

## Intelligent Fire Rated Technology

## The Fire Rated Downlight Evolution

featuring 'cool cage' design with freedom of lamp choice

14W GUI0 CFL



www.iCage.co.uk

## iCage - Breakthrough

iCage is a unique 'cool cage' design that allows freedom of lamp choice to the installer and end user compared to traditional 'can' type fire rated downlights.

During extensive fire testing iCage demonstrated that the cage construction radiated reduced levels of heat into the ceiling void. This culminated in significant lower joist temperatures, thus maintaining their durability and strength.

With the construction differentials of each ceiling, it is imperative that Fire Rated Downlights pass all three tests. It is not credible to assume that because a fitting passes the 90-minute test, that it will pass the 30-minute and 60-minute tests.

With the complexity of the various applications and statutory enforcement of Part B, it can be difficult to assess the needs of an installation. iCage takes away this problem as it is fully tested in 30, 60 and 90 minute ceilings and can be specified for all applications.





# **innovative** INTUMESCENT ACTION



This patented and registered design, incorporates a unique intumescent reaction allowing a totally new concept as a cage constructed luminaire.

In comparison to existing fire rated enclosed can designs, iCage and its components operate in a cooler environment and are not reliant on forward heat lamps to provide lower operating temperatures.

iCage offers the installer and specifier a wide range of lamp options, including Part L compliant fluorescent up to 14W and 7W LED, as well as the traditional halogen lamp options.

# You can trust iCage



## Part B – Fire Safety (30, 60 and 90 minute ceilings)

Part B of the Building Regulations has been a legal requirement since 1987. The scope of the current regulation, published in 2000, requires that the

building structure should provide adequate resistance to fire so as to aid the escape of personnel.

The categories of resistance to fire are split into three defined and structurally different ceiling sections



The ceiling is constructed with ceiling joists at 600mm spacings and a single layer of 12.5mm plasterboard fixed to the underside of the joist.



The ceiling is constructed with ceiling joists at 600mm spacings and a dual layer of 15mm plasterboard fixed to the underside of the joist.



The ceiling is constructed with ceiling joists at 450mm spacings and a dual layer of 15mm plasterboard fixed to the underside of the joist.

#### ALL iCage downlights have passed this rigorous testing







### Part C - Moisture Protection

It is important to limit the amount of moisture that is allowed to pass into a potentially cold ceiling void or roof space as current modern building methods can negate the need for ventilated spaces.

Under the requirements of Part C every effort should be made to prevent moisture entering the cold roof space from habited areas. It is therefore a requirement for any equipment installed into a ceiling, to restrict the passage of moisture laiden air into the cold roof void.

For Part C compliance, air at a rate not greater than 0.06m3/hr/m2, is permitted to pass through the fitting at an air pressure of 2 Pascal's.

Part C has been a basic requirement for all new buildings constructed 1st July 2005.

#### All iCage standard and IP65 downlights have passed this rigorous testing.



### **Part E - Acoustic** (Resistance to Passage of Sound)

The intrusion of sound and noise pollution can have an impact upon health. It is therefore important to limit sound intrusion from adjacent rooms.

All iCage standard and IP65 downlights have been designed to limit the passage of sound.

#### All iCage standard and IP65 downlights have passed this rigorous testing.



### Part L – Conservation of Fuel and Power

With the environment at the top of the global agenda, it is vital that energy efficient equipment is used. The current 2006 document details a requirement

for one per four fixed lighting fittings to comply and also luminaires that only accept energy efficient lamps.

The iCage range includes dedicated energy saving versions, offering CFL and LED options.

LIA refers to new dwellings, whilst LIB is for existing properties



This logo indicates that the lamp to be used achieves a minimum of 40 lumens per watt and complies with the requirements of Part L of the Building Regulations.

Building regulations quoted apply to England and Wales. Variations may apply in other territories, please consult relevant local authorities in such cases.

