

FIRE & ACOUSTIC RATED DOWNLIGHTS



FlameGuard® protected, fire and acoustic rated products



The FlameGuard® System has already been incorporated into a selection of our ranges of low voltage and mains downlights. All of the different downlight types are more fully described in the following pages but you may be assured that there is a FlameGuard® protected, fire and acoustic rated downlight to fit virtually every installation requirement. Other related products include optional Moisture Seals to prevent the ingress of moisture laden air into ceiling voids or attic spaces etc... and a specially developed Insulation Support Box which facilitates the laying of an unbroken layer of insulation material directly over any FlameGuard® downlight installation.

Contents

H138 / H144	GU10 Fixed Downlights
H139	GU10 Adjustable Downlights
H140 / H145	Cast Fixed Downlights
H141	Cast Adjustable Downlights
H142	GU5.3 Fixed Downlights
H143	GU5.3 Adjustable Downlights
H147	Downlight Housing
H150	Back Boxes

Ceramic lampholder

A number of lamp holders are available in the FlameGuard[®] range, all of which are manufactured from ceramic material with double insulated supply cables.

FlameGuard[®] seal

Located inside the top of the downlight and around the outside of the body, the FlameGuard[®] seals are manufactured from an intumescent material that expands in the event of fire. As the material expands it fills the ventilation holes in the top of the downlight and also seals the ceiling cut-out.

Metal body

The enclosed metal body of the downlight helps to maintain the sound and airflow rating of the ceiling.

Moisture seal

The design of all FlameGuard[®] luminaires already inhibits the Flow[™] of air through and behind the fitting. This is a crucial feature of their ability to resist the spread of fire. In order to enhance the appeal of FlameGuard[®] to builders, developers and designers, we are also offering an optional moisture seal for use with the FlameGuard[®] fittings which are designed to eliminate the Flow[™] of moisture laden air into the void behind the downlight and thereby reduce the risk of damp and condensation. Independent tests carried out show impressive further reductions of airflow through FlameGuard[®] fittings fitted with the moisture seal, all in compliance with BS5250:2002

Flow[™] plug-in connector

We recognise that your time is money, our plug-in connector gives you easy access with large terminals and fast connection. Designed initially for lighting circuits to enable isolation of transformers, control gear etc. whilst conducting the 1000V insulation resistance test.

- 250V- 20A plug-in connector
- Large terminals with easy access
- Terminal screws supplied raised
- Easy lock and release mechanism
- Versatile, easy-connection system
- Increased load handling with 20A rating
- Male: Max 1.5mm² 3 core cable; Female: Max 3 x 2.5mm² twin and earth (with additional loop terminal)



Spring fixing arms

Heavy duty springs are provided to support the downlight in the ceiling. Whilst being strong enough to retain the downlight, they can easily be pulled back to allow the downlight to pass through the ceiling cut-out during installation.

Moisture seal

Fitted to all FlameGuard[®] downlights as standard, the moisture seal prevents warm moist air from passing into the cold space above a ceiling where it could cause condensation to form.

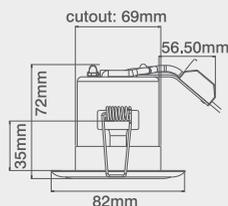


Available Finishes



Please add required finish in to the code e.g. **GU315AB**.

Dimensions

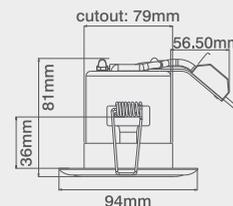


Available Finishes



Please add required finish in to the code e.g. **GU320AB**.

Dimensions



230V Fixed Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU315AB	230V GU10 50W Max. Fixed Downlight - Antique Brass	1	GU10	50W
GU315CH	230V GU10 50W Max. Fixed Downlight - Chrome	1	GU10	50W
GU315SC	230V GU10 50W Max. Fixed Downlight - Satin Chrome	1	GU10	50W
GU315WH	230V GU10 50W Max. Fixed Downlight - White	1	GU10	50W

Lamp not included



Product Approvals

Complies with BS EN 60598

230V Adjustable Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU320AB	230V GU10 50W Max. Adjustable Downlight - Antique Brass	1	GU10	50W
GU320CH	230V GU10 50W Max. Adjustable Downlight - Chrome	1	GU10	50W
GU320SC	230V GU10 50W Max. Adjustable Downlight - Satin Chrome	1	GU10	50W
GU320WH	230V GU10 50W Max. Adjustable Downlight - White	1	GU10	50W

Lamp not included

Product Approvals

Complies with BS EN 60598



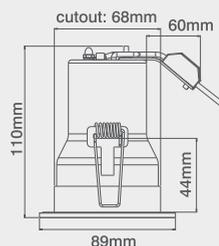


Available Finishes



Please add required finish in to the code e.g. **GU300AB**.

