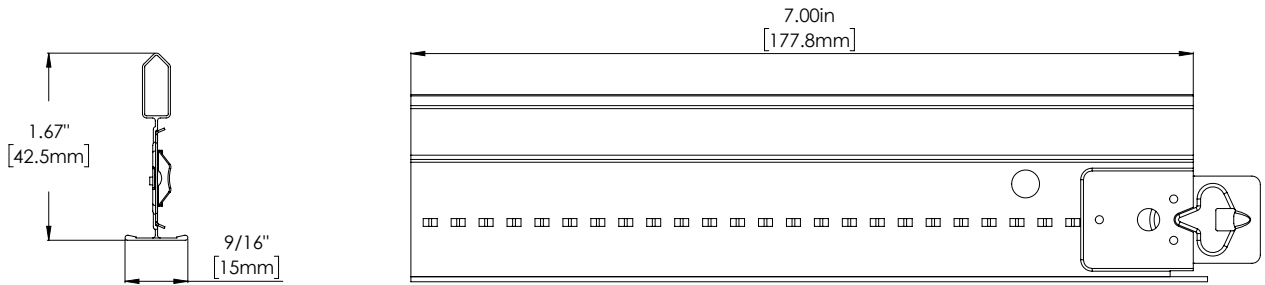


The T-BAR FLEX® is specifically designed for DESIGNFlex® Ceilings Systems by Armstrong®. To learn more about this ceiling system visit [www.armstrongceilings.com/designflex](http://www.armstrongceilings.com/designflex)

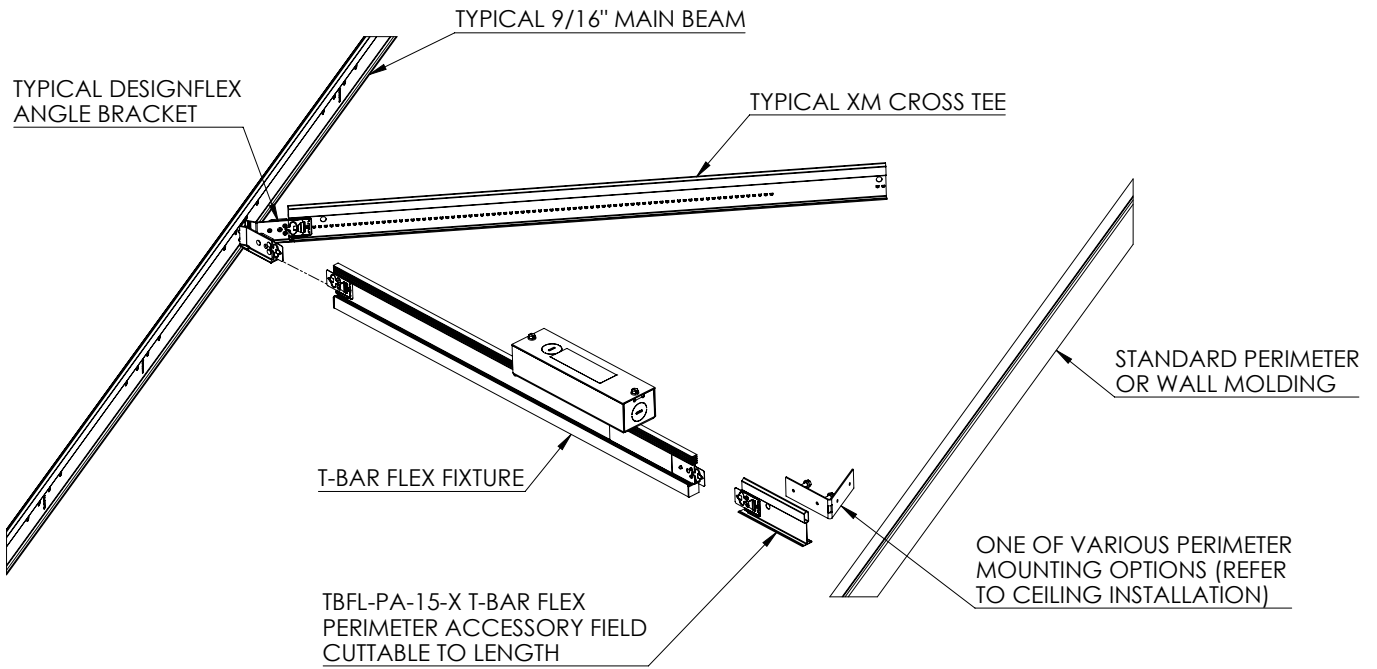


Perimeter Kit Accessory Dimensions

A T-BAR FLEX Perimeter Accessory is only necessary in DESIGNFlex ceilings when the T-BAR FLEX fixture is abutting the perimeter trim of a ceiling cloud or the wall molding.



TBFL-PA-15-X



The T-BAR FLEX® is specifically designed for DESIGNFlex® Ceilings Systems by Armstrong®. To learn more about this ceiling system visit [www.armstrongceilings.com/designflex](http://www.armstrongceilings.com/designflex)

JLC-Tech LLC | Pembroke, MA - USA | [info@jlc-tech.com](mailto:info@jlc-tech.com) | [www.jlc-tech.com](http://www.jlc-tech.com)

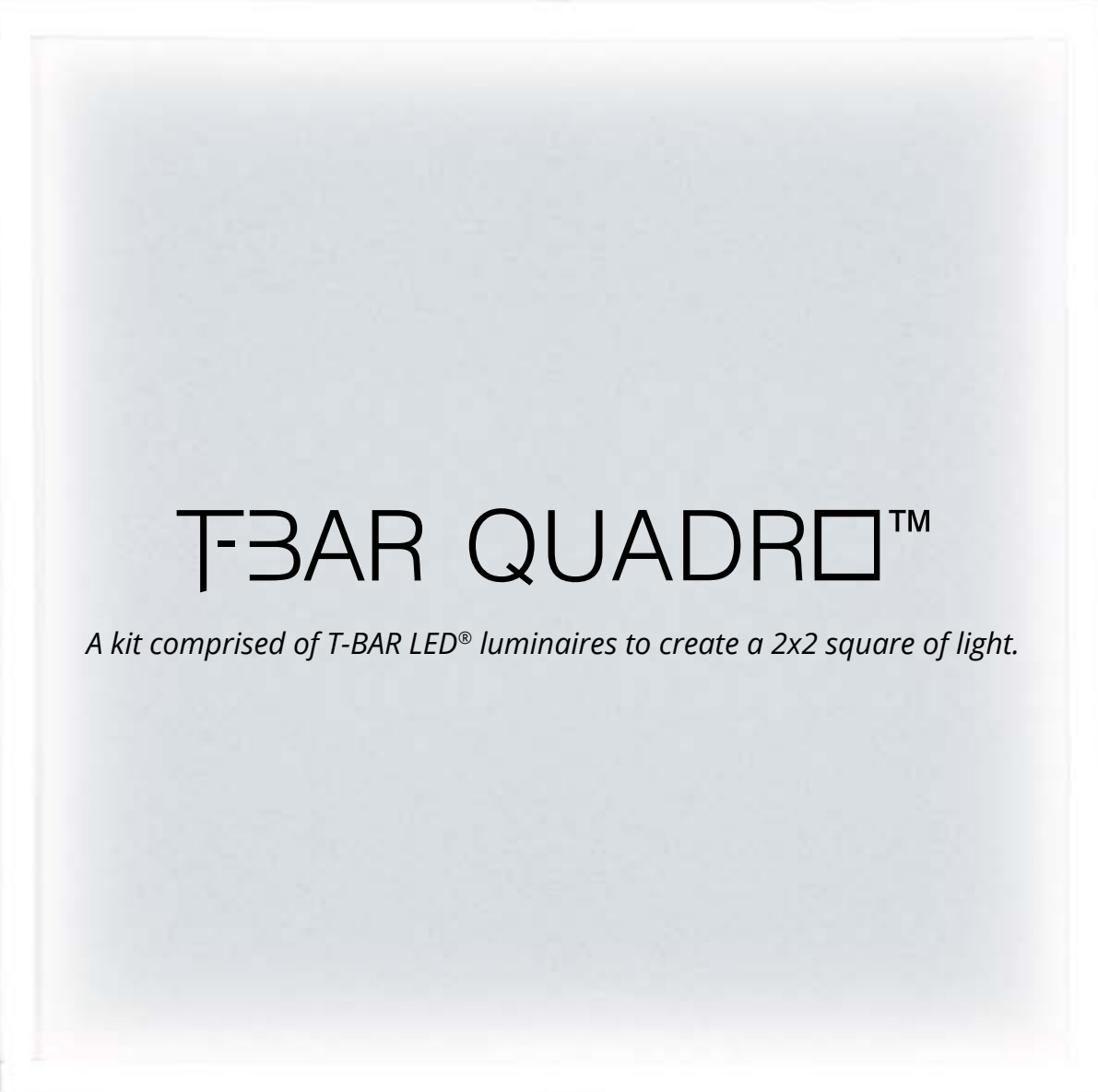
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Benham Architecture - Oklahoma City, OK  
*Benham, A Haskell Company*





# T-BAR QUADRO™

*A kit comprised of T-BAR LED® luminaires to create a 2x2 square of light.*



Block Clear Diffusing Lens



Diffusing Lens



Black Multi-Reflector Lens

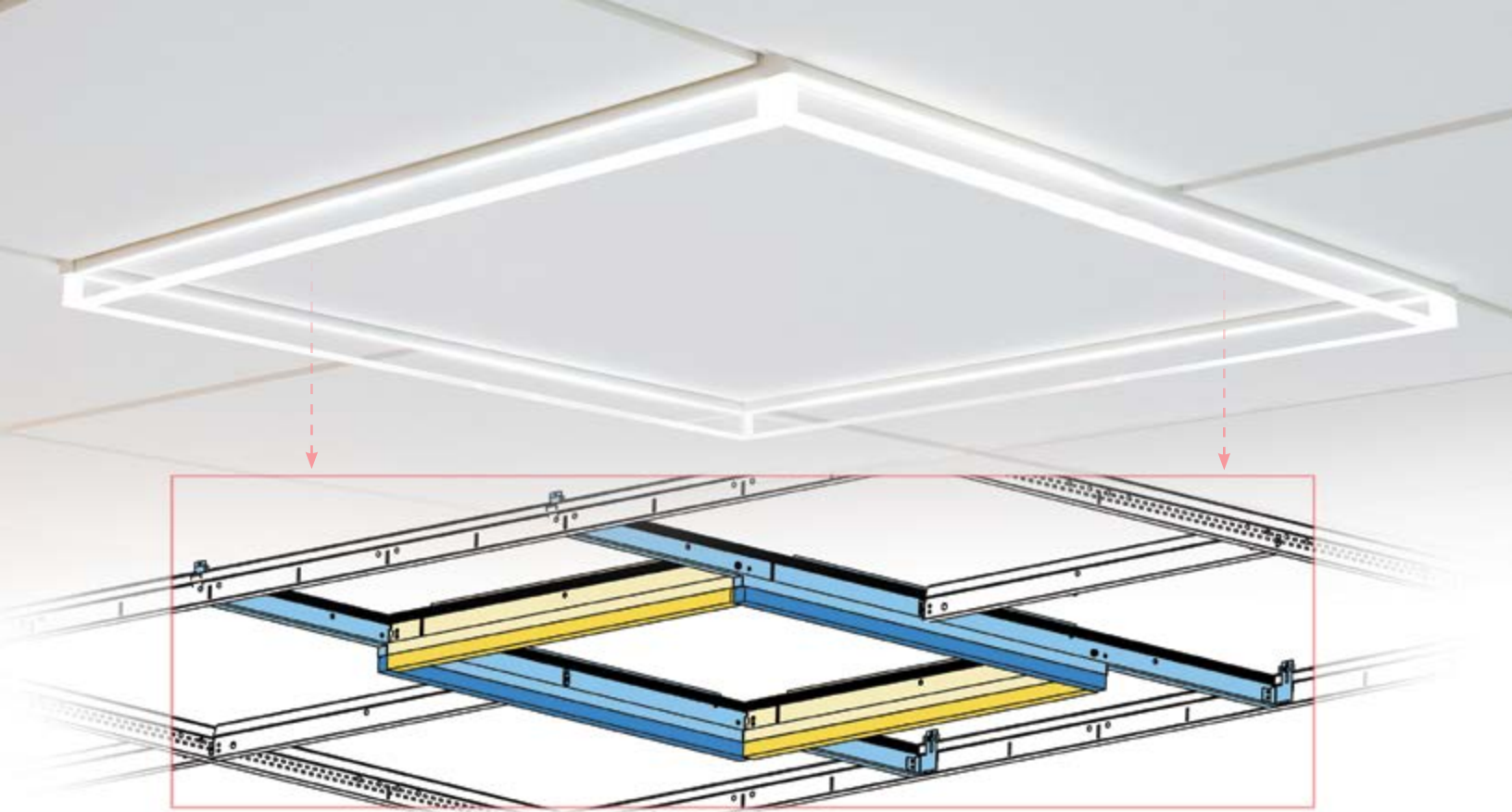
## T-BAR QUADRO™

by JLC • tech

T-BAR QUADRO introduces a new shape offering to complement the T-BAR LED® product line. Providing designers a tool to create additional lighting layout options including: concentric square within squares, checkered patterns throughout a space, or a complement to a geometric design.

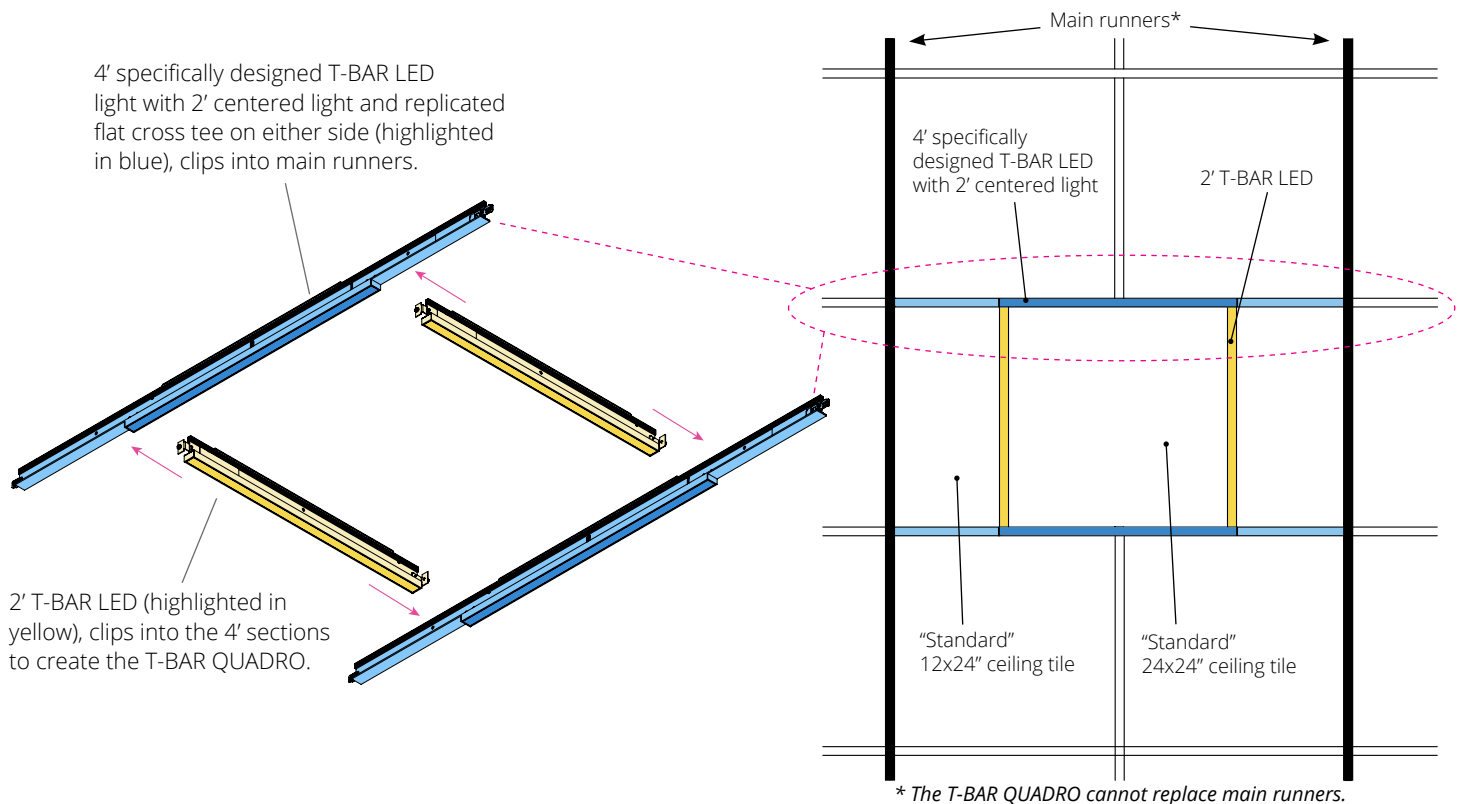
The T-BAR QUADRO is a kit comprised of standard T-BAR LED luminaires to create a 2x2 square of light by utilizing JLC-Tech's patented technology. Available in several offerings of T-BAR LED optics, as well as both 15/16" and 9/16" grid systems, the T-BAR QUADRO has maximum flexibility to complement any space.

*JLC-Tech is a pioneer in LED lighting, revolutionizing and challenging the status quo on how we illuminate our spaces.*



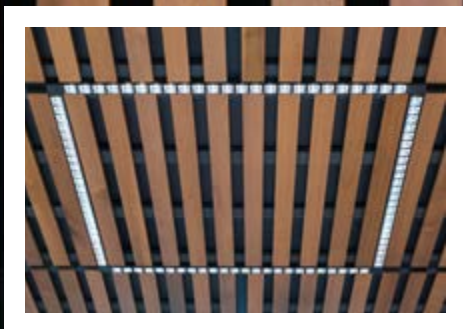
### How the T-BAR QUADRO™ works:

Complete squares of light can be created in a suspended grid ceiling using the T-BAR QUADRO by utilizing JLC-Tech's patented technology of replacing the cross tees with a building-integrated light fixture. Two specially designed 4' T-BAR LED lights with 2' of light at their center, clip into the main runners of the suspended ceiling system. Two 2' lights with specially designed mounting system clip into the 4' members, completing the square of light.



\* The T-BAR QUADRO cannot replace main runners.

T-BAR QUADRO™ Multi-Reflector Lens in Armstrong® Ceiling Solutions WoodWorks® Grille 15/16"



Product Name	LED/K Color	Grid Size	Grid Type	Optic	Mounting Clips	Color	Driver	Options
TBQD = T-BAR QUADRO	HW = 3000K	2Q = 2 x 2 ft	24 = 15/16"	D = Diffusing Lens	U = Universal	W = White	UNV = Universal	CP = Chicago Plenum
	MW = 3500K	Metric	15 = 9/16"	B = Block Clear Diffusing Lens	A = Armstrong	B = Black	120-277V 0-10V dimming	IP65 = IP65*
	MN = 4000K	6Q = 60 x 60 cm	15B = 9/16" Bolt Slot	B2 = Block Frosted Diffusing Lens	C = Custom	C = Custom	UNVEM = Universal	POE = Power over Ethernet**
	HN = 4500K				C2 = Multi-Reflector		120-277V with battery backup	
	CN = 5000K			C2WH = White Multi-Reflector				
	90 CRI available, on request.			C2BL = Black Multi-Reflector				

www.jlc-tech.com/patents

\*Not available in C2 Model \*\*For PoE, consult factory

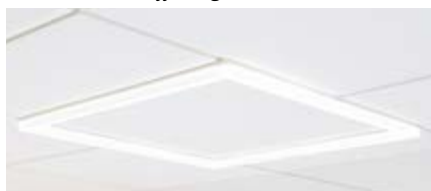
Diffusing Lens (D)



Block Clear Diffusing Lens (B)



Block Frosted Diffusing Lens (B2)



Multi-Reflector (C2)



**NOTES:**

T-BAR QUADRO kits are designed to provide a 2x2 square of light by replacing cross tees in a suspended ceiling. Kit includes Class 2 remote power supply with integrated JB compartment for 120 - 277V 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. Please refer to the T-BAR LED power supply documentation for more detailed information. EM option includes remote driver pre-wired with battery backup. Refer to T-BAR LED EM Battery Kit documentation for more detailed information.

**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 manufacturers' ceiling suspension systems. Armstrong compatible mounting clips for installation with Armstrong Ceiling 15/16" Prelude® and Clean Room™, 9/16" Suprafine®, Silhouette®, Sonata® and Interlude® suspension systems. Compatible with Tegular and Lay-in tiles.

**MATERIALS:**

Anodized and painted aluminum extruded body, steel mounting clips, white PC end caps, high transmitting acrylic PMMA lens, (D, B, B2 Models), high reflectance 98% aluminum coated or white or black PC reflectors on each LED for a dark light effect, (C2 Models).

**ELECTRIC:**

Fixtures consume 64W per kit (power supply consumption not included). Class 2 plenum rated cables at each end of fixture equipped with quick connectors for connection to 24VDC power supply output and to allow the kit to be easily connected together. Use solid copper wire or wire ferrules to fit into quick connectors. Available with 0-10V nominal 1% dimming system. 120-277VAC input remote power supply included.

**WARRANTY:**

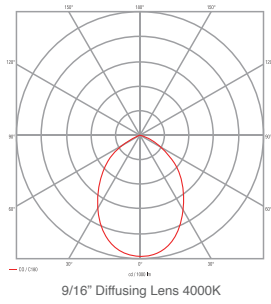
5 years

**LISTINGS:**

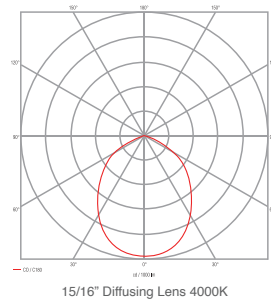
ETL/cETLus CE RoHS. Indoor use only. IC Rated. IP 40, IP 20 (C2 Models).

