



Recessed Modules

Fully Boxed Recessed Modules

Description

Our fully boxed powder coated recessed modules, suitable for 25 & 15mm Tee ceiling systems. Our products sit on the back of the (38 or 30mm) Tee for speed of installation. All attachments are lift and tilt and sit on the bottom of the Tee section.



Construction

Manufactured from sheet steel which is punched, folded and welded to give a fully boxed construction, then polyester powder coated white. Component specification is high and includes quality control gear, power factor correction, fused terminal block and Phillips starter switches. All components are BS approved.



Euro Module

The Euro module is similar in construction to the standard recessed modules, its difference is it incorporates deeper side flanges so the louvre and body are packed together. These also incorporate the receptacles for the wishbones springs of the louvre. The louvre is a fully trimmed unit which has full end caps to give that extra quality appearance at a competitive cost. The louvre is fixed via 4 wishbone springs and has the added advantage of suiting 15 or 25mm T bar systems.

Applications

Features

- Fully boxed & powder coated
- Fused terminal block
- Slim design

- Offices
- Factories
- Corridors
- Shopping Malls

Fully Boxed Recessed Modules

Product Range and Ordering Details

Part Number	Nominal Dimensions	No & Wattage of Tubes	Weight Kg
FLRB632	600 x 300	2 x 18 w	2.50
FLRB662	600 X 600	2 X 18 w	3.60
FLRB663	600 x 600	3 x 18 w	4.00
FLRB664	600 x 600	4 x 18 w	4.00
FLRB1232	1200 x 300	2 x 36 w	4.00
FLRB1262	1200 x 600	2 x 36 w	6.00
FLRB1263	1200 x 600	3 x 36 w	6.50
FLRB1264	1200 x 600	4 x 36 w	7.50
FLRB1863	1800 x 600	3 x 70 w	14.00
FLRB1864	1800 x 600	4 x 70 w	14.00
FLRE664	600 x 600	4 x 18 w	4.10

Options

Description	Suffix
Integral Three Hour Maintained Emergency Pack	EM3
High Frequency Control Gear	HF
High Frequency Dimmable Control Gear	HFD*
Air Handling (40 litres per second)	AH

* For more details on dimming fluorescent luminaires see page 18

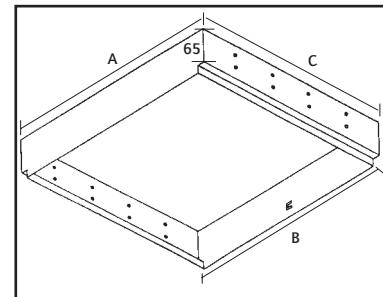
Attachments

Description	Suffix
Category One Louvre	CT1
Category Two Louvre	CT2
Category Three Louvre	CT3
Low Brightness Louvre	LBX
TPB Prismatic	PR
TPA Fire Rated Prismatic	PRF

Please specify T size required at time of ordering

Dimensions

Fitting	A	B	C
600x300	610	590	290
600x600	610	590	590
1200x300	1220	1190	290
1200x600	1220	1190	590
1800x600	1786	1810	590



Recessed Sealed Modules

Description

A range of environmentally sealed recessed modules with TPA (fire rated) prismatic diffuser as standard. This fitting is suitable for a wide range of applications. The IP54 version is suited to most standard applications such as kitchens, changing rooms and computer rooms. For more critical environments we have IP65 sealed versions and rear access versions for walk on ceiling applications.

Features

- Sealed and Gasketed with Tpa prismatic panel
- Suitable for plank, plaster and T bar Ceilings
- Class 100,000 IP54, Class 10,000 IP65
- T5 and T8 lamps available with all gear options
- Rear Access version available



Applications

- Kitchens
- Clean Rooms
- Hospitals
- Food Factories
- Pharmaceutical production areas

Options

Description	Suffix
3 Hour Maintained Emergency	EM
High Frequency Control Gear	HF
High Frequency Dimmable Gear	HFD
Rear Access for Lamp Change	RA