Dimensions



230V Cast Fixed Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU300AB	230V GU10 50W Max. Fixed Downlight - Antique Brass	1	GU10	50W
GU300CH	230V GU10 50W Max. Fixed Downlight - Chrome	1	GU10	50W
GU300SC	230V GU10 50W Max. Fixed Downlight - Satin Chrome	1	GU10	50W
GU300WH	230V GU10 50W Max. Fixed Downlight - White	1	GU10	50W

Lamp not included



Product Approvals

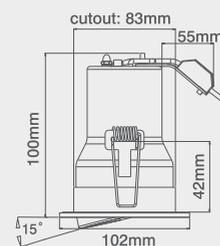
Complies with BS EN 60598

Available Finishes



Please add required finish in to the code e.g. **GU305AB**.

Dimensions



230V Cast Adjustable Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU305AB	230V GU10 50W Max. Adjustable Downlight - Antique Brass	1	GU10	50W
GU305CH	230V GU10 50W Max. Adjustable Downlight - Chrome	1	GU10	50W
GU305SC	230V GU10 50W Max. Adjustable Downlight - Satin Chrome	1	GU10	50W
GU305WH	230V GU10 50W Max. Adjustable Downlight - White	1	GU10	50W

Lamp not included

Product Approvals

Complies with BS EN 60598



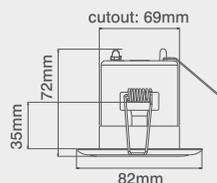


Available Finishes



Please add required finish in to the code e.g. LV315CH.

Dimensions



12V 50W Max. Fixed Downlights c/w Flow™ Connector, Moisture Seal & 60va Transformer

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
LV315CH	12V GU5.3 50W Max. Fixed Downlight - Chrome	1	GU5.3	50W
LV315SC	12V GU5.3 50W Max. Fixed Downlight - Satin Chrome	1	GU5.3	50W
LV315WH	12V GU5.3 50W Max. Fixed Downlight - White	1	GU5.3	50W

Lamp not included



Product Approvals

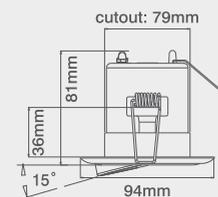
Complies with BS EN 60598

Available Finishes



Please add required finish in to the code e.g. LV320CH.

Dimensions



12V 50W Max. Adjustable Downlights c/w Flow™ Connector, Moisture Seal & 60va Transformer

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
LV320CH	12V GU5.3 50W Max. Adjustable Downlight - Chrome	1	GU5.3	50W
LV320SC	12V GU5.3 50W Max. Adjustable Downlight - Satin Chrome	1	GU5.3	50W
LV320WH	12V GU5.3 50W Max. Adjustable Downlight - White	1	GU5.3	50W

Lamp not included

Product Approvals

Complies with BS EN 60598



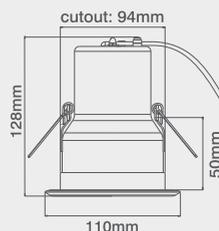


Available Finishes



Please add required finish in to the code e.g. **GU4101CH**.

Dimensions



230V Fixed 110mm Dia. Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU4101CH	230V GU10 50W Max. Fixed Downlight - Chrome	1	GU10	50W
GU4101SC	230V GU10 50W Max. Fixed Downlight - Satin Chrome	1	GU10	50W
GU4101WH	230V GU10 50W Max. Fixed Downlight - White	1	GU10	50W

Lamp not included



Product Approvals

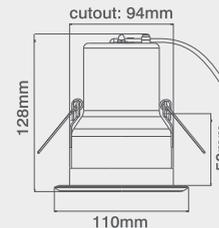
Complies with BS EN 60598

Available Finishes



Please add required finish in to the code e.g. **GU4201CH**.