Photometrics CRI = >82 L<sub>80</sub> > 60K hrs

Diffusing

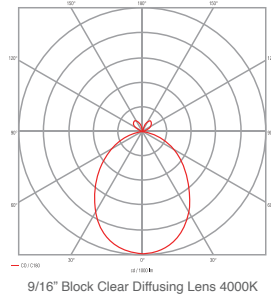


TBQD-MN-XX-15-D-X-X-X  
3560 lm  
54 lm/W

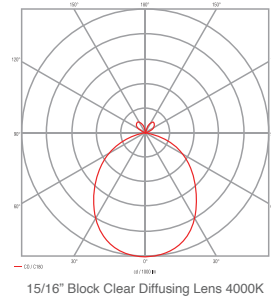


TBQD-MN-XX-24-D-X-X-X  
4672 lm per foot  
75 lm/W

Block Clear Diffusing

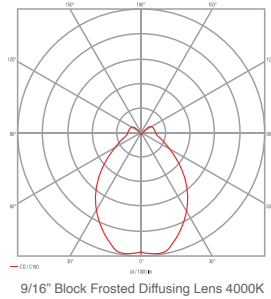


TBQD-MN-XX-15-B-X-X-X  
3504 lm  
56 lm/W

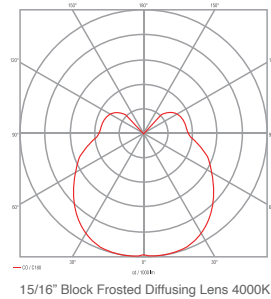


TBQD-MN-XX-24-B-X-X-X  
4512 lm  
72 lm/W

Block Frosted Diffusing



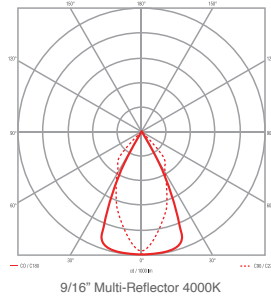
TBQD-MN-XX-15-B2-X-X-X  
3680 lm  
59 lm/W



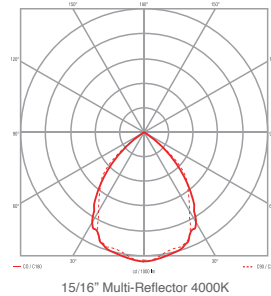
TBQD-MN-XX-24-B2-X-X-X  
4688 lm  
75 lm/W

Multi-Reflector  
(metalized finish)

\*C2WH and C2BL IES files  
available on [www.jlc-tech.com](http://www.jlc-tech.com)



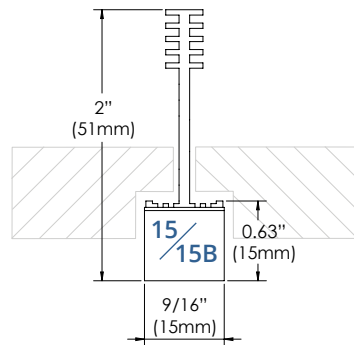
TBQD-MN-XX-15-C2-X-X-X  
6152 lm  
98 lm/W



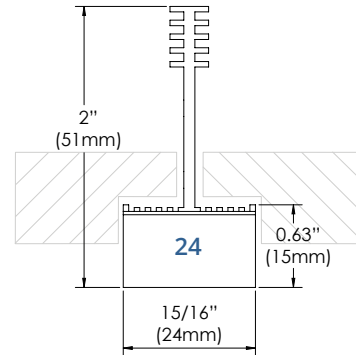
TBQD-MN-XX-24-C2-X-X-X  
6272 lm  
100 lm/W

\*Complete photometric info and IES files are available for download at [www.jlc-tech.com](http://www.jlc-tech.com)

Profile Dimensions (Compatible with Tegular and Lay-in tiles)

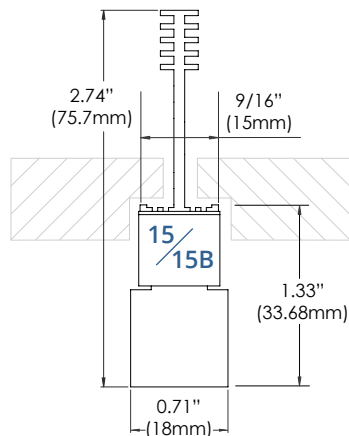


9/16" Diffusing Lens/Multi-Reflector  
TBQD-XX-XX-15/15B-D/C2-X-X-X

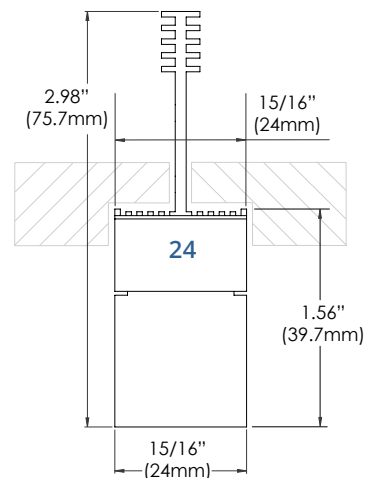


15/16" Diffusing Lens/Multi-Reflector  
TBQD-XX-XX-24-D/C2-X-X-X

Clear block and frosted block variable heights 1/2" - 4" available, consult factory.



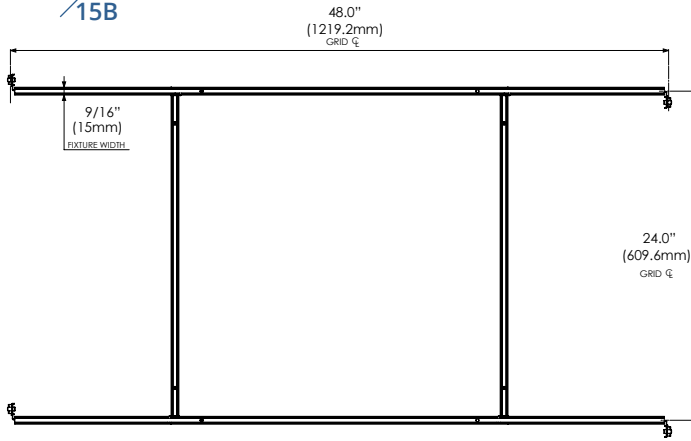
9/16" Block Lens  
TBQD-XX-XX-15/15B-B/B2-X-X-X



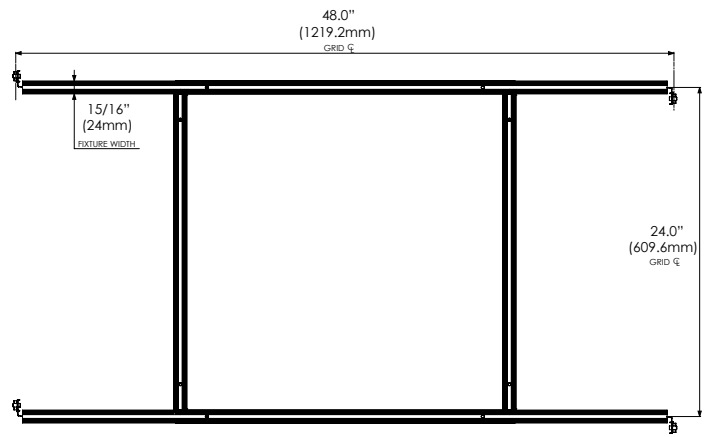
15/16" Block Lens  
TBQD-XX-XX-24-B/B2-X-X-X

Dimensions

2Q 15/15B

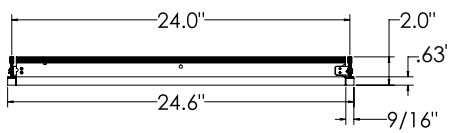


2Q 24

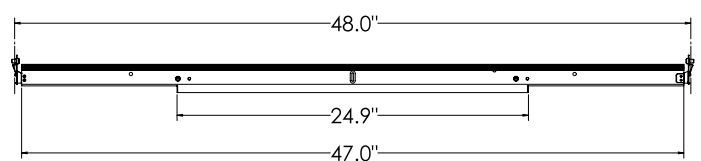
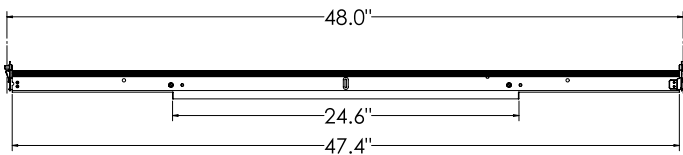
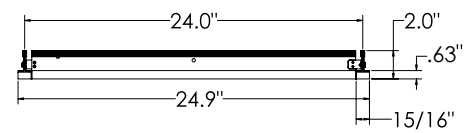


Diffusing Lens/Multi-Reflector

2Q 15/15B

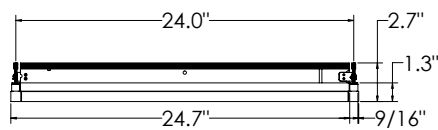


2Q 24

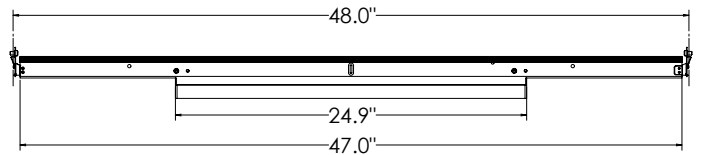
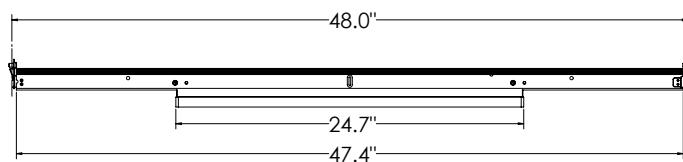
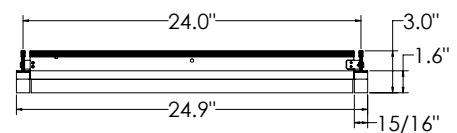


Block Clear/Block Frosted Diffusing Lens

2Q 15/15B



2Q 24







Cafeteria

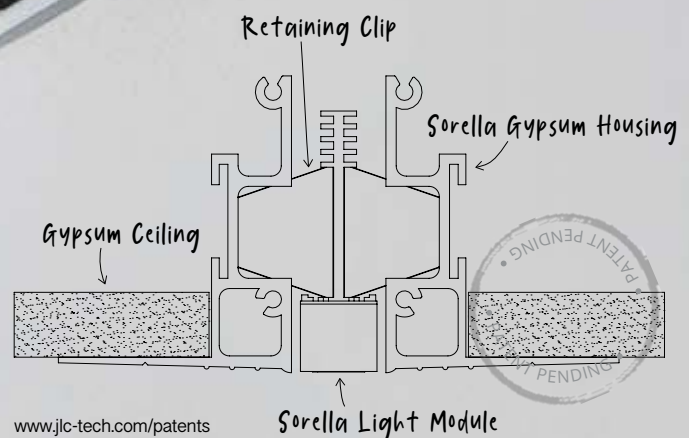


# Sorella<sup>®</sup>

*Introducing T-BAR LED's sister –Sorella!  
Modular lighting for integration with gypsum ceilings.*

# Sorella<sup>®</sup>

by JLC • tech



JLC-Tech is proud to introduce T-BAR LED's sister, Sorella – a modular integrated lighting solution for gypsum ceilings. Sorella provides the same experience as the T-BAR LED and applies it to gypsum ceilings, creating a cohesive architectural lighting layout across mixed ceiling types.

Available in various lengths and with the entire suite of T-BAR LED<sup>®</sup> performance optics, you can now expand your JLC-Tech lighting design beyond grid ceiling systems!



1. Specify Light Module

Product Name	LED/K Color	Length	Aperture	Optic	Color	Options
SOR = Sorella Light Module	HW = 3000K MW = 3500K MN = 4000K HN = 4500K CN = 5000K TU = 2700-5000K tunable* 90 CRI available, on request.	1 = 1 ft 2 = 2 ft 3 = 3 ft 4 = 4 ft 5 = 5 ft	24 = 15/16" 15 = 9/16"	D = Diffusing Lens DW = Diffused White B = Block Clear Diffusing Lens B2 = Block Frosted Diffusing Lens C2 = Multi-Reflector C2WH = White Multi-Reflector C2BL = Black Multi-Reflector A2 = Asymmetric S = Signage	W = White B = Black C = Custom	IP = IP65*  Optional EM Battery/Driver Kit available (sold separately).

2. Specify Housing



\*Not available in C2 or DW Models

Product Name	Length	Aperture	Mounting	Color	Options
SORH = Sorella Housing	1 = 1 ft 2 = 2 ft 3 = 3 ft 4 = 4 ft 5 = 5 ft	24 = 15/16" 15 = 9/16"	MF = Mud Flange FL = Flange Trim	W = White B = Black C = Custom  Leave blank for Mud-Flange	CP = Chicago Plenum**

www.jlc-tech.com/patents

\*\*Not available in 9/16"

Example specification code: SOR-MW-1-15-B-W + SORH-1-15-MF

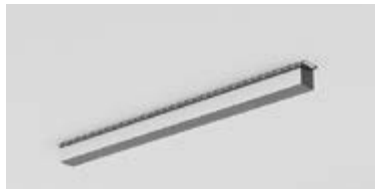
Diffusing Lens (D)



Diffused White Lens (DW)



Block Clear Diffusing Lens (B)



Block Frosted Diffusing Lens (B2)



Multi-Reflector (C2BL)



Asymmetric Lens (A2)



Signage (S)



NOTES:

Sorella 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, must be installed in an accessible location. Max distance from power supply to fixtures is 30 feet with 18 AWG wire. Longer distance achievable if using higher gauge wire. \*Power supply ordered separately (refer to website).

APPLICATIONS:

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

MOUNTING:

Mud flange housing for trimless installation into gypsum ceiling applications. Appropriate backer or fasteners required. Flange trim mounting with spring clips also available.

MATERIALS:

**Light Module:** Anodized and painted aluminum extruded body, stainless steel mounting clips, white PC end caps, high transmitting acrylic PMMA lens, (D, DW, B, B2 Models), high reflectance 98% aluminum coated or white or black PC reflectors on each LED for a dark light effect, (C2 Models).  
**Housing:** Aluminum extruded, flange trim option powdered coated.

ELECTRICAL/OPTICAL:

Fixtures consume 8W/ft. Power supply consumption not included. Input voltage 24VDC. Plenum rated input cable provided with quick connector 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. For EM Battery/Driver Kit, order separately. For Chicago Plenum option, housing is provided with a gasketed and sealed junction box, refer to website for more info

WARRANTY:

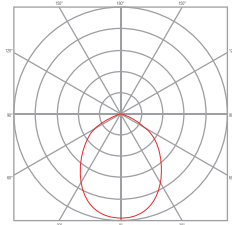
5 years

LISTINGS:

ETL/cETLus CE RoHS. Indoor use only. IC Rated. IP 40, IP 20 (C2 Models).

Photometrics CRI = >82

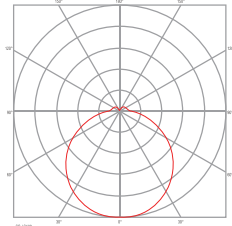
L<sub>80</sub> > 60K hrs



15/16" Diffusing Lens 4000K

D = Diffusing Lens

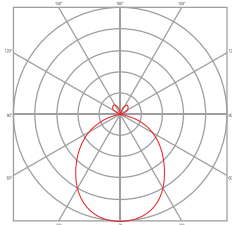
Grid Type	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
24 = 15/16"	584	8	75
15 = 9/16"	445	8	54



15/16" Diffused White Lens 4000K

DW = Diffused White

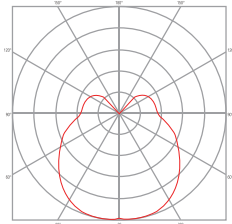
Grid Type	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
24 = 15/16"	532	8	73
15 = 9/16"	377	8	51



15/16" Block Clear Diffusing Lens 4000K

B = Block Clear Diffusing Lens

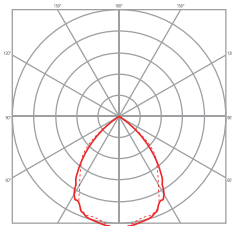
Grid Type	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
24 = 15/16"	564	8	72
15 = 9/16"	438	8	56



15/16" Block Frosted Diffusing Lens 4000K

B2 = Block Frosted Diffusing Lens

Grid Type	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
24 = 15/16"	586	8	75
15 = 9/16"	460	8	59

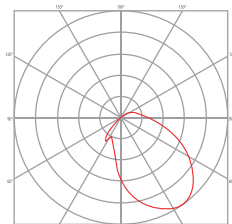


15/16" Multi-Reflector 4000K

C2 = Multi-Reflector (Metalized finish)

Grid Type	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
24 = 15/16"	784	8	100
15 = 9/16"	769	8	98

\*C2WH and C2BL IES files available on [www.jlc-tech.com](http://www.jlc-tech.com)



15/16" Asymmetric 4000K

A2 = Asymmetric

Grid Type	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
24 = 15/16"	582	8	75
15 = 9/16"	484	8	62

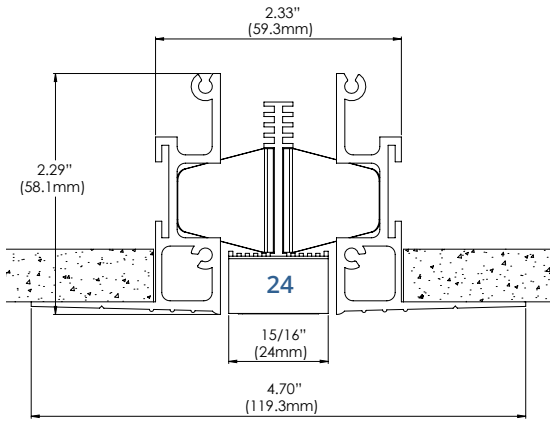
\*Complete photometric info and IES files are available for download at [www.jlc-tech.com](http://www.jlc-tech.com)

JLC-Tech LLC | Pembroke, MA - USA | [info@jlc-tech.com](mailto:info@jlc-tech.com) | [www.jlc-tech.com](http://www.jlc-tech.com)

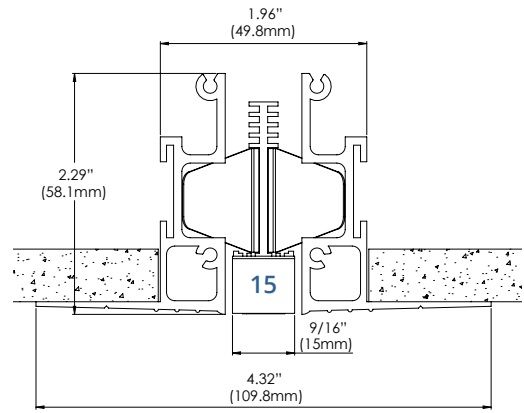
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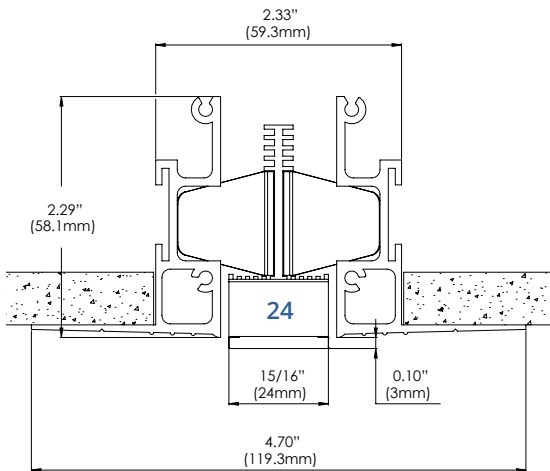
Profile Dimensions for Mud Flange



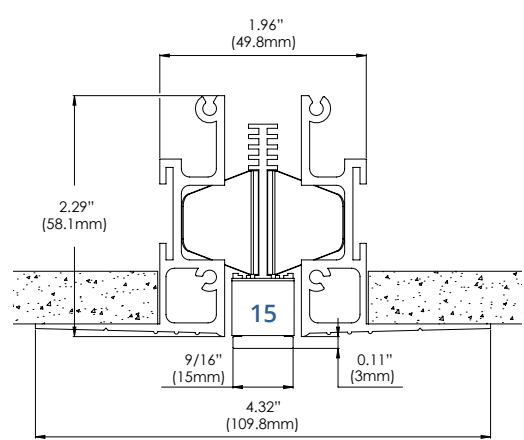
15/16" Diffusing Lens/Multi-Reflector  
SOR-XX-X-24-D/C2-X + SORH-X-24-MF



9/16" Diffusing Lens/Multi-Reflector  
SOR-XX-X-15-D/C2-X + SORH-X-15-MF

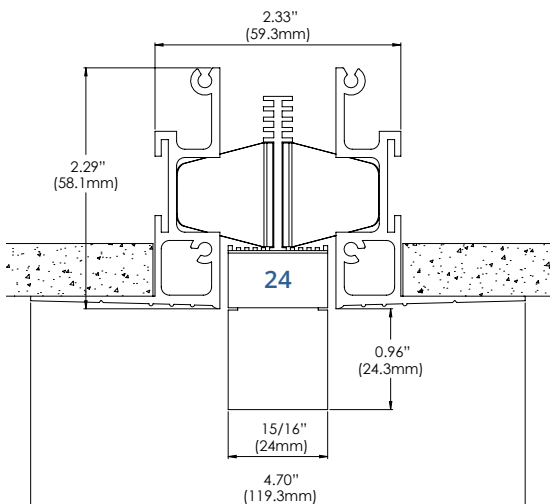


15/16" Diffused White Lens  
SOR-XX-X-24-DW-X + SORH-X-24-MF

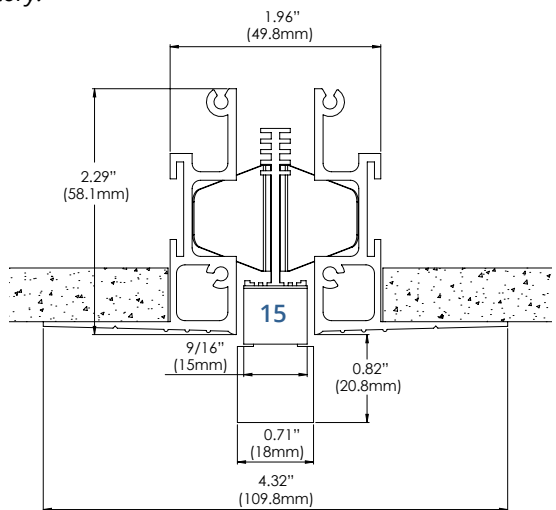


9/16" Diffused White Lens  
SOR-XX-X-15-DW-X + SORH-X-15-MF

Clear block and frosted block variable heights 1/2" - 4" available, consult factory.

