

Backlit Flat LED Panel Light

TOPBAND Backlit Flat LED Panel Light is a highly versatile luminaire designed to provide smooth lighting. It comes in 1195*595*35mm, 620*620*35mm and 595*595*35mm back lit light distribution for a shadowless and more evenly distributed effect. The enhanced optics with back lit technology produces a low glare and a consistent even illumination. Backlit panel light has a longer lifespan, good resistance to yellowing. Adjustable CCT optional: 3500K-4000K-5000K. UGR<19 optional. Three types for option: non-dimmable, 0-10V dimmable, and DALI dimmable.



PRODUCT FEATURES

Electrical

- Input voltage: 220-240VAC, 50Hz. Long-life LEDs provide the fixture a rate life of 50,000 hours.
- Excellent luminaire efficacy provides significant energy savings.
- Isolated power supply is relatively safer.
- To ensure trouble-free operation, protection is provided against output over-current, output over-voltage, short circuit.

Construction

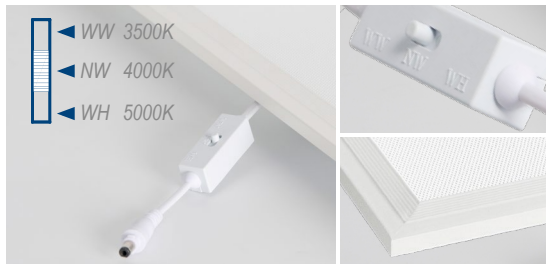
- Compared with general edge lit panel, TOPBAND backlit is more lightweight without the light guide plate (LGP).
- The light is made of cold-rolled steel SPCC back and aluminum frame.
- All dimensional panel light are manufactured with quality components and finishes.
- IP20, suitable for indoor / Dry applications.

Optical

- Translucent white polystyrene (PS) face frame delivers soft and comfortable light.
- Specialised optics design makes the light more uniform.
- Lead free and eco-friendly, zero maintenance.

Application

- Backlit Flat LED Panel Light is the ideal low profile replacement for fluorescent fixture.
- Ideal for general lighting applications such as open office, schools, healthcare, and retail.
- Operating temp range: -20°C ~ +40°C (-4°F ~ +104°F).



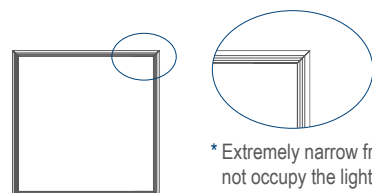
* Optional: CCT Adjustable / UGR<19

* Switchable CCT technology: Three discrete color temperatures are adjustable after purchase.

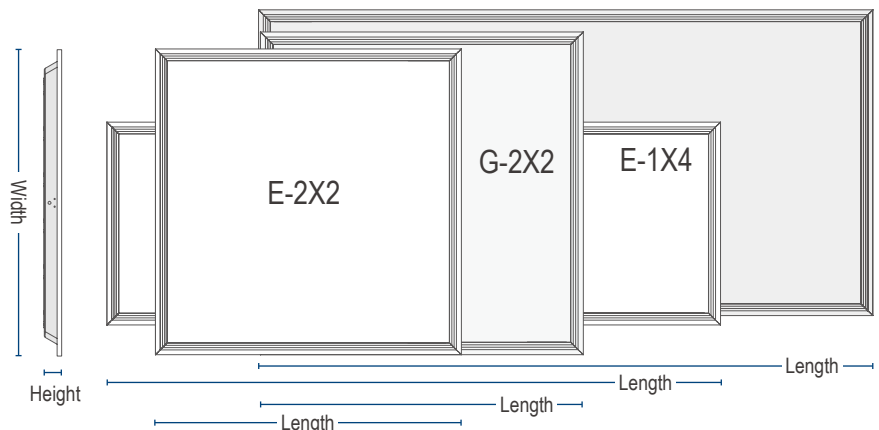
CRI	Power efficiency	PF	Beam angle	Output voltage
>80	88%	>0.9	120°	36V

DIMENSION

Size	Length	Width	Height
E-1X4	1195mm/47.1"	395mm/15.5"	35mm/1.37"
G-2X2	620mm/24.4"	620mm/24.4"	35mm/1.37"
E-2X2	595mm/23.4"	595mm/23.4"	35mm/1.37"
E-2X4	1195mm/47.1"	595mm/23.4"	35mm/1.37"



* Extremely narrow frame, does not occupy the lighting area.