Dimensions



230V Cast Fixed 118mm Dia. Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU4201CH	230V GU10 50W Max. Fixed Downlight - Chrome	1	GU10	50W
GU4201SC	230V GU10 50W Max. Fixed Downlight - Satin Chrome	1	GU10	50W
GU4201WH	230V GU10 50W Max. Fixed Downlight - White	1	GU10	50W

Lamp not included

Product Approvals

Complies with BS EN 60598



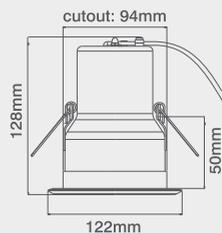


Available Finishes



Please add required finish in to the code e.g. **GU4211CH**.

Dimensions



230V Cast Fixed 122mm Square Downlights c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU4211CH	230V GU10 50W Max. Fixed Downlight - Chrome	1	GU10	50W
GU4211SC	230V GU10 50W Max. Fixed Downlight - Satin Chrome	1	GU10	50W
GU4211WH	230V GU10 50W Max. Fixed Downlight - White	1	GU10	50W

Lamp not included



Product Approvals

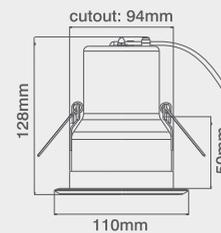
Complies with BS EN 60598

Available Finishes



Please add required finish in to the code e.g. **GU4300CH**.

Dimensions



IP65

230V Fixed Downlight Housing c/w Flow™ Connector & Moisture Seal

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU4301	230V GU10 50W Max. IP65 Fixed Downlight Housing	1	GU10	50W

Lamp not included Requires Bezel (GF4300, GF4310, GF4311) not included

Cast Downlight Bezels

- GF4300* Cast IP65 118mm Diameter Bezel
- GF4301* Cast IP65 122mm Square Bezel
- GF4311* Cast Bezel With Halo Glass
Requires GU4301 or LE5301 Housing

Product Approvals

Complies with BS EN 60598

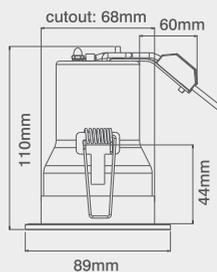




Available Finishes



Dimensions



IP65

230V IP65 Fixed Downlight Housing c/w Flow™ Connector

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
GU395	230V GU10 50W Max. IP65 Fixed Downlight Housing Lamp not included Requires Bezel (GF495) not included	1	GU10	50W

Cast Downlight Bezels

GF495CH	Cast IP65 Bezel - Chrome
GF495SC	Cast IP65 Bezel - Satin Chrome
GF495WH	Cast IP65 Bezel - White Requires GU395 or GZ096 Housing



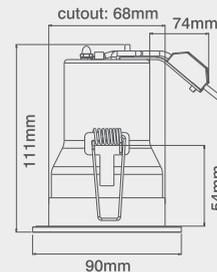
Product Approvals

Complies with BS EN 60598

Available Finishes



Dimensions



IP65

12V 50W Max. IP65 Fixed Downlight Housing c/w Flow™ Connector, Moisture Seal & 60Va Transformer

Code	Description	No. of Lamps	Lampholder Type	Max Wattage
LV395	12V GU5.3 50W Max. IP65 Fixed Downlight Housing Lamp not included Requires Bezel (GF495) not included	1	GU5.3	50W

Cast Downlight Bezels

GF495CH	Cast IP65 Bezel - Chrome
GF495SC	Cast IP65 Bezel - Satin Chrome
GF495WH	Cast IP65 Bezel - White Requires GU395 or GZ096 Housing

Product Approvals

Complies with BS EN 60598



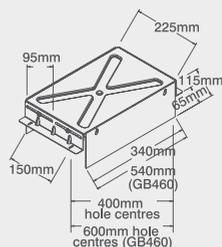
GB440/460



essentials™

Community Registered Design No. 000390091-0001

Dimensions



Insulation Support Boxes

Code	Description
GB440	Insulation Support Box To Span 400mm Truss Centres
GB460	Insulation Support Box To Span 600mm Truss Centres

As an integral part of the development of the FlameGuard[®] System, our engineers and designers have also been examining other issues connected with the installation of downlights. One such issue has been the matter of insulation around the back of a downlight in a ceiling void or attic for example. Insulation Support Box allows free air circulation around luminaire and provides rigid skin over which insulation can be laid.