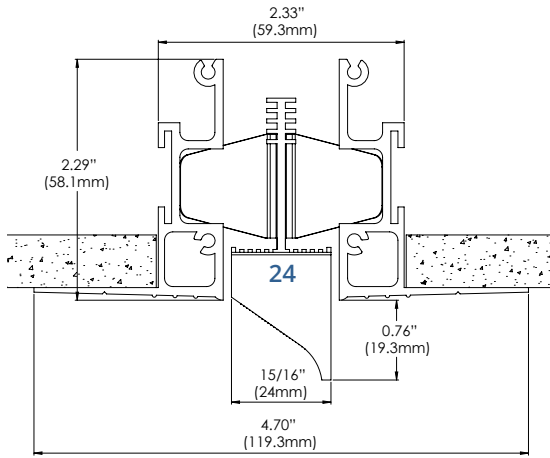


15/16" Block Lens  
SOR-XX-X-24-B/B2-X + SORH-X-24-MF

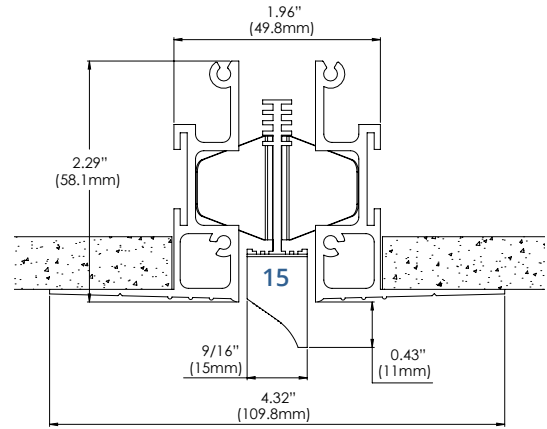


9/16" Block Lens  
SOR-XX-X-15-B/B2-X + SORH-X-15-MF

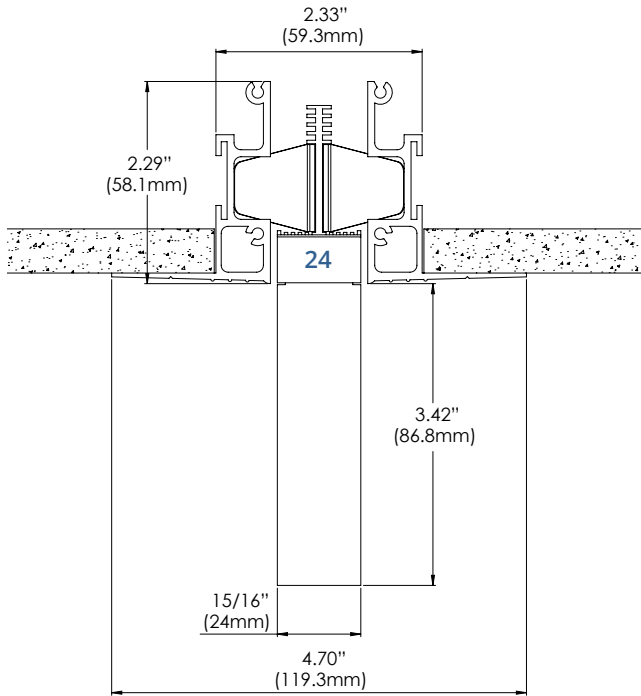
Profile Dimensions for Mud Flange



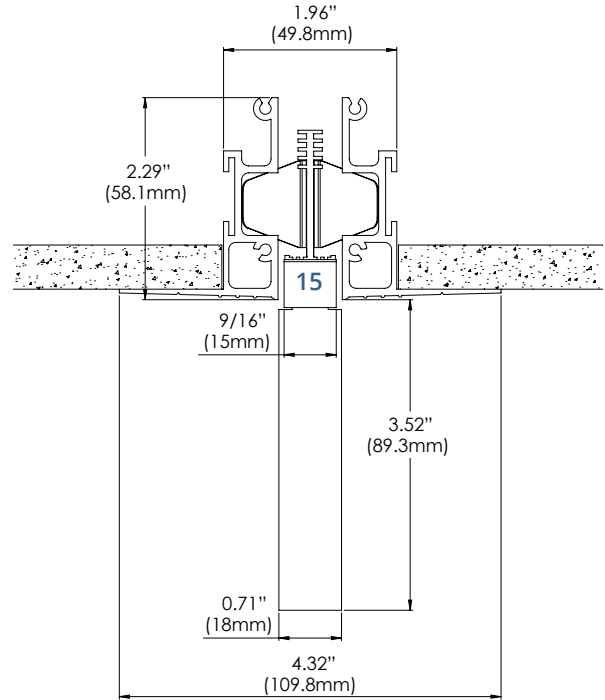
15/16" Asymmetric Lens  
SOR-XX-X-24-A2-X + SORH-X-24-MF



9/16" Asymmetric Lens  
SOR-XX-X-15-A2-X + SORH-X-15-MF



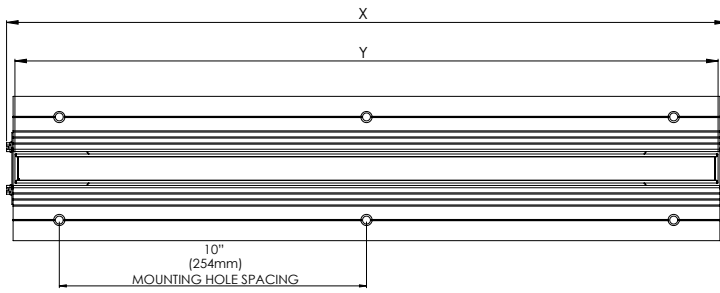
15/16" Signage  
SOR-XX-X-24-S-X + SORH-X-24-MF



9/16" Signage  
SOR-XX-X-15-S-X + SORH-X-15-MF

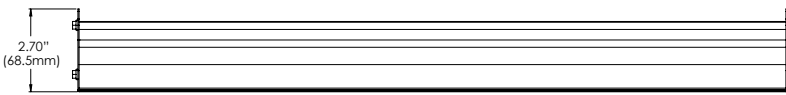


Length Dimensions for Mud Flange



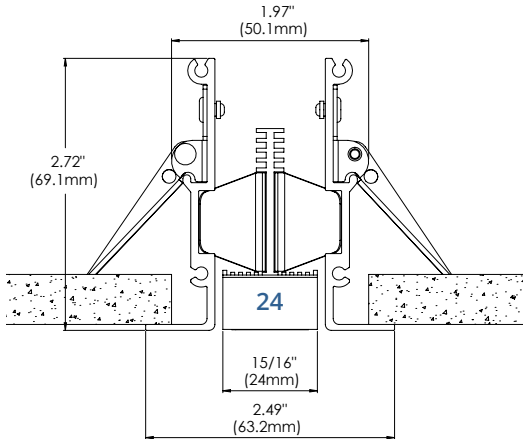
Length	Aperture	X	Y
1 = 1ft	15 = 9/16"	12.1"	11.6"
2 = 2ft	15 = 9/16"	23.4"	22.9"
3 = 3ft	15 = 9/16"	34.8"	34.2"
4 = 4ft	15 = 9/16"	46.8"	46.3"
5 = 5ft	15 = 9/16"	59.6"	59.1"

Length	Aperture	X	Y
1 = 1ft	24 = 15/16"	12.1"	11.6"
2 = 2ft	24 = 15/16"	23.4"	22.9"
3 = 3ft	24 = 15/16"	34.8"	34.2"
4 = 4ft	24 = 15/16"	46.8"	46.3"
5 = 5ft	24 = 15/16"	59.6"	59.1"

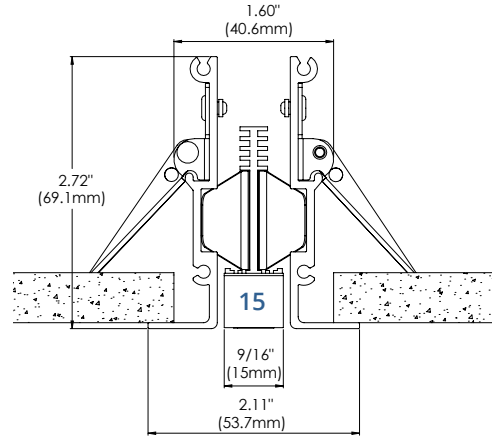


\*For gypsum cut-out dimensions, refer to installation instruction.

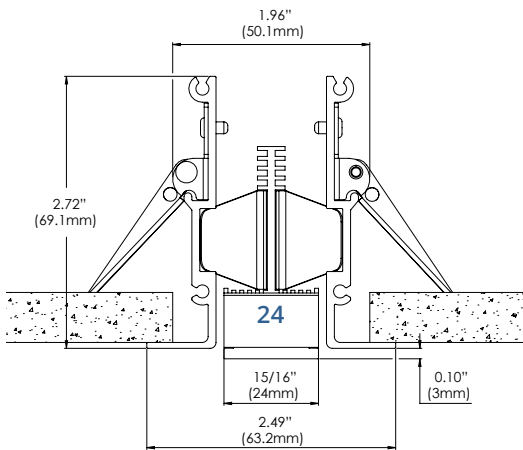
Profile Dimensions for Flange Trim



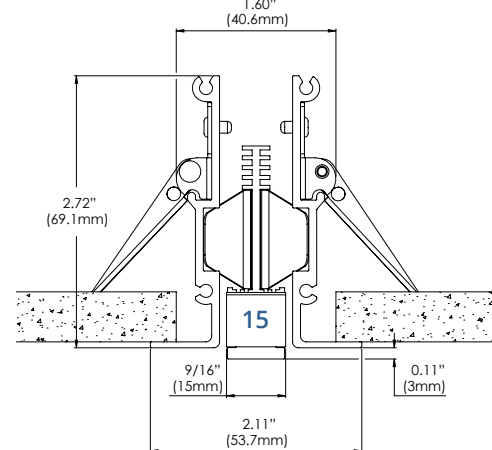
15/16" Diffusing Lens/Multi-Reflector  
SOR-XX-X-24-D/C2-X + SORH-X-24-FL



9/16" Diffusing Lens/Multi-Reflector  
SOR-XX-X-15-D/C2-X + SORH-X-15-FL

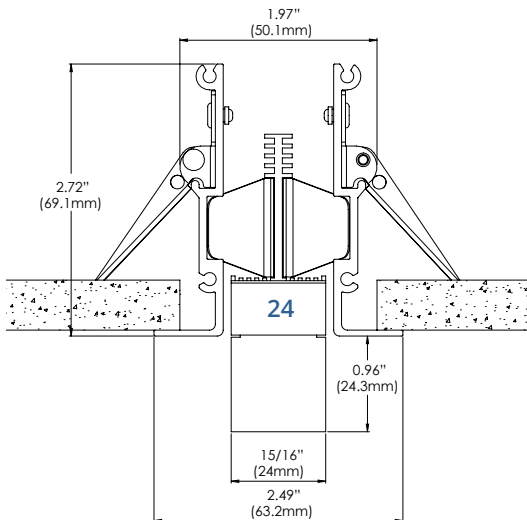


15/16" Diffused White Lens  
SOR-XX-X-24-DW-X + SORH-X-24-FL

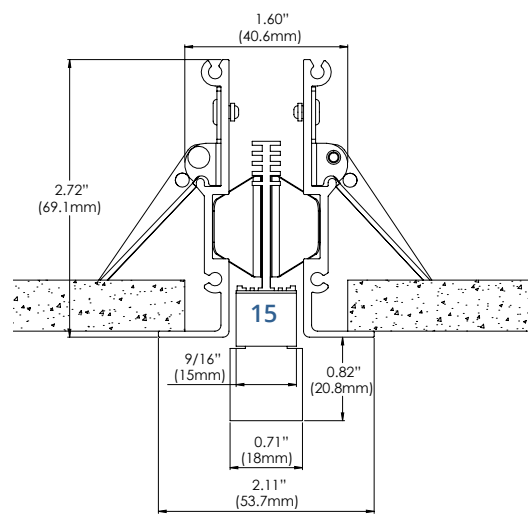


9/16" Diffused White Lens  
SOR-XX-X-15-DW-X + SORH-X-15-FL

Clear block and frosted block variable heights 1/2" - 4" available, consult factory.

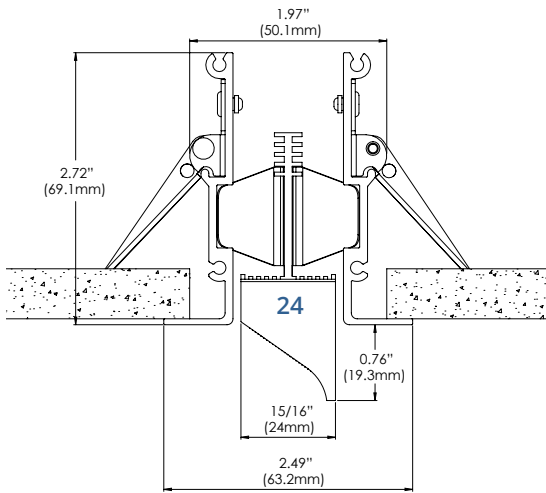


15/16" Block Lens  
SOR-XX-X-24-B/B2-X + SORH-X-24-FL

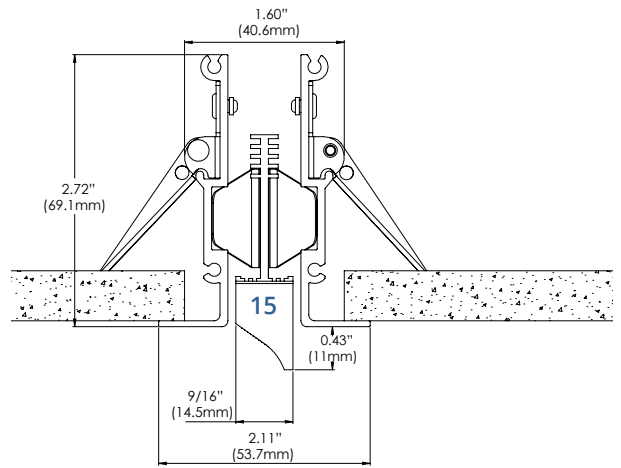


9/16" Block Lens  
SOR-XX-X-15-B/B2-X + SORH-X-15-FL

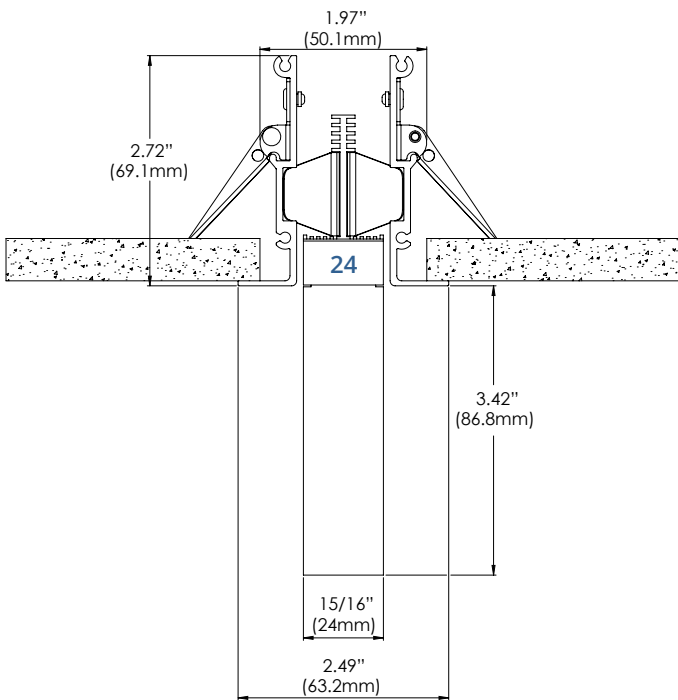
Profile Dimensions for Flange Trim



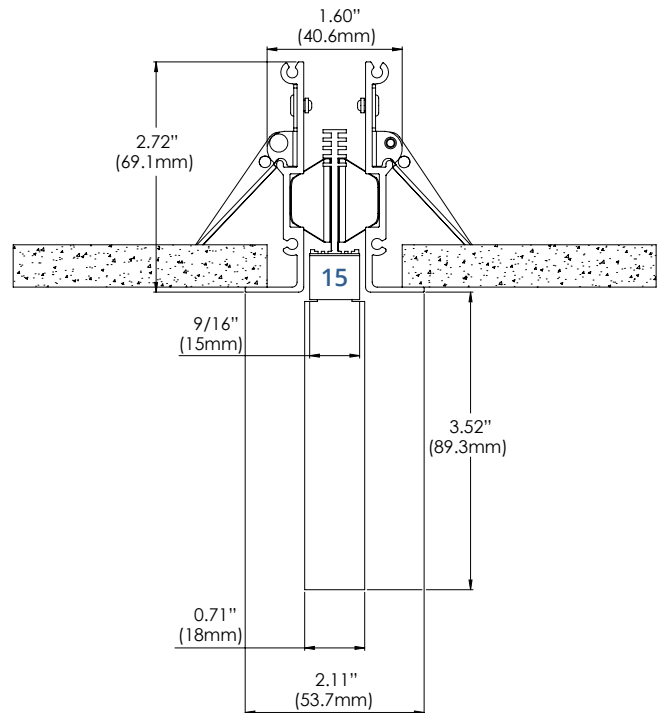
15/16" Asymmetric Lens  
SOR-XX-X-24-A2-X + SORH-X-24-FL



9/16" Asymmetric Lens  
SOR-XX-X-15-A2-X + SORH-X-15-FL

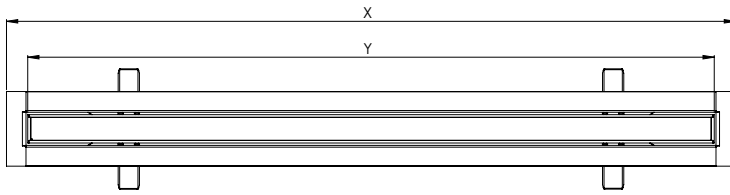


15/16" Signage  
SOR-XX-X-24-S-X + SORH-X-24-FL

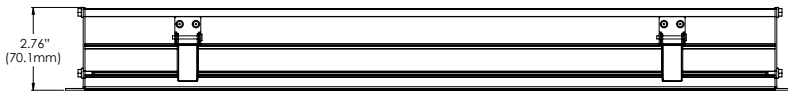


9/16" Signage  
SOR-XX-X-15-S-X + SORH-X-15-FL

Length Dimensions for Flange Trim



Length	Aperture	X	Y
1 = 1ft	15 = 9/16"	13.0"	11.6"
2 = 2ft	15 = 9/16"	24.3"	22.9"
3 = 3ft	15 = 9/16"	35.6"	34.2"
4 = 4ft	15 = 9/16"	47.7"	46.3"
5 = 5ft	15 = 9/16"	60.5"	59.1"



Length	Aperture	X	Y
1 = 1ft	24 = 15/16"	13"	11.6"
2 = 2ft	24 = 15/16"	24.3"	22.9"
3 = 3ft	24 = 15/16"	35.6"	34.2"
4 = 4ft	24 = 15/16"	47.7"	46.3"
5 = 5ft	24 = 15/16"	60.5"	59.1"

*\*For gypsum cut-out dimensions, refer to installation instruction.*

A photograph of a modern kitchen and dining area. The ceiling features recessed lighting strips and circular fixtures. The kitchen has light-colored cabinets, a blue mosaic backsplash, and a microwave. A white dining table is surrounded by light blue chairs with wooden frames. The text 'T-BAR LED® X SERIES' is overlaid on the image.

# T-BAR LED® X SERIES

*A line voltage version of the T-BAR LED® offering enhanced efficiency and a choice of lumen outputs.*



*Photo above featuring:  
Coast Industrial Systems – San Diego, CA  
Interior Designer: FS Design Group*

# T-BAR LED<sup>®</sup> X SERIES

by JLC • tech

T-BAR LED X-Series is a line voltage version of the T-BAR LED offering enhanced efficiency and a choice of lumen outputs. The on-board 120-277Vac input driver offers 0-10V dimming to 1% and up to 120 lm/W. Available with many of the same great features as the T-BAR LED, the X-Series is perfect for applications targeting stringent energy codes.

Product Name	LED/K Color	Light Output	Grid Size	Grid Type	Optic	Mounting	Color	Driver	Options
TBLX = T-BAR LED X-SERIES	HW = 3000K	LO = Low	2 = 2 ft	24 = 15/16"	D = Diffusing Lens	U = Universal	W = White	UNV = 120-277	CP = Chicago
	MW = 3500K	MO = Medium	4 = 4 ft	15 = 9/16"	DW = Diffused White Lens	A = Armstrong	B = Black	0-10V dimming	Plenum
	MN = 4000K	HO = High	5 = 5 ft	15B = 9/16" Bolt Slot	B = Block Clear Diffusing Lens	C = Custom	C = Custom	POE = Power over Ethernet**	
	HN = 4500K		4L	15H = 9/16" High Efficiency*	B2 = Block Frosted Diffusing Lens				
	CN = 5000K		Metric	15HB = 9/16" High Efficiency Bolt Slot*					
	90 CRI available on request.	Custom lumen outputs available, consult factory.	6 = 60 cm	24C = 15/16" Partially Concealed Grid					Optional EM Battery Kit available (sold separately).
			12 = 120 cm						
			12L						

www.jlc-tech.com/patents

\*15H/15HB and 24C models cannot be used for geometric shapes.

\*\*For PoE, consult factory

Diffusing Lens (D)



**NOTES:**

T-BAR LED X-SERIES is a 120–277VAC input, high efficiency LED fixture designed specifically for integration into suspension ceiling systems by directly replacing cross tees. On-board junction box includes driver and 0–10V dimming connection.

**APPLICATIONS:**

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

**MOUNTING:**

Universal mounting brackets are for easy installation to standard 15/16" or 9/16" T-Bars of most manufacturers' ceiling suspension systems. Armstrong compatible mounting clips for installation with Armstrong Ceiling 15/16" Prelude® and Clean Room™, 9/16" Suprafine®, Silhouette®, Sonata® and Interlude® suspension systems. Compatible with Tegular, Lay-in, and Partially Concealed tiles.

**MATERIALS:**

Anodized and painted aluminum extruded body, steel junction box and mounting clips, PC end caps, high transmitting acrylic PMMA lens.

