

LIGHTING DESIGN

Specification of Luminaires

Rev. E

Project:	Fitzjohns Avenue
Client:	Pegasus Life Ltd
Architect:	Sergison Bates Architects LLP
Date:	05 April 2016
Ref:	925/JS

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1. GENERAL CONDITIONS

- 1.1 The specification sheets indicating the lighting design requirements for specific areas within this project form part of this document and should be read in conjunction with this preamble and the Lighting Consultant's relevant drawings, and associated sketches.
- 1.2 This specification supersedes all previous issues.
- 1.3 All quantities shall be checked against the construction drawings.
- 1.4 Final locations and details associated with all lighting equipment is to be confirmed with the design team.
- 1.5 Manufacturers selected shall be capable of understanding project requirements and demonstrate satisfactory production of the specified lighting equipment for a period of not less than 5 years prior to date of issue. Said manufacturers shall be required to provide not less than 24 months guarantee of equipment performance from the completion of commissioning.

2 SAMPLES & PROTOTYPES

- 2.1 All lighting equipment shall be currently available – working samples will be required for submission and are to be approved by the Client/Architect.
- 2.2 Should a sample of a standard, or prototype of a special luminaire or variant of a standard luminaire be ordered, its cost shall either be incorporated in a tender price, or shall be invoiced to the Client or his nominated representative separately, as agreed.
- 2.3 Any such sample prototype or variant shall comply with the lighting design specification, and shall be submitted to the Lighting Consultant, together with full photometric and dimensional data if specifically requested, to enable both its accurate assessment and the detailing of any adjustments deemed necessary prior to the commencement of full production.

3 STANDARDS COMPLIANCE

- 3.1 For projects in the United Kingdom, all equipment supplied shall comply with the relevant BS, EN and IEC requirements, and be capable of installation in accordance with the manufacturers' instructions, the current edition of the IEE Wiring Regulations

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and all statutory and local authority requirements. Standards requirements particular to individual luminaire types are indicated on the relevant specification sheet.

- 3.2 Notwithstanding the above, the following British Standards in particular should be checked for compliance:
- BS 559 - Electric signs and high voltage luminous discharge tube installations.
 - BS 3535 - Safety isolating transformers for industrial and domestic purposes.
 - BS 4533 - Luminaires.
- 3.3 For projects outside the United Kingdom, all equipment supplied shall comply with the relevant standards currently in force in the project's country of origin.
- 3.4 The cost of obtaining any necessary approvals shall be included in any tender price, detailed as a separate item.

4 PROTECTION

- 4.1 All equipment shall be supplied with adequate means of protection to ensure its preservation during transport to site and any subsequent storage prior to installation.
- 4.2 All vulnerable finished parts liable to scratching or other abrasion during handling and installation shall be further protected by a removable film applied prior to dispatch.

5. TECHNICAL REQUIREMENTS

5.1 Luminaires

- 5.1.1 Equipment selected as a standard item from a particular manufacturer's range has been specified with a view to performance, optics, maintenance, quality, aesthetics, etc.
- 5.1.2 Should alternative equipment be offered, full technical and photometric data shall be submitted to IlluminationWorks in time to enable its accurate assessment. If any variants of standard luminaires are required, these shall be developed by the manufacturer of the standard luminaire, unless otherwise specifically stated, and shall be manufactured to the same standards as the equivalent standard luminaire.
- 5.1.3 If specified, two copies of all working drawings of proposed variants dimensioned in mm, shall be supplied to IlluminationWorks for approval prior to fabrication.

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- 5.1.4 Notwithstanding the above, the manufacturer shall remain responsible for ensuring compliance with relevant standards, the accuracy of the information shown on his drawings at all times including installation instructions and for ensuring that the equipment shown fulfils the requirements of this specification.
 - 5.1.5 IlluminationWorks cannot accept responsibility for faults relating to the improper installation of lighting equipment.
 - 5.1.6 The final location of each luminaire and, where relevant, its integration with the architecture shall be as detailed on the construction issue drawings. IlluminationWorks cannot accept responsibility for luminaires installed in a manner other than indicated in the relevant drawings or as otherwise agreed and recorded.
 - 5.1.7 IlluminationWorks cannot accept responsibility for faults relating to the improper installation of lighting equipment.
 - 5.1.8 Minimum gauge sheet steel; 22 gauge for fluorescent; 18 gauge for tungsten. All ballast and control gear compartments shall be adequately ventilated for normal application and shall be easily accessible for maintenance. All metal work shall be sound and free from imperfections and discolouration.
 - 5.1.9 All lighting equipment shall be supplied with a final, synthetic high temperature baked enamel coating of colour and finish as directed. Provide white baked enamel reflective surfaces, aluminium reflectors excepted. Final exterior finish and colour may be required to match specific architectural requirements. Contractor to have Architect and/or interior designer to verify final finish of each light fixture before the order is placed.
 - 5.1.10 The contractor is to verify compatibility of all light fittings with the construction and materials of all surfaces, including ceilings, walls and floors, to which the light fittings are to be mounted or recessed.
 - 5.1.11 All exterior lighting equipment shall be designed and manufactured specifically for use in exterior environment and shall have materials, parts and general construction suitable for this requirement.
- 5.2 Control Gear
- 5.2.1 All necessary control gear and transformers shall be mounted within the luminaire unless shown as being located remote or adjacent. All such gear shall be of good quality construction, shall comply with all relevant statutory