* All dimensions are inches (centimeters) unless otherwise indicated.

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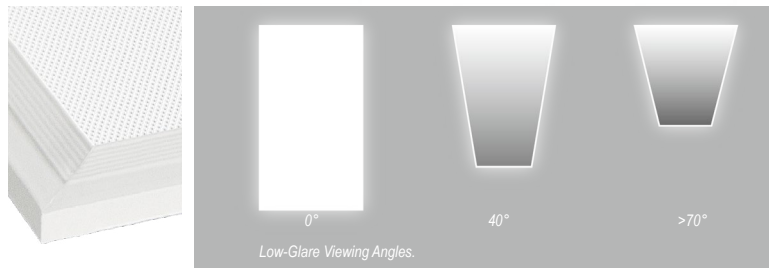
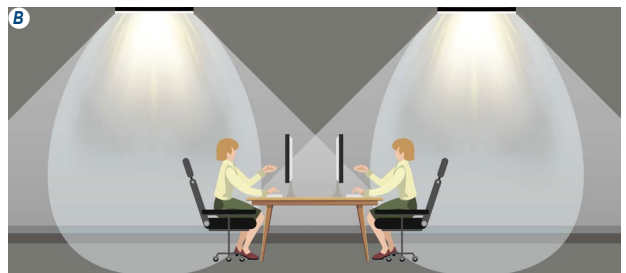
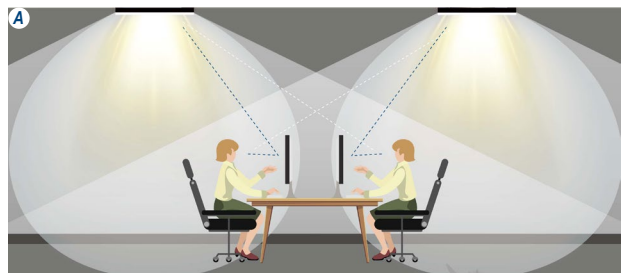
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ABOUT UGR<19

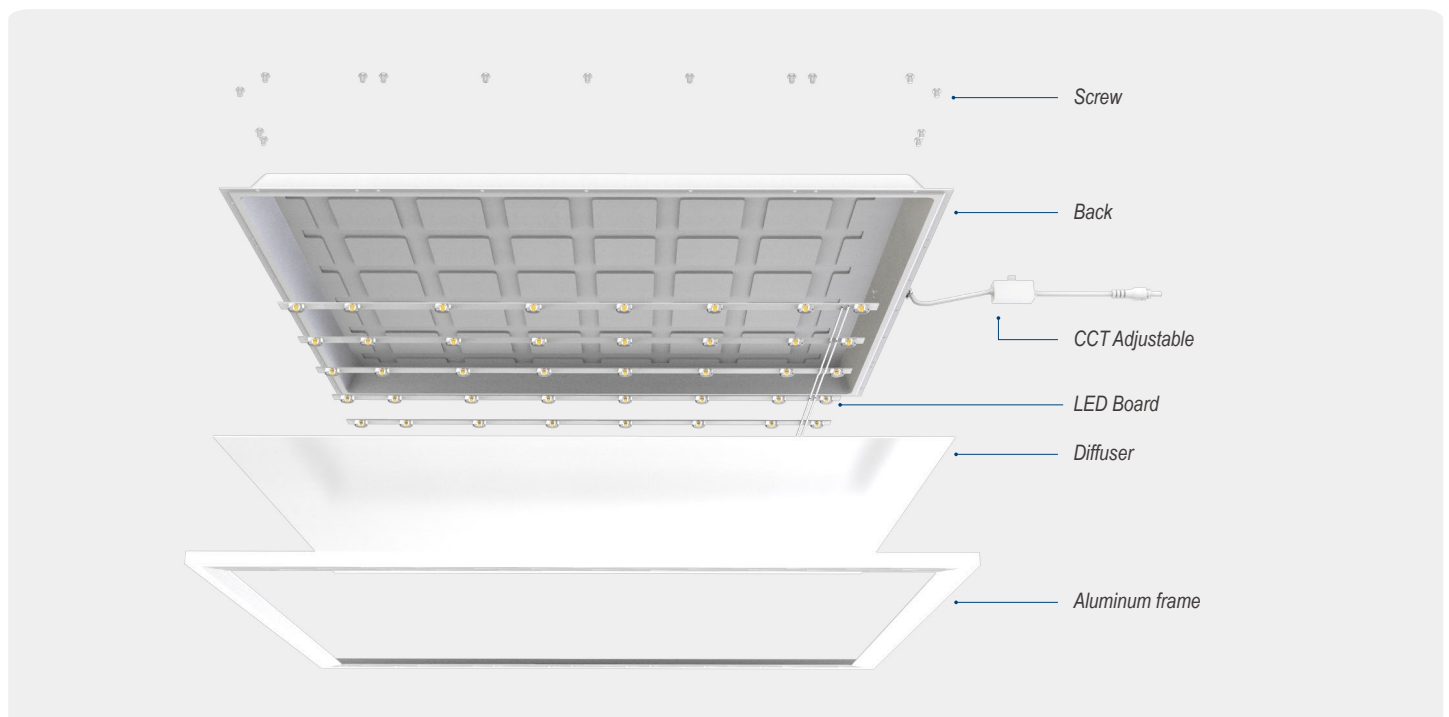
UGR (Unified Glare Rating) is a metric that is used to calculate level of glare in a certain application. Standards are set specific to applications and its related tasks, to ensure that the UGR is at the correct level for the space and doesn't interfere with general productivity.