## THE FIRE RATED DOWNLIGHT EVOLUTION

from Ansell Lighting



## Intelligent Fire Rated Technology

ingenious design

intelligent thermal management for optimum lamp life

- innovative intumescent action
- independently tested to Building Regulations Parts B, C and E
- inclusive of GU10 and MR16 lampholders (apart from dedicated low energy models)
- integral Twistlock design for GU10, Low Voltage and all IP65 versions
- inconspicuous ultra-slim bezel
- Install both standard and gimbal version in 76mm cut out

## Fully tested in 30, 60 and 90 minute ceilings







intelligent

# intelligent FIRE RATED TECHNOLOGY

6

Terminals comfortably accept  $2 \times 1.5$ Twin and Earth cables with screwless snap-fit cover and cable clamp, for ease and speed of installation Patented intumescent disc

Open design of fitting allows lamp to 'breathe' providing optimum lamp life and allows for use of ALL suitable branded lamps

Sleeved AND double insulated high temperature cable

> Supplied c/w GU10 & LV Lampholders (except low energy versions)

Ultra slim bezel provides minimalistic look

Moisture seal

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Sprung clips for sturdy

fixing in variable

ceiling

ceiling thicknesses

providing tight and

lasting positioning to

Twistlock operation for easy lamp installation and replacement

## iCage 50W GUI0/MRI6 Die-Cast Downlight

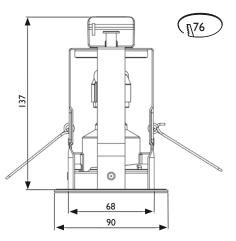
- Dedicated forward heat lamps NOT required
- Supplied c/w GUI0 AND MRI6 lampholders
- Extra large terminals for fast loop-in, loop-out wiring
- Twistlock lamp retaining ring for ease of lamp replacement
- Ulta-slim bezel profile
- Will accept GU10 CFL and LED lamps

Code	Lamp Type	Description	
AICD/W	MR16 or GU10	50W - White	
AICD/BR	MR16 or GU10	50W - Brass	
AICD/CH	MR16 or GU10	50W - Chrome	
AICD/SC	MR16 or GU10	50W - Satin Chrome	













## iCage 7W to 14W CFL/LED Part L Die-Cast Downlight

#### Supplied Less Lamp

• Dedicated low energy downlight with spring-loaded GUI0 lampholder for ease of lamp change

<u>Lm</u>

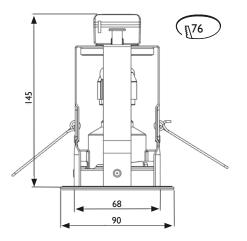
- 7,9,11 and 14W CFL or 7W LED GU10 lamp
- Extra large terminals for fast loop-in, loop-out wiring
- Twistlock lamp retaining ring for ease of lamp replacement
- Ulta-slim bezel profile

Lamp Type	Description
CFL / LED	14W GU10 CFL - White
CFL / LED	14W GU10 CFL - Brass
CFL / LED	14W GU10 CFL - Chrome
CFL / LED	14W GU10 CFL - Satin Chrome
	CFL / LED CFL / LED CFL / LED











## iCage 50W GUI0/MRI6 Die-Cast Gimbal

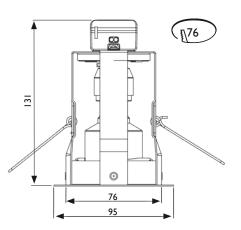
- Dedicated forward heat lamps NOT required
- Supplied c/w GU10 AND MR16 lampholders
- Extra large terminals for fast loop-in, loop-out wiring
- Twistlock lamp retaining ring for ease of lamp replacement
- Ulta-slim bezel profile
- Will accept GU10 CFL and LED lamps

Code	Lamp Type	Description	
AICG/W	MR16 or GU10	50W - White	
AICG/BR	MRI6 or GUI0	50W - Brass	
AICG/CH	MRI6 or GUI0	50W - Chrome	
AICG/SC	MRI6 or GUI0	50W - Satin Chrome	