**ELECTRIC:**

Universal input voltage of 120–277Vac. Junction box installed on fixture with integral driver for connection to line voltage and 0-10V dimming system, (dimnable to 1%). For EM Battery Kit order separately.

**WARRANTY:**

5 years limited warranty. For complete warranty terms, please visit our website.

**LISTINGS:**

ETL/cETLus CE RoHS. Indoor use only. IC rated. IP 40.

Diffused White Lens (DW)



Block Clear Diffusing Lens (B)



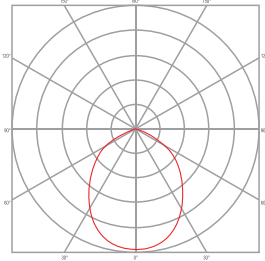
Block Frosted Diffusing Lens (B2)



Photometrics CRI = >82

L<sub>80</sub> > 60K hrs

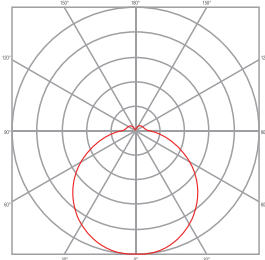
Diffusing Lens - Grid Type: 24 and 15H/15HB



15/16" & 9/16" High Efficiency Diffusing Lens 4000K

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	389	3.3	118
MO = Medium	595	5.2	114
HO = High	1038	9.5	109

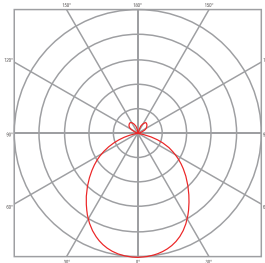
Diffused White Lens - Grid Type: 24 and 15H/15HB



15/16" & 9/16" High Efficiency Diffused White Lens 4000K

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	337	3.3	102
MO = Medium	515	5.2	99
HO = High	900	9.5	95

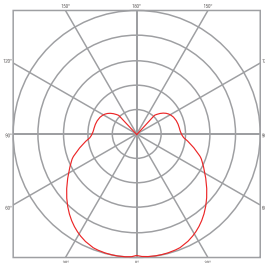
Block Clear Diffusing Lens - Grid Type: 24 and 15H/15HB



15/16" & 9/16" High Efficiency Block Clear Diffusing Lens 4000K

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	370	3.3	112
MO = Medium	564	5.2	109
HO = High	995	9.5	105

Block Frosted Diffusing Lens - Grid Type: 24 and 15H/15HB



15/16" & 9/16" High Efficiency Block Frosted Diffusing Lens 4000K

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	389	3.3	118
MO = Medium	595	5.2	114
HO = High	1038	9.5	109

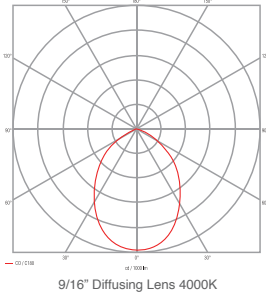
\*Complete photometric info and IES files are available for download at [www.jlc-tech.com](http://www.jlc-tech.com)



Photometrics CRI = >82

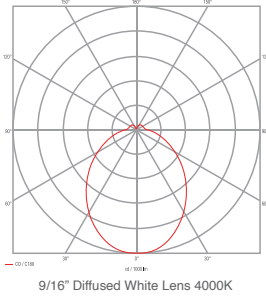
L<sub>80</sub> > 60K hrs

Diffusing Lens – Grid Type: 15/15B



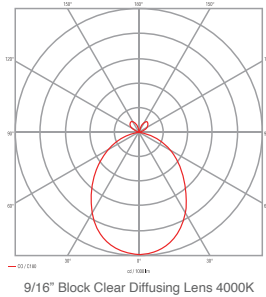
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	282	3.3	85
MO = Medium	440	5.2	84
HO = High	806	9.5	85

Diffused White Lens – Grid Type: 15/15B



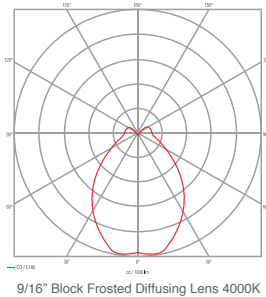
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	196	3.3	60
MO = Medium	311	5.2	60
HO = High	560	9.5	59

Block Clear Diffusing Lens – Grid Type: 15/15B



Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	274	3.3	83
MO = Medium	436	5.2	84
HO = High	797	9.5	84

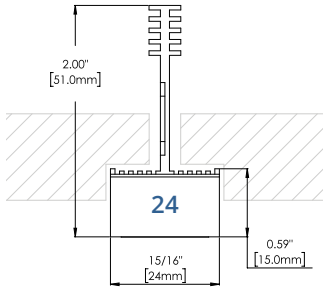
Block Frosted Diffusing Lens – Grid Type: 15/15B



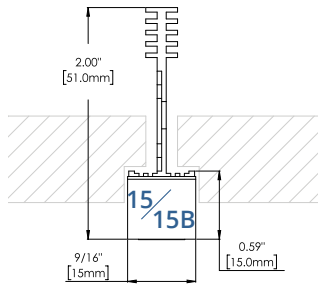
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
LO = Low	280	3.3	85
MO = Medium	445	5.2	86
HO = High	813	9.5	86

\*Complete photometric info and IES files are available for download at [www.jlc-tech.com](http://www.jlc-tech.com)

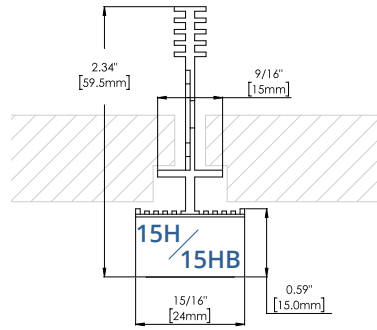
Profile Dimensions (Compatible with Tegular, Lay-in and Partially Concealed tiles)



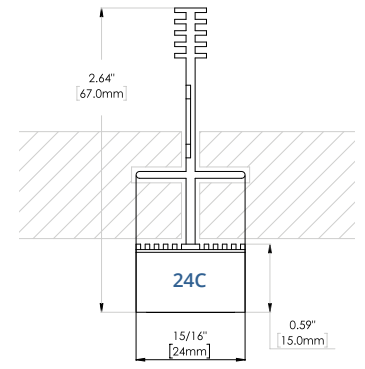
15/16" Diffusing Lens  
TBLX-XX-XX-X-24-D-X-X-UNV



9/16" Diffusing Lens  
TBLX-XX-XX-X-15/15B-D-X-X-UNV

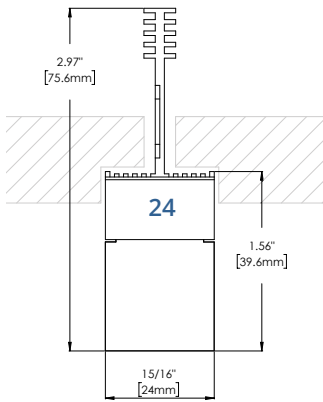


9/16" High Efficiency Diffusing Lens  
TBLX-XX-XX-X-15H/15HB-D-X-X-UNV

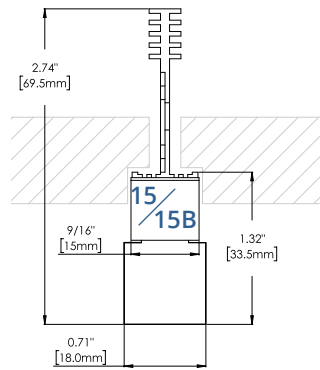


15/16" Concealed Diffusing Lens  
TBLX-XX-XX-X-24C-D-X-X-UNV

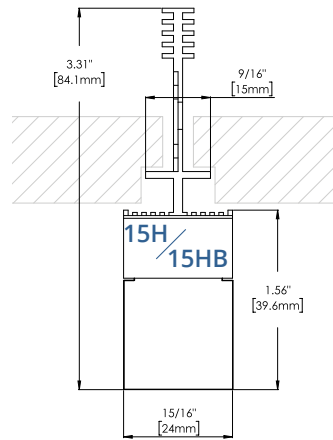
Clear block and frosted block variable heights 1/2" – 4" available, consult factory.



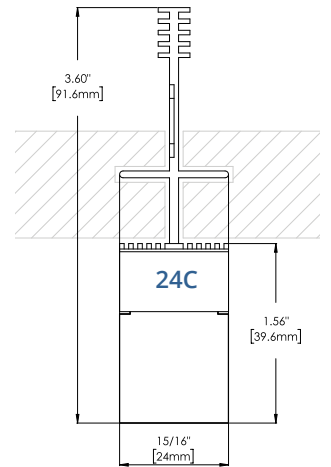
15/16" Block Lens  
TBLX-XX-XX-X-24-B/B2-X-X-UNV



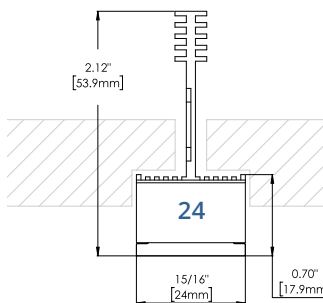
9/16" Block Lens  
TBLX-XX-XX-X-15/15B-D-X-X-UNV



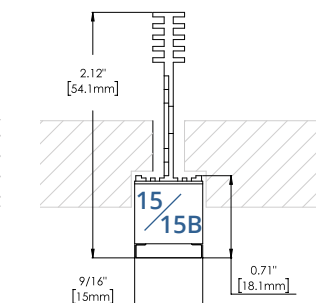
9/16" High Efficiency Block Lens  
TBLX-XX-XX-X-15H/15HB-B/B2-X-X-UNV



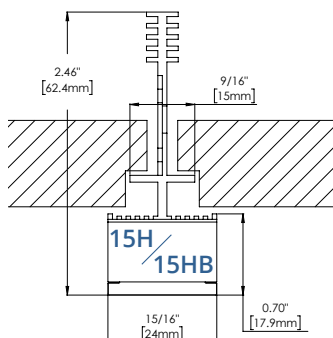
15/16" Concealed Block Lens  
TBLX-XX-XX-X-24C-B/B2-X-X-UNV



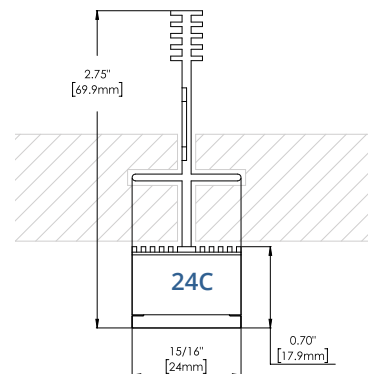
15/16" Diffused White Lens  
TBLX-XX-XX-X-24-DW-X-X-UNV



9/16" Diffused White Lens  
TBLX-XX-XX-X-15/15B-D-X-X-UNV

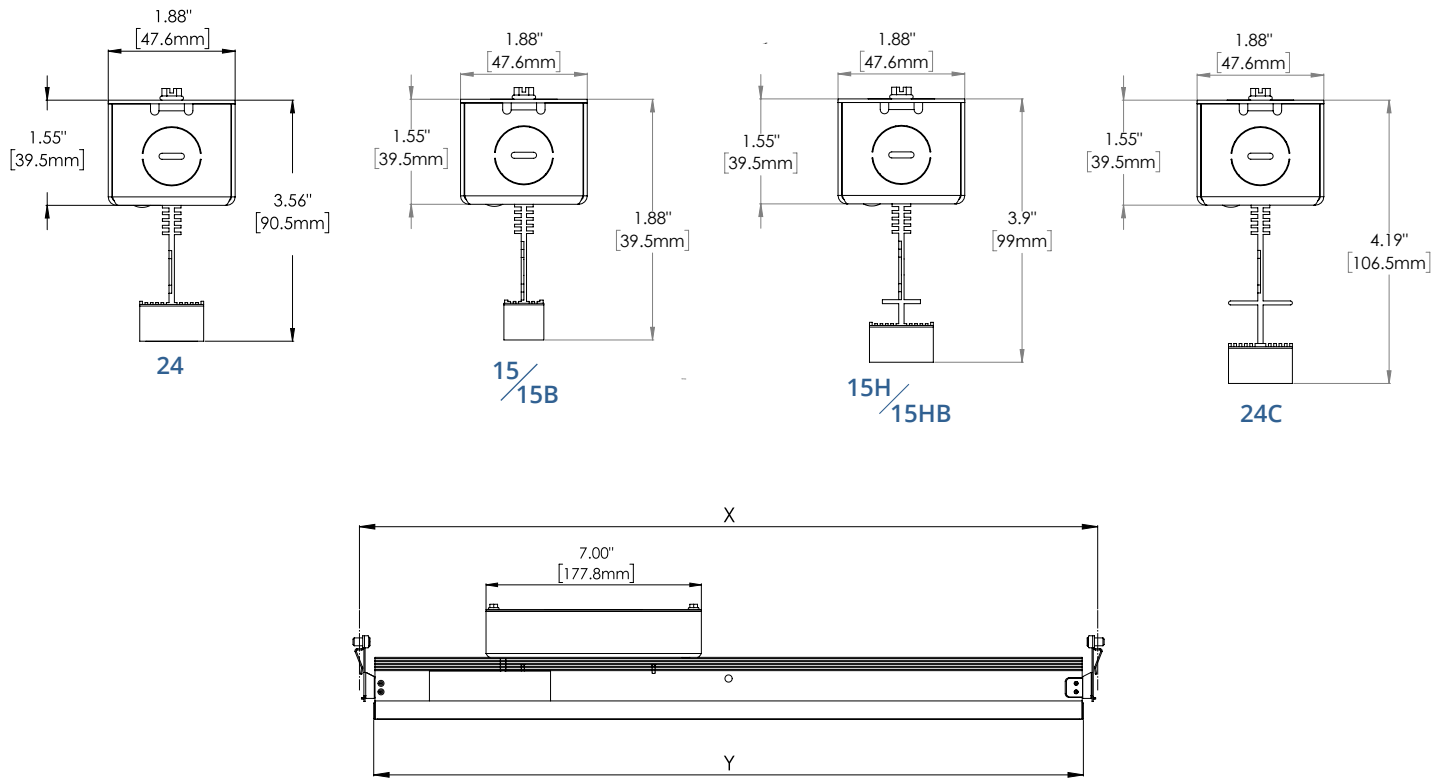


9/16" High Efficiency  
Diffused White Lens  
TBLX-XX-XX-X-15H/15HB-DW-X-X-UNV



15/16" Concealed Diffused White Lens  
TBLX-XX-XX-X-24C-DW-X-X-UNV

Length Dimensions



Size	Grid Type	X	Y
2 = 2ft	24 = 15/16"	24"	23"
4 = 4ft	24 = 15/16"	48"	47"
5 = 5ft	24 = 15/16"	60"	59"
4L	24 = 15/16"	48"	24"

Size	Grid Type	X	Y
2 = 2ft	15/15B = 9/16"	24"	23.4"
4 = 4ft	15/15B = 9/16"	48"	47.4"
5 = 5ft	15/15B = 9/16"	60"	59.4"
4L	15/15B = 9/16"	48"	24"

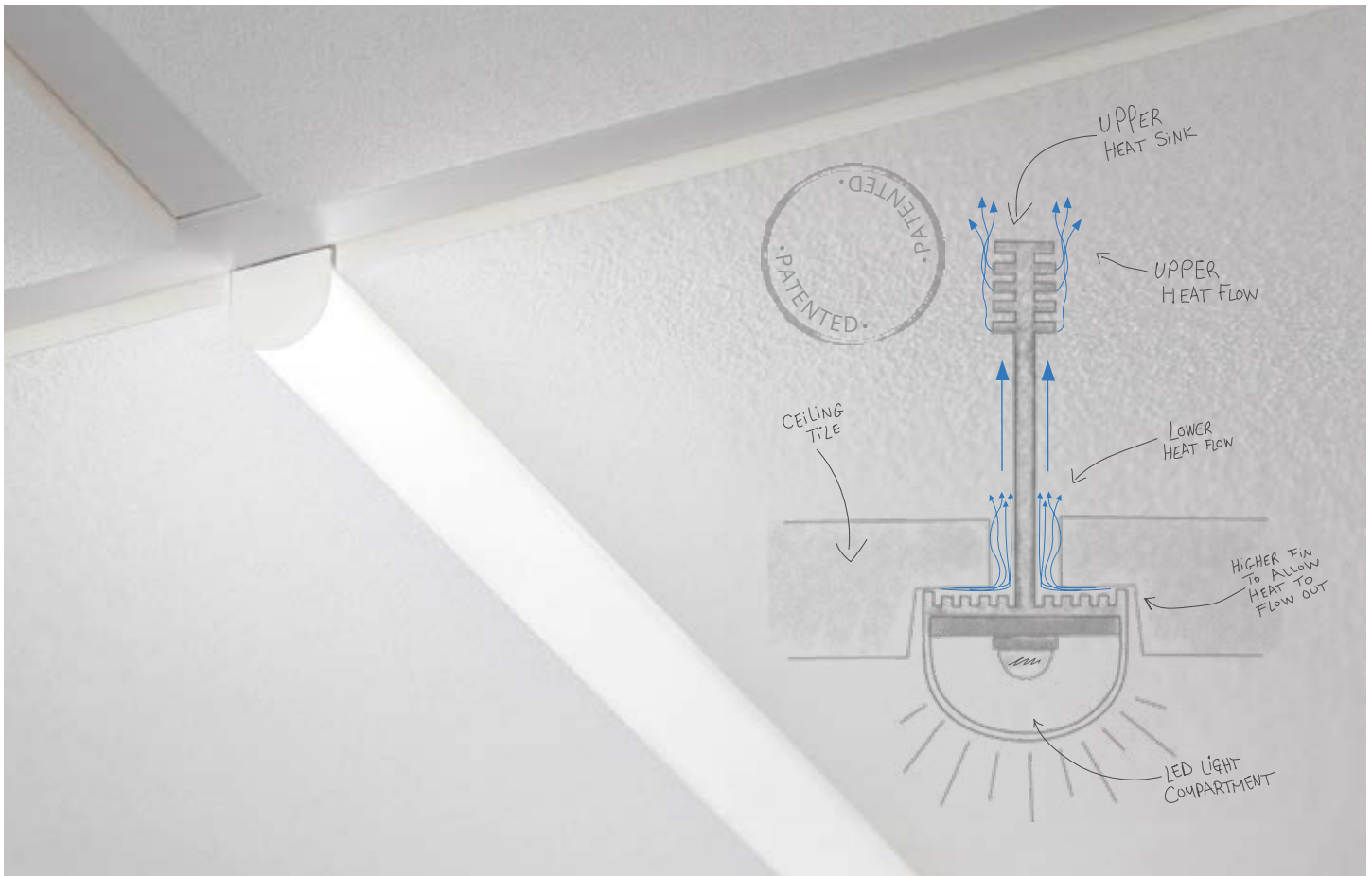
Size	Grid Type	X	Y
2 = 2ft	15H/15HB = 9/16"	24"	23.4"
4 = 4ft	15H/15HB = 9/16"	48"	47.4"
5 = 5ft	15H/15HB = 9/16"	60"	59.4"

Size	Grid Type	X	Y
2 = 2ft	24C = 15/16"	24"	23.7"
4 = 4ft	24C = 15/16"	48"	47.8"



# T3BAR ECO<sup>®</sup>

*A cost-effective solution ideal for contractor design-build projects needing quick delivery and high efficiency performance.*



## T-BAR ECO<sup>®</sup> by JLC • tech

JLC-Tech, a pioneer for architecturally integrated LED lighting solutions, strives to offer the most technologically advanced options when it comes to lighting your next project.

T-BAR ECO is designed to optimize energy efficiency, while also leveraging JLC-Tech's patented technology of directly replacing the cross members in a suspended ceiling. Available in a typical line voltage model, with on-board 120-277VAC driver and 0-10V dimming, as well as a low voltage 24VDC option with remotely installed 0-10V dimming driver. Both models offer square or round extruded lens options, and have proprietary mounting clips that make installation simple. Ideal for a wide range of both retrofit and new construction applications, the T-BAR ECO offers superior performance with a greater return on investment, while also reducing building materials and maintenance.

JLC-Tech - "It takes a genius to make it simple."

MADE IN **USA**

[www.jlc-tech.com/patents](http://www.jlc-tech.com/patents)

# Why T-BAR ECO?

The T-BAR ECO is a standard commercial grade product offering the same key benefits and high-end aesthetics that are present with the T-BAR LED® architectural line. With a more basic feature set, but same quality engineering standards, the T-BAR ECO is a cost-effective solution ideal for contractor design-build projects needing quick delivery and high efficiency performance.



## Key Benefits



### NO PLENUM OCCUPANCY

- Low profile lighting replaces the grid (equals height of a cross tee)
- Remote DC power supplies leaves plenum virtually unoccupied
- No competition for space with other ceiling utilities



### REDUCE AND SAVE

- Installation is literally a snap! Minimal-to-no-tools required
- No field modification of grid or tiles required
- Up to 50% savings in labor and materials costs



### IMPROVED CEILING PERFORMANCE

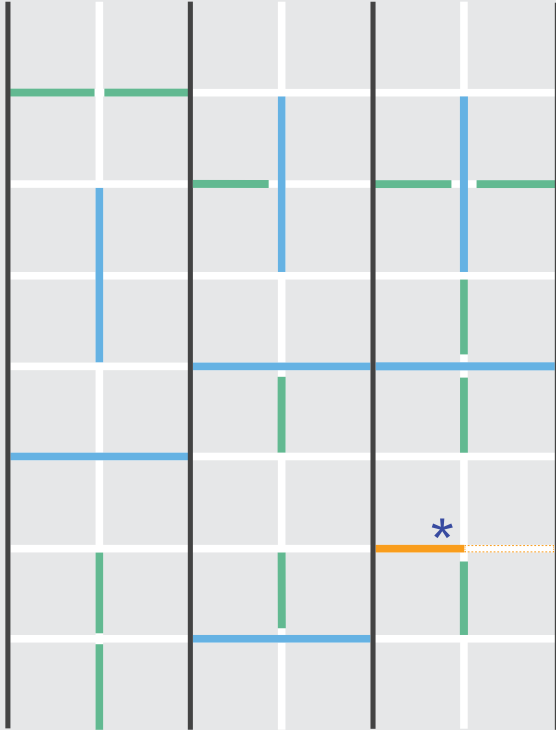
- Lights occupy the grid only, optimizing the ceiling's ability to enhance occupant well-being
- No interrupted tiles means maximizing tile's acoustical qualities
- Simplifies the disinfecting and cleaning of ceiling surfaces
- Uniform ceiling surface equals improved light reflectance

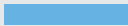



### MAXIMIZED VERSATILITY


- Modular lighting system can be placed in the ceiling wherever light is needed
- Simple to relocate fixtures in flexible work space designs
- Remote low voltage power supplies can be independently controlled for up to 12 linear feet

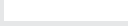
T-BAR ECO can be installed in many configurations by replacing any of the cross tees between the main runners of the grid ceiling assembly.

