

# Market leading fire-rated LED downlights

- New FGLED3® upgrade
- Crystal clear engineered lenses
- Highest specification construction
- Patented design for maximum fire safety

# Advanced **LED** lighting

10YR EXTENDED WARRANTY



We believe that a manufacturers' of quality.

This is why we have always provided FGLED® products with an industry leading ten year domestic and five year commercial extended warranty.

All of our products are independently tested to ensure that they perform to the highest standards.

To register your warranty, simply go to: jcc.co.uk/warranty

#### Service & support

If you have any questions about the FGLED® range please contact a member of our team.

**Customer services** 01243 **838999** 

Technical support 01243 838986

Email



Download JCC's free cost saving app to see how much you could save by using our commercial downlights.









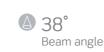


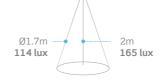
## The cost effective fire-rated LED downlight

380 lumens |

Cool white (4000K) Warm white (3000K)

- **NEW** increased light output
- **NEW** dimmable as standard
- NEW 90mm depth, ideal for shallow ceiling voids
- **NEW** press fit termination
- Up to 88% saving against halogen









## The market leading fire-rated LED downlight

⊕ 500 lumens | 450 lumens

Cool white (4000K) Warm white (3000K)

- Ideal retrofit halogen replacement
- Six LED array provides clear crisp light
- Designed for standard ceiling heights
- Tilt version available
- Dimmable option



# FGLED10



## The **high output** fire-rated LED downlight

9 850 lumens | 750 lumens

Cool white (4000K) Warm white (3000K)

- Achieve the same light level using 50% less fittings
- Fewer fittings reduces installation costs
- Provides cleaner, less cluttered ceilings
- Ideal for new builds and renovations
- Dimmable as standard





What makes FGLED® the UK's favourite LED downlight?



# Safety first

#### **Enclosed steel can design**

JCC's enclosed steel can design stops flames from entering the ceiling void, forming a complete barrier in the event of a fire.

In addition, the steel can protects the heat sink from flammable dust, ensuring maximum fire safety.



Air vent dissipates heat during normal operation.

#### Patented intumescent seals

FGLED® downlights use a patented intumescent material which expands in the event of a fire. The intumescent seal combines with the can to seal the gap in the plasterboard ceiling and prevent any flames rising past the fitting.

Unlike many fire-rated LED downlights, FGLED® provides dual protection both around the bezel and around the air vent at the top of the fire proof steel can.



Intumescent material expands and seals in event of fire.

#### Fully fire-rated

FGLED® products are rigorously fire tested to provide fire safety that you can trust.



600mm joist centres Single layer 12.5mm plasterboard



600mm joist centres Double layer 15.0mm plasterboard



450mm joist centres Double layer 15.0mm plasterboard

Complies with Part L, B, C and E of the latest building regulations.

# Designed for simple installation



Integrated driver

The FGLED® enclosed steel can design allows the direct mounting of the driver to the fixture.



Fixed die-cast aluminium bezel

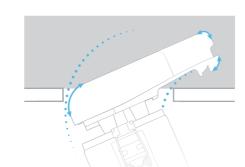
No need for separate bezels, saving valuable time during installation.



Adjustable steel clips

Pre-connected high strength steel clips designed to accommodate different thickness of ceilings.

# Easy ceiling entry



#### Rounded driver housing

Round edges provide easy entry through the ceiling cut out.



# Ultra fast push fit termination\*



Wider access for wiring

Clear access is provided to the terminal block for easy wiring.



#### Large terminal buttons

FGLED® provides larger terminal buttons and wire entry points.



#### Solid and stranded cable

FGLED® accommodates both solid and stranded cable.

Tel: 01243 838999 Email: sales@jcc.co.uk \*FGLED3® uses press fit terminal

# Cutting edge LED technology

Up to 88% energy saving against halogen



FGLED10® Chip-on-board configuration



FGLED6® Six LED configuration



FGLED3® Three LED configuration

## Crystal clear engineered lenses

FGLED® products are designed with the highest LED specification that focusses through specially developed composite lenses. This helps to reduce glare and creates the crystal clear sparkling light that has become synonymous with the FGLED® brand.