Glare is a visual sensation that occurs when two competing light sources are present simultaneously in a person's line of vision. The main type of glare that is experienced in the offices is discomfort glare, usually caused by an overbearing back light around a computer screen or a strong overhead light (A). By adjusting the level of glare that is emitted by these luminaires to a more comfortable level for the eye, an optimum working environment can be achieved (B).

Special diffuser effectively shields the unwanted glare from the LEDs creating a soft, diffused light; comfortable to a human eye. It is the perfect solution for offices, libraries, or any situation to help reduce high-angle glare and minimize visual glare discomfort.



DETAILS



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PARAMETER

Ordering Information

Example: **TPEBPD14NKBC-24WB**

TP	EB	PD	14	N	K	BC	24W	B
Manufacturer	Products Series	Products Type	Length	Function	AC Input	CCT Adjustable	Product Wattage	LEDs
Topband	EB= E-Backlit	Panel Direct lighting	14=1x4FT 22= 2x2FT 24= 2x4FT	N= Non-dimmable D= Dimmable	AC220-240V	CCT Adjustable	24W,36W,40W,48W	SMD2835

ORDERING

Summary	Model No.	Power	Lumens			Size	Version	CCT
			100LPW	125LPW	UGR<19 115LPW			
Non-dimmable	TPEBPD14NKBC-24WB	24W	2400lm	3000lm	2760lm	E-1X4	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD14NKBC-36WB	36W	3600lm	4500lm	4140lm	E-1X4	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD14NKBC-40WB	40W	4000lm	5000lm	4600lm	E-1X4	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD22NKBC-24WB	24W	2400lm	3000lm	2760lm	E-2X2 / G-2X2	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD22NKBC-36WB	36W	3600lm	4500lm	4140lm	E-2X2 / G-2X2	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD22NKBC-40WB	40W	4000lm	5000lm	4600lm	E-2X2 / G-2X2	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD24NKBC-48WB	48W	4800lm	6000lm	5520lm	E-2X4	Standard CCT	3500K/ 4000K/ 5000K

Summary	Model No.	Power	Lumens			Size	Version	CCT Adjustable
			100LPW	125LPW	UGR<19 115LPW			
Non-dimmable CCT Adjustable	TPEBPD14NKBC-24WB	24W	2400lm	3000lm	2760lm	E-1X4	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD14NKBC-36WB	36W	3600lm	4500lm	4140lm	E-1X4	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD14NKBC-40WB	40W	4000lm	5000lm	4600lm	E-1X4	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD22NKBC-24WB	24W	2400lm	3000lm	2760lm	E-2X2 / G-2X2	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD22NKBC-36WB	36W	3600lm	4500lm	4140lm	E-2X2 / G-2X2	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD22NKBC-40WB	40W	4000lm	5000lm	4600lm	E-2X2 / G-2X2	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD24NKBC-48WB	48W	4800lm	6000lm	5520lm	E-2X4	CCT Adjustable	3500K-4000K- 5000K