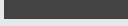


4' T-BAR ECO 

2' T-BAR ECO 

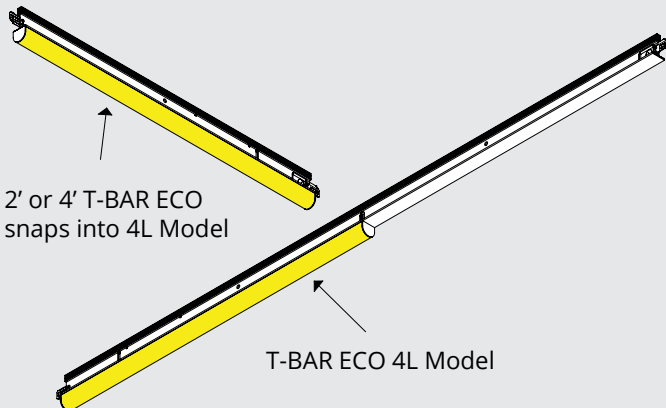
4L<sup>®</sup> Model T-BAR ECO 

Possible positions for T-BAR ECO light modules 

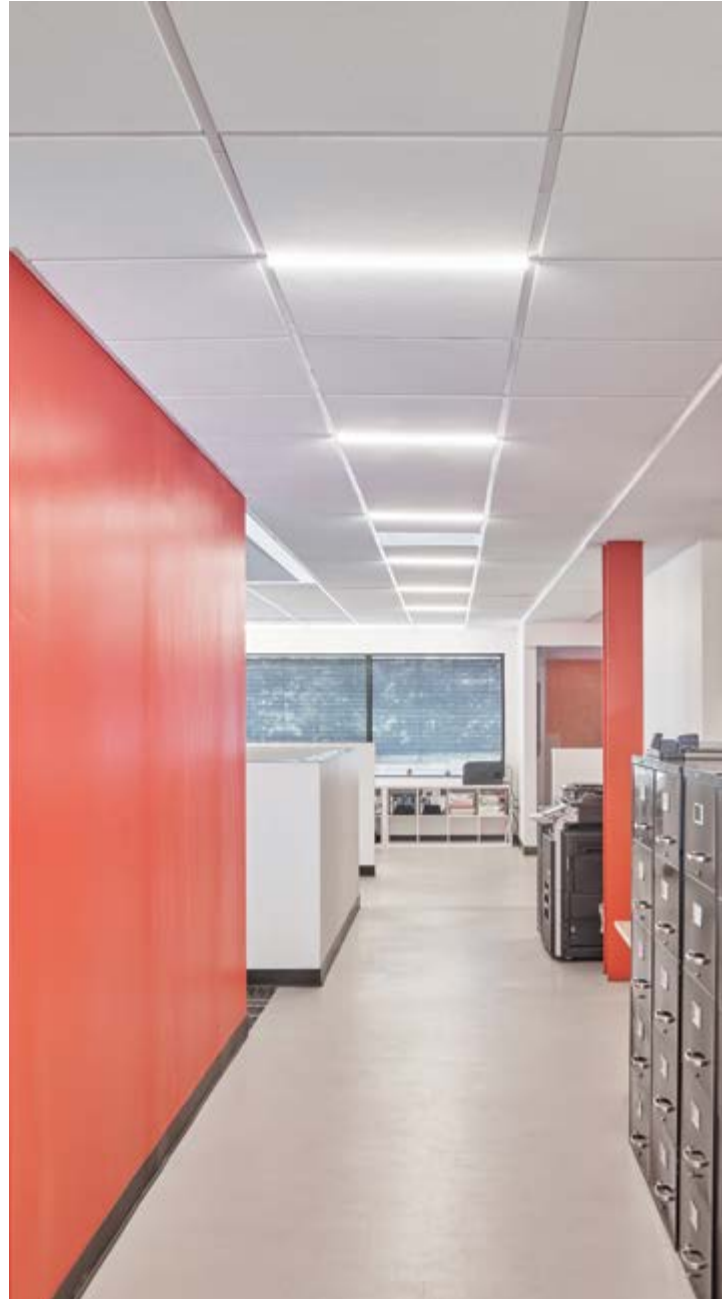
One-piece main runner cannot be replaced by light modules 

## \* 4L<sup>®</sup> 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.



## Mounting Configurations



Weigand Associates, Inc. – Germantown, MD

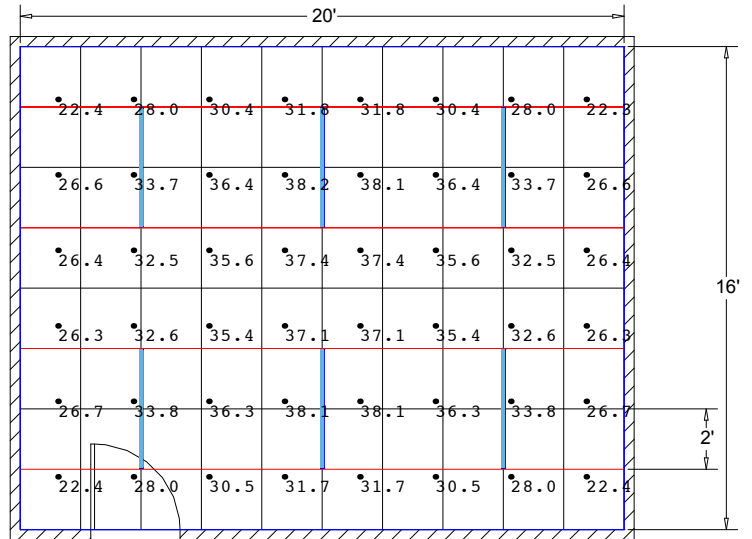


90° configurations are possible by using our 4L<sup>®</sup> Model



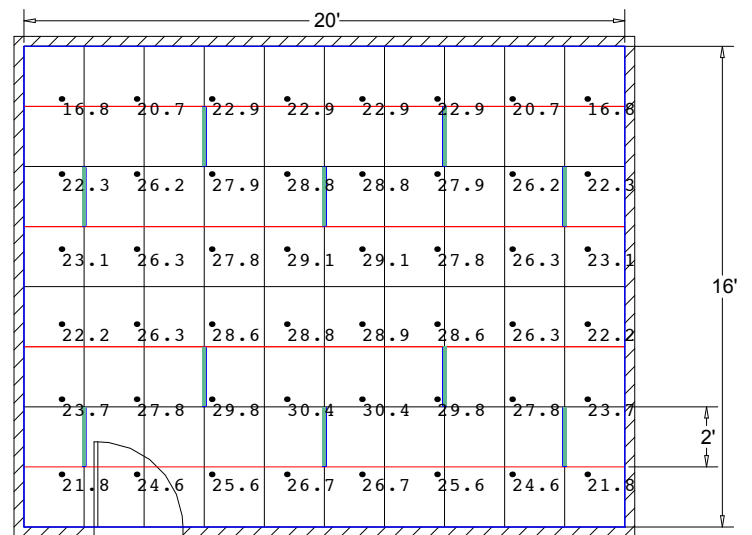
## Symmetric configuration

Room Dimension: **16x20 feet (320 S.F.)**  
 Ceiling Height: **9 feet**  
 Average foot candle achieved at desk level: **31.59**  
 Power Density: **0.33 W/sq. ft.**  
 Quantity of product: **6 pcs. TBECOH-MN-4-24-DW-X-UNV**



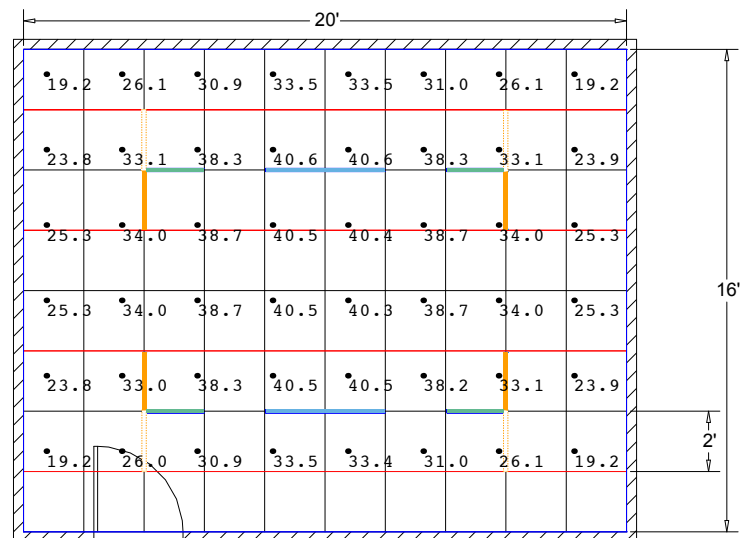
## Staggered configuration

Room Dimension: **16x20 feet (320 S.F.)**  
 Ceiling Height: **9 feet**  
 Average foot candle achieved at desk level: **25.46**  
 Power Density: **0.29 W/sq. ft.**  
 Quantity of product: **10 pcs. TBECOH-MN-2-24-DW-X-UNV**



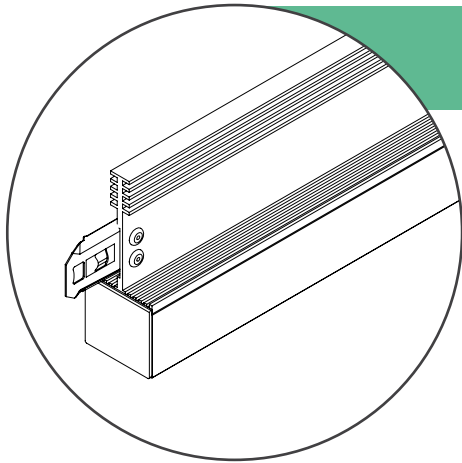
## 4L™ Model configuration

Room Dimension: **16x20 feet (320 S.F.)**  
 Ceiling Height: **9 feet**  
 Average foot candle achieved at desk level: **31.99**  
 Power Density: **0.34 W/sq. ft.**  
 Quantity of product: **4 pcs. TBECOH-MN-2-24-DW-X-UNV**  
**2 pcs. TBECOH-MN-4-24-DW-X-UNV**  
**4 pcs. TBECOH-MN-4L-24-DW-X-UNV**



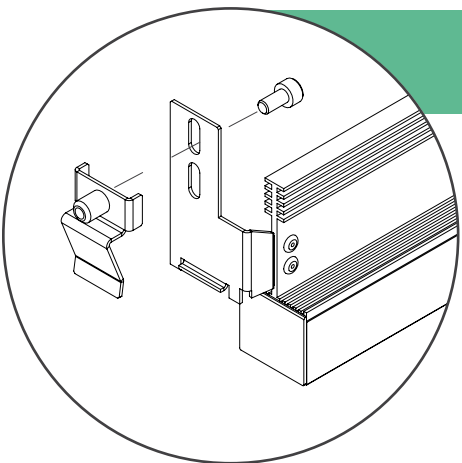
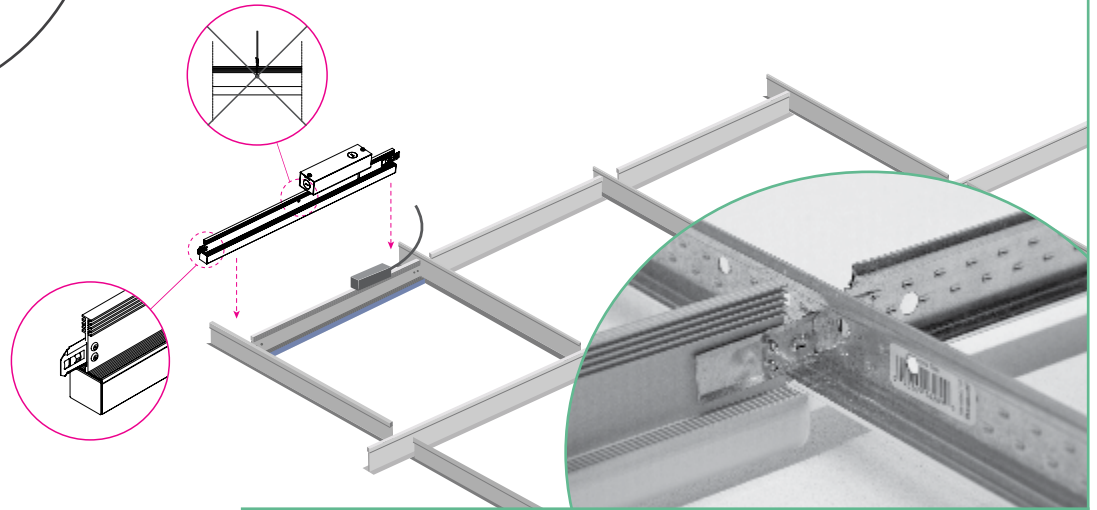


# Two Easy Installations for Suspended Ceiling Systems



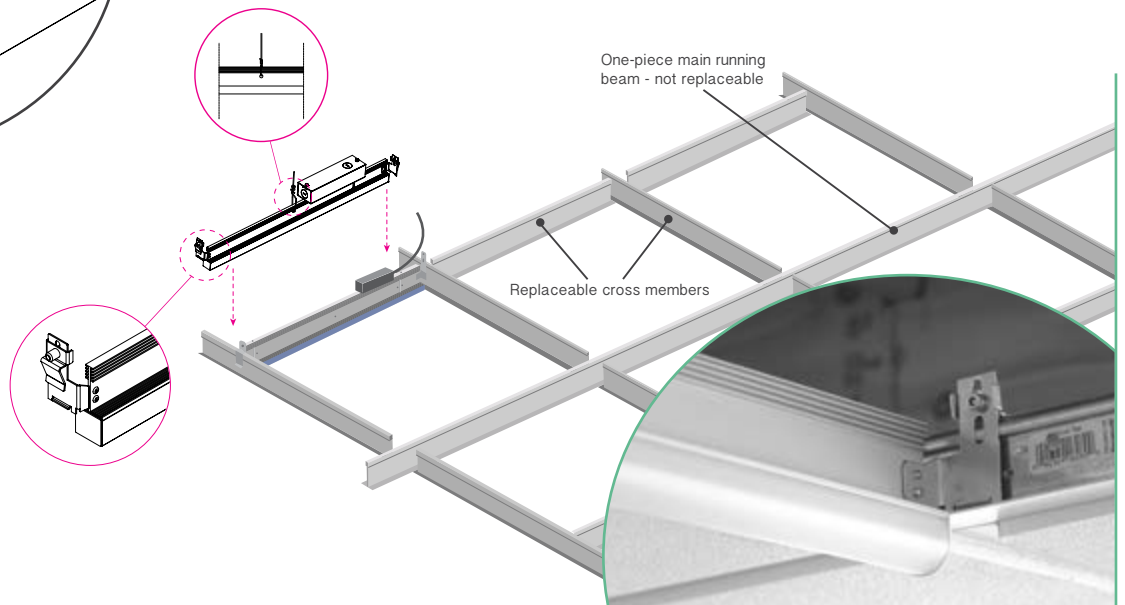
## Armstrong® CEILING SOLUTIONS Compatible Clip

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" ceiling suspension systems, allowing the fixture to become a part of the certified ceiling assembly, eliminating the need for support wires. T-BAR ECO replaces selected cross tees of the grid ceiling suspension system where light is desired. (See Armstrong Ceiling Compatible Clip installation instruction for more details.)

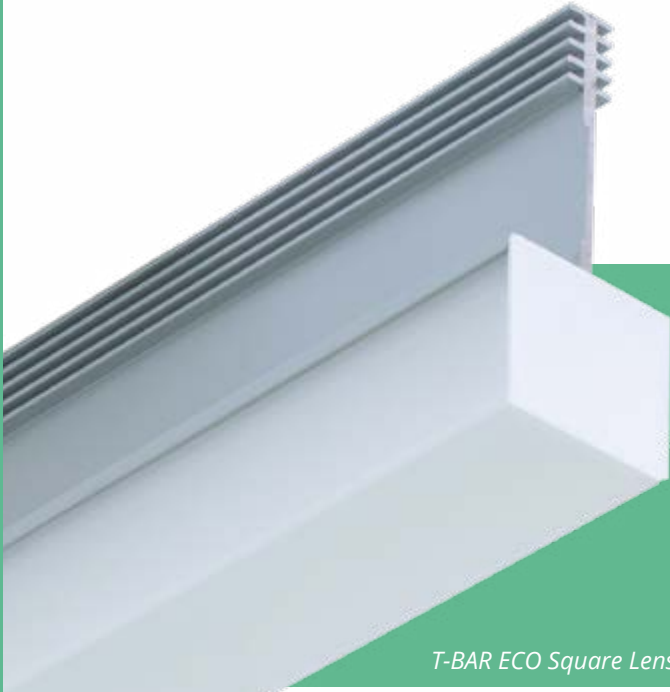


## Universally Compatible Clip

Specially designed brackets are mounted at each end of the fixture for easy installation into most manufacturers' standard 15/16" ceiling suspension systems. T-BAR ECO replaces selected cross tees of the grid ceiling suspension system where light is desired. (See Universal Clip installation instruction for more details.)



## Two Optic Options

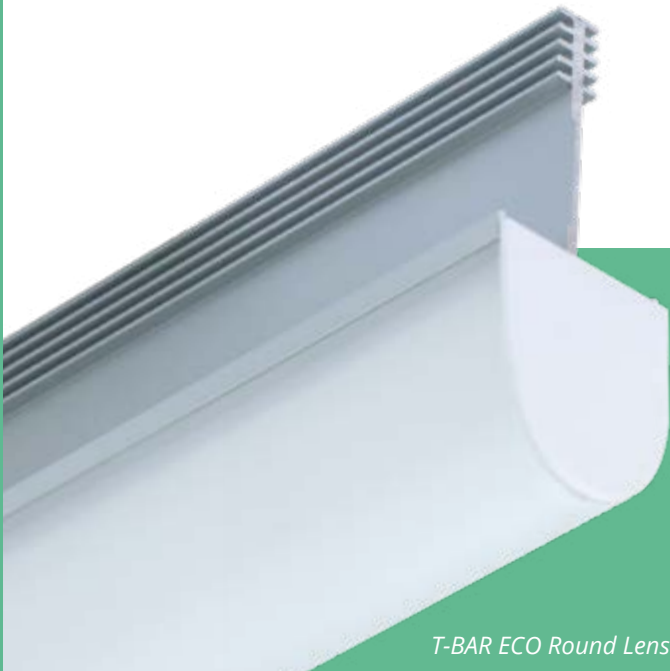


*T-BAR ECO Square Lens*



### T-BAR ECO Square Lens & Round Lens

T-BAR ECO and T-BAR ECO DC are both available with either a square or round lens form factor, for different aesthetical options in a design. The lens material is made from a high quality extruded PMMA that has been precisely balanced with a milky white finish that hides any LED imaging while maintaining high light transmission for optimal efficiency.



*T-BAR ECO Round Lens*



# T-BAR ECO<sup>®</sup>

## Line Voltage

The T-BAR ECO Line Voltage model offers a more typical approach to wiring with a junction box containing integral driver located on the back of each fixture. The on board driver features a universal 120-277VAC input and 0-10V dimming, and the junction box has multiple knock-outs for branch circuit connections and continuous row mounting. This power option allows for optimized electrical efficiency providing for exceptionally high lumens per watt.



Weigand Associates, Inc. - Germantown, MD

Product Name	LED/K Color	Grid Size	Grid Type	Optic	Mounting Clips	Driver	Options
TBECOH = T-BAR ECO High Output	HW = 3000K	2 = 2 ft	24 = 15/16"	DW = Diffused White Round	U = Universal	UNV = Universal 120-277V 0-10V dimming	CP = Chicago Plenum
	MW = 3500K	4 = 4 ft	15H = 9/16" High Efficiency*	DWS = Diffused White Square	A = Armstrong	POE = Power over Ethernet**	
TBECOL = T-BAR ECO Low Output	MN = 4000K	4L	15HB = 9/16" High Efficiency Bolt Slot*				
	CN = 5000K	Metric					
	90 CRI available, on request.	6 = 60 cm					Optional EM Battery Kit available (sold separately).
		12 = 120 cm					
		12L					

www.jlc-tech.com/patents

\*15H/15HB Model cannot be used for geometric shapes

\*\*For PoE, consult factory

Diffused White Round Lens (DW)



Diffused White Square Lens (DWS)



**NOTES:**

T-BAR ECO is a high efficiency LED fixture with integral driver, accepting universal voltage input and 0-10V dimming, offering uniform and diffuse light. On-board junction box includes driver and 0-10V dimming connection.

**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 for easy installation to standard 15/16" T-Bars of most manufacturers' ceiling suspension systems. Armstrong compatible mounting clips for installation with Armstrong Ceiling 15/16" Prelude® and Clean Room™, 9/16" Suprafine®, Silhouette®, Sonata® and Interlude® suspension systems. Compatible with Tegular and Lay-in tiles.

**MATERIALS:**

Anodized aluminum extruded body, steel mounting clips, white PC end caps, high transmitting acrylic PMMA lens.

**ELECTRIC:**

Universal input voltage of 120V - 277VAC. Junction box installed on fixture with integral driver for connection to line voltage and 0-10V dimming system. For Battery Back-up kit order separately. PoE options available, consult factory.

**WARRANTY:**

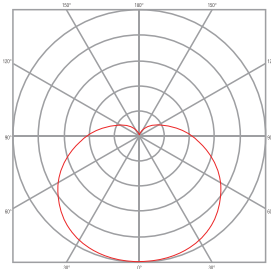
5 years limited warranty. For complete warranty terms, please visit our website.

**LISTINGS:**

ETL/cETLus CE RoHS Indoor use only. IC Rated. IP 40.

