

# LUMINO

## V36S OPTIC IP50

### INSTALLATION MANUAL

IMV36S\_OPTIC\_IP50\_R2202

### TECHNICAL SUPPORT

+44(0) 1279 635 411  
www.lumino.lighting

### LUMINO DISTRIBUTION LTD

Lumino House, Lovet Road  
Harlow, Essex CM19 5TB  
United Kingdom

Authorised EU Representative:  
LDL LIGHTING EUROPE LIMITED  
The Black Church, St Mary's Place  
Dublin, D07 P4AX  
Ireland

Installers must read this document and any other referenced documents in full before commencing installation work. Failure to observe all installation guidance in this document may result in unsafe installation, cause permanent product damage and void product warranty.

This document is subject to change without notice. Check for latest documentation with LUMINO. Copyright © LUMINO. E&OE



### HANDLING PRECAUTIONS

#### PLASTIC COVER / DIFFUSER

To avoid permanent damage, do not allow small or sharp objects to apply pressure on to the plastic cover / diffuser.

#### IMPACT PROTECTION

The product is not vandal resistant. Never stand or place weighted items on the product. This product has a maximum IK rating of IK08.

#### POWER CABLES

The product end caps, power cables and connectors must not be pulled or twisted. Never pull the product by its power cables or hang it from its power cables or connectors.

#### CUTTING AND SAWING

The product must not be sawn, drilled or otherwise modified in any way.

#### DAMAGES

Inspect the product. If you see any damage upon unpacking, report to LUMINO immediately and do not install the product.

#### LOCATION

**Use in dry locations only.** This product is unsuitable for wet and damp locations. **IP50 rated for dust protection.**

Protect product from dust, paint and harmful substances during installation and use. Ensure product is not exposed to VOC gases. Do not obstruct the product and its light output.

### SAFETY GUIDANCE

#### WIRING GUIDE

Follow the guidance shown in the provided wiring guide, including maximum cable lengths, cable sizes and other wiring instructions. When running cables through an enclosure, ensure cables are protected from damage, separated from mains voltage cables and anchored against being pulled. Make connections appropriate for the IP rating of the product.

#### QUALIFIED INSTALLER

Installation must be carried out by a qualified person and conducted in accordance with local regulations and applicable standards.

#### THERMAL MANAGEMENT

Ensure ambient temperature ( $T_a$ ) does not exceed  $40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ) and case temperature ( $T_c$ ) does not exceed  $70^{\circ}\text{C}$  ( $158^{\circ}\text{F}$ ). Exceeding maximum  $T_c$  will cause permanent damage and void the product warranty.

Allow sufficient clear air space for the LED drivers, as well as suitable access to the drivers as specified on installation instructions.

#### REPAIR AND REPLACEMENT

If the product is not functioning, contact LUMINO to register a Service Call for factory repair or replacement. Light source is not user replaceable. See page 5 for Ecodesign and end of life information.



### DRIVERS

#### POWER OFF

Product and driver must not be live wired. Switch off power before work begins. Follow instructions and guidance for the make and model of driver being used.

#### CONSTANT CURRENT DC

Ensure supply current does not exceed 350mA or 500mA (see product label). Drivers must be constant current type with both overload and short-circuit protection. Exceeding the stated voltage or current will cause permanent damage and void the product warranty.

#### DIMMERS

Check dimmer is compatible with the driver and certified to local regulations.

#### INRUSH CURRENT

Many LED drivers can have high inrush current at power-on. Driver inrush current can be many times the normal operating current. Use a suitable MCB. Type C MCBs are normally suitable but if inrush current is a persistent problem an inrush suppressor may be required.

#### PROTECTION

Use only with constant current Class 2 power unit to UL1310 standard with overload and short-circuit protection. Rate drivers for at least 10% above load. Driver protection circuitry must not be relied upon to protect secondary electrical circuits from damage caused by over-voltage or short circuit. DC fuses or DC electronic circuit breakers are recommended for full protection. Allow for access to drivers for maintenance and sufficient clear air space for ventilation.

