



# LED Lighting Information & Instructions

RIFCO

EST. 1975

# LED Lighting

## SECTION 1: *Information*

### Getting Started

LED lighting can really supplement your interior design but it can be challenging to understand.

Please ensure you read this document to better understand how to use and install LED lighting for your Rifco vanity, cabinet or mirror.



### WARNING!



**All electrical work should ONLY be carried out by a licensed electrician.**

### Key Terms

- **IP Rating**

A classifying system that rates the degree of protection provided by mechanical casings and electrical enclosures against intrusion, dust, accidental contact and water.

- **LED**

Stands for Light Emitting Diode, which are solid state lighting components. Each individual LED consists of a semiconductor diode which emits light when a voltage is applied.

- **Lumens**

A unit of luminous intensity which measures the total quantity of visible light emitted by a source per unit of time.

- **Transformer**

An electrical device that transfers electrical energy from one electrical circuit to another, reducing or increasing the voltage of an electrical circuit.

- **Voltage**

The pressure from an electrical circuit's power source that pushes charged electrons (the current) through a conducting loop, enabling them to illuminate.

- **Watts**

A power unit or radiation flux, corresponding to the rate of consumption of energy in an electrical circuit where the potential difference is one volt and the current one ampere.

# LED Lighting

## SECTION 1: *Information*

### Document Key



DIY (Do It Yourself) should not be utilised for this work. Licensed electrician **REQUIRED**.



Made to measure. This means it will fit your item straight from the box!



IP rating is made up of two numbers (e.g. IP44 or IP65). The first numerical value in the IP code indicates the level of a device's resistance to solids. This numerical value ranges from 0 to 6.



The second numerical value in the IP code indicates how resistant an electrical device is to liquids. It ranges from 0 to 9, with a rating 0 meaning no protection.

If an electrical product has an IP44 rating, it means it is protected against most solid objects and can easily withstand water splashes or light rain.



Electrical hazard, risk of shock and potential for serious injury or death if appropriate precautions are not adhered to.

**SHOULD ONLY BE CARRIED OUT BY A LICENCED ELECTRICIAN.**

# LED Lighting

## SECTION 1: *Information*

### Understanding Colour Temperature

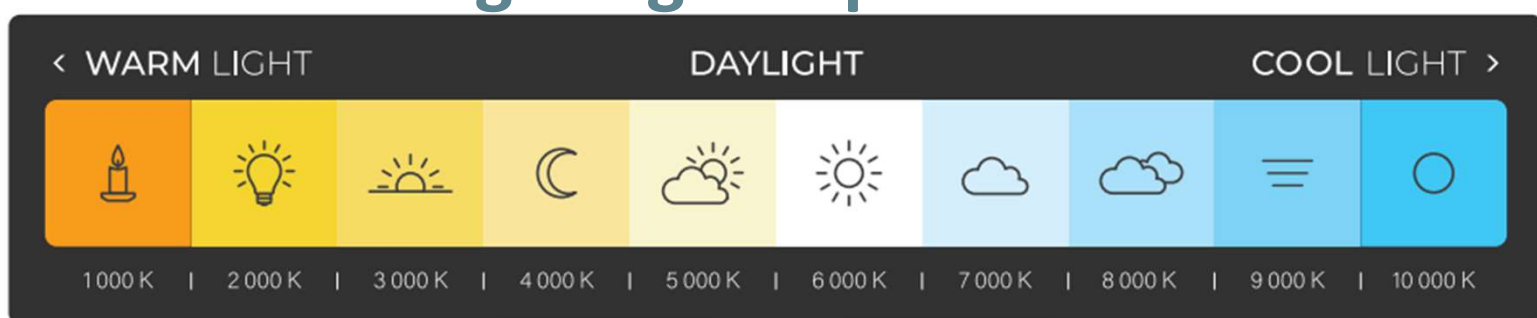
When selecting LED lighting for your vanity, cabinet or mirror you will be given the choice of Warm or Cool lighting. But what does that actually mean?

The Kelvin degree system designates a rating to the colour temperature of the light, corresponding to this spectrum. The higher the Kelvin, the cooler the colour temperature.