Photometrics CRI = >82

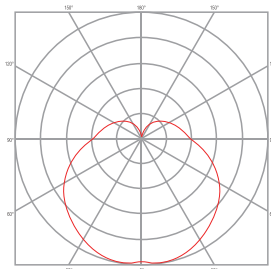
L<sub>80</sub> > 60K hrs



15/16" T-BAR ECO Round Lens 4000K

Diffused White Round Lens – Grid Type: 24

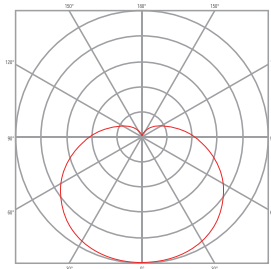
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECOL = Low Output	474	3.3	144
TBECOH = High Output	664	4.7	141



15/16" T-BAR ECO Square Lens 4000K

Diffused White Square Lens – Grid Type: 24

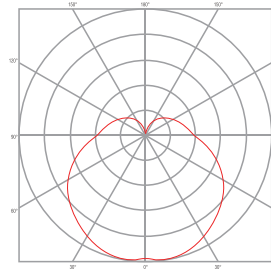
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECOL = Low Output	481	3.3	145
TBECOH = High Output	681	4.7	142



9/16" High Efficiency T-BAR ECO Round Lens 4000K

Diffused White Round Lens – Grid Type: 15H/15HB

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECOL = Low Output	474	3.3	144
TBECOH = High Output	664	4.7	141



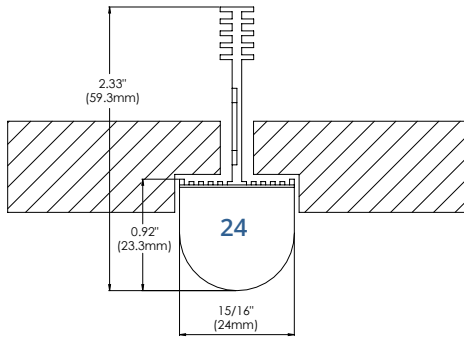
9/16" High Efficiency T-BAR ECO Square Lens 4000K

Diffused White Square Lens – Grid Type: 15H/15HB

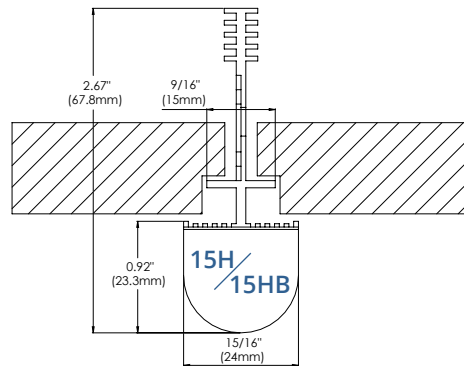
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECOL = Low Output	481	3.3	145
TBECOH = High Output	681	4.7	142

Profile Dimensions

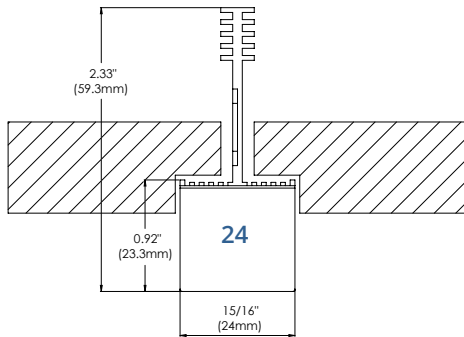
(Compatible with Tegular and Lay-in tiles)



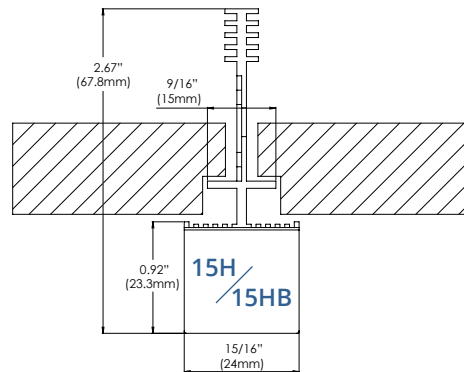
15/16" Diffuse White Round Lens  
TBECOXX-X-24-DW-X-X



9/16" High Efficiency Diffuse White Round Lens  
TBECOXX-X-15H/15HB-DW-X-X

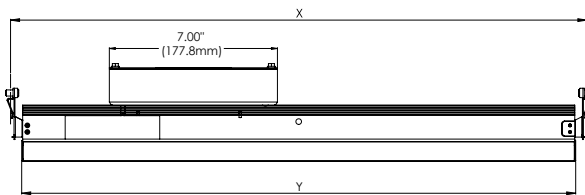
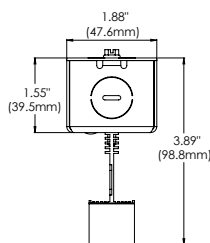


15/16" Diffuse White Square Lens  
TBECOXX-X-24-DWS-X-X



9/16" High Efficiency Diffuse White Square Lens  
TBECOXX-X-15H/15HB-DWS-X-X

Length Dimensions



Size	Grid Type	X	Y
2 = 2ft	24 = 15/16"	24"	23"
4 = 4ft	24 = 15/16"	48"	47"
4L	24 = 15/16"	48"	24"

Size	Grid Type	X	Y
2 = 2ft	15H/15HB = 9/16"	24"	23.4"
4 = 4ft	15H/15HB = 9/16"	48"	47.4"
4L	15H/15HB = 9/16"	48"	24"



Weigand Associates, Inc. - Germantown, MD



# T-BAR ECO<sup>®</sup> DC

## Low Voltage

The T-BAR ECO DC model is a 24VDC low voltage light fixture that requires a remotely installed driver. Each fixture has a small junction box located on the back with low voltage wires inside to connect to a Class 2 remote power supply. The remote power supply has an integrated junction box and is rated for plenum installations, with a 120-277VAC input and 0-10VDC the 96W supply can power up to 12ft of T-BAR ECO DC product. Using safe, low voltage Class 2 wiring allows for a simple electrical installation, easy reconfiguration of fixtures for flexible use spaces, as well as the option to connect directly into DC powered micro-grid buildings.



Van Ness Building – Boston, MA  
Samuels & Associates

Product Name	LED/K Color	Grid Size	Grid Type	Optic	Mounting Clips	Options
TBECODC = T-BAR ECO DC	HW = 3000K MW = 3500K MN = 4000K CN = 5000K	2 = 2 ft 4 = 4 ft 4L Metric 6 = 60 cm 12 = 120 cm 12L	24 = 15/16" 15H = 9/16" High Efficiency* 15HB = 9/16" High Efficiency Bolt Slot*	DW = Diffused White Round DWS = Diffused White Square	U = Universal A = Armstrong	CP = Chicago Plenum  Optional EM Battery/Driver Kit available (sold separately).

www.jlc-tech.com/patents

\*15H and 15HB Models cannot be used for geometric shapes

Diffused White Round Lens (DW)



Diffused White Square Lens (DWS)



**NOTES:**

T-BAR ECO DC is a 24VDC low voltage LED fixture that replaces the cross tees in a grid ceiling, offering uniform and diffuse light. T-BAR ECO DC 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. IP65 and Chicago Plenum optional ratings available.

\*Power supply ordered separately (refer to website).

**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 for easy installation to standard 15/16" T-Bars of most manufacturers' ceiling suspension systems. Armstrong compatible mounting clips for installation with Armstrong Ceiling 15/16" Prelude® and Clean Room™, 9/16" Suprafine®, Silhouette®, Sonata® and Interlude® suspension systems. Compatible with Tegular and Lay-in tiles.

**MATERIALS:**

Anodized aluminum extruded body, steel mounting clips, white PC end caps, high transmitting acrylic PMMA lens.

**ELECTRIC:**

Fixtures consume 7W/ft. Power supply consumption not included. Input voltage 24VDC. Junction box installed on fixture for low voltage wiring connection to remote driver (sold separately). For Battery Back up/Driver Kit order separately.

**WARRANTY:**

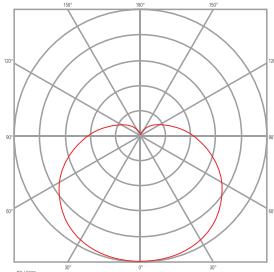
5 years limited warranty. For complete warranty terms, please visit our website.

**LISTINGS:**

ETL/cETLus CE RoHS Indoor use only. IC Rated. IP 40.

Photometrics CRI = >80

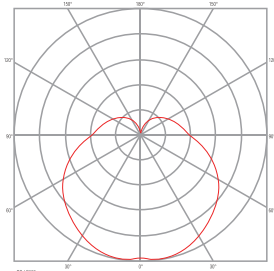
L<sub>80</sub> > 60K hrs



15/16" T-BAR ECO DC Round Lens 4000K

Diffused White Round Lens – Grid Type: 24

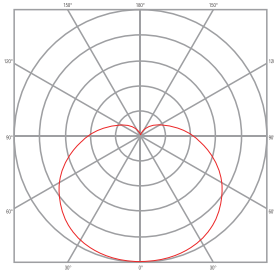
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECODC	634	5.6	113



15/16" T-BAR ECO DC Square Lens 4000K

Diffused White Square Lens – Grid Type: 24

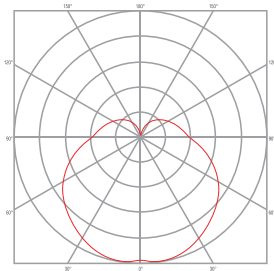
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECODC	636	5.6	114



9/16" High Efficiency T-BAR ECO DC Round Lens 4000K

Diffused White Round Lens – Grid Type: 15H/15HB

Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECODC	634	5.6	113



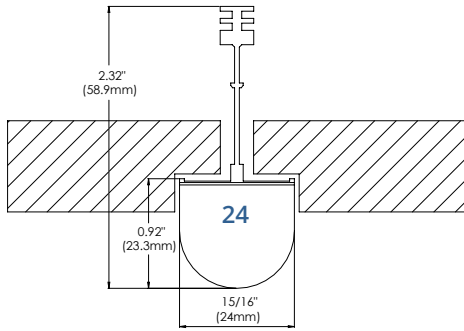
9/16" High Efficiency T-BAR ECO DC Square Lens 4000K

Diffused White Square Lens – Grid Type: 15H/15HB

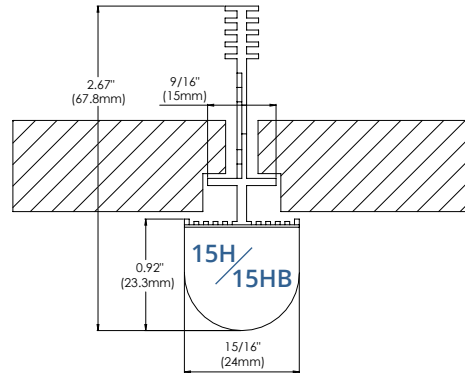
Code Selection	Output (lm/ft)	Power (watts/ft)	Efficacy (lm/W)
TBECODC	636	5.6	114

Profile Dimensions

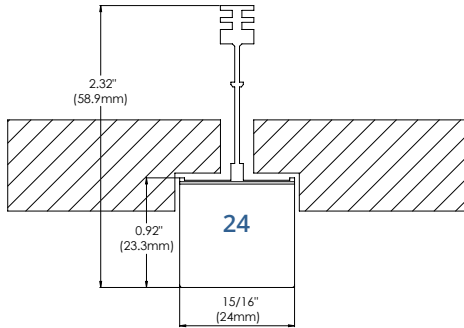
(Compatible with Tegular and Lay-in tiles)



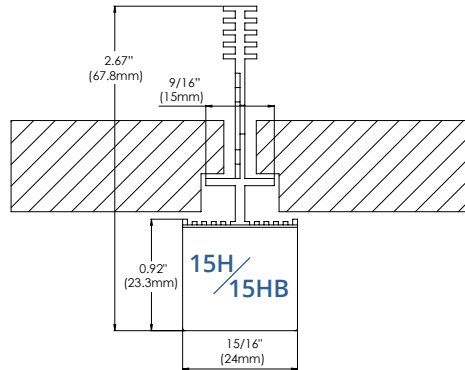
15/16" Diffuse White Round Lens  
TBECODC-XX-X-24-DW-X-X



9/16" High Efficiency Diffuse White Round Lens  
TBECODC-XX-X-15H/15HB-DW-X-X

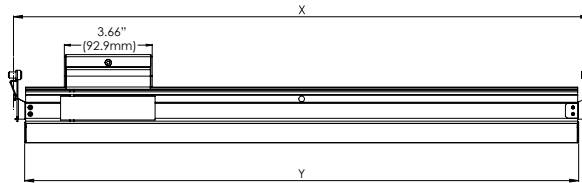
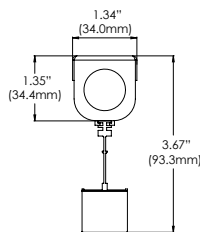


15/16" Diffuse White Square Lens  
TBECODC-XX-X-24-DWS-X-X



9/16" High Efficiency Diffuse White Square Lens  
TBECODC-XX-X-15H/15HB-DWS-X-X

Length Dimensions



Size	Grid Type	X	Y
2 = 2ft	24 = 15/16"	24"	23"
4 = 4ft	24 = 15/16"	48"	47"
4L	24 = 15/16"	48"	24"

Size	Grid Type	X	Y
2 = 2ft	15H/15HB = 9/16"	24"	23.4"
4 = 4ft	15H/15HB = 9/16"	48"	47.4"
4L	15H/15HB = 9/16"	48"	24"

Product Name	Driver Type	Power	Wattage	Voltage
TBSL = T-BAR LED Power Supply	PS = Non Dimmable DIM = 1% Dimmable 0-10 VDC	HP = High Power	100W = 96W 200W = 192W 400W = 384W	UNV = Universal 100-277V

**WARRANTY: 5 years** Optional EM Battery Kit available (sold separately).

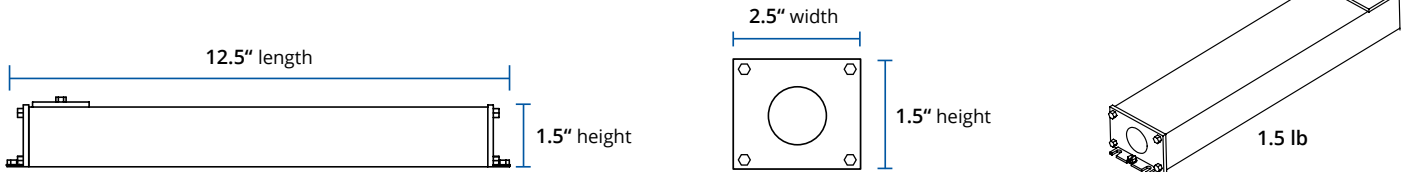


### 24VDC LED Driver 96W Power Supply

0-10 VDC dimmable and non dimmable

Light 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.

#### 96W Power Supply dimensions

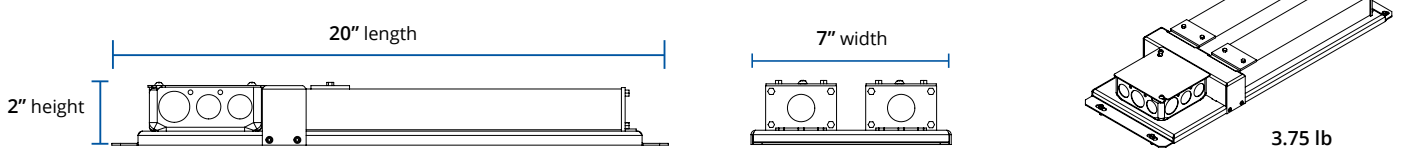


### 24VDC LED Driver 192W Power Supply

0-10 VDC dimmable and non dimmable

Light modules can be parallel connected up to 12 linear feet max per channel totaling 24 linear feet of illuminated product. Power supply includes JB compartment for AC input direct wiring with metal conduit and separate branch connections for control of each individual driver.

#### 192W Power Supply dimensions

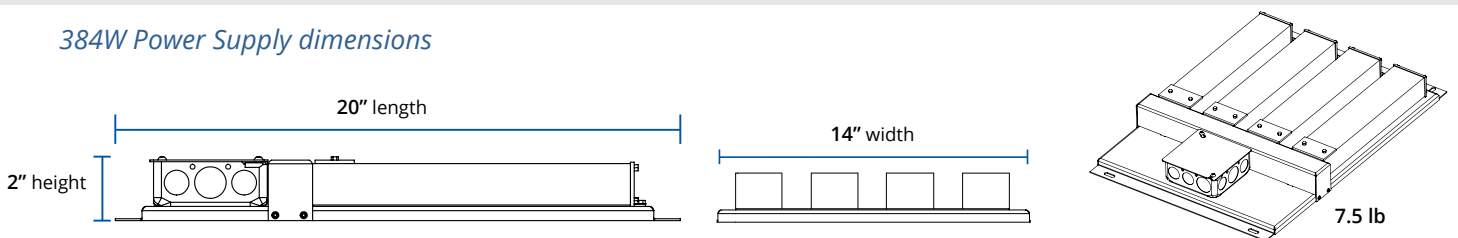


### 24VDC LED Driver 384W Power Supply

0-10 VDC dimmable and non dimmable

Light 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.

#### 384W Power Supply dimensions



JLC-Tech LLC | Pembroke, MA – USA | [info@jlc-tech.com](mailto:info@jlc-tech.com) | [www.jlc-tech.com](http://www.jlc-tech.com)



Ohio Project – Columbus, OH  
*Styled Pretty, Inc.*



# TERALyte™

*An integrated lighting solution for data centers.*





TERALyte™ 1"



TERALyte™ 2"

## TERALyte™ by JLC • tech

TERALyte by JLC-Tech is a complete line of integrated lighting solutions for suspended ceilings used specifically in data center applications. In addition to physically supporting equipment, a suspended ceiling system plays a critical role in the performance of a data center by helping to maintain thermal containment zones. Lighting in these spaces not only needs to provide adequate light levels, but it should enhance the critical role of the ceiling, be simple to install, and energy efficient.

TERALyte offers integrated lighting options for the two types of suspended ceiling systems typically found in data centers including 15/16" heavy duty grid as well as extruded aluminum grid systems. The lights occupy the grid only by replacing the cross tees in a 15/16" system or by mounting directly to the extruded system, therefore optimizing the ceiling's role in high performance data centers.

MADE IN USA

[www.jlc-tech.com/patents](http://www.jlc-tech.com/patents)

# TERALyte™ for Data Centers

A ceiling system in a data center is one of the most important infrastructure components to keep the equipment operating at a high level. Plenum space is at a premium, the ceiling must properly support airflow management, and the system must be flexible and easy to install. TERALyte helps to support all of these important ceiling functions.



## Key Benefits



### NO PLENUM OCCUPANCY

- Low profile lighting replaces or mounts directly into the grid, leaving the space above the ceiling virtually unoccupied.
- No competition for space with other ceiling utilities.



### MAXIMIZED VERSATILITY

- Modular lighting system can be placed in the ceiling wherever light is needed.
- Simple to relocate fixtures to keep up with the ever-changing needs of a data center.



### IMPROVED CEILING PERFORMANCE

- Lights occupy the grid only, optimizing the ceiling's ability to maintain a high performing data center.
- No interrupted tiles means maximizing the ceiling's airflow management characteristics.
- Uniform ceiling surface for improved acoustics and light reflectance.



### REDUCE AND SAVE

- Installation requires minimal-to-no tools.
- Minimal-to-no field modification of the grid, and zero modification of tiles.
- Up to 50% savings in labor and materials costs compared to traditional troffers.
- Ultra-high efficiency to support the energy demands of data centers.

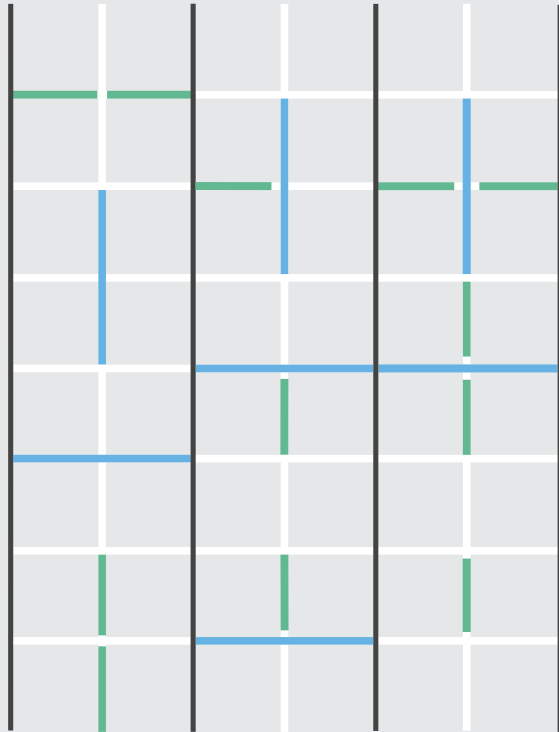
# TERALyte™ 1”

for  **Armstrong® Prelude XL Max**  
CEILING SOLUTIONS



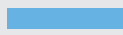
TERALyte 1” utilizes JLC-Tech’s patented technology of directly replacing the cross tees in a suspended ceiling system. Designed specifically for the Armstrong® Prelude XL Max 15/16” suspension system, the TERALyte 1” installs just like a typical cross tee. The on-board driver features a universal 120-277VAC input and 0-10V dimming.

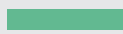
# Mounting Configurations

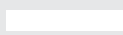


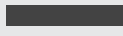
*TERALyte 1" becomes a part of the ceiling assembly.*

TERALyte 1" can be installed in many configurations by replacing any of the cross tees between the main runners of the grid ceiling assembly.