The face of FGLED® lenses use a honeycomb structure to diffuse the light and ensure smooth and even light distribution.

## Designed as a family

All FGLED® products have common design features to provide a consistent style throughout applications. Products are available with matching colour temperatures and finishes.

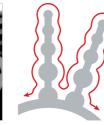
## Intelligent thermal management

The reliability of FGLED® owes a great deal to its ability to efficiently dissipate heat away from the LED chips.

#### Efficient heat transfer

- The LED chips generate heat which needs to be quickly dissipated.
- Metal mounting plate transmits heat away from the LED.
- Conductive thermal paste ensures total transfer of heat from the LED mounting board to the advanced heat sink.
- Contoured heat sink fins provide a larger surface area to dissipate heat.









Advanced heat sink



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Unique fixed driver design, allows you to lay insulation directly over the back of the fitting.

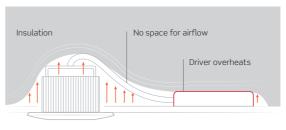
FGLED's unique design allows for the driver to be securely fixed on top of the enclosed steel can that surrounds the heat sink. The driver is positioned to give clear space between the vent above the heat sink and the base of the driver. Heat is dissipated effectively whilst shielding the opening from dust.

The fixed driver ensures that when the fitting is placed into a ceiling which contains insulation a clear space is created around the fitting\*. This controlled environment allows air to flow freely, maintaining the correct operating temperature.

\*Ceiling insulation can be laid over the top of the fitting but it is important that it is not packed around.

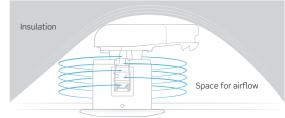
# Can lay insulation directly over the fitting

#### Competitor with separate driver



Fire-rated downlights with separate drivers do not create adequate space for airflow and risk reliability due to overheating.

#### **FGLED®** fitting



The FGLED® larger air pocket guarantees that the temperature of the driver remains at the correct operating level.

- No need to cut holes in mineral wool insulation
- No need for firehoods or fire cages
- No need for insulation accessories



# The **high output** fire-rated LED downlight

Achieve the same light level using 50% less fittings

- Fewer fittings reduces installation costs
- Provides cleaner, less cluttered ceilings
- Ideal for new builds and renovations

- 850 lumens
  Cool white (4000K)
- 750 lumens Warm white (3000K)
- 10W LED 12.4W total wattage
- 69 LpcW
  Lumens per circuit watt
- IP IP65
  For bathrooms
- 60°
- Beam angle
- Dimmable Emergency
  As standard Version available





#### Cutout sizes Ø71-73mm – 12.5m

Ø71-73mm – 12.5mm thick 30 minute ceiling types

Ø80mm – 30mm thick 60-90 minute ceiling types

Colour temperature Total wattage IP rating Beam angle Lumens LpcW 850 12.4W 69 IP65 60° Cool white Warm white 750 12.4W 60 IP65 60°

FGLED10® options





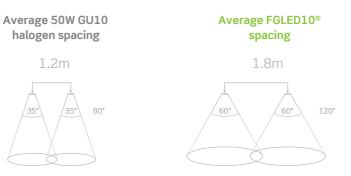


# Fills the room with light. **Not lights.**

# Genius.

Sometimes it can be the simplest innovations that provide the greatest benefits. FGLED10® delivers 850 lumens spread across a wide 60° beam angle.

This means that you can achieve the same light level as 50W GU10 halogen with 50% fewer fittings. Simple.



## Cleaner, less cluttered ceilings

Why use more fittings than needed? FGLED10® resolves the issue of unnecessary downlights and provides clean, contemporary ceilings.



#### Reduced installation time and costs

Fewer fittings means reduced installation time coupled with lower material costs.  $FGLED10^{\circ}$  incorporates our latest driver design to ensure ultra fast and efficient wiring.