#### CABLING

Do not overload the driver. Damage will be caused by incorrect input voltage, reverse polarity or short circuit. Plan for loads, driver locations, dimming and cabling prior to start of work. Ensure basic insulation is maintained between mains and dimming control wires.

## ACCESSORIES

### IDC Connector

VECA-CA90\_\_-R1

Sealant connector.

1 - 3A Max / 3 - 5A Max. Pair



### Easy Mount

V36S-MS402-R1

Mounting clips

1 pair per luminaire

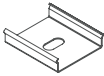


### Stealth Mount

V36S-MS501-R1

Hidden fixing clip

Allow 3 clips per metre



### Rotation Mount

V36S-MS601-R1

Rotation mount

Allow 2 clips per metre

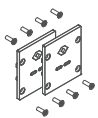


### End Cap Kit

V36S-M\_\_202-R1

Pair of end caps

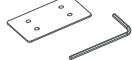
S - Silver / B - Black / W - White



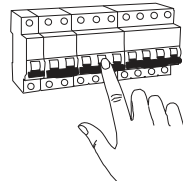
### IP50 Joining Kit

V36S-JA203-R1

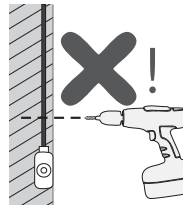
Linear joining kit



## CHECK FIRST!



TURN OFF POWER!  
COUPER LE COURANT!  
STROM ABSHALTEN!  
CORTE CORRIENTE!



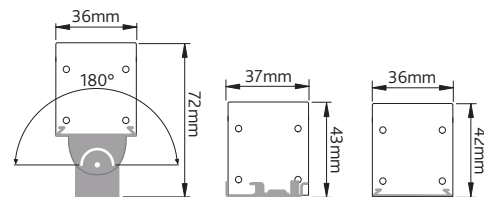
CHECK THE WALL!  
VÉRIFIER LE MUR!  
DIE WAND ÜBERPRÜFEN!  
COMPRUEBE LA PARED!

## INSTALLATION

### 1. Plan Installation

Check product and its dimensions against the planned installation. Runs of LEDs may have to be installed in a particular sequence.

305 / 600 / 900 / 1190mm length  
▲ ~1714g per metre



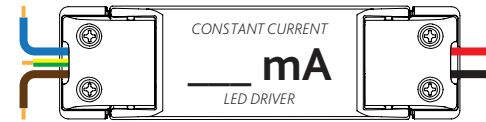
Rotation Mount

Easy Mount

Stealth Mount

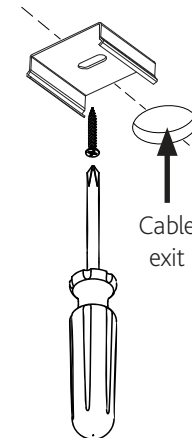
### 2. Prepare Power Supply

This product requires a 350mA or 500mA (see product label) constant current power supply. Please refer to the provided wiring guide document. Failure to follow guide may result in damage to the product and voiding of warranty.



### 3. Cable Exit

Plan cable entry and exit points before installing the product. Make a suitably sized hole for the cable/s to pass through, and position beneath where the product is planned to be placed.



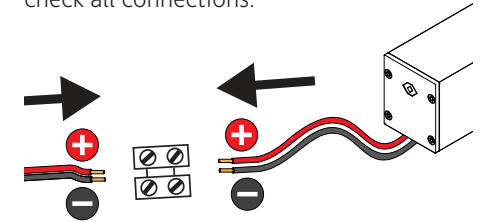
### 4. Mounting Clips

Fix all the clips securely to the mounting surface. Recommended screw size is no greater than Ø4.00mm in diameter. Use fixings suitable for the material being fixed into.