While whiter lights may seem brighter, the number of lumens doesn't actually change, and the true brightness is not affected by the change in colour temperature.

Traditionally, most homes were lit by incandescent bulbs with a warm white tone and while these bulbs were most common, it doesn't necessarily mean that they are the best option for every space. The colour temperature of your lighting can make a big difference to your paint and even the overall look and feel of your space.

### Lighting Temperature



# LED Lighting

## SECTION 2: Options

### LED Strip Lighting



- **Available In:** Warm or Cool
- **Fitting:** Surface Mounted or Rebated (see page 7)

#### Technical Data

Colour Temperature (Kelvin)	Cool	5000K
	Warm	2700K
Nominal Voltage	12V	
Wattage/m	4.8	
Dimmable	Yes	
Material	Silicone	
Colour	White	
Silicone Tube Width	10mm	
Silicone Tube Length	4.8mm	
Strip Width	8mm	
Section Length	50mm	
Contact Surface Length	4mm	
Energy Efficiency Class	A+	
Degree of Protection	IP44	
Manufacturer	HÄFELE	
Warranty Period	3 Years*	

\* Terms & Conditions apply. Please visit [https://www.hafele.com.au/hap-live/static/WFS/Hafele-HAA-Site/-/HafeleHAA/en\\_AU/opentext/assets/haa/LooxWarranty.pdf](https://www.hafele.com.au/hap-live/static/WFS/Hafele-HAA-Site/-/HafeleHAA/en_AU/opentext/assets/haa/LooxWarranty.pdf) for further details.

# LED Lighting

## SECTION 2: Options

### LED Internal Lighting



- **Available In:** Warm or Cool
- **Fitting:** For Mounting in drilled hole and for clamp fixing

#### Technical Data

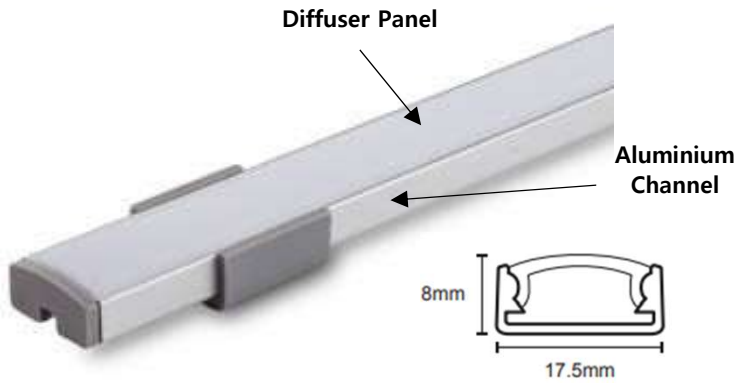
Colour Temperature (Kelvin)	Cool	5000K
	Warm	3000K
Nominal Voltage	12V	
Wattage/m	2.5W	
Drill Hole Ø	58mm	
Dimmable	Yes	
Housing Material	Aluminium	
Diffuser Material	Plastic	
Design	Plastic Panel	
Energy Efficiency Class	A	
Degree of Protection	IP20	
Cable Length	2000mm	
Manufacturer	HÄFELE	
Warranty Period	3 Years*	

\* Terms & Conditions apply. Please visit [https://www.hafele.com.au/hap-live/static/WFS/Haefele-HAA-Site/-/HaefeleHAA/en\\_AU/opentext/assets/haa/LooxWarranty.pdf](https://www.hafele.com.au/hap-live/static/WFS/Haefele-HAA-Site/-/HaefeleHAA/en_AU/opentext/assets/haa/LooxWarranty.pdf) for further details.