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regulations, shall be compatible with the lamps specified, and shall be mounted and wired in accordance with the manufacturers' instructions.

- 5.2.2 Where appropriate, the luminaire manufacturer shall ensure compatibility between control gear and the proposed control system. The manufacturer shall also provide all necessary data regarding gear losses, etc. to enable dimmers / contactors to be sized correctly.
- 5.2.3 Transformers shall have a stable output voltage of 11.8V / 22.8V, under varying loads, where the output voltage is nominally quoted at 12V / 24V.
- 5.2.4 Unless otherwise stated, all transformers shall be suitable for dimming on their primary side via a thyristor controlled remote lighting control system.
- 5.2.5 Where gear or transformers are installed remotely, care should be taken to ensure that any audible sounds generated by control gear, or by lamp filaments via control gear are kept to a minimum. Where this is particularly crucial, detailed acoustic requirements are included in the Specific Conditions.
- 5.2.6 All equipment shall be protected from unexpected mains failure, and mains borne interference.
- 5.2.7 Electrical supply connections shall be designed to facilitate the easy installation of the luminaires. The supplier shall liaise with the Electrical Engineer to ensure any specific requirements of his in this respect are met.

5.3 Lamps

- 5.3.1 A complete set of lamps shall be supplied at the completion of construction work prior to practical completion
- 5.3.2 The following lamp manufacturers are approved;
Osram; Philips; General Electric; Sylvania; Venture; and BLV.
- 5.3.3 Incandescent and tungsten halogen lamps shall not be operated, other than for initial testing, prior to final inspection.
- 5.3.4 Should alternative lamps be offered, these shall require the approval of IlluminationWorks except where noted below, provided particular attention is paid to colour rendering, colour temperature, light distribution, life expectancy and general performance when selecting such alternatives.

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- 5.3.5 For fluorescent and HID sources, alternative lamps may only be substituted if full technical data is first supplied to IlluminationWorks to enable their accurate assessment and approval.
- 5.3.6 All fluorescent lamps shall be tri-phosphor, colour 85 or equivalent and suitable for use with electronic ballast.
- 5.3.7 For low voltage reflector lamps, alternative may only be substituted where the lamp has the same lumen output, beam angle, lamp cover and shield characteristics as the lamp specified.
- 5.3.8 Allowance shall be made for the specialised installation of lighting as required (i.e. cold cathode). Such installation may require the services of a specialised sub contractor.
- 5.3.9 Refer electrical engineers documentation for emergency lighting requirements and provisions.
- 5.3.10 IlluminationWorks recommends that a lamp recycling/disposal regime be assessed by the client/building operator prior to completion of the project. Services provided by various lamp recycling contractors vary and the suitability for a particular project and the completeness of their recycling processes should be assessed by the operator.

Disposal of twenty fluorescent, or metal halide, lamps or greater is considered hazardous waste disposal and must be carried out at a licensed landfill site or through a licensed recycling company.

Recommended lamp recycling contractors include but are not limited to:

The Lamp Recycling Company

7 Bessemer Park
Bessemer Road
Basingstoke, RG21 3NB
United Kingdom

Recyclite Limited

36-38 Maurice Gaymer Road,
Gaymers Industrial Estate,
Attleborough,
Norfolk NR17 2QZ
United Kingdom

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FITTING CODE **D1**

LOCATION: Wellness Centre – Throughout

MANUFACTURER: **Lucent**
(Robbie Ormrod – Tel: +44 208 442 0880)

REFERENCE: **FITTING: Prospex Pinhole Edge Accent for LED50 - 91413-A-LED-WH-9000-PCZ + HONEYCOMB LOUVER**
LED MODULE: LED51-27-24

DESCRIPTION: Recessed adjustable accentlight with flush trim plate and die-cast interior baffle to eliminate glare, honeycomb louver, trim installation flush with the ceiling, