

# pr1meFX<sup>™</sup>

The First Layer of Light. Indirectly.

# APPLICATION GUIDE



# Next-Generation Indirect Lighting

### Typical cove lighting



Less than 50% of the light exits the cove. Even with an aimable luminaire, only 60% of the light exits the cove.

# prlmeFX™



pr1meFX optics, combined with a revolutionary wall mount design, directs over 85% of the light out of the cove. The light reflects off the ceiling to provide the first layer of light to the space. No aiming or adjusting is required.







Patented optical technology and micro-reflectors direct the light out over the top of the cove and across the ceiling. The light is reflected down and provides soft, glare-free illumination to the work plane or floor.

The wall-mounted design allows pr1meFX to be used with any cove profile.

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Built-in 20° upward tilt combined with the proprietary optic system creates an asymmetric vertical beam spread while controlling the horizontal spread. This innovative technology reduces the lighting crossover effect on perpendicular walls.

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## Clean Ceilings. Better Light. Increased Efficiency.



RECESSED LIGHTS CLUTTER THE CEILING

Recessed lighting requires mulitple points of light creating the potential for shadowing throughout the room. pr1meFX creates a continuous line of light which provides thourough, even illumination.



Old and outdated troffer lighting is bulky, unsightly and does not represent the aesthetic in the age of LED. Troffers are also typically high-glare light sources. Today's work spaces focus on visual comfort as much as pure foot candles. pr1meFX delivers both on both comfort and illumination requirements.

### Meeting Title 24 2020 Requirements Footcandles at the Work Plane

#### LARGE ROOM - 25' x 35' x 10'(h)

8W pr1meFX on two 35' sides Footcandles at the working plane (30")

Average Footcandles: 23.2 Ave/Min Ratio: 1.67 Total Feet of pr1meFX: 66' (33' each side) Total Wattage: 528W C/W/F Reflectance: 0.86 / 0.80 / 0.20

#### LPD: 0.58 W/ft<sup>2</sup>

Exceeds Title 24 Requirement Suitable for: School - 0.65 W/ft<sup>2</sup> Financial Institution - 0.65 W/ft<sup>2</sup> Library - 0.70 W/ft<sup>2</sup>





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21 25 23 20 17	15 14 15	16 19 21 22 29
24 28 26 22 18	16 15 16	18 21 24 25 23
26 30 27 23 19	17 16 16	19 22 26 27 24
27 31 28 23 19	17 16 17	19 23 27 29 25
28 32 29 24 20	18 17 18	20 24 28 30 26
28 32 30 24 20	18 17 18	20 24 29 31 27
8 32 30 25 20	18 17 18	21 25 30 31 27
32 30 25 21	18 17 18	21 25 29 31 27
32 30 25 21	18 17 18	21 25 30 31 27
33 30 25 20	18 17 18	21 25 30 31 27
33 30 25 20	10 17 10	
33 30 23 20	19 17 19	21 23 29 31 27
32 30 24 20	18 17 18	20 24 29 31 27
32 29 24 20	18 17 18	20 24 29 31 27
32 29 24 20	17 16 17	20 24 28 30 26
1 28 23 19	17 16 17	19 23 27 29 25
9 27 22 18	16 15 16	5 18 22 26 28 24
25 21 17	15 15 15	5 17 20 24 25 21
22 19 16 1	15 14 14	4 16 18 21 22 19

#### SMALL ROOM - 15' x 15' x 10'(h)

5W pr1meFX on two parallel 15' sides Footcandles at the working plane (30")

Average Footcandles: 17.7 Ave/Min Ratio: 1.32 Total Feet of pr1meFX: 26' (13' each side) Total Wattage: 130W C/W/F Reflectance: 0.86 / 0.80 / 0.20

LPD: 0.52 W/ft<sup>2</sup> Exceeds Title 24 Requirement Suitable for: Office - 0.65 W/ft<sup>2</sup> Library - 0.70 W/ft<sup>2</sup>

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### Meeting Title 24 2020 Requirements Footcandles at the Floor