# LED Lighting

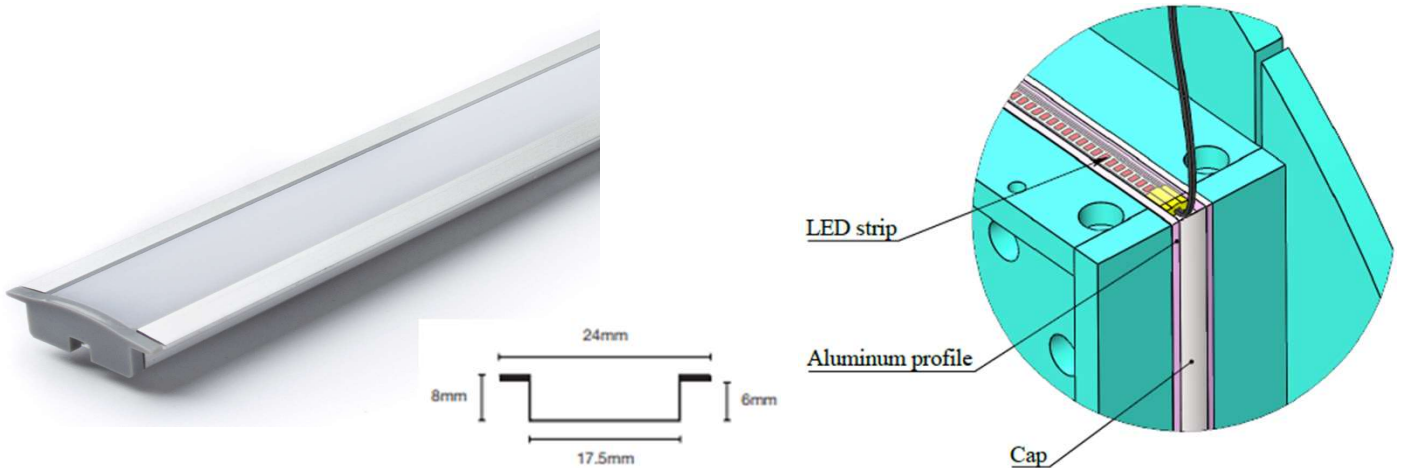
## SECTION 3: Fitting Options

### LED Strip Lighting: Surface Mounted



Aluminium profile that can be glued, screwed or clipped on using the mounting clips supplied to the sides, bottom or top of your shaving cabinet or underneath your vanity.

### LED Strip Lighting: Rebated



Aluminium Slim Profile that is recessed into shaving cabinet and held in place by silicone. This process is done in the factory.

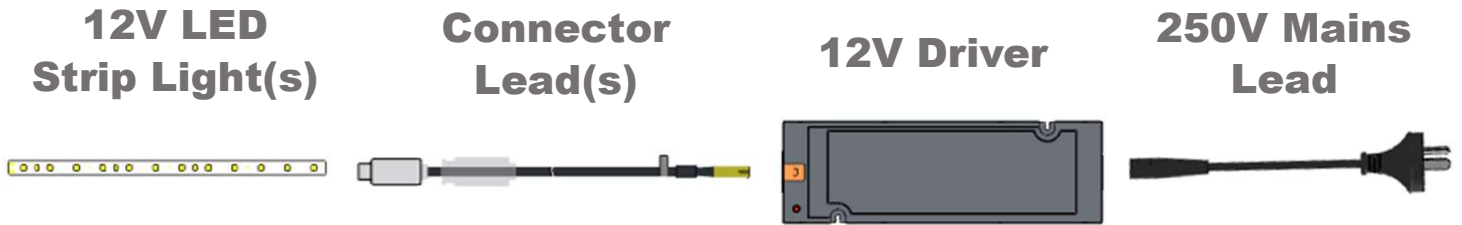
**NOTE: This option is not available on vanities or Fully Recessed and Semi-Recessed shaving cabinets.**





### What's Included?

#### LED Strip Lighting



### Installation

#### Surface Mounted Option

##### *Wall Mounted or Semi-Recessed Cabinets*

1. Un-clip the mounting brackets from the aluminium channel and set channel aside for now.
2. Using the mounting clips and screws provided, position the clips at appropriate distances along the edge of the vanity or cabinet (e.g. far left, middle & far right) and mark their location. ***For cabinets with lighting that is on all four sides, disregard the mounting clips and instead attach the channel directly to the cabinet using silicone and/or glue. This is to ensure the channel butts up against the side of the product avoiding gaps.***
3. Pre-drill holes as per markings determined above.
4. Using the 5mm counter sunk screws (provided) attach the mounting clips.
5. Click the aluminium channel into place with the mounting clips now attached to the vanity or cabinet.
6. Now remove the clear diffuser from the aluminium channel.
7. Peel off the 3M double sided tape backing found on the back of the strip lighting and position in channel ensuring that the tape adheres to the channel. ***(NOTE: ensure the end of the strip light that connects to the connector lead is positioned in the correct direction for the use case before affixing to channel).***
8. Re-attach the diffuser panel by clicking it back into place on the channel.