* For more details on dimming fluorescent luminaires see page 18

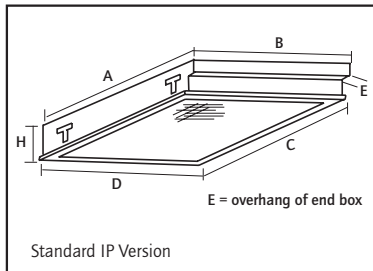
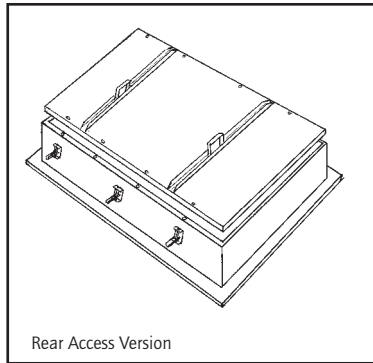
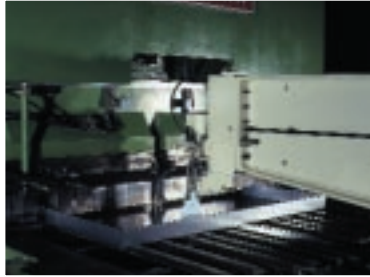
Construction

Fabricated sheet steel body 0.8mm, iron phosphate pre-treated then polyester powder coated to 100 microns, this equates to 300 hours salt spray. The TPA diffuser is fully sealed to IP54. The IP65 version includes a removable gear tray, optional rear entry for walk on ceilings, and 20mm glanded entry at the rear.

IP Ratings

IP54 or IP65

Recessed Sealed Modules



Product Range & Ordering Details

Part Number	Nominal Dimensions	No & Wattage of Tubes	Weight Kg
FLR663-IP	600 X 600	3 X 18w T8	5.80
FLR664-IP	600 X 600	4 X 18w T8	5.80
FLR664x14-IP	600 X 600	4 X 14w T5	5.20
FLR664x24-IP	600 X 600	4 X 24w T5	5.20
FLR1232-IP	1200 X 300	2 X 36w T8	5.30
FLR1232x28-IP	1200 X 300	2 X 28w T5	4.50
FLR1263-IP	1200 X 600	3 X 36w T8	10.00
FLR1264-IP	1200 X 600	4 X 36w T8	11.00
FLR1264x38-IP	1200 X 600	4 X 38w T8	11.00
FLR1264x28-IP	1200 X 600	4 X 28w T5	9.00
FLR1264x54-IP	1200 X 600	4 X 54w T5	11.00
FLR1532-IP	1500 X 300	2 X 58w T8	10.30
FLR1532x49-IP	1500 X 300	2 X 49w T5	8.80
FLR1832-IP	1800 X 300	2 X 70w T8	11.00

Dimensions

Part No.	A	B	C	D	E	H	Cut out
FLR66	612	550	599	599	62	108	575 x 575
FLR123	1222	250	1199	299	72	108	1175 x 275
FLR126	1222	550	1199	599	72	108	1175 x 575
FLR153	1550	250	1499	299	51	108	1475 x 275
FLR183	1850	250	1799	299	10	108	1775 x 275

Rear Access Version available in T5 and 38wT8 versions only

FLR66	612	612	670	670		200	625 x 625
FLR126	1212	612	1270	670		200	1225 x 625

NB T5, Rear Access and T8 38watt do not have end box projection

T5 Recessed Master Range



Description

A range of T5 high efficiency recessed 600 x 600 modular fittings. These luminaries break new ground for lighting efficacy. The multi-phosphor lamps give true colour appearance and high lumen packages with low

wattage inputs. Coupled with warm start high frequency control gear. The lamps are rated at 20,000 hours for low whole of life cost. The slim design and flexible fixing system means these fittings will as standard fit 15 and 25mm T bar systems,

concealed grid, SAS plus most other usual ceiling grids available, along with plasterboard compatibility you don't have to order another fitting.

T5 Recessed Master Range

Construction

A fabricated 0.8mm zintec coated sheet steel body iron phosphate treated and then epoxy polyester powder coated to give a high quality base for this luminaire. High frequency warm start gear directly mounted to the luminaire chassis and wired in accordance with EN60598 standards. The unit incorporates a fused terminal block and all components are certified to BS or Europeans standards. The specular high efficiency fully trimmed louvre, gives 70% DLOR and is positively retained via a bespoke spring clip system. All units are individually boxed and supplied with lamps.