12 14 14 13 13 11	CORRIDOR - 22' (I) x 12'(w) x 12' (h) 8W pr1meFX on one side Footcandles at the floor
14 16 16 15 14 13   15 17 16 15 13   16 17 18 17 16 14   16 18 18 16 14   16 18 18 16 14   17 18 19 18 16 15	Average Footcandles: 15.6 Ave/Min Ratio: 1.5 Total Feet of pr1meFX: 20' Total Wattage: 160W C/W/F Reflectance: 0.86 / 0.80 / 0.20
17 18 19 18 17 15 16 18 18 18 16 14	LPD: 0.60 W/ft <sup>2</sup> Exceeds Title 24 Requirement Suitable for: Office - 0.65 W/ft <sup>2</sup>
16 17 18 17 16 14 15 17 17 16 15 13	HALLWAY - 22' (I) x 6'(w) x 8 5W pr1meFX on one side Footcandles at the floor
14 15 16 15 14 12	Average Footcandles: 13.1 Ave/Min Ratio: 1.92 Total Feet of pr1meFX: 20' Total Wattage: 100W C/W/F Reflectance: 0.86 / 0.80 / 0.20 LPD: 0.38 W/ft <sup>2</sup>

atio: 1.5 of pr1meFX: 20' ge: 160W ectance: 0.86 / 0.80 / 0.20 //ft <sup>2</sup> e 24 Requirement W/ft <sup>2</sup>	11   13   13   11   9   7     13   15   14   12   18   8     14   16   15   13   11   9     15   17   16   14   11   9
HALLWAY - 22' (I) x 6'(w) x 8' 5W pr1meFX on one side Footcandles at the floor	(h)
Average Footcandles: 13.1 Ave/Min Ratio: 1.92 Total Feet of pr1meFX: 20' Total Wattage: 100W C/W/F Reflectance: 0.86 / 0.80 / 0.20	16 18 17 14 12 10 15 17 16 14 11 9 14 16 15 13 11 9
LPD: 0.38 W/ft <sup>2</sup> Exceeds Title 24 Requirement Suitable for: Library / Restaurant - 0.70 W/ft <sup>2</sup>	13 15 14 12 10 8

### ILLUMINANCE VALUES FOR GENERAL INTERIOR LIGHTING

As currently recommended by the Illuminating Engineer Society (IES)

	FOOTC	ANDLES	LL	X			
TTPE OF ACTIVITY	AVERAGE	RANGE	AVERAGE	RANGE	REFERENCE WORK-FLANE		
Public spaces with dark surroundings	3	2-5	30	20-50			
Simple orientation for short temporary visits	7.5	5-10	75	50-100	General lighting throughout		
Working spaces where visual tasks are only occasionally performed	15	10-20	150	100-200	spaces		
Performance of visual tasks of high contrast or large size	30	20-50	300	200-500			

### ORDERING INFORMATION

#### Example: PFXC-CW-0-120E8-35WH-6

pr1meFX Cove, Ceiling Wash Optics, 120V, ELV dimming, 8W/ft, 3500K, White Finish, 6 foot



#### SYSTEM INTEGRATION ACCESSORIES

MOUNT	ING HARDWARE FOR RETROFIT LINEAR FI	XTURE (NO COVE					
	PFX-SM	Surface Mounting					
POWER	FEED CABLES Additional lengths available, o	contact factory					
	PFPFX-F-36	Female connector					
	PFPFX-M-36	Male connector, 3					
UMPER FEED CABLES Additional lengths available, contact factory							
	JFPFX-MF-12	Female/Male conr					
	JFPFX-MF-18	Female/Male conr					
	JFPFX-MF-24	Female/Male conr					
DIMMING INTERFACE MODULE (DIM) 600W max at 120V and 1,300W							
	DIM-Z	Converts 0-10V dir					
SURGE S	SUPPRESSION DEVICE A Tempo furnished su	rge suppression dev					
	SSD-120	120V Branch Circu					
	SSD-277	277V Branch Circu					
	1	l					

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						WF	1			
mming	Wa	itts/Foot	-	Colo	r Temp	Finish		-	Se	ction Length
ELV Electronic Low Voltage	5 8	5 W/ft 8 W/ft		27 30 35 40	2700K 3000K 3500K 4000K	WH	White		2 3 4 5 6	2 ft minimum 3 ft 4 ft 5 ft 6 ft maximum

#### PROFILE)

Rail for Retrofit Coves and Coves by Others. 6 ft section

, 36 in.