### Installation Continued..

#### Rebated Option

##### *Wall Mounted Cabinets Only*

Aluminium channel is attached straight from the box so no installation of channel is required. However, the LED strip light will still need to be attached.

1. Remove the clear diffuser from the aluminium channel.
2. Peel off the 3M double sided tape backing found on the back of the strip lighting and position in channel ensuring that the tape adheres to the channel. **(NOTE: ensure the end of the strip light that connects to the connector lead is positioned in the correct direction for the use case before affixing to channel).**
3. Re-attach the diffuser panel by clicking it back into place on the channel.

**NOTE: Installation and concealment of components (e.g. driver) is the responsibility and at the discretion of, the licensed electrician installing the product(s).**

### Strip Lighting FAQ's

**Question:** What lighting colour can I choose with each option (Surface Mounted or Rebated)?

**Answer:** You can choose either Cool or Warm LED lights for either option at no additional cost.

**Question:** Is there any price difference to choose rebated or surface mounted?

**Answer:** No! There is no price difference no matter which option you choose.

**Question:** I want to have a fully-recessed shaving cabinet, can I have rebated lighting?

**Answer:** Unfortunately, due to positioning of structural components it is not possible to have rebated lighting on your shaving cabinet.

**Question:** Can I have rebated lighting added to an already made shaving cabinet?

**Answer:** As the rebate for the aluminium channel is done in the initial stages of production it is not possible to add a rebated channel after the fact. You can instead go for the surface mounted option.



### What's Included?

#### LED Internal Down Lighting

**INFORMATION MISSING –  
YET TO BE ADDED**

### Installation

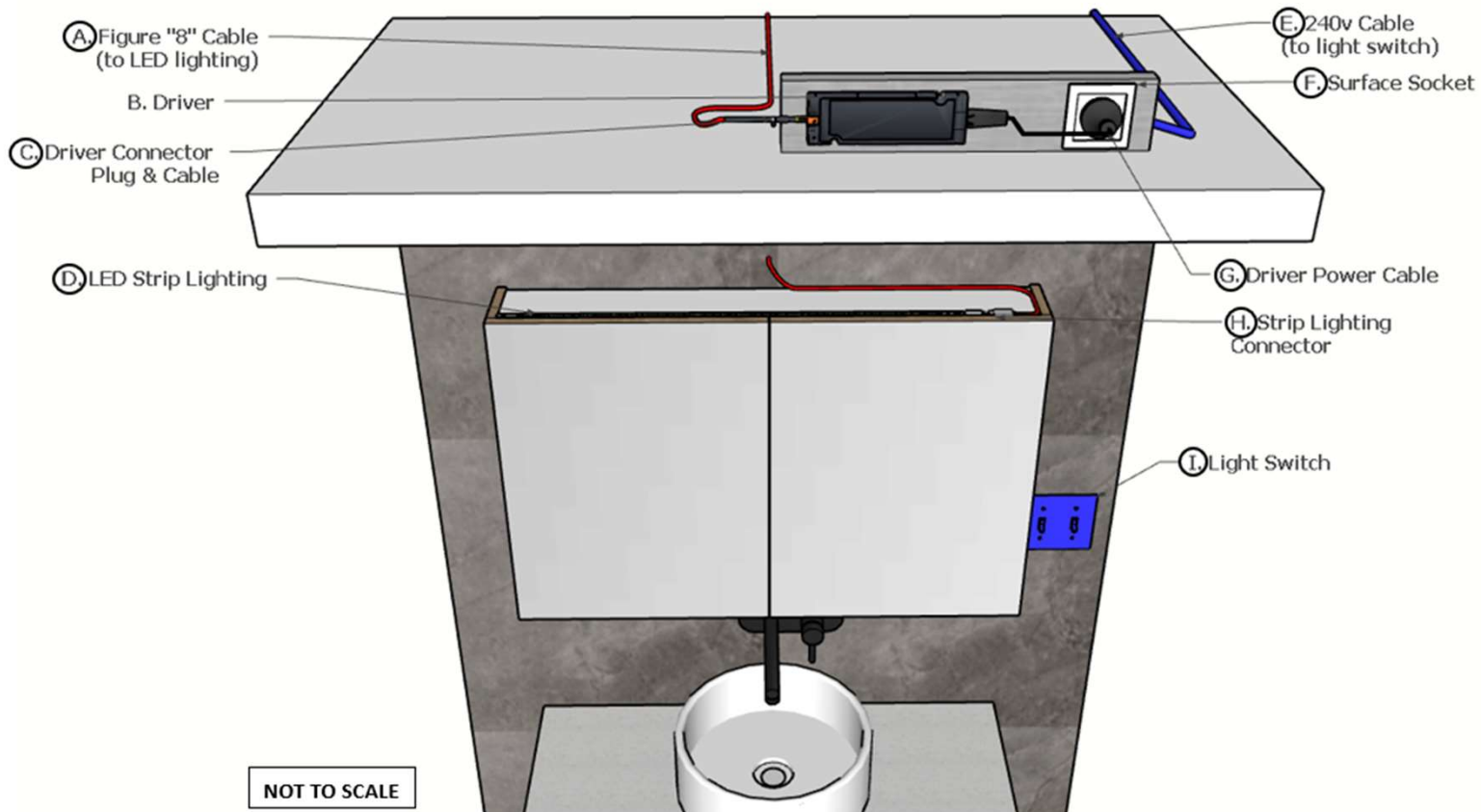
1. Un-box the housing and downlight.
2. Mark out the position of where the downlight is to be positioned and drill hole in cabinet (Ø 58mm) for downlight wirings.
3. Position the housing centrally over hole made in previous step and screw the housing to the cabinet using the screw provided.
4. Fed the lighting cable through the hole and click the light into the housing.
5. Connect the lighting cable to the driver (see next section for suggested layout).