Summary	Model No.	Power	Lumens			Size	Version	CCT
			100LPW	125LPW	UGR<19 115LPW			
Dali / 0-10V	TPEBPD14DKBC-24WB	24W	2400lm	3000lm	2760lm	E-1X4	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD14DKBC-36WB	36W	3600lm	4500lm	4140lm	E-1X4	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD14DKBC-40WB	40W	4000lm	5000lm	4600lm	E-1X4	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD22DKBC-24WB	24W	2400lm	3000lm	2760lm	E-2X2 / G-2X2	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD22DKBC-36WB	36W	3600lm	4500lm	4140lm	E-2X2 / G-2X2	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD22DKBC-40WB	40W	4000lm	5000lm	4600lm	E-2X2 / G-2X2	Standard CCT	3500K/ 4000K/ 5000K
	TPEBPD24DKBC-48WB	48W	4800lm	6000lm	5520lm	E-2X4	Standard CCT	3500K/ 4000K/ 5000K

Summary	Model No.	Power	Lumens			Size	Version	CCT Adjustable
			100LPW	125LPW	UGR<19 115LPW			
Dali / 0-10V CCT Adjustable	TPEBPD14DKBC-24WB	24W	2400lm	3000lm	2760lm	E-1X4	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD14DKBC-36WB	36W	3600lm	4500lm	4140lm	E-1X4	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD14DKBC-40WB	40W	4000lm	5000lm	4600lm	E-1X4	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD22DKBC-24WB	24W	2400lm	3000lm	2760lm	E-2X2 / G-2X2	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD22DKBC-36WB	36W	3600lm	4500lm	4140lm	E-2X2 / G-2X2	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD22DKBC-40WB	40W	4000lm	5000lm	4600lm	E-2X2 / G-2X2	CCT Adjustable	3500K-4000K- 5000K
	TPEBPD24DKBC-48WB	48W	4800lm	6000lm	5520lm	E-2X4	CCT Adjustable	3500K-4000K- 5000K

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ENERGY SAVING SOLUTION

Estimated lighting costs using a standard 3 lamp T8 troffer

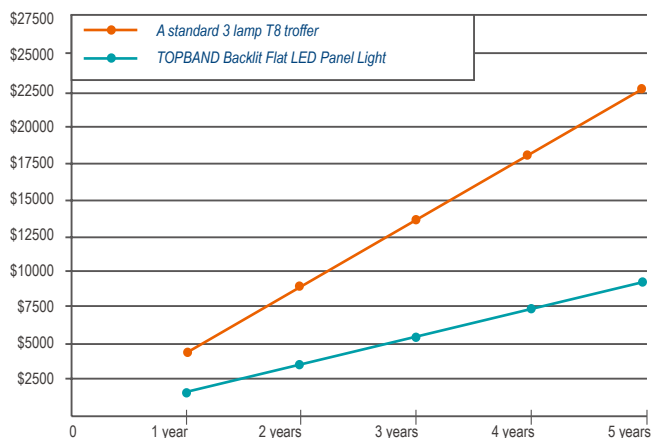
Present wattage	85 W
× Annual operating hours	4,380 hrs
	= 372,300 Watt-Hours
÷ 1,000	= 372.3 kWh per year
× kWh rate of \$0.10	= \$37.23 per year
× 125 fixtures	\$4,653.75 annual energy cost per space

Estimated lighting costs using a TOPBAND Backlit Flat LED Panel Light

Present wattage	36 W
× Annual operating hours	4,380 hrs
	= 157,680 Watt-Hours
÷ 1,000	= 157.68 kWh per year
× kWh rate of \$0.10	= \$15.768 per year
× 125 fixtures	\$1,971 annual energy cost per space

Total estimated annual savings \$2,682.75

Based on 125 fixtures per space operating 4,380 hours a year. 125 fixtures is roughly equivalent to a 10,000 square foot space. kWh rates will vary.