Features

- Suits most ceiling types
- Super Slim, 69mm design
- 70% DLOR Louvre
- 20,000 hour lamp life

Applications

- Offices
- Schools
- Colleges
- Retail

Options

HFD*	High Frequency Dimmable control gear
EM	Integral 3 Hour emergency
CAT2	Category Two Louvre is supplied as standard
LBX	Low Brightness Louvre
PR	Framed Prismatic Diffuser

* For more details on dimming fluorescent luminaires see page 18

Can be painted silver RAL 9006, white RAL9003,
or Architectural White RAL 9010

The hole pattern in the wings can be customised or removed.

Ordering Details

Part Number	Description
TL5R3X14CT2	600 x 600 Recessed 3 x 14 watt cat 2 fitting and Louvre
TL5R4X14CT2	600 x 600 Recessed 4 x 14 watt cat 2 fitting and louvre

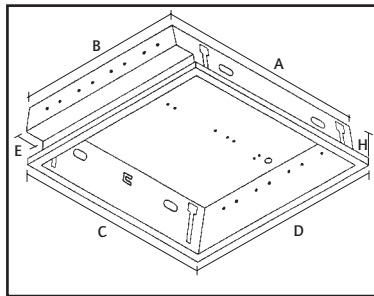
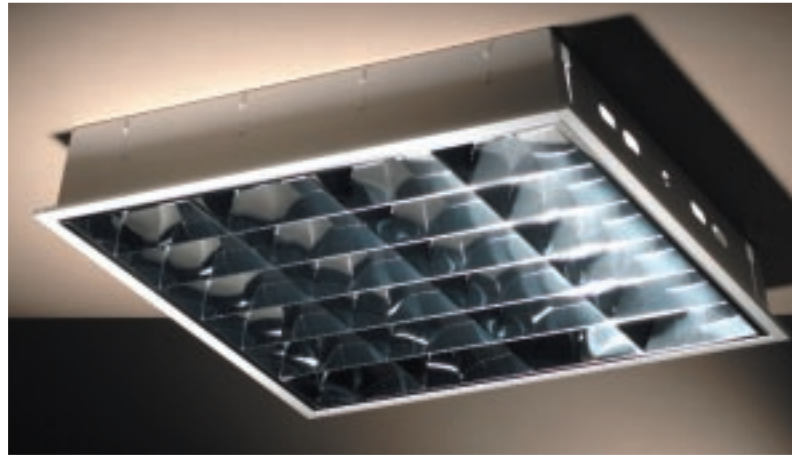
Universal Recessed Modules

Construction

Fully boxed self trimming totally enclosed body and fully trimmed louvre with end caps, located by wishbone springs. High quality control gear meeting European Standards, with fused terminal block.

This fitting is suitable for standard 15 and 25mm Tee, concealed grid and plasterboard ceilings.

Side arm suspensions are required when installed in plasterboard or concealed grid ceilings.



Options

Description	Suffix
Integral Three Hour Maintained Emergency Pack	EM3
High Frequency Control Gear (standard on 40 & 55 w PLL)	HF
High Frequency Dimmable Control Gear (Analogue or Digital)	HFD*
Air Handling (40 litres per second)	AH
Side Arm Suspension Brackets	SA

* For more details on dimming fluorescent luminaires see page 18

Attachments

Description	Suffix
Category Two Louvre	CT2
Low Brightness Louvre	LBX
TPB Framed Prismatic	PR
16 Cell Louvre for Twin PLL Fitting	16C

Universal Recessed Modules

Description

The Universal module has been developed to suit virtually all applications for a recessed luminaire. It is fully boxed, self trimming with side arm suspension brackets (extra cost), fully trimmed louvre attachments with full end caps are fixed via wishbone springs. Linear T8 and high efficiency PLL versions are available along with high frequency and high frequency dimmable control gear.

Features

- Fully Boxed Self Trimming Body
- Fully Trimmed Louvre with Endcaps
- Suits Most Ceiling Types
- Louvre Fixed by Wishbone Springs

Applications

- Offices
- Retail Outlets

Product Range & Ordering Details

Part Number	Nominal Dimensions	No & Wattage Tubes	Weight Kg
FLRU552xPLL36	500 x 500	2 x 36w PLL	2.8
FLRU662xPLL36	600 x 600	2 x 36w PLL	5.1
FLRU662xPLL40	600 x 600	2 x 40w PLL	5.1
FLRU662xPLL55	600 x 600	2 x 55w PLL	5.1
FLRU663	600 x 600	3 x 18w T8	5.6
FLRU664	600 x 600	4 x 18w T8	5.6
FLRU1232	1200 x 300	2 x 36w T8	7.5
FLRU1263	1200 x 600	3 x 36w T8	9.8
FLRU1264	1200 x 600	4 x 36w T8	10.8
FLRU1532	1500 x 300	2 x 58w T8	7.8
FLRU1832	1800 x 300	2 x 70w T8	9.1