NO DIY

### Recommended Wiring Layout

Please read below for recommended layout and configuration of all components. Preparations should be made prior to the vanity or cabinet arriving. All parts should be placed in a serviceable area (e.g. roof).



- A. Figure "8" Cable (LOW VOLTAGE) to LED Lighting (not supplied)
- B. Driver Pack
- C. Driver Connector Plug & Cable
- D. LED Strip Lighting (and/or LED Internal Lighting)
- E. 240v Cable (HIGH VOLTAGE) to Lighting Switch (not supplied)
- F. Surface Socket (not supplied)
- G. Driver Power Cable
- H. Strip Lighting Connector
- I. Light Switch (not supplied)



### Pre-Installation of Vanity or Cabinet

Prior to installation of your new Rifco vanity or cabinet. It is important that some preparations are made particularly before “rough in” is completed. The below items should be sourced and installed prior to arrival of Rifco product.

- **Figure 8 Cables:** to connect the driver and LED lighting. This will usually need to be done before tiling can be completed. (not supplied)
- **Surface Socket (or similar):** to allow for the driver to be plugged in and powered. (not supplied).
- **240v Cable:** to lighting switch, motion sensor, or other switch to allow the lighting to be turned on. (not supplied).

We recommend ensuring that all items relating to the LED lighting are placed in a serviceable area should you need to access them in the future for replacement or repairs. Positioning and general connectivity should be discussed with the home/business owner and a licensed electrician prior to ordering.

### Strip Lighting FAQ's

**Question: Can I connect strip lighting and internal lighting using the same driver?**

Answer: Yes you can! If ordered together you will be supplied with an adaptor for the driver allowing multiple connections. \*Please note that if on the same driver, the lights will **NOT** be controller independently of each other.

**Question: How do I connect the figure 8 cable to the driver cable?**

Answer: The driver/led lighting cable (not AC power cable) should be cut, where appropriate, and then the figure 8 cable should be spliced to the two cut ends allowing for an extensions of the existing cable. (See Below).



# RIFCO

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