Savings calculations are based on energy costs using \$0.1 per kWh and 12 hours of daily operation.

PHOTOMETRY

TPGPBD22NKA-36W-2835LEDMLS-3600 nominal delivered lumens

Catalog No. TPEBPD14NKB-36WB
Manufacture: TOPBAND
S/MH: C0_a180=1.272 C90_270=1.265
Lamp Type: LED
Rated Voltage: 220V

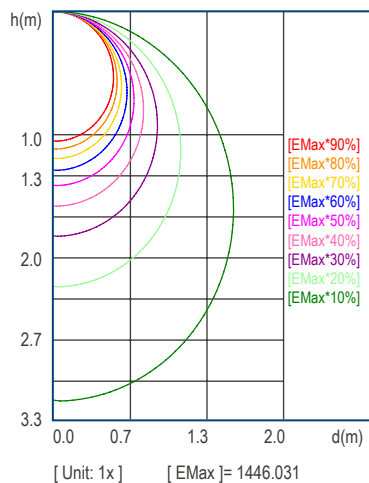
Photometric values based on test performed in compliance with LM-79.

Coefficients of Utilization

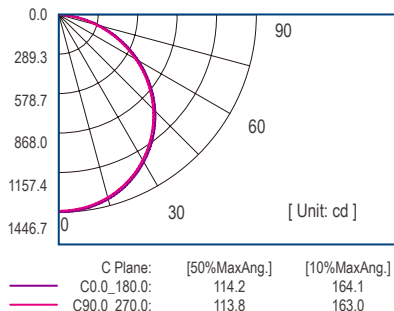
Coefficients of Utilization - Zonal Cavity Method

Coef.	Effective Floor Cavity Reflectance RFC=0.20																						
	80			70			50			30			10			0							
RhoCC(%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR	Coefficient of Utilization (%)																						
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97	97	97	97	97	97
1	108	103	99	95	105	100	96	93	96	92	89	91	89	86	87	85	83	87	85	83	87	85	83
2	98	90	83	77	95	87	81	76	83	78	73	80	75	71	76	73	69	67	63	59	67	63	59
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	67	63	59	67	63	59
4	72	69	61	43	79	68	60	53	65	58	52	62	56	51	60	55	50	60	55	50	60	55	50
5	75	62	53	54	73	61	52	46	58	51	45	56	49	44	54	48	43	54	48	43	54	48	43
6	69	56	47	46	67	55	46	40	52	45	39	51	44	39	49	43	38	49	43	38	49	43	38
7	64	50	42	40	62	49	41	35	48	40	35	46	39	34	44	38	34	44	38	34	44	38	34
8	60	46	37	32	58	45	37	31	44	36	31	42	35	31	41	35	30	41	35	30	41	35	30
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	38	32	27	38	32	27	38	32	27
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	35	29	25	35	29	25

C0 Space ISO Illuminance Curve



C Plane Distribution Diagram

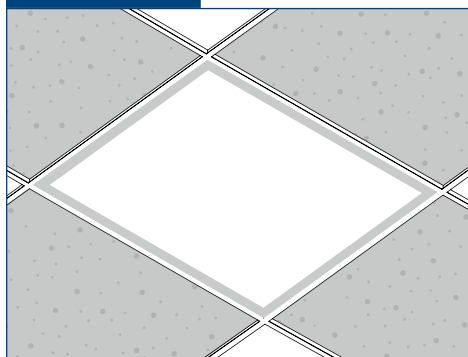


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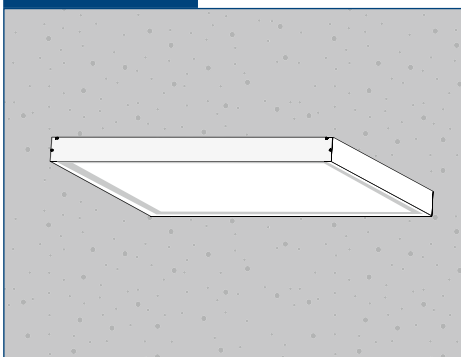
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INSTALLATION

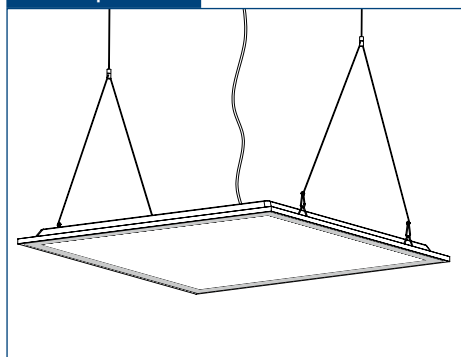
Recessed



Surface



Cable-suspended

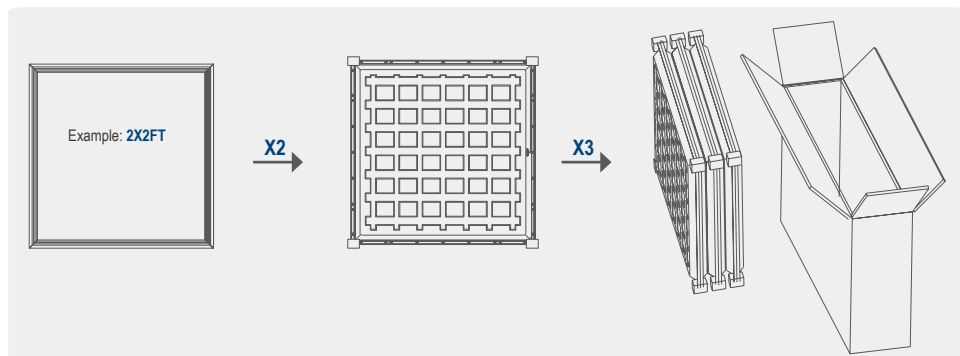


TOPBAND Backlit Flat LED Panel Light :

- Please check the accessory bag before installation.
- Turn power off before installation or disassembly.
- Connect the wires correctly. If the dimming wire not needed, make it insulated in case of electricity.

* Please refer to *Installation Manual of LED Panel Light* for more information.

SCHEMATIC DIAGRAM OF PACKAGING



Size	Product Dimension	Carton Dimension	N.W. / Product	G.W. / Carton	Pcs / Carton
G-2X2	620*620*35mm(24.4*24.4*1.37")	680*700*195mm(26.7*27.5*7.67")	1.95kg	11.1kg	4 pcs, 2 storeys
E-2X2	595*595*35mm(23.4*23.4*1.37")	640*640*250mm(25.2*25.2*9.84")	1.47kg	9.6kg	6 pcs, 3 storeys
E-2X4	1195*595*35mm(47.1*23.4*1.37")	1240*640*167mm(48.8*25.2*6.57")	2.93kg	12.8kg	4 pcs, 2 storeys

* Storage temp: -30°C ~ +60°C (-22°F ~ +140°F)

Backlit Flat LED Panel Light

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WARNING

RISK OF FIRE OR ELECTRIC SHOCK

The Backlit Flat LED Panel Light must be installed by a qualified electrician in accordance with applicable federal, state, and local laws and codes. Installation requires knowledge of luminaire electrical systems and installer should be familiar with the operation of this product. If not qualified, do not attempt installation; contact a qualified electrician. Manufacturer assumes no responsibility for the improper installation of this luminaire. When installing the fixture, drilling may damage luminaire wiring and electrical parts. Check for wiring and components in enclosure before drilling. Before installation or maintenance, please disconnect the power to prevent electric shock.

WARNING

To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects. When installing this kit, drilling may damage luminaire wiring and electrical parts. Check for wiring and components in enclosure before drilling.

CAUTION

RISK OF PERSONAL INJURY

- Wear gloves or proper handling protection to prevent cuts or abrasions when handling and maintaining this product. This equipment may have sharp edges. To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards read all warning and instructions included with and on the fixture box and all fixture labels.

- Avoid direct eye exposure to the light source while it is on.

WARNING

RISK OF PERSONAL INJURY, FIRE OR ELECTRIC SHOCK

Turn OFF power before installation.

NOTICE

- Specifications and dimensions subject to change without notice.

- Please keep the LED Panel away from any corrosive substance, and please use dry cloth when you clean it.

- Suitable for Dry location only.

Contact manufacturer with any questions or concerns regarding installation of this luminaire.

TOPBAND

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FOR LIGHT EFFICIENT DESIGN PRODUCT INFO CALL

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