Dimensions

	A	B	C	D	E	H	Cut out
FLRU55	430	430	495	495		135	480 x 480
FLRU66	610	530	595	595	45	100	575 x 575
FLRU66-PLL	530	530	595	595		135	575 x 575
FLRU123	1220	230	1195	295	55	100	1170 x 270
FLRU126	1220	530	1195	595	55	100	1170 x 570
FLRU153	1522	230	1497	297	57	100	1475 x 275
FLRU183	1784	230	1797	297	19	100	1775 x 275

NB. PLL versions do not have lamp box overhang

Indirect Recessed Modules

Description

Utilising the highly efficient PLL light source this new concept luminaire gives a gentle spread of even light. This also has the effect of lifting the apparent height of the ceiling.

Construction

Fabricated zinc plated sheet steel body with perforated or solid fronts. The category two unit also incorporates a slim category two louvre in the centre for the additional light and effect. Utilising two 40 or 55 watt PLL lamps, or T5 14 or 24 watt lamps to give high light output and high efficiency (a 4 x 14 version is also available). All gear is mounted on a removable gear tray and each unit is available with dimming control gear and integral emergency pack.

Applications

- Offices
- Entrance Lobbies
- Retail
- Showrooms

Features

- High efficiency lamps and gear
- High lumen packages
- Category Two Compliant
- Pleasing effect



Indirect Recessed Modules

Range and Ordering Details

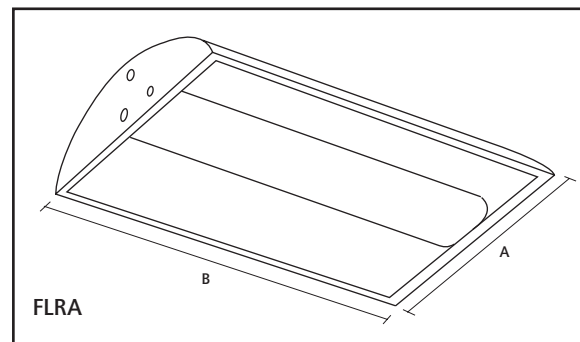
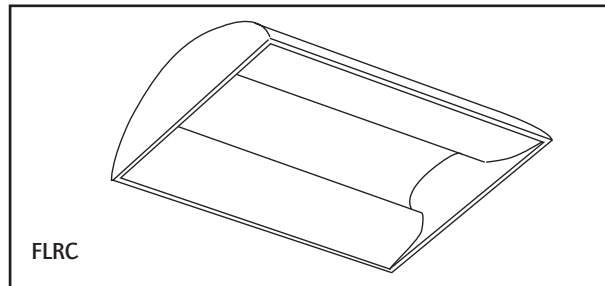
Part Number	Description
FLRA662x40PLL	2 x 40 w PLL Indirect/Direct Module
FLRA662x55PLL	2 x 55 w PLL Indirect/Direct Module
FLRA662x40PLL-CT2	2 x 40w PLL Indirect/Direct Module c/w Cat 2 Louvre
FLRA662x55PLL-CT2	2 x 55w PLL Indirect/Direct Module c/w Cat 2 Louvre
FLRA662x14T5-CT2	2 x 14w T5 Indirect/Direct Module c/w Cat 2 Louvre
FLRA662x24T5-CT2	2 x 24w T5 Indirect/Direct Module c/w Cat 2 Louvre
FLRA664x14T5-CW3	4x14w Indirect/Direct Module c/w White Broad spread Louvre

Single lamp version also available. Please state whether perforated or solid lamp cover is required

FLRC662x40PLL	2 x 40 w PLL Indirect Module
FLRC662x55PLL	2 x 55 w PLL Indirect Module

Options

Part Number	Description
HF	All fittings are high frequency
HFD	High frequency Dimmable Gear - available on all
EM3	Emergency Pack to run 1 lamp for 3 hours



Dimensions

	A	B	Depth
FLRA	595	595	140
FLRC	595	595	140

PLL & T5 Asymmetric Recessed Fittings

Description

A range of slim profile unobtrusive asymmetric fittings designed for wall and display illumination. The units have been designed so as to give virtually no visual intrusion to the retail or display space. Each unit integrates fully with T bar ceiling systems, and being self trimming, require no additional fixing. The 200mm wide unit is available in 600 and 1200mm lengths, the 120mm width unit is only available in the 600mm length. A satin high efficiency reflector gives a gently diffused light. Ideal for wall display and notice board illumination. Available with warm start high frequency gear as standard these units are efficient, silent and neat.