Products should be held with equally spaced clips (see accessories for quantity per metre). Products shorter than 505mm may be held by just 2 clips. There must always be a clip within 100mm to 200mm of each end of the product.

### 5. Connect to LED Driver

With the power off. Feed the power cables to the V36S, connecting the product to the LED driver. Finalise all electrical connections and test the circuit. If the product does not function as expected, turn power off immediately and check all connections.

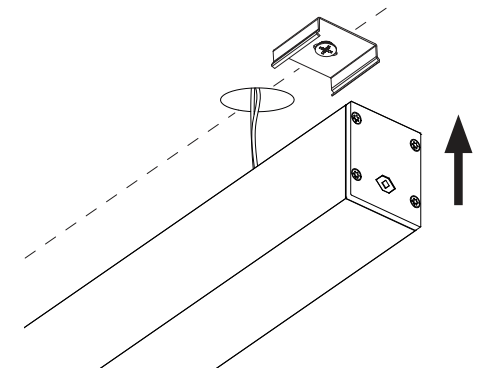


- Local regulations must be observed.
- Do not exceed current rating on product label.
- Do not hot-wire the luminaire.

Please refer to provided wiring guide document. Failure to follow the provided guide may result in damage to the product and voiding of warranty.

### 6. Mount Product

Align clips and carefully push the product into the clips. Ensure the product is fully clipped in place and check it is not misaligned or misplaced due to screw heads or wires. Ensure that cables are not pinched when installed.

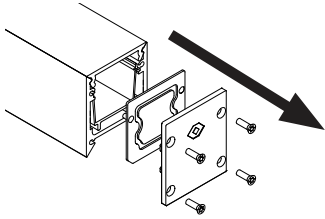


## ROTATION MOUNT INSTALLATION

V36S-MS601-R1

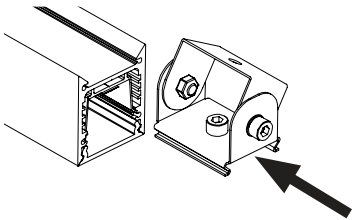
### 1. Remove End Cap and Gasket

To install the rotation mounts, remove the end cap and gasket from one end of the product, using a torx T8 screwdriver.



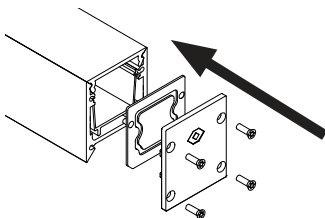
### 2. Install Mounts

Slide rotation mounts into the rear channel of the V36S. A minimum of 2 are required for products up to 1.4m in length, and 3 required for products longer than 1.4m.



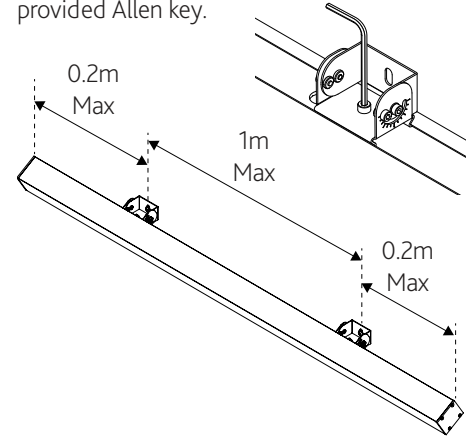
### 3. Reinstall End Cap and Gasket

Using a torx T8 screwdriver, reattach the end cap and gasket to the V36S profile. Hand tighten screw, do not over torque.



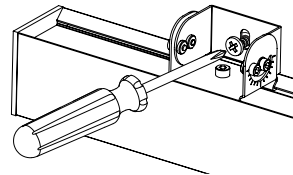
### 4. Tighten Mounts

Fix positions of the mounts against the V36S profile by spacing the mounts out as shown in the diagram, then tighten screws using the provided Allen key.



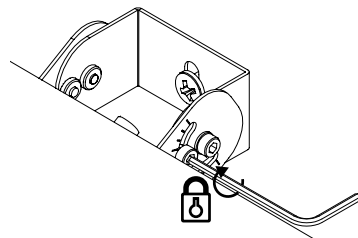
### 5. Mount the V36S

Fix the V36S to the mounting surface using a screw fixing appropriate for the mounting surface.



### 6. Adjust

Adjust the V36S to the desired position and lock of the angle of adjustment using the provided Allen key. Ensure that all adjustment screws are tightened.

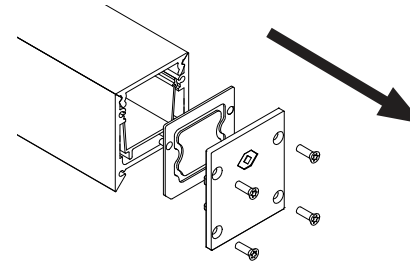


## JOINING KIT INSTALLATION

V36S-JA203-R1

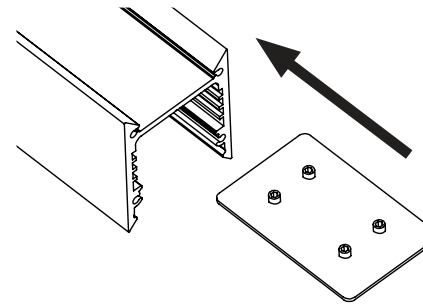
### 1. Remove End Cap and Gasket

To install the joining kit, prepare both joining products by removing an end cap and gasket from each product, using a torx T8 screwdriver.



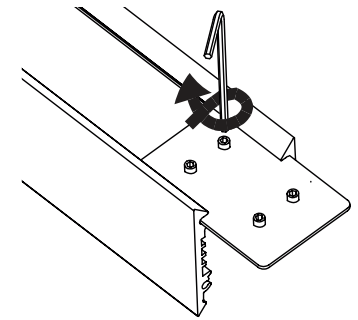
### 2. Install Joining Plate

Slide plate into the rear channel of the V36S.



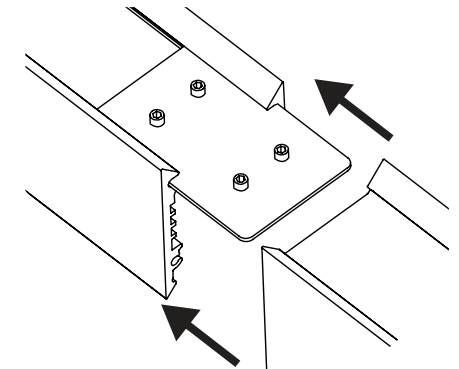
### 3. Tighten Screws

Fix position of the plate against the first V36S profile. Make sure that the joining plate will equally straddle both joining products.



### 4. Join Products

Slide the next V36S on to the joining plate and tighten grub screws.



### 5. Mount the Joined V36S

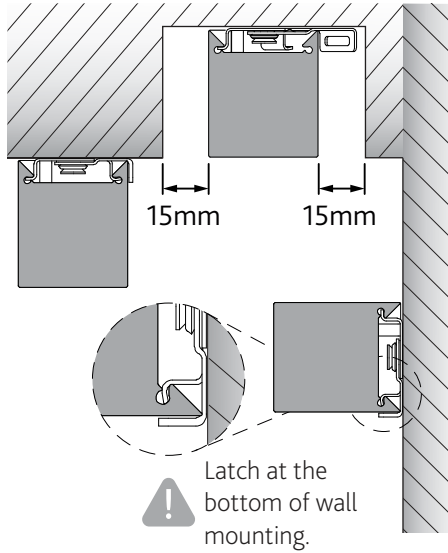
Carefully lift and mount the joined products to the chosen mounting accessories.

# EASY MOUNT INSTALLATION

V36S-MS402-R1

## 1. Plan Out Installation

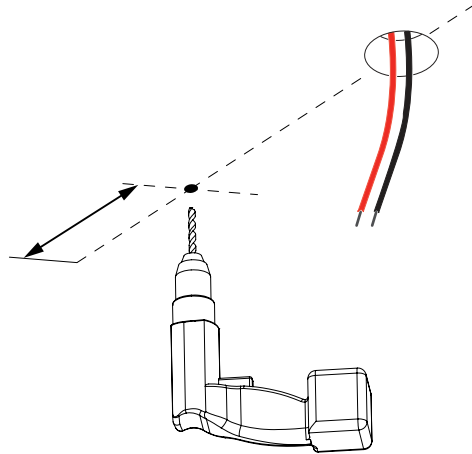
Easy mount fixing orientation should be installed as shown.



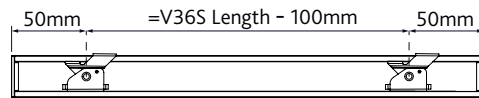
## 2. Measure and Drill Holes

Plan fixing hole positions, drill pilot holes and cable entry/exit holes as required.

Make a suitably sized hole for the cable/s to pass through, and position beneath where the product is planned to be placed.

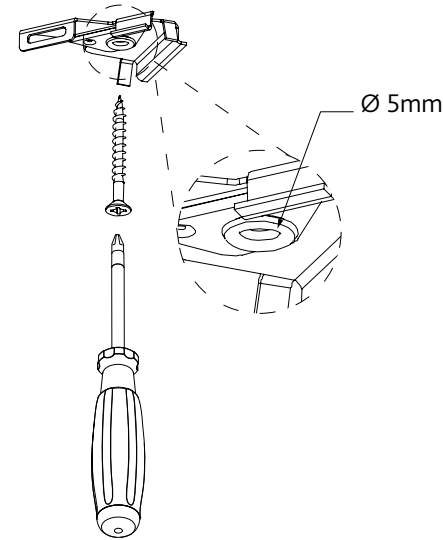


! Easy mounts spaced 50mm from each end of the luminaire.



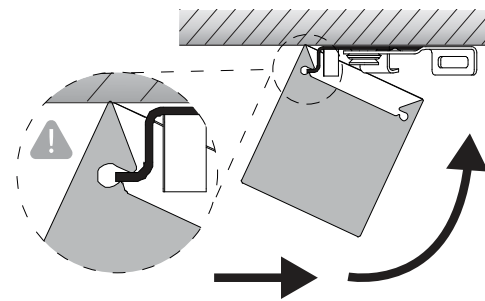
## 3. Fix to Mounting Surface

Fix the easy mount to the fixing surface using a screw fixing appropriate for the mounting surface. Use a screw no bigger than  $\text{Ø}5\text{mm}$ . Allow for easy mount to have some movement.



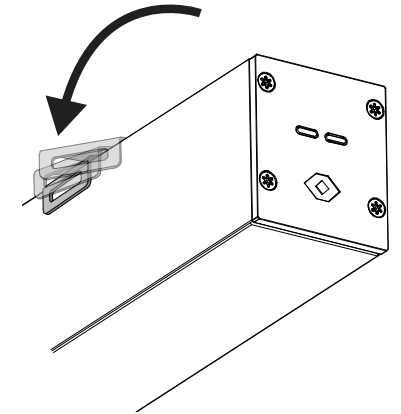
## 4. Install V36S

Fit V36S to the easy mounts, making sure not to pinch cables when installing.



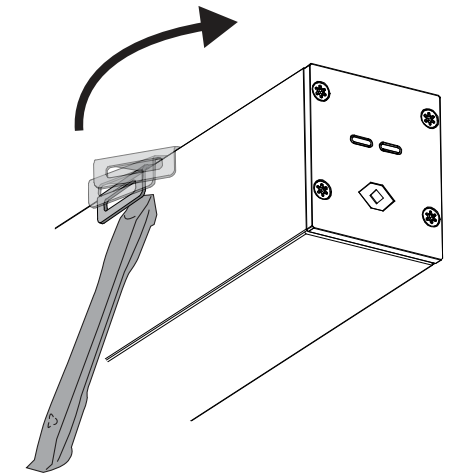
## 5. Close Latch

Secure V36S to the easy mounts by closing the latch. Check that mounting is secure.



## Removing V36S

To remove, use a plastic pry tool. Following steps 4 and 5 in reverse.



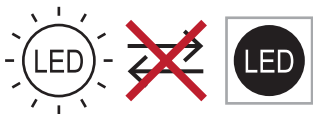
# LUMINO

## ECODESIGN REGULATION

This product is considered to be a “containing product” in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015.

The contained light source is an integrated part of the containing product. Its removal can only be done by causing permanent damage to the containing product. However, it is possible for the purposes of verification by market surveillance authorities.

Therefore, replacement of the light source with the use of commonly available tools is not justified due to its restricted mechanical, electrical, optical, thermal and/or environmental protection requirements.



## DISMANTLING

Dismantling of light source from the containing product at end of life:

The containing product shall be cut to the length of the contained light source and the light source mechanically detached from the containing product. Containing product component parts shall then be disassembled.

Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK.

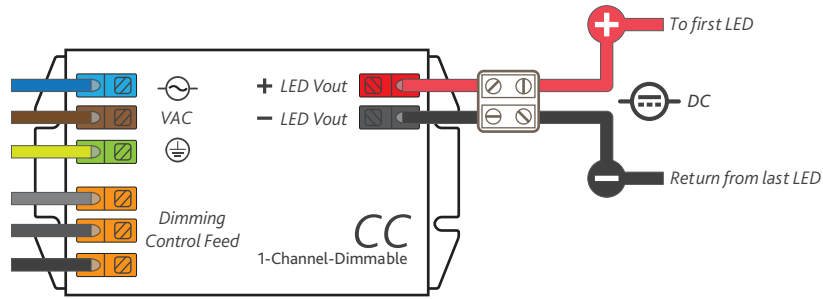
LUMINO is a member of the WEEE producer compliance scheme.  
Registration number: WEE/MM8138AA

## ENERGY RATING

This product contains light sources of energy efficiency classes as shown:

LED	CCT	EPREL	60W/m
ColorCORE OPTIC	4000K	1283502	E
	3000K	1283501	E
	2700K	1283500	E
	2200K	1283499	F

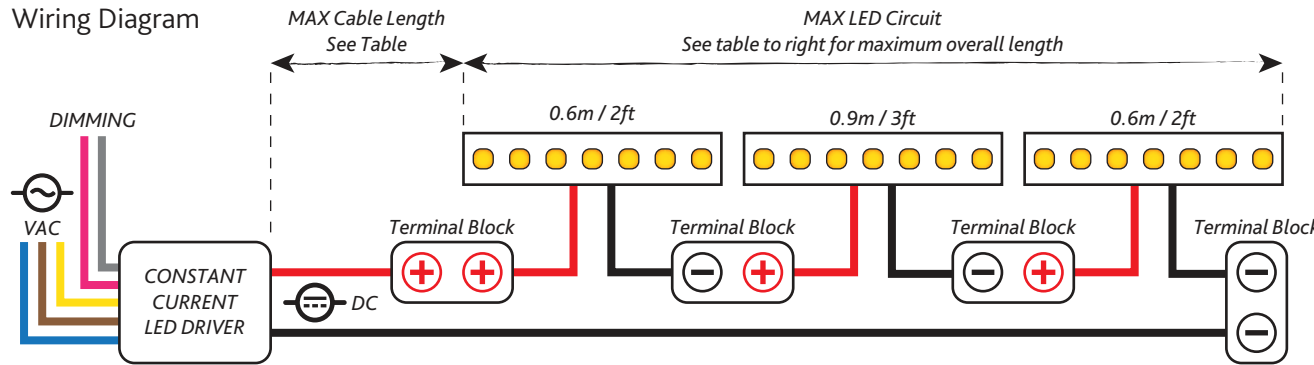
### LED Driver Wiring



LED LENGTH	VOLTAGE	WATTAGE	DRIVE CURRENT	MAX CABLE DISTANCE*					
				0.3mm <sup>2</sup> 22AWG	0.5mm <sup>2</sup> 20AWG	0.75mm <sup>2</sup> 18AWG	1.0mm <sup>2</sup> 17AWG	1.5mm <sup>2</sup> 16AWG	2.5mm <sup>2</sup> 14AWG
0.3m / 1ft to 2.1m / 7ft	36V	12.6W	350mA	16m	25m	40m	40m	40m	40m
0.3m / 1ft to 2.1m / 7ft	252V	88.2W	350mA	52ft	82ft	131ft	131ft	131ft	131ft
0.3m / 1ft to 2.1m / 7ft	36V	18W	500mA	11m	18m	29m	36m	40m	40m
0.3m / 1ft to 2.1m / 7ft	252V	126W	500mA	36ft	59ft	95ft	118ft	131ft	131ft

\*Observe maximum cable lengths - as shown above or as specified by the driver manufacturer, whichever is the shortest. Longer cable lengths increase EMI susceptibility.

### Wiring Diagram



LED LENGTH	VOLTAGE	MAX WATTAGE	
		350mA	500mA
0.3m / 1ft	36V	12.6W	18W
0.6m / 2ft	72V	25.2W	36W
0.9m / 3ft	108V	37.8W	54W
1.2m / 4ft	144V	50.4W	72W
1.5m / 5ft	180V	63W	90W
1.8m / 6ft	216V	75.6W	108W
2.1m / 7ft	252V	88.2W	126W

**!** Cable lengths are based on average resistance for typical copper cables. Cable characteristics may vary according to manufacturer, temperature, copper purity, connections etc.

For further help regarding installation visit [lumino.lighting](http://lumino.lighting)

Use appropriate **constant current** LED drivers (350mA or 500mA, see product specification) with overload and short-circuit protection. Use reputable driver manufacturers with appropriate standards for the local requirements.

**USA & Canada:** Use only with Class 2 power unit to UL1310 standard. Use only with maximum output 350mA or 500mA (see product specification) Class 2 power unit.

**!** Maximum cable lengths shown above are calculated for voltage drop and do not consider **EMI**. Long cables can potentially emit **EMI**. Do not exceed the maximum cable length stated by the driver manufacturer. Installers must ensure **EMI** emissions do not exceed local regulated limits.

Shielded cables and ferrite coils can be used where applicable.

Installers must ensure voltage drop does not exceed 2%.

Ensure LED driver is **disconnected from mains before making any connections**.

**Polarity is critical** and must be observed when making connections.

Constant current LED circuits **must be wired in series**. Parallel wiring will not correctly power the LEDs and can potentially cause damage.

Live loading or incorrect polarity connections of LEDs will cause damage and void the warranty.

Constant current LEDs can have high forward voltages at power-on. LED forward voltage can be significantly higher than the normal operating voltage of the circuit. Colder temperatures will also increase the forward voltage required to power up the LEDs.

Constant Current LED drivers can also have high inrush current at power-on. Driver inrush current can be many times the normal operating current. Use a suitable MCB. Type C MCBs are normally suitable but if inrush current is a persistent problem an inrush suppressor may be required.

- Installation must be carried out by qualified electrician.
- Electrical work to be conducted in accordance with local regulations.
- Power must be disconnected prior to installation work.
- Ensure free-moving air space around LEDs and drivers.
- Protect the LEDs from dust and paint during installation and use.
- Plan for loads, driver locations, cables sizes etc prior to installation.
- Shielded control pair required for dimming signal wires.
- Incorrect current/voltage, reverse polarity or short circuit will cause damage.