6 in.

nector, 12 in. nector, 18 in.

nector, 24 in.

#### max at 277V

mming signals to ELV, 120 - 277 Universal Line Voltage

must be installed on each supplying branch circuit to comply with 5-year warranty

# Optimize the Performance of pr1meFX



- Minimum distance from ceiling to top edge of cove is 8 inches.
- Maximum distance from ceiling to top edge of cove is 30 inches.
- Optimum location from ceiling to top edge of cove is 12" to 24", which will provide the best performance and maximum light output at the work plane.
- Minimum interior depth of cove is 3".
- pr1meFX should be installed with the top edge of the mounting rail in line with top edge of cove.
- Use a high Light Reflectance Value (LRV) rated paint on walls and ceiling and they become part of the lighting system. For best results, the ceiling should be 0.85 or higher LRV and walls at 0.80 or higher LRV.





### TEMPO ALUMINUM COVE SYSTEM



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Prefabricated cove designed for use with multiple Tempo linear LED lighting fixtures including pr1meFX.

Patented extruded 6063 aluminum design provides simple and fast installation with a sharp, modern look. Designed with Drywall Contractors to cut down costs on labor and material associated with cove framing and installation.

Manufactured in USA. See website for more details.

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# Installation



The top edge of the mounting rail should be in line with the top edge of the cove. Do not mount lower than the top edge of the cove or light output will be reduced.



Removable spacers are provided with each 12" section of pr1meFX. Removing spacers allows pr1meFX to telescope in for those instances where you require slightly shorter runs. Telescoping the pr1meFX LED light engines closer together does not affect light distribution.



Leave a minimum space of 6 inches from ends and corners for uniform light without hot spots. The optimum distance from the ends and corners is 9 inches and the maximum distance is 12 inches. Remove 1" spacers between light engines to telescope the light engines closer together if needed.



Use 12" jumper feed cables (JFPFX-MF-12) to make connections in the corners. Remember to leave 9 inches (Min 6"/Max 12") of space from corners for uniform light without hot spots.



Figure 1 Connect field wires to the pr1meFX power feed cable(s) inside the grounded J-Box.



Figure 2

#### DOUBLE FEED IN CENTER OF RUNS





Figure 4 Determine where the start of the runs will be and drill a hole for the conduit feed in between runs.

Figure 5 Attach the mounting rails to the left and right side of the conduit hole 1 inch apart (See Figures 2 & 3 for rail mounting).



The hole for the conduit can be drilled through the rail as needed.

The conduit bushing is optional.



**Important Note:** Instructions shown are a summary of basic installation procedures. Please reference complete Installation Instructions included with pr1meFX or from Tempollc.com.

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Using a laser level, define a reference line for installing the mounting rail. The top of the rail must be in line with or slightly above the top edge of the cove.



Figure 3 Secure the mounting rail to the wall using the supplied wall-dog screws.





Figure 6 Drill a hole 1 to 3 inches from the left end of the run. Use Female

power feed cable.

SINGLE FEED AT BEGINNING OF A RUN GOING RIGHT TO LEFT



#### Figure 7

Drill a hole 1 to 3 inches from the right end of the run. Use Male power feed cable.

Attach pr1meFX by placing the bottom side over the bottom lip of the rail and then carefully pushing the top of the fixture onto the rail until it snaps into place.



Connect the first fixture(s) to the power feed cables with the supplied toolless connectors. Connect pr1meFX runs together using same tool-less connectors.

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pr1meFX Recognized by:

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