Good building practise dictates that insulation material is laid, unbroken, over the whole floor area. Good electrical practise however dictates that a minimum amount of free air is left around a luminaire in order to allow any heat build-up from the light source to be dissipated. Our new Insulation Support Box satisfies both of these requirements without compromising either.

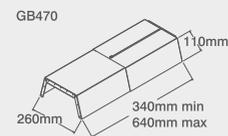
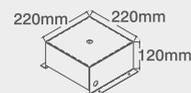
GB400



essentials™

Community Registered Design No. 000497433-0001

Dimensions



GB470

Installation from below

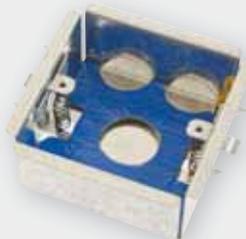
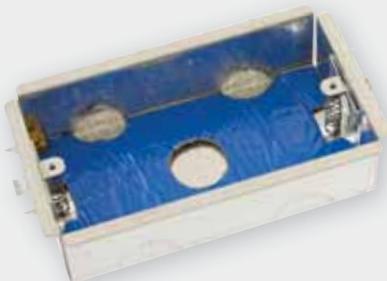


Insulation Support Boxes

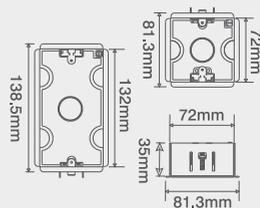
Code	Description
GB400	Flatpacked Steel Insulation Support Box 220x220x120mm
GB470	Insulation Support Box 340-620mm Between Floors

Before any insulation is laid, either at first or second fix the Support Boxes are installed in a semi-permanent fashion as required. Once installed, the Support Boxes allow sufficient circulation of air around the downlight to satisfy the electrician's requirement and the enclosed nature of the Box allows the builder to install an unbroken insulation barrier. The Insulation Support Boxes also accommodate transformers used in low voltage installations, thereby allowing any necessary maintenance to be carried out through the downlight cut-out in the ceiling. The GB440 and 460 Insulation Support Boxes are available

in two different sizes with fixing centres at 400mm and 600mm, designed to fit the vast majority of truss spacings in new builds in the U.K. The pressed steel construction of the Support Box is strong enough to carry a weight of approx. 100kgs without distorting. The adjustable Insulation Support Box (Item GB470) has been designed specifically to be installed between floors or in flat roofs and can be installed from above or below. The new free standing Support box (Item GB400) is supplied in flat galvanised steel for quick easy folding on site.



Dimensions



Cavity Wall Boxes

Code	Description	Depth
WA4135	1 Gang 35mm Deep FG Dry Lining Box	35mm
WA4235	2 Gang 35mm Deep FG Dry Lining Box	35mm

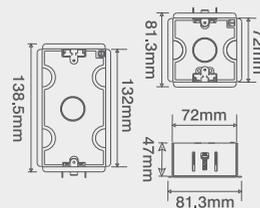
The One & Only Range of Fire & Acoustic Rated Metal Dry Lining Back Boxes

1 gang and 2 gang boxes in both 35mm and 47mm depths, as simple to install as a standard cavity wall box.

Building Regulations are becoming more stringent in today's modern world, with alternative building materials and products being developed with improved safety in mind.

Based upon our development and test work carried out with the original FlameGuard[®] downlights it very quickly became apparent that standard PVC, polycarbonate or urea materials could not tolerate the high temperatures encountered in a major fire. A durable all metal construction was therefore chosen.