PLL & T5 Asymmetric Recessed Fittings

Range and Ordering Details

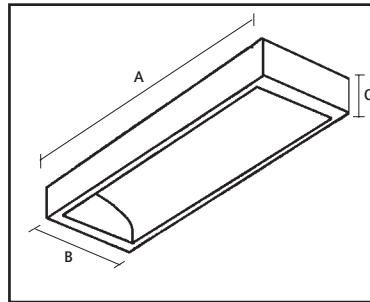
FLRA621x55 PLL	600 x 200 1 x 55w PLL
FLRA622 x 24 T5	600 x 200 2 x 24w T5
FLRA1222 x 55 PLL	1200 x 200 2 x 55w PLL
FLRA1222 x 54 PLL	1200 x 200 2 x 54w T5
FLRA611 x 55 PLL	600 x 120 1 x 55w PLL
FLRA612 x 24 T5	600 x 120 2 x 24w T5
FLRA631	600 x 300 1 x 55 PLL
FLRA1232	1200 x 300 2 x 55 PLL

Dimensions

	Flange	Rear	Depth
621	600 x 230	575 x 200	72
1221	1200 x 230	1175 x 200	72
612	595 x 120	570 x 120	75
632	595 x 295	595 x 295	70
1232	1195 x 295	1195 x 295	70

Applications

- Wall illumination
- Display illumination
- Retail



Construction

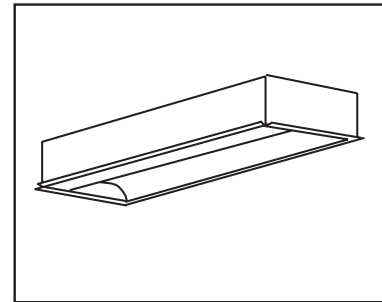
A single piece steel body, iron phosphate treated prior to epoxy polyester powder coating, housing the warm start high frequency control gear. The high efficiency satin aluminium reflector is pre-folded to a precise angle in order to achieve the controlled light output.

Features

- Slim profile
- High efficiency lamps & gear
- Minimum visual appearance
- Integrates in to T bar systems

Options

- Specular Aluminium Reflector



Dimming of Fluorescent Lamps

Dimming of fluorescent lamps has developed significantly in recent years. Costs, quality and reliability have improved enormously along with advances in applications and simplicity of installation.

Two main avenues remain available to the user/installer, 1 to 10 volt (analogue) control signal or the digital ballast option, each having its own benefits.

All main ballast manufacturers have now agreed a common digital control, which is referred to as DALI and will be the standard system, which will dominate the dimming of fluorescent products. This common standard means cross manufacturer compatibility of all ballasts and control systems. This is still in its early stages and product is limited to certain lamp types. Obviously non 'DALI' ballasts will remain available for all lamp types for some time to come.

There is a choice for the end user/consultant of whether to use 'in fitting' controls or controllers which operate a group of fittings.

In fitting controls are the simplest to use but are limited and can be expensive. Simple controls of this type include daylight linking for energy conservation and comfort, which are the most basic, followed by presence detection. Other controls allow the fitting to reduce its light output to 10%. When the sensor is then activated the light is then instantly increased to 100%. Full infrared control, daylight linking and presence detection are also available but do increase costs. All these 'IN LUMINAIRE' controls are simple to install and do not require any additional wiring for installation. These are particularly useful for refurbishment work so existing wiring can be utilised.

Controlling groups of fittings is much more cost effective and improves flexibility in the installed system. The new DALI system allows luminaires to be controlled in one or more groups. This enables the user to set scenes for different applications of an area, areas within areas or even link areas together.

In general installers should install two extra wires to each luminaire, which are brought back to one point in a particular area. This allows virtually any dimming systems to be installed according to the requirements of the client or consultant.

We can advise you on any applications you may have for dimming and can offer a full range of controls from the simple to the most complex. We also offer a full commissioning service. All this ensures you get the best from this flexible new technology.