4' TERALyte 1" 

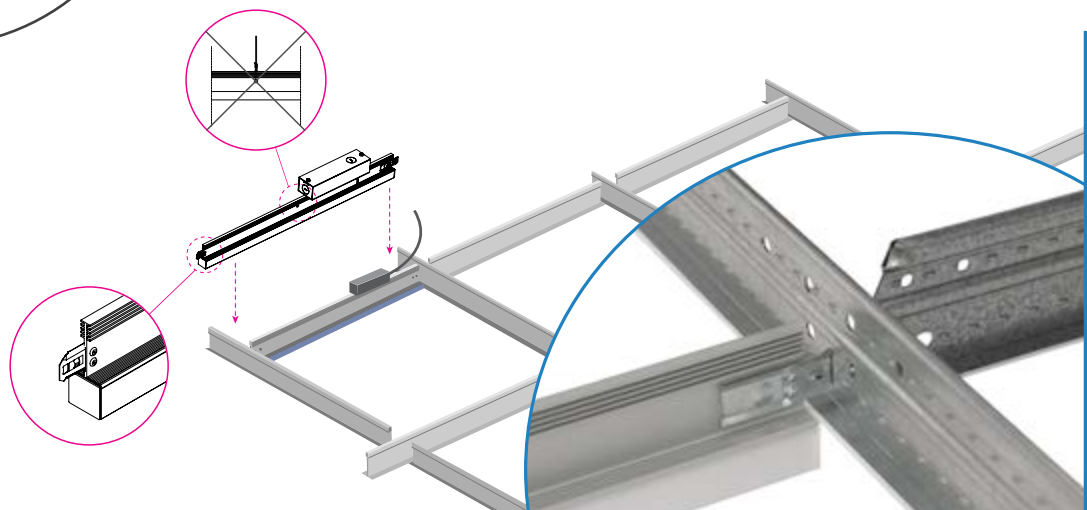
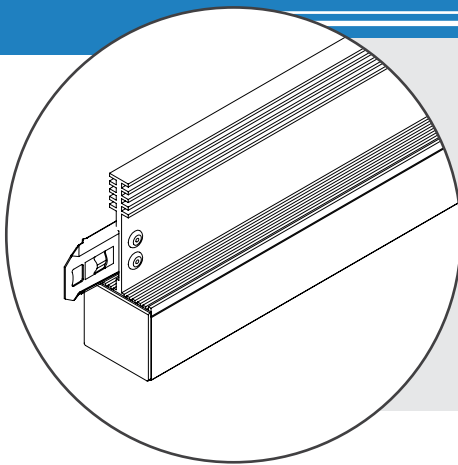
2' TERALyte 1" 

Possible positions for TERALyte 1" light modules 

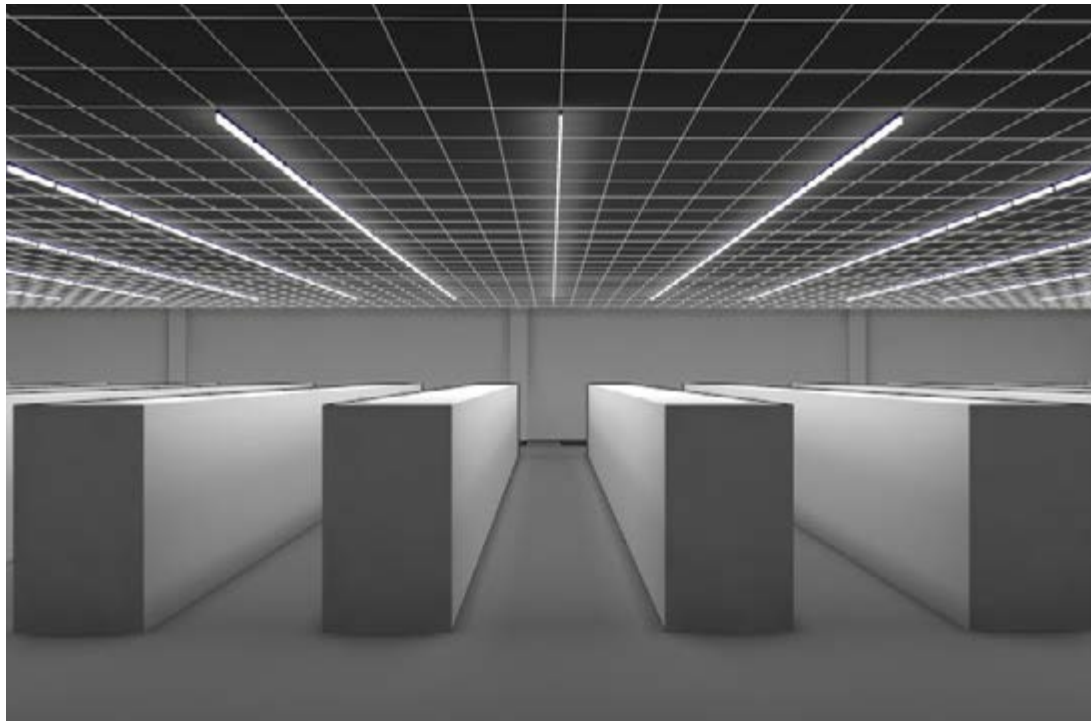
One-piece main runner cannot be replaced by light modules 

## Installation

Specifically designed by Armstrong Ceiling Solutions for JLC-Tech, the X-LED clip is mounted at each end for easy installation into Armstrong® Prelude XL Max 15/16" ceiling suspension systems, allowing the fixture to become a part of the certified ceiling assembly, and eliminating the need for support wires. TERALyte 1" replaces selected cross tees of the grid suspension system where light is desired.



# Light Calculations



Room Dimension: **85 x 150 ft (12,750 S.F.)**  
 Ceiling Height: **15.66 ft**  
 Average foot candle achieved at work plane level: **33.86 Fc**  
 Quantity of product: **300 pcs. TRL1-MN-HO-4-24-DWS-X-W-UNV**

																		30.1
.8	39.9	40.5	40.9	41.1	41.2	41.3	41.3	41.2	41.0	40.6	40.0	39.1	37.4	34.2	31.5			30.8
.6	39.7	40.3	40.7	40.9	41.0	41.1	41.0	40.9	40.7	40.4	39.8	38.9	37.2	34.1	31.4			30.7
																		30.0
.1	29.8	30.2	30.5	30.6	30.6	30.7	30.6	30.6	30.5	30.2	29.9	29.3	28.1	25.8	26.0			28.5
																		28.4
.2	37.3	37.9	38.3	38.5	38.6	38.6	38.6	38.5	38.3	38.0	37.4	36.5	34.9	32.1	29.6			28.6
.4	39.3	40.1	40.4	40.6	40.8	40.7	40.8	40.6	40.5	40.1	39.5	38.6	36.9	33.9	30.5			27.5
																		26.2
.4	32.8	33.6	34.1	34.4	34.5	34.5	34.5	34.3	34.0	33.5	32.5	31.4	30.0	27.8	26.1			25.0
.3	38.5	39.6	40.0	40.3	40.5	40.4	40.5	40.2	40.0	39.4	38.8	38.5	37.2	34.3	30.0			24.3

Product Name	LED/K Color	Light Output	Grid Size	Grid Type	Optic	Mounting Clips	Color	Driver
TRL1 = TERALyte 1"	HW = 3000K MW = 3500K MN = 4000K CN = 5000K  90 CRI available, on request.	LO = Low Output MO = Medium Output HO = High Output  Custom lumen outputs available, consult factory.	2 = 2 ft 4 = 4 ft 4L Metric 6 = 60 cm 12 = 120 cm 12L	24 = 15/16	DWS = Diffuse White Square	A = Armstrong Prelude XL Max	W = White C = Custom	UNV = 120-277 Vac 0-10V dimming POE = Power over Ethernet*  Optional Battery Back Up Available (sold separately)

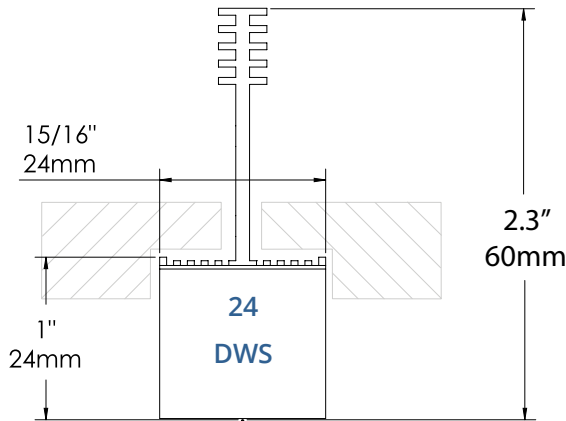
www.jlc-tech.com/patents

\*For PoE, consult factory



Profile Dimensions

(Compatible with Tegular and Lay-in tiles)



NOTES:

TERALyte™ 1" is a high efficiency LED fixture designed specifically for integration into Armstrong's 15/16" Prelude XL Max suspension system. Installation simply just replaces cross tees in the grid ceiling using the Armstrong XLED clip.

APPLICATIONS:

Data centers and other applications using Armstrong's 15/16" Prelude XL Max suspension system.

MOUNTING:

Armstrong compatible mounting clips for installation with Armstrong Ceilings 15/16" Prelude XL Max suspension system. Compatible with Tegular and Lay-in tiles.

MATERIALS:

Anodized aluminum extruded body, steel mounting clips, ABS end caps, high transmitting acrylic PMMA lens.

ELECTRIC:

Universal input voltage of 120-277Vac. Junction box installed on fixture with integral driver for connection to line voltage and 0-10V dimming system. For EM Battery Kit order separately. PoE options available, consult factory.

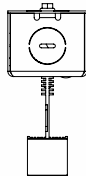
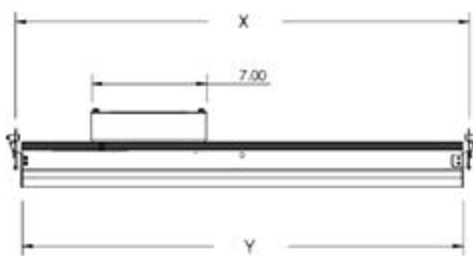
WARRANTY:

5 years limited warranty. For complete warranty terms, please visit our website.

LISTINGS:

ETL/cETLus CE RoHS. Indoor use only. IC rated.

Length Dimensions

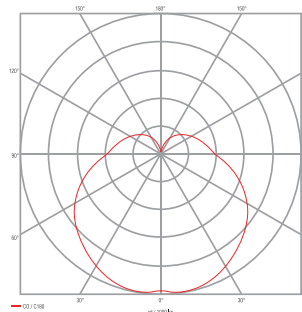


Size	Grid Type	X	Y
2 = 2ft	24 = 15/16"	24"	23"
4 = 4ft	24 = 15/16"	48"	47"
4L	24 = 15/16"	48"	24"

Photometrics

CRI > 82 (90CRI available on request)

L80 > 60,000 hrs



Diffuse White Square 4000K

Output	lm/ft	W/ft	lm/W
LO	480	3.2	150
MO	682	4.9	139
HO	1003	7.4	135

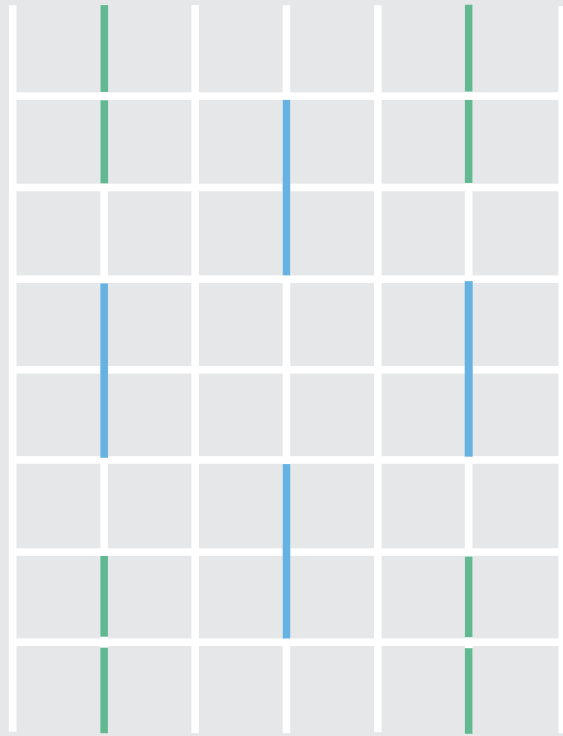
# TERALyte™ 2”

for  **DYNAMax™**  
CEILING SOLUTIONS



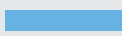
TERALyte 2” provides an integrated lighting solution that mounts directly into the 3/8” bottom slot of the Armstrong® Dynamax structural aluminum grid system. The fixture is designed to occupy the width of the grid only, and the junction box can be simply installed onto the upper screw slot of the grid system. The integrated driver features a universal 120-277VAC input and 0-10V dimming.

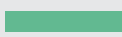
# Mounting Configurations

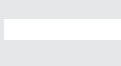


*TERALyte 2" is a fully integrated lighting solution for heavy duty extruded ceiling systems.*

TERALyte 2" can be installed anywhere along the bottom slot of the extruded grid ceiling system including both main runners and cross tees for maximum light design versatility.

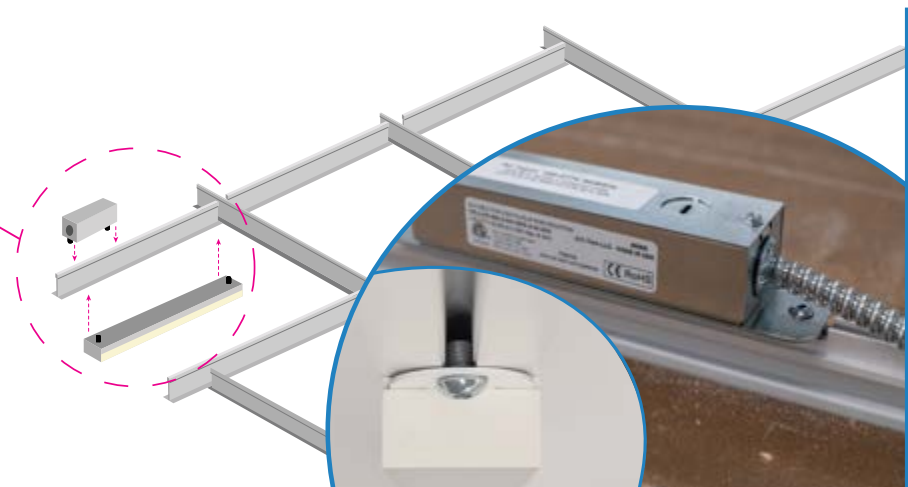
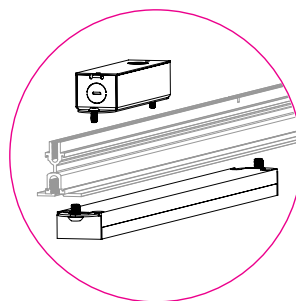
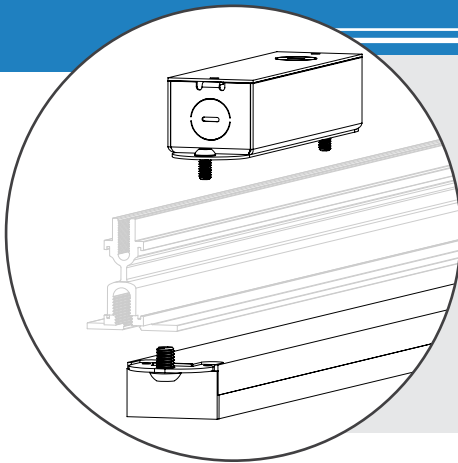
4' TERALyte 2" 

2' TERALyte 2" 

Possible positions for TERALyte 2" light modules 

## Installation

TERALyte 2" utilizes simple mounting clips on each end and is provided with 3/8" bolts for installation into the bottom screw slot of the Armstrong® Dynamax grid system. The fixture requires a single hole to be drilled through the grid for wiring access. The junction box easily installs into the upper screw slot of the grid system.





# Light Calculations



Room Dimension: **46 x 79 ft (3,634 S.F.)**

Ceiling Height: **13 ft**

Average foot candle achieved at work plane level: **54.39 Fc**

Quantity of product: **110 pcs. TRL2-MN-HO-4-XX-DWS-X-W-UNV**

27.8	34.6	41.8	46.7	46.2	44.9*	45.6*	45.9*	45.9*	45.9*	45.9*	45.9*	45.9	45.9	45.9	45.9	45.9	45.9*	4
32.5	40.4	48.6	53.4	46.3	40.9*	43.0*	44.3*	45.2*	45.7*	46.0*	46.1	46.1	46.0	45.7	45.2	44.3*	4	
36.8	45.3	53.7	49.5	[Hatched Area]														
38.6	47.5	52.9	45.7															
41.0	49.8	58.7	54.7	44.5	33.4	35.9	38.7	41.0	42.7*	43.7*	44.1*	44.1*	43.7*	42.7*	41.0	38.6		
42.9	51.6	60.3	55.9	44.5	33.4	35.8	38.6	41.0	42.7*	43.6*	44.1*	44.1*	43.6*	42.7*	41.0	38.6		
44.7	53.6	62.2	47.5	[Hatched Area]														
45.6	55.8	61.9	51.7															
46.4	56.3	66.1	70.1	46.2	44.9*	45.6*	45.9*	45.9*	45.9*	45.9*	45.9	45.9	45.9	45.9	45.9	45.9*	4	
46.9	56.4	65.9	69.7	54.2	47.0*	47.4*	47.4*	47.4*	47.3*	47.3*	47.3	47.3	47.3	47.3	47.3	47.4	47.4*	5
47.4	56.5	66.0	60.8	[Hatched Area]														
47.4	57.3	63.3	53.5															

Product Name	LED/K Color	Light Output	Length	Grid Type	Optic	Mounting Clips	Color	Driver
TRL2 = TERALyte 2"	HW = 3000K MW = 3500K MN = 4000K CN = 5000K  90 CRI available, on request.	LO = Low Output MO = Medium Output HO = High Output  Custom lumen outputs available, consult factory.	2 = 2 ft 4 = 4 ft	DM = Armstrong Dynamax  O = Other	DWS = Diffuse White Square	B38 = Bottom Slot Thread 3/8"  C = Custom	W = White B = Black C = Custom	UNV = 120-277 Vac 0-10V dimming POE = Power over Ethernet*  Optional Battery Back Up Available (sold separately)

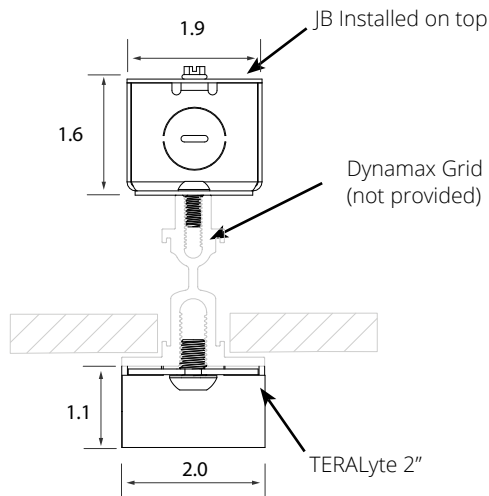
www.jlc-tech.com/patents

\*For PoE, consult factory

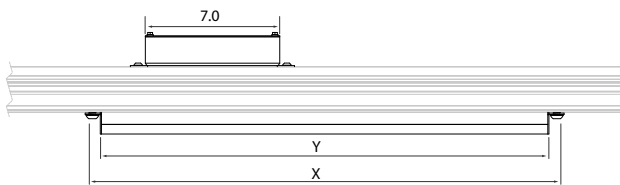


**Profile Dimensions**

(Compatible with Tegular and Lay-in tiles)



**Length Dimensions**



Size	Grid Type	X	Y
2 = 2ft	DM = Dynamax	24"	23"
4 = 4ft	DM = Dynamax	48"	47"

**NOTES:**

TERALyte™ 2" is designed for a simple and seamless installation with heavy duty extruded aluminum suspension ceiling systems including Dynamax™ structural aluminum grid by Armstrong Ceilings.

**APPLICATIONS:**

Data centers and other spaces using extruded aluminum or Dynamax™ structural grid suspension ceiling systems.

**MOUNTING:**

Mounting brackets for easy installation into the bottom extruded screw boss of the grid ceiling system. Remote LED driver simply installs onto the back extruded screw boss. Compatible with Tegular and Lay-in tiles.

**MATERIALS:**

Painted aluminum extruded body, steel mounting clips, painted aluminum end caps, high transmitting acrylic PMMA lens.

**ELECTRIC:**

Universal input voltage of 120 - 277VAC. Junction box installed remote to fixture with integral driver and wire nuts inside for connection to branch circuit and 0-10V dimming system. Fixture must be installed in accordance with local electrical codes. For EM Battery Kit order separately. PoE options available, consult factory.

**WARRANTY:**

5 years

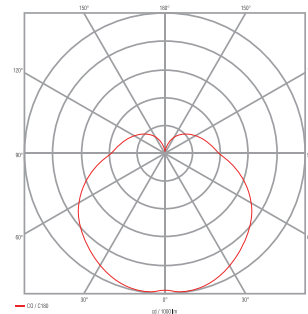
**LISTINGS:**

ETL/cETLus CE RoHS. Indoor use only.

**Photometrics**

CRI > 82

L80 > 60,000 hrs



Output	lm/ft	W/ft	lm/W
LO	640	4.7	136
MO	980	7.5	131
HO	1246	9.4	132



Data Center - Mid-Atlantic Region  
*Facility Management and Illuminations Inc.*



## EM Battery & Driver Kit *for 24 VDC Product lines*

Compatible with

T3BAR LED® | T3BAR UP® | T3BAR TWO® | T3BAR ECO® DC | Sorella®

# EM Battery & Driver Kit

for 24 VDC Product lines  
by JLC • tech

Factory wired LED driver with battery back-up for remote installation allows the same 24VDC fixture to be used for both normal and emergency operation. In emergency mode the kit provides 12W of power for 90 minutes. Available with 0-10Vdc nominal 1% dimming during non-emergency mode.