## iCage IP65 50W GUI0 / MRI6 Die-Cast Downlight

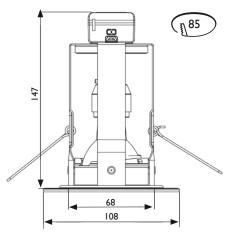
- Supplied c/w GU10 AND MR16 lampholders
- Extra large terminals for fast loop-in, loop-out wiring
- Twistlock lamp retaining ring for ease of lamp replacement
- Ulta-slim bezel profile
- IP65 rating protects against moisture and dust
- Will accept GU10 CFL and LED lamps

Code	Lamp Type	Description	
AICD/IP65/W	MR16 or GU10	50W - White	
AICD/IP65/BR	MR16 or GU10	50W - Brass	
AICD/IP65/CH	MR16 or GU10	50W - Chrome	
AICD/IP65/SC	MR16 or GU10	50W - Satin Chrome	











## iCage IP65 7W to 14W CFL/LED Part L Die-Cast Downlight

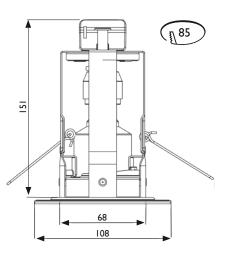
- Dedicated low energy downlight with spring-loaded GU10 lampholder
- 7, 9,11 or 14W CFL or 7W LED GU10 lamp
- Extra large terminals for fast loop-in, loop-out wiring
- Twistlock lamp retaining ring for ease of lamp replacement
- Ulta-slim bezel profile
- IP65 rating protects against moisture and dust

Code	Lamp Type	Description
AICDLE/IP65/W	CFL / LED	14W GU10 CFL - White
AICDLE/IP65/BR	CFL / LED	14W GU10 CFL - Brass
AICDLE/IP65/CH	CFL / LED	14W GU10 CFL - Chrome
AICDLE/IP65/SC	CFL / LED	14W GU10 CFL - Satin Chrome













# intelligent FIRE RATED TECHNOLOGY

Patented intumescent disc

Open design of fitting allows lamp to 'breathe' providing optimum lamp life

Sleeved AND double insulated high femperature cable

Moisture seal

Terminals comfortably accept  $2 \times 1.5$ Twin and Earth cables with screwless snap-fit cover and cable clamp, for ease and speed of installation



Sprung clips for sturdy fixing in variable ceiling thicknesses providing tight and lasting positioning to ceiling

13W GX53 lamp

Slim die-cast removable twist-on, twist-off bezel supplied in white finish as standard. Additional accessories include plated bezels, painted and plated drop glass attachments and IP65 covers intelligent

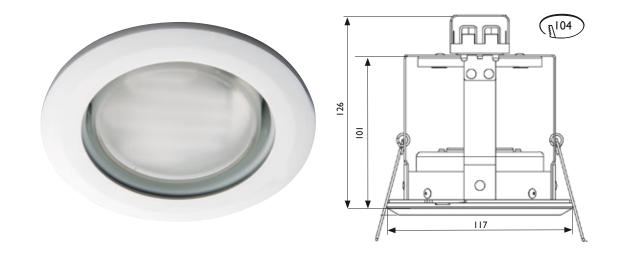
## iCage 13W GX53 Low Energy Die-Cast Downlight

#### Supplied Less Lamp

- Dedicated lamp base with high output Megaman GX53 lamp achieving 40 lumens per watt and meeting requirements of Building Reguations Part L
- Shallow ceiling void depth
- Range of twist-on accessories provide comprehensive range of decorative attachments and IP65 seals.

Code	Lamp Type	Description
AICGXD/W	GX53 CFL	13W GX53 CFL - White
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See opposite for plated trim bezels and accessories.