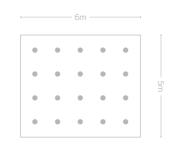


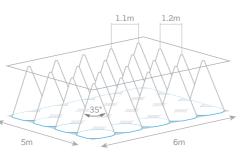


# 50W GU10 halogen

#### Lamp replacements

During the life of FGLED10® you would typically have to replace each halogen lamp more than 30 times. This is based on an average halogen lamp life of 2000 hours.





# **9** fittings

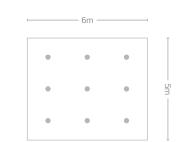
# FGLED10®

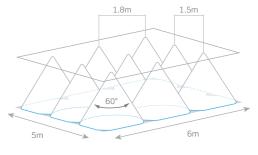
Cost saving **£279.70**pa

Tel: 01243 838999 Email: sales@jcc.co.uk

CO<sub>2</sub> reduction 722kgCO<sub>2</sub>e

6m x 5m living room using FGLED10®





**220** Lux\* (average)

\*Measured at 1.65m from fitting. Based on a standard 2.4m ceiling.



## The market leading fire-rated LED downlight

#### Ideal retrofit halogen replacement

- 88% energy saving against 50W halogen
- Six LED array provides clear crisp light
- Designed for standard ceiling heights

500 lumens

6W LED

- 450 lumens Warm white (3000K)

70 LpcW Lumens per circuit watt

- **IP65**
- Beam angle
- Dimmable
- Emergency Version available

# **▼** JC**94475CH**



#### **Cutout sizes**

Ø71-73mm – 12.5mm thick 30 minute ceiling types

Ø76mm-80mm - 30mm thick 60-90 minute ceiling types

Colour temperature Cool white Warm white

12

Lumens 500 7.2W 450 7.2W

Total wattage

LpcW 70 63

IP rating IP65 IP65

Beam angle

38° 38° FGLED6® options













# FGLED6 TILT

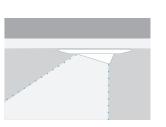
## All the features of FGLED6® with unique tilt and rotate

Ideal for sloped ceilings and directing light

- 20° tiltable and 360° rotatable lens
- Dimmable as standard
- Outperforms 50W GU10 halogen
- Brushed nickel, white and chrome bezel options available



Use on sloped ceilings to provide vertical downlight.



Use on horizontal ceilings to direct light and wall wash.



**IP20** 





**Cutout sizes** Ø71-73mm – 12.5mm thick 30 minute ceiling types

Ø80mm - 30mm thick 60-90 minute ceiling types



Competitor product without an enclosed can





FGLED6® Tilt with an

enclosed steel can



#### Enclosed steel can, essential for fire protection

Tilting the lens in a standard LED fitting can create a gap that, in the event of a fire, will allow flames to penetrate into the ceiling void.

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4.4m x 4.6m kitchen using FGLED6®

# FGLED6® provides 88% energy saving against halogen

# **50W GU10 halogen** / 12 fittings

Total wattage

CO₂ emission

#### Lamp replacements

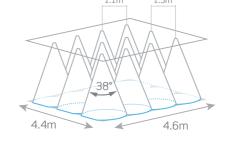
During the life of FGLED6® you would typically have to replace each halogen lamp more than 30 times. This is based on an average halogen lamp life of 2000 hours.

# FGLED6® / 12 fittings

Total wattage 86.4watts CO<sub>2</sub> emission 70kgCO<sub>2</sub>e



CO<sub>2</sub> reduction 418kgCO<sub>2</sub>e



199 Lux\* (average)

\*Measured at 1.65m from fitting. Based on a standard 2.4m ceiling.



# The **cost effective** fire-rated LED downlight

#### Ultra low energy usage

- **NEW** increased light output
- **NEW** dimmable as standard
- NEW 90mm depth, ideal for shallow ceiling voids
- **NEW** press fit termination
- Up to 88% saving against halogen





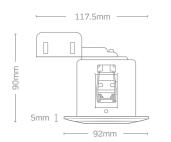












#### Cutout sizes

Ø72-74mm - 12.5mm thick 30 minute ceiling types

Ø79-81mm – 30mm thick 60-90 minute ceiling types

Colour temperature	Lumens	Total wattage
Cool white	380	4.8W
Warm white	320	4.8W

# Total wattage LpcW IP rating Beam angle 4.8W 79 IP65 38° 4.8W 66 IP65 38°

#### FGLED3® options









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# Reliability & trust

#### Designed, developed and tested as a single integrated unit

FGLED® products are an integrated lighting solution. This means that the LED has been specifically designed to operate within the fixture. Replacement LED lamps are not designed to operate within enclosed steel cans. This can result in excessive heat build up which will reduce the life expectancy and reliability of the lamp.

#### Replacement LED lamps

#### Compromise reliability and looks

- Typical 2 year warranty
- Not designed to operate within a can
- Heat build up reduces LED life
- Average lamp life of just 15,000 hours

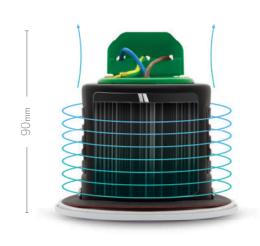
#### **♥** FGLED3®

#### **Guaranteed quality**

- 10 year warranty for entire fitting
- Guaranteed performance & fire safety
- Unique design ensures adequate airflow
- Outstanding 50,000 hour lifetime



Lamp-in-can / 90°C



FGLED3® / 40°C

## New upgraded features



Increased lumens

FGLED3® now delivers up to 380 lumens, whilst maintaining it's outstanding 88% energy saving.



Dimmable as standard

FGLED3® now comes dimmable as standard. An approved dimmer list can be found at <a href="jcc.co.uk">jcc.co.uk</a>.



Fast press fit terminal

The new loop-in/loop-out press fit terminal dramatically increases the speed of installation.

> See how FGLED3® compares to lamp-in-can online: jcc.co.uk/FGLED3

# FGLED \* ANTI-GLARE

## The quality of FGLED® with discreet light source

Creates a strong, clean beam of light

- Recessed LED module
- Ideal for corridors, bars, restaurants and retail
- Black baffle to reduce glare



272 lumens Warm white (3000K)



6W LED 7.2W total wattage



**IP65** For bathrooms



Beam angle



Dimmable



Emergency



#### √ JC94507 / JC94515



Colour temperature

272

Warm white

18

**Cutout sizes** 

Ø72-74mm - 12.5mm thick 30 minute ceiling types

Ø79-81mm – 30mm thick

7.2W max





IP65

60-90 minute ceiling types

Total wattage

38

25°

Beam angle

# FGLED® Anti-glare







√ JC94515WH



√ JC94180BN



√ JC94180WH



**IP65** For bathrooms

IP20

# Converter plate

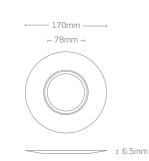
Allows the retrofit of a standard FGLED® units where larger downlights were previously installed

• Part B compliant (fire rated)

ACCESSORIES

- Suitable for all ceiling types for cut outs 80-130mm in diameter
- Chrome, brushed nickel and white finish to match bezels
- FGLED6® Tilt version available





√ JC94515CH







# Concealer ring

Subtle retrofit option for standard FGLED® units where the ceiling cut out may have suffered cosmetic damage (Note: Does not maintain fire rated ceiling)

- For use with ceiling cut outs 80-110mm in diameter
- White finish to match average ceiling colour
- Ideal for installing FGLED® into suspended ceilings
- FGLED6® Tilt version available

√ JC94183



# √ JC94183 ─ 115mm — -76.6mm⊣

FGLED3/6/10®

#### FGLED6® Tilt

8mm I



**Cutout sizes** JC94183 - Ø78mm JC94185 - Ø86mm

19

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Code	Description	Dimmable	Bezel	Colour temp.	LED's	Lumens	Beam
JC <b>94501</b>	FGLED10®	Yes	Round	Cool white	10W	850	60°
JC <b>94503</b>	FGLED10®	Yes	Round	Warm white	10W	750	60°
JC <b>94502</b>	FGLED10® emergency	Yes	Round	Cool white	10W	850	60°
JC <b>94504</b>	FGLED10® emergency	Yes	Round	Warm white	10W	750	60°

#### FGLED6°

Code	Description	Dimmable	Bezel	Colour temp.	LED's	Lumens	Beam
JC <b>94472</b>	FGLED6®	Yes	Round	Warm white	6W	450	38°
JC <b>94473</b>	FGLED6®	Yes	Round	Cool white	6W	500	38°
JC <b>94474</b>	FGLED6®	No	Round	Warm white	6W	450	38°
JC <b>94475</b>	FGLED6®	No	Round	Cool white	6W	500	38°
JC <b>94476</b>	FGLED6® emergency	Yes	Round	Warm white	6W	450	38°
JC <b>94477</b>	FGLED6® emergency	Yes	Round	Cool white	6W	500	38°
JC <b>94478</b>	FGLED6® emergency	No	Round	Warm white	6W	450	38°
JC <b>94479</b>	FGLED6® emergency	No	Round	Cool white	6W	500	38°
JC <b>94572</b>	FGLED6®	Yes	Square	Warm white	6W	450	38°
JC <b>94573</b>	FGLED6®	Yes	Square	Cool white	6W	500	38°
JC <b>94574</b>	FGLED6®	No	Square	Warm white	6W	450	38°
JC <b>94575</b>	FGLED6®	No	Square	Cool white	6W	500	38°
JC <b>94576</b>	FGLED6® emergency	Yes	Square	Warm white	6W	450	38°
JC <b>94577</b>	FGLED6® emergency	Yes	Square	Cool white	6W	500	38°
JC <b>94578</b>	FGLED6® emergency	No	Square	Warm white	6W	450	38°
JC <b>94579</b>	FGLED6® emergency	No	Square	Cool white	6W	500	38°

#### FGLED6°TILT

Code	Description	Dimmable	Bezel	Colour temp.	LED's	Lumens	Beam
JC <b>94481</b>	FGLED6® Tilt	Yes	Round	Warm white	6W	450	38°
JC <b>94482</b>	FGLED6® Tilt	Yes	Round	Cool white	6W	500	38°

#### FGLED3°

Code	Description	Dimmable	Bezel	Colour temp.	LED's	Lumens	Beam
JC <b>94301</b>	FGLED3®	Yes	Round	Warm white	3W	320	38°
JC <b>94302</b>	FGLED3®	Yes	Round	Cool white	3W	380	38°
JC <b>94311</b>	FGLED3®	Yes	Square	Warm white	3W	320	38°
JC <b>94312</b>	FGLED3®	Yes	Square	Cool white	3W	380	38°

#### FGLED ANTI-GLARE

Code	Description	Dimmable	Bezel	Colour temp.	LED's	Lumens	Beam
JC <b>94507</b>	FGLED® Anti-glare	Yes	Round	Warm white	6W	272	25°
JC <b>94511</b>	FGLED® Anti-glare emergency	No	Round	Warm white	6W	272	25°
JC <b>94515</b>	FGLED® Anti-glare	Yes	Square	Warm white	6W	272	25°
JC <b>94519</b>	FGLED® Anti-glare emergency	No	Sauare	Warm white	6W	272	25°

#### **ACCESSORIES**

Code	Description	Code	Description
JC <b>94180</b>	FGLED6® converter plate	JC <b>94183</b>	FGLED10/6/3® concealer ring white (5 pack)
JC <b>94184</b>	FGLED6® Tilt converter plate	JC <b>94185</b>	FGLED6® Tilt concealer ring white (5 pack)

#### LED

Warm white 3000K CRI: Ra (80) Cool white 4000K CRI: Ra (80)

#### Construction

**Body** – pressed steel (converter plate cast aluminium) **Bezel** – die-cast aluminium

Max. void working temperature 30°C







# Calculate your cost savings

Download JCC's free cost saving app to see how much money you could save by using any FGLED® fitting.

Simply enter the number of fittings that you require and see your precise energy reduction and cost savings.





JCC's cost saving app is available for **free** on both iOS & Android devices.

#### **JCC Lighting Products Ltd**

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