**CP** CONSTANT  
POWER  
EMERGENCY OUTPUT

*EM Battery & Driver Kit is compatible with the following product range:*

T-BAR LED®  
T-BAR UP®  
T-BAR TWO®  
T-BAR ECO® DC  
Sorella™

## Key Features

- 120-277V AC Input
- Up to 64W output power in standard operation (Up to 8ft of JLC-Tech 24V DC product max, 2ft of product minimum)
- 12W output power in emergency operation
- Constant Voltage Output
- 0-10V Dimming
- UL Listed
  - UL8750 and UL2043 (LED Driver)
  - UL924 Listed, UL Listed and Classified to FTBV (Battery)
- Rated for use in Plenum, Dry and Damp Locations
- Long life high temperature recyclable Ni-Cad Battery (24 hour recharge, 7-10 year life expectancy)
- For use with switched or unswitched fixtures
- Includes single piece test switch and charge indicator light
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- 90 min operation maintains illumination for the full emergency runtime with no degradation
- Operating Temp: 0° - 50° C
- 5 year warranty
- RoHS compliant



*EM Battery & Driver Kit comes with a single-piece charge indicator light and test switch accessory.*



## Mechanical Details

Ingress Protection:	IP20
Weight:	6 lbs
Dimensions:	20" x 7" x 2"
I/O Connections:	AC input and DC output connections are made inside the wiring junction boxes

## Input/Output Specifications

Input Voltage	120–277VAC, 50/60Hz
Input Rating (Battery)	3.7 Watts (Max)
THD	< 20%
Power Factor	≥ 0.9
Output Voltage (Driver)	24V DC
Output Current (Driver)	2.74A (Max)
Output Power (Driver)	64 Watts (Max)
Output Power (Battery)	12 Watts (Constant)
Efficiency (Driver)	90% typical
Emergency Operation	90 minutes
Output Current in Dimming	1 to 100%
Maximum 0-10 sourcing current	500 uA (Max)

## Emergency Lumen Performance

### Emergency Lumens\*

	15/16"	9/16"
T-BAR LED/Sorella "D" Optic	900	650
T-BAR LED/Sorella "B/B2" Optic	865	675
T-BAR LED/Sorella "C2" Optic	1200	1050
T-BAR UP	925	925
T-BAR ECO DC	1360	1360

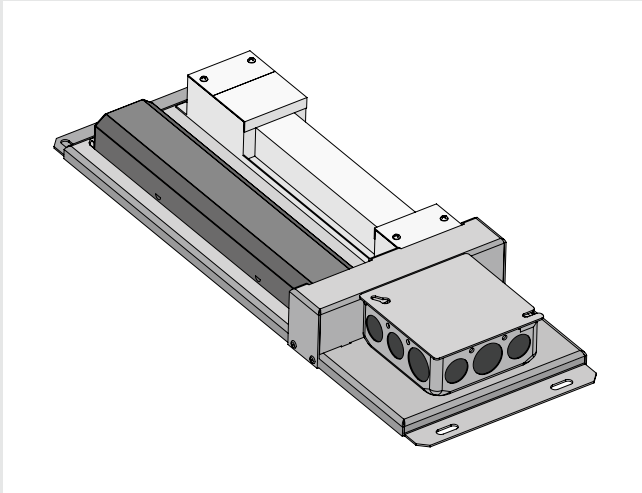
\*Due to the 12W Constant Power output, when operating in emergency mode in the event of a power loss, the lumen output from the 24V DC products connected to the kit will always correspond with the above chart, regardless of the fixture run length. For example, 2ft of T-BAR LED connected to the emergency kit, when operating in emergency mode, will output the same amount of lumens as 8ft of T-BAR LED.

During normal operation, any fixture connected to the emergency kit will provide its typical lumen output according to the individual fixtures spec sheet.

*Please contact JLC-Tech for additional information on other available optic types or for assistance with photometric performance/calculations.*

Product Name	Driver Type	Battery	Wattage	Voltage
TBEM = T-BAR LED EM Battery/Driver Kit	PS = Non Dimmable DIM = 1% Dimmable 0-10 VDC	12 = 12W Battery	64 = 64W Driver	UNV = Universal 120-277V

WARRANTY: 5 years



## EM Battery & Driver Kit

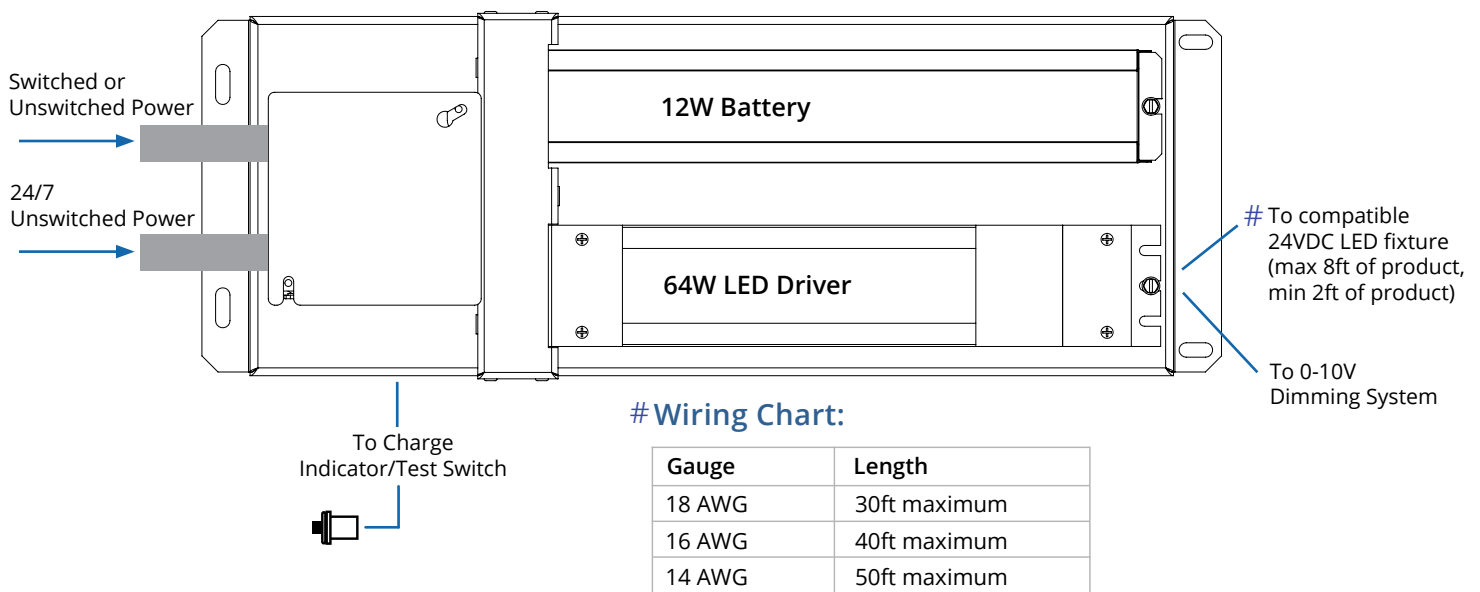
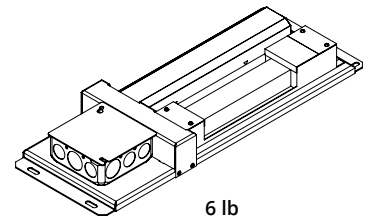
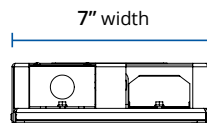
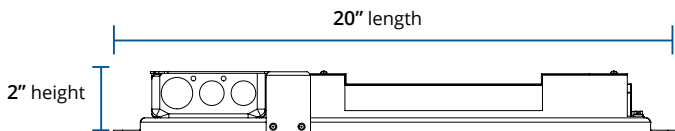
### 24VDC 64W LED Driver with 12W Battery Kit 0-10 VDC dimmable and non dimmable

Factory wired battery backup and LED driver for remote installation allows the same 24VDC fixture to be used for both normal and emergency operation. In emergency mode the kit provides 12W of power for 90 minutes. Available with 0-10Vdc nominal 1% dimming during non-emergency mode.

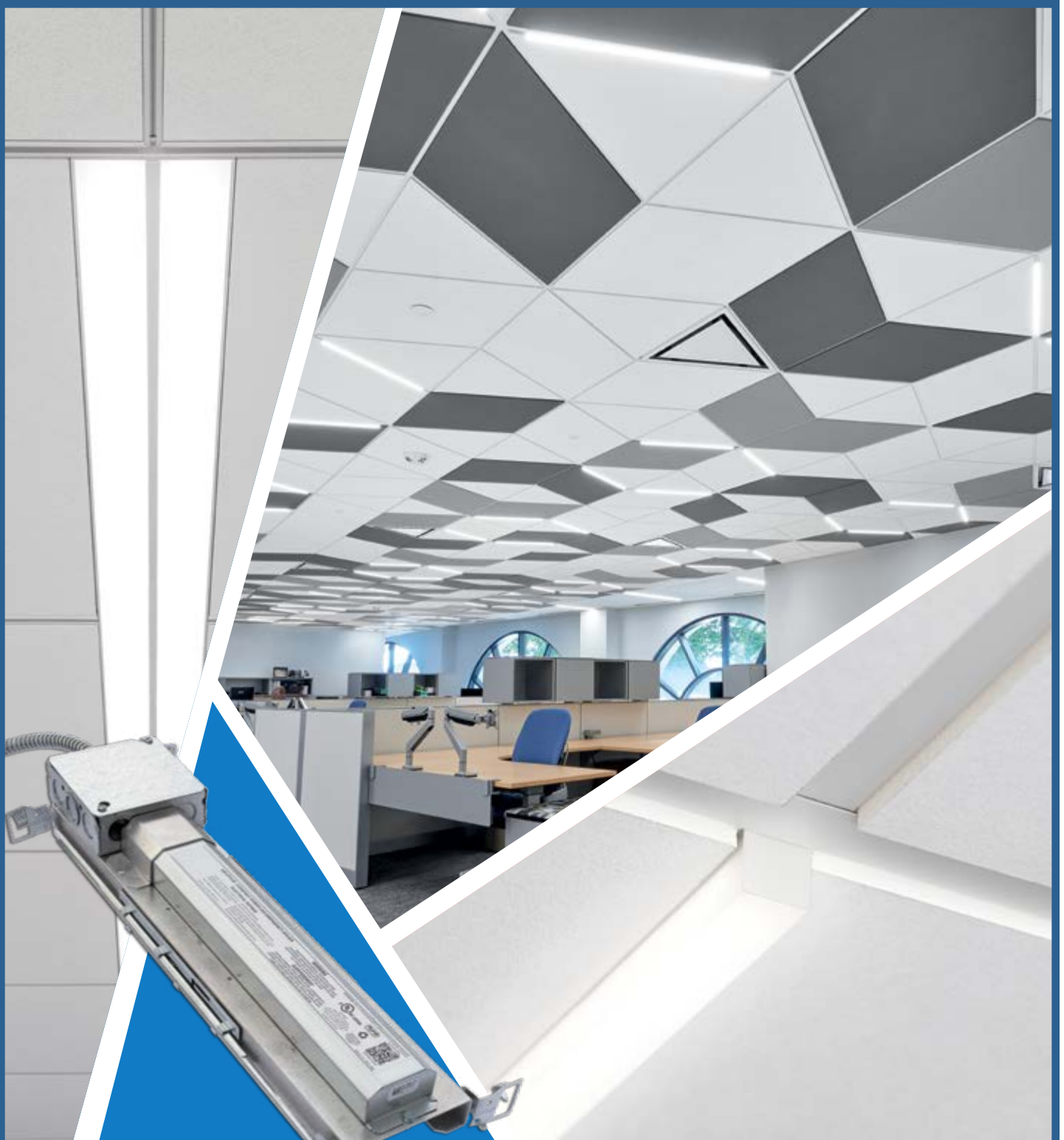
Power kit includes 4" JB for 120-277V AC input direct wiring with metal conduit and single-piece charge indicator and test switch accessory.

EM Battery & Driver Kit is compatible with the following product range: T-BAR LED®, T-BAR UP®, T-BAR TWO®, T-BAR ECO® DC, Sorella™.

### 24VDC 64W LED Driver and 12W Battery



\* Refer to spec sheet and installation instruction for technical specifications and detailed wiring diagram.



## Emergency Battery Kit *for Line Voltage Product Lines*

Compatible with

GEMINI™ | T-BAR FLEX® | T-BAR ECO® | TERA<sub>3</sub>Lyte™ | T-BAR LED® X<sub>SERIES</sub>



# Emergency Battery Kit

for Line Voltage Products

by JLC • Tech

Factory wired battery backup with integral grid ceiling mounting brackets to easily convert any compatible JLC-Tech fixture into an emergency fixture. The provided flexible metal conduit is pre-wired for a quick connection to a compatible fixture type, allowing the fixture to operate in both normal and emergency operation. In emergency mode the battery kit provides 12W of power for 90 minutes.



*Emergency Battery Kit is compatible with the following product range:*

GEMINI™  
T-BAR FLEX®  
T-BAR ECO®  
TERALyte™  
T-BAR LED® X-Series

**CP** CONSTANT  
POWER  
EMERGENCY OUTPUT

## Key Features

- Input Voltage 120-277V AC, 50/60Hz Input
- Input Rating (120/277) 3.7 Watts (max)
- 12W output power (constant)
- Compatible with T-BAR FLEX®, T-BAR ECO®, GEMINI™, TERALyte™, T-BAR LED® X-Series product lines *(fixture sold separately)*
- 24" Flexible metal conduit with wiring for simple connection to compatible fixtures
- Adjustable T-BAR mounting brackets (and surface mount holes) for easy installation in close proximity to fixtures
- UL924 Listed, UL Listed and Classified to FTBV
- UL1310 Certified, Output Class 2 Compliant
- Rated for use in Plenum, Dry and Damp Locations
- Long life high temperature recyclable Ni-Cad Battery (24 hour recharge, 7-10 year life expectancy)
- For use with switched or unswitched fixtures
- Includes single piece test switch and charge indicator light
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- 90 min operation maintains illumination for the full emergency runtime with no degradation
- Operating Temp: 0° - 55° C
- 5 year warranty
- RoHS compliant



*Emergency Battery Kit for line voltage products comes with a single-piece charge indicator light and test switch accessory.*

## Input/Output Specifications

Input Voltage	120–277VAC, 50/60Hz
Input Rating (Battery)	3.7 Watts (Max)
THD	< 20%
Power Factor	≥ 0.9
Output Power (Battery)	12 Watts (Constant)
Emergency Operation	90 minutes

\*Contact factory for additional battery technical data.

## Emergency Lumen Performance

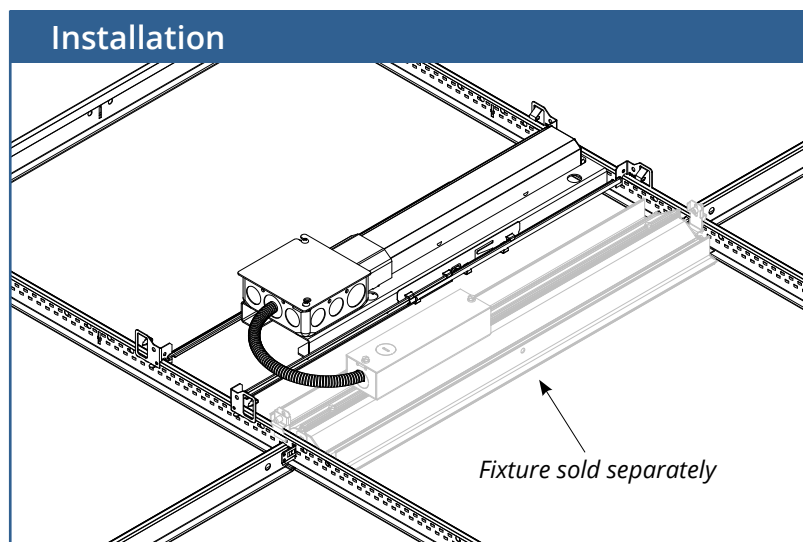
T-BAR Flex "D/B/B2" Optic	1140
T-BAR ECO "DW/DWS" Optic	1800
GEMINI 2" Single Lens "DW" Optic	1440
GEMINI 2" Single Lens "VC" Optic	1440
GEMINI 4" Single Lens "DW" Optic	1440
GEMINI 4" Single Lens "VC" Optic	1500
GEMINI 4" Double Lens "DW" Optic	1320
GEMINI 4" Double Lens "VC" Optic	1200
TERALyte 1" "DWS" Optic	1800
TERALyte 2" "DWS" Optic	1632
T-BAR LED X-Series "D/B/B2" Optic	1320
T-BAR LED X-Series "DW" Optic	1200

\*Approximate values, consult factory for more info.



During normal operation, any fixture connected to the emergency kit will output its typical lumen output according to the individual fixture's spec sheet.

**Please contact JLC-Tech for additional information or for assistance with photometric performance/calculations.**



The battery backup kit is provided with a pair of adjustable T-BAR mounting brackets for simple installation in close proximity to the LED fixture (*sold separately*). They can be adjusted to fit over various typical grid spacing patterns (i.e 2x2) and also DESIGNFlex™ grid layouts. Alternatively the kit can be surface mounted using the provided four mounting holes.

Product Name	Fixture	Battery	Voltage
TBEM = T-BAR LED EM Battery Kit	FLEX = T-BAR FLEX ECO = T-BAR ECO GEM = GEMINI TRL = TERALyte XS = T-BAR LED X-Series	12 = 12W Battery	UNV = Universal 120-277V

WARRANTY: 5 years

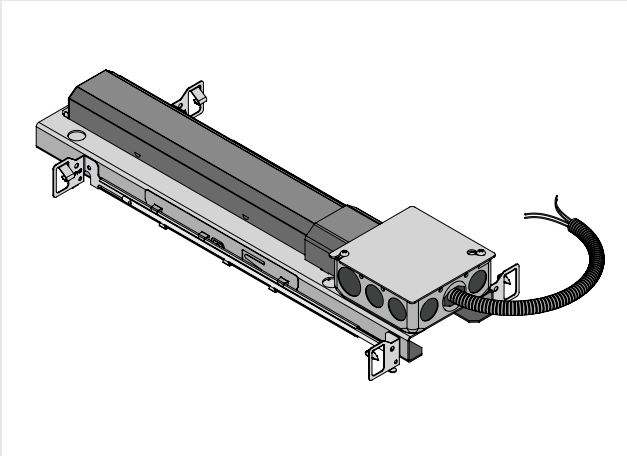
### Emergency Battery Kit

12W Constant Power Battery Backup Kit for T-BAR FLEX®, T-BAR ECO®, GEMINI™, TERALyte™ and T-BAR LED® X-Series (Fixture sold separately)

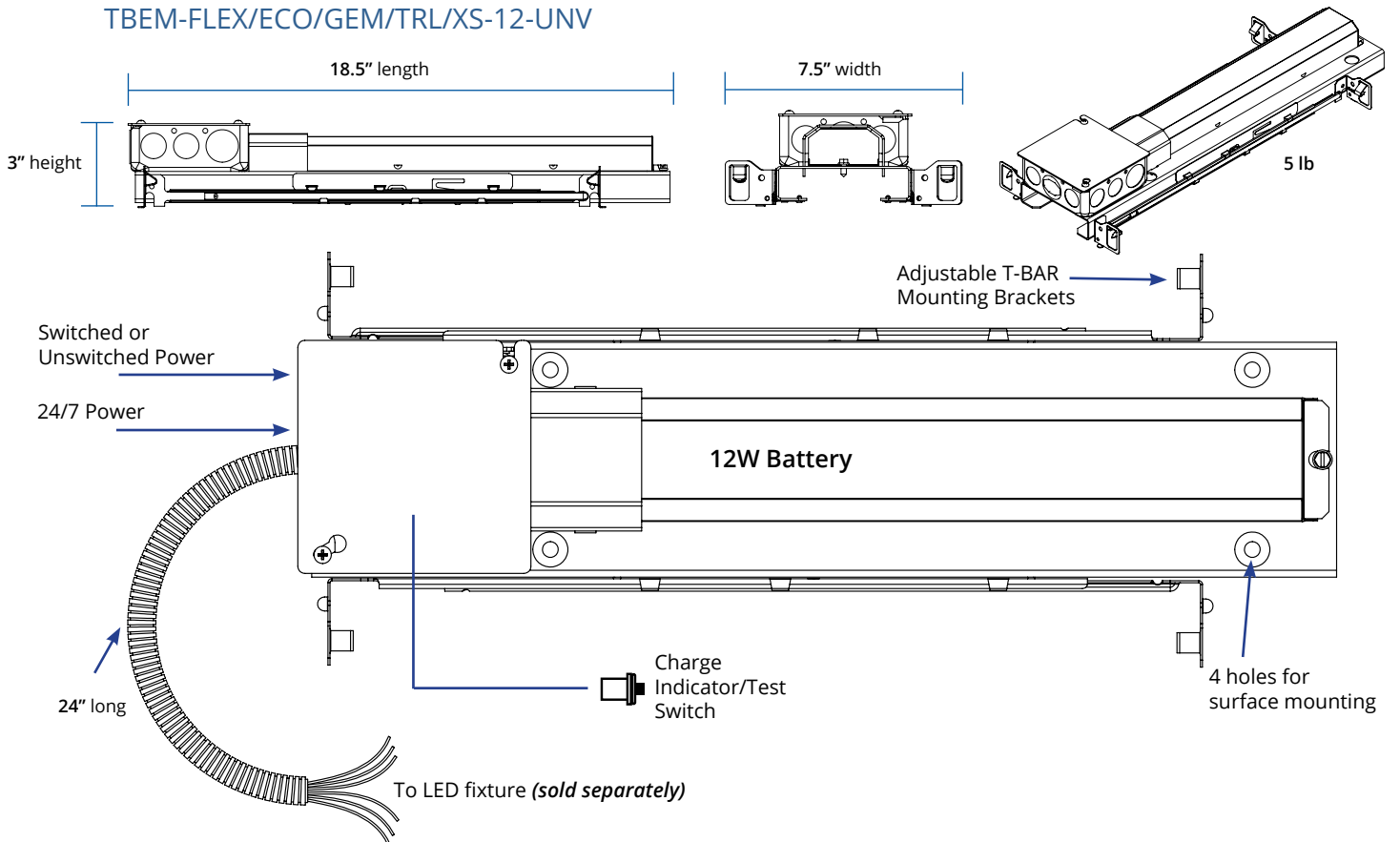
Battery backup for remote installation allows a compatible fixture to be used for both normal and emergency operation. In emergency mode the kit provides 12W of power for 90 minutes (refer to technical spec for lumen information).

Battery kit includes 4" JB for 120-277V AC input wiring, adjustable T-BAR mounting brackets, surface mounting holes, 24" flexible metal conduit with wiring for easy connection to compatible fixture and single-piece charge indicator and test switch accessory (face plate not provided).

**Compatible with line voltage product lines.**



#### TBEM-FLEX/ECO/GEM/TRL/XS-12-UNV



\*Refer to spec sheet and installation instruction for technical specifications and detailed wiring diagram.

# JLC • tech



*Where no light has gone before.*

JLC-Tech was founded with one singular vision: to create unique and useful LED lighting fixtures.

Improve room acoustics, achieve even illumination, reduce installation costs and minimize construction waste by using JLC-Tech's products, the only lighting fixtures that replace the cross tee in the suspended ceiling system.

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