Dimensions



Cavity Wall Boxes

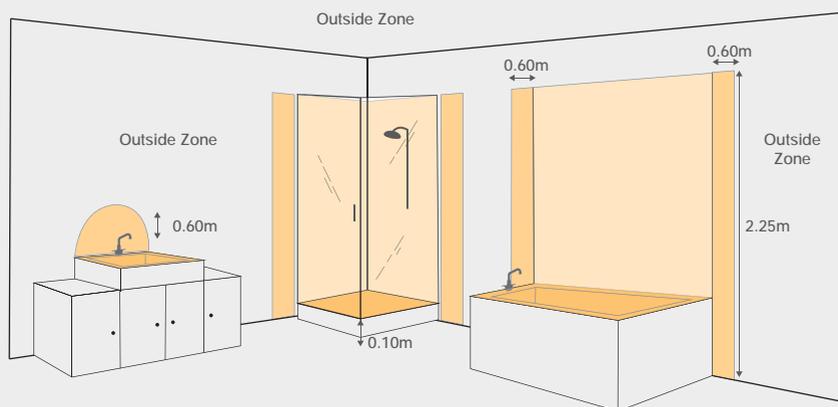
Code	Description	Depth
WA4147	1 Gang 47mm Deep FG Dry Lining Box	47mm
WA4247	2 Gang 47mm Deep FG Dry Lining Box	47mm

Product Approvals

FlameGuard[®] back boxes have been tested and conform to both fire and acoustic BS EN standards
 Fire: BS EN 1363-1: 1999 & BS EN 1364-1: 1999
 Acoustic: BS EN ISO 140-3: 1995 & BS EN ISO 717-1: 1997
 Complies with Building Regulations. Fire tested up to 90 minutes with the capability of the boxes being mounted back to back

essentials™

- No additional components to purchase or install
- Simple and quick to install saving time and money
- Unique spring loaded lugs
- Substantial amount of cable entries
- Earth terminal fitted



- Zone 0** - Minimum IPX7 can be used
- Zone 1** - Minimum IPX4 can be used
- Zone 2** - Minimum IPX4 can be used
- Outside Zone** - Minimum IPX2 can be used

ZONE 0: MINIMUM REQUIREMENT IPX7

Zone 0 is the interior of the bath tub or shower basin. Only Low voltage (SELV) fittings are permitted with the transformer located outside all zones.

ZONE 1: MINIMUM REQUIREMENT IPX4

Zone 1 is the area around the bath or shower basin up to a height of 2.25m above floor levels and at a radius of 1.2m from the water outlet. If there is a likelihood of water jets being used for cleaning purposes, then this becomes a minimum requirement of IPX5.

ZONE 2: MINIMUM REQUIREMENT IPX4

Zone 2 is limited by the vertical planes external to zone 1 and parallel vertical planes(s) 0.60m external to zone 1. If there is a likelihood of water jets being used for cleaning purposes, then this becomes a minimum requirement of IPX5. For showers without a basin, there is no zone 2 but an increased zone 1.

IMPORTANT

Protection for all electrical fixtures within the bathroom and shower should be provided by the use of an RCD with a rated residual current not exceeding 30mA and an operating time not exceeding 40ms.

There are a number of special requirements for fitting lights in bathrooms and to clarify these requirements, certain zones have been created. Within each of these zones only fittings with certain minimum IP ratings can be installed. The basic recommendations are set out above.

H151 (Insulation Support)
H150 (Insulation Support)
H137 (Condensation Control)
H149 (IP Rated LED)
H140 (Low Energy LED)
H145 (Professional Cast)

Choose from our comprehensive range for ultimate flexibility and safety

Versatile and decorative, FlameGuard® system products are suitable for a wide range of domestic and commercial applications.

Illustrated above are just some of those typical applications.

In'tu'mes'cent

Dictionary definition – Swelling up, expanding.

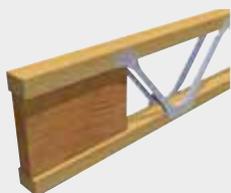
How does it work?

The FlameGuard® intumescent seal, when exposed to fire, forms a dense carbon char which separates and insulates the substrate from the heat of the fire. The expanded seal eliminates the Flow™ of air through the void and thereby starves the fire of vital elements for combustion.



Complies with Class 3 safety extra-low voltage (selv) requirements of BS EN 60598

Metal web joists



Combination of timber runners with metal webbing.

Solid timber



Traditional solid wood joist which has been used in house building for decades.

Engineered 'I' beam joists



Combining an engineered composite panel with high grade softwood.

With the nature of fire testing and the different types of joists, do not take it for granted that a downlight tested in a solid timber construction will maintain the same integrity within a construction using metal web or engineered 'I' beam joists.