## iCage 13W GX53 Accessories

Comprehensive range of twist-on accessories for GX53 Downlight

#### Trim Bezels

AGMPL/TB/BRBrass Trim BezelAGMPL/TB/CHChrome Trim BezelAGMPL/TB/SGSilver Grey Trim BezelAGMPL/TB/SCSatin Chrome Trim Bezel

#### Drop Glass I (Clear outer ring with frosted centre disc)

AGMPL/DGI/W	Drop Glass I, White Bezel
AGMPL/DGI/BR	Drop Glass I, Brass Bezel
AGMPL/DG1/CH	Drop Glass I, Chrome Bezel
AGMPL/DG1/SC	Drop Glass I, Satin Chrome Bezel
AGMPL/DG1/SG	Drop Glass I, Silver Grey Bezel

#### Drop Glass 3 (Frosted glass halo with open centre)

AGMPL/DG3/W	Drop Glass 3, White Bezel
AGMPL/DG3/BR	Drop Glass 3, Brass Bezel
AGMPL/DG3/CH	Drop Glass 3, Chrome Bezel
AGMPL/DG3/SC	Drop Glass 3, Satin Chrome Bezel
AGMPL/DG3/SG	Drop Glass 3, Silver Grey Bezel

#### Drop Glass Mesh ( Clear glass with decorative chrome mesh)

AGMPL/MSH/W	Drop Glass Mesh, White Bezel
AGMPL/MSH/BR	Drop Glass Mesh, Brass Bezel
AGMPL/MSH/CH	Drop Glass Mesh, Chrome Bezel
AGMPL/MSH/SG	Drop Glass Mesh, Silver Grey Bezel

#### IP65 Protective Covers

AGMPL/OPC	IP65 Opal Polycarbonate Cover
AGMPL/CPC	IP65 Clear Polycarbonate Cover
AGMPL/DCG	IP65 Decorative Cone Glass













### iBox (Suitable for 400mm to 600mm Joist Spacings)

With building regulations requiring insulation to be run continuously in loft spaces, this can obscure the presence of a fitting below insulation.

iBox provides non load bearing mechanical protection against accidental damage which can be caused when loft spaces are used for storage. It also provides the fitting with additional ventilation further increasing lamp life as well as compliance with the requirements of good installation practice and building regulations.

iBox is supplied in a pre-fabricated flatpack format which can be quickly assembled without the use of any tools.

## Step I – Unpack and fold iBox, forming 2 'tunnels'



Step 3 – Place iBox over the icage downlight and secure



#### Step 2 – Slide I tunnel in to the other, (iBox is adjustable to fit 400mm-600mm joist spacings)



Step 4 – Insulation material may now be placed over iBox



Note: iBox is not designed to provide a load bearing platform within a roof void.

Code	Description	Dimensions
ΑΙΒΟΧ	iBox Insulation Protector	H: 220mm W: 196mm L: 400-600mm





## iCage Conformity Selector

	Hole Cut-Out	Max Wattage		Part <b>B</b> 2007	Part <b>C</b> 2004	Part <b>E</b> 2003	Part <b>LIA</b> 2006	Part <b>LIB</b> 2006
Downlight AICD	76mm	50VV	GUI0 MRI6	<b>S</b>	0	0		
Part L Low Energy Downlight AICDLE	76mm	14W 7W	CFL LED					
Gimbal AICG	76mm	50VV	GUI0 MRI6	0		0		
IP65 Downlight AICD/IP65	85mm	50₩	GUI0 MRI6		<b>Ø</b>			
IP65 Part L Low Energy Downlight AICDLE/IP65	85mm	14W 7W	CFL LED	<b>S</b>	0	<b>S</b>	<b>S</b>	
Part L GX53 Low Energy Downlight AICGXD	104mm	137	GX53					

Building Regulations quoted apply to England and Wales. Variations may apply in other territories, please consult relevant local authorities in such cases.

For Maximum Wattage - 14Watt CFL or 13Watt GX53 lamps, iCage recommends Megaman lamps and for 7Watt LED, Philips Master LED spot or Megaman LED reflector.



Ansell Lighting recommends the use of recognised branded lamps.

# **Regulations**







# Certification



Part E Test No. 254782



Part B Test Nos. Chilt/IF08002, Chilt/IF08003, Chilt/IF09046



Part C Test Nos. 259471-1, 2595471-2, 259471-3





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