





## Installation Instructions

## Kova Surface



### IMPORTANT

- DISCONNECT ELECTRICAL SUPPLY BEFORE INSTALLATION OR SERVICING.
- THIS PRODUCT MUST BE EARTHED.
- THIS PRODUCT IS DESIGNED TO OPERATE OUTDOORS. IF REQUIRED TO BE USED INDOORS PLEASE CONSULT DW WINDSOR.

IP65 IK10+ CE  

230VAC 50Hz



Carefully read the instructions before mounting the light fitting.

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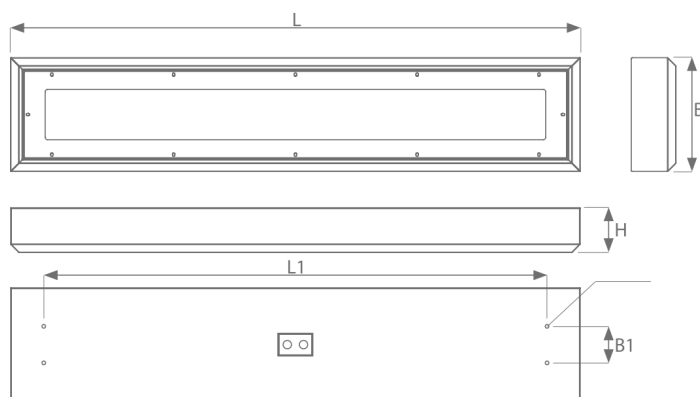
## 1. GENERAL INFORMATION

Dustproof and waterproof light fitting for installation indoors and outdoors. Designed for use in tunnels, underpasses and any areas exposed to acts of vandalism.

LED module risk group RG=1

## 2. TECHNICAL INFORMATION

Type	Power	Electrical unit	IP	Protection class	Power factor	Ambient temp.
KOV S 60 1	18.8 W	230V 0,50,60Hz	65	I (II optional)	≥0,95	-30 to +45°C
KOV S 60 2	27.2 W					
KOV S 60 3	36.6 W					
KOV S 60 4	42.1 W					
KOV S 12 1	36.6 W					
KOV S 12 2	42.1 W					
KOV S 12 3	55.5 W					
KOV S 12 4	72.1 W					
KOV S 12 5	83.2 W					
KOV S 15 1	45.4 W					
KOV S 15 3	72.7 W					



TYPE	L	L1	B	B1	H
Kova Surface 600	760	594	280	90	110
Kova Surface 1200	1370	1240			
Kova Surface 1500	1670	1240			

Default cable entry is on the back centre of the luminaire housing:



Cable entry positions at one/both end(s) are also available (please state the requirement upon order):



### 3. PHOTOMETRIC DATA

Type	Luminous flux	Efficiency	Colour temperature	CRI	Lifetime
KOV S 60 1	2,113 lm	112 lm/W	4000K	>80	>50,000 h
KOV S 60 2	2,857 lm	105 lm/W			
KOV S 60 3	4,171 lm	114 lm/W			
KOV S 60 4	4,665 lm	111 lm/W			
KOV S 12 1	4,420 lm	121 lm/W			
KOV S 12 2	5,921 lm	119 lm/W			
KOV S 12 3	9,037 lm	111 lm/W			
KOV S 12 4	9,853 lm	125 lm/W			
KOV S 12 5	5,040 lm	118 lm/W			
KOV S 15 1	7,237 lm	111 lm/W			
KOV S 15 3	7,237 lm	100 lm/W			

Lifetime of a LED modules: L<sub>90</sub>B<sub>50</sub>

## 4. MATERIALS

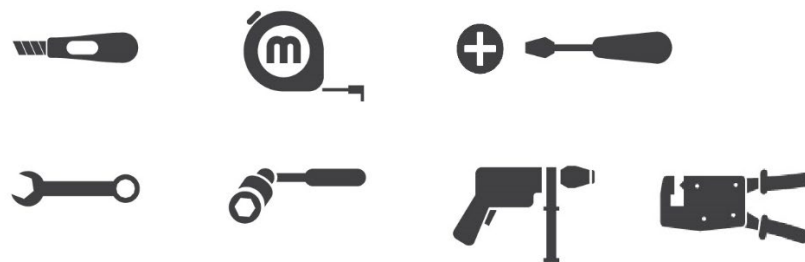
Housing is made of stainless steel. Diffuser is made of polycarbonate. Mounting tray is made of powder painted galvanized steel.

## 5. PRELIMINARIES

### CONDITIONS OF SAFETY RULES

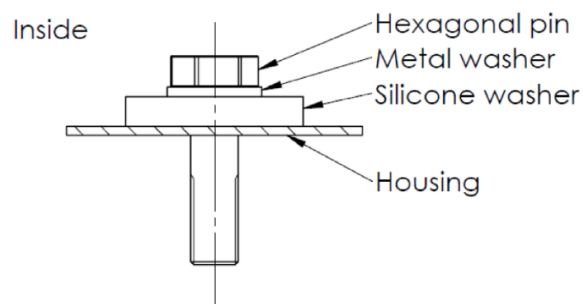
- Carefully read all the information included in the manual before mounting the light fitting
- General safety must be applied.
- Failure to comply with rules of the installation and use can lead to personal injury or property losses.
- Failure to comply with rules included in manual will void warranty.

### NECESSARY TOOLS



## 6. LIGHT FITTING MOUNTING

The light fitting is designed for mounting on a ceiling. 4 silicone washers and 4 metal washers are included. They should be used to installation, as in the figure below. Bolts are not supplied. The fitting should be mounted with bolts with a minimum Ø8mm diameter. Silicone and metal washers should be installed on unthreaded surface.

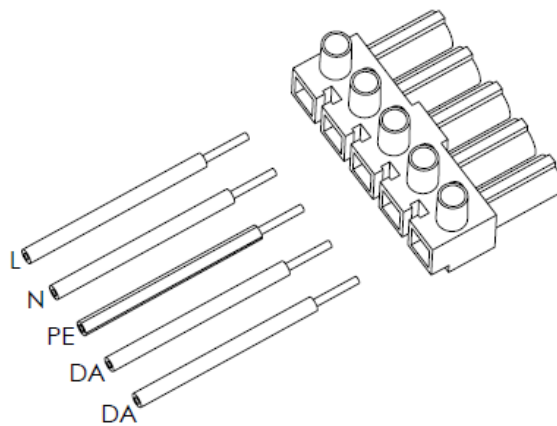


## 7. ELECTRICAL CONNECTION

To connect power supply:

- Bring the power cable into the product through the cable gland.
- Carefully strip the cable cores (8-10mm), and fix to the connector according to marking inside the light fitting,
- tighten the power cable in the strain relief and then connect plug and socket;
- check the effectiveness of grounding (only in case of light fittings made in I protection class).

Power connection:



Remarks:

- It is necessary to carefully make a hole in cable gland. The diameter of the hole needs to provide a tight fit of the gland with power cable.
- Use one wrench to tighten the sealing nut, while using the second wrench to block gland body against rotation, otherwise damage of the sealing can be caused and therefore sealing level will be decreased.

## 8. CONDITIONS OF SAFETY USE

- Light fittings are designed for fixed installations only.
- Using light fitting outside the designated operating temperature range will decrease the lifetime of light fitting and/or damage it.
- Admission cables must have 3-wires (power only), or 5-wires (DALI) and diameter 6-12mm.
- Use power wires with cross section 0.5-1.8mm<sup>2</sup>.
- Maximum cross current I=16A.
- The diffuser is made of polycarbonate, so it mustn't be exposed to chemical substances which may destroy it, especially: oil, acetone, chloride, ethyl, ether.



- Do not stare into working light source.



- Risk of electrical shock.

## 9. LIGHT FITTING MAINTENANCE AND SERVICING

**REMARK:** during the servicing and maintenance touching of LED are prohibited, because it will decrease the lifetime of light fitting and cause the loss of manufacturer's warranty.

**CLEANING:** do not allow for dust (dirt) deposition on the light fitting. Cleaning must be proceeded without use of chemical. Cleaning must be proceeded with use of compressed air and soft cleaning cloth or soft brush. If necessary use water and/or neutral detergent, however without any chemicals, which can damage any part of the light fitting.

## 10. PARTS EXCHANGE

All of parts considered as spare parts must be ordered from manufacturer.

## 11. REPAIRING

All repairs to be made by manufacturer only.

## 12. TRANSPORT AND CONDITIONS OF STORAGE

During transportation light fittings shouldn't be exposed to moisture or mechanical shock.

Light fittings should be stored only in sheltered warehouses, within +5°C to +35°C temperature range, and relative humidity lower than 75%. No corrosion causing vapors or gases should be present.

## 13. DISPOSAL OF WASTE EQUIPMENT

User must obey relevant rules and regulations about disposal of wasted equipment valid in their country.

## 14. WARRANTY

- Do not use damaged or malfunctioning light fitting.
- Disconnect power supply from the light fitting before any maintenance work.

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Due to continuous product development the details within this document are subject to change at any time, please contact us for the most up-to-date information or visit: [www.dwwindsor.com](http://www.dwwindsor.com)

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