FlameGuard® has been fire tested in floor constructions with these types of modern joists, and is compliant for both 30 and 60 minutes to BS EN 1365:2000

The complete range of electrical accessories

In addition to the FlameGuard® range illustrated herein, a host of other electrical products are available. If you require any wiring accessories please see our Wiring Accessories Catalogue.

For further information on any of these products please call our sales office on 01827 63454.



If you would like to view a copy of the FlameGuard® approvals Compendium, containing test and approvals data evidencing compliance with all of the latest regulations relating to Fire Safety, Noise Ingress and Control of Airborne Moisture etc., **please call 01827 63454 or e-mail us at sales@scolmore.com**

FlameGuard® System downlights have been fully tested and approved as fire and acoustic rated fittings according to the following criteria:

Complies with Part B of Building regulations.

Fire tested to full 90 minute rating and approved to BS 476 Part 21 1987 with solid timber joists.

Fire tested to 60 minutes rating by BRE and approved to BS EN 1365-2: 2000 with both metal web and 'I' beam engineered joists.

Fire & Acoustic testing carried out using plasterboard, timber joist and tongue and groove floor construction.

Acoustically tested and approved by The Building Test Centre to BS EN ISO 140-3: 1995, BS EN ISO 140-6: 1998, BS EN ISO 7171: 1997, BS EN ISO 717-2: 1997 and Appendix F of Robust Details Ltd. All in compliance with the relevant sections of Part E of Building Regulations.

Tested in accordance with Robust Details requirements.

FlameGuard® downlights are accepted by the NHBC as satisfying their requirements relating to levels of air movement through the fitting.

Testing carried out in relation to Part C of Building Regs. As it relates to passage of moisture laden air into cold spaces such as lofts etc., in compliance with BS5250: 2002.

All FlameGuard® luminaires are supplied with comprehensive and easy to follow installation instructions in compliance with Part P of Building Regulations.

The Low Energy FlameGuard® fitting meets the requirements of Part L of Building Regulations relating to the installation of low energy luminaires.

Complies with Scottish Building Regulations, Section 2 (fire), Section 3 (air movement) and Section 5 (noise).



ACCEPTED BY:



Tested in accordance with robust details requirements.

Product Code	Description	Cut-Out	Recess Depth	Air Flow	Page
GU315	230V 50W Fixed Downlight	69mm	72mm	0.023	H138
LV315	12V 50W Fixed Downlight	69mm	72mm	0.023	H142
GU300	230V 11W Fixed Downlight	68mm	110mm	0.052	H140
GU320	230V 50W Adjustable Downlight	79mm	81mm	0.119	H139
LV320	12V 50W Adjustable Downlight	79mm	81mm	0.119	H143
GU305	230V 50W Adjustable Downlight	83mm	100mm	0.046	H141
GU4101	230V 50W Fixed Downlight	94mm	128mm	0.412	H144
GU4201	Cast 230V 50W Fixed Downlight	94mm	128mm	0.412	H145
GU4211	Cast 230V 50W Fixed Downlight	94mm	128mm	0.412	H146
GU4301	Cast 230V 50W Fixed Downlight	94mm	128mm	0	H147

The table above is designed to illustrate which fittings are suitable for retro fitting in installations where cut-out and recess parameters are restricted.

Recessed ceiling lights (downlights) are a potential leakage path for the convection of moist air through a ceiling and consequential problems in the roof or loft space.

Building Regulations Approved Document Part C2: 2004 Resistance to moisture refers to BS 5250: 2002 as the main means of compliance with the requirement laid down in relation to resistance to damage from interstitial and surface condensation.

Amendment No. 1 (December 2005) to BS 5250: 2002: Code of Practice for control of ventilation in buildings (Clause 8.4.1.2 thereof) requires that the leakage through all downlights in a ceiling beneath a roof should not exceed 0.06m³/h m² at a pressure difference of 2 Pa in order to restrict moisture ingress into roofs. BS 5250: 2002 invokes BS EN 13141-1: 2004: Ventilation for buildings – Performance testing of components/products for residential ventilation – Part 1: Externally and internally mounted air transfer devices for the test procedure to be used to determine the air leakage through downlights.

The National House-Building Council (NHBC) also requires that downlights be tested for air leakage compliance to BS 5250: 2002 by an independent organization (NHBC Technical Newsletter, Dec 2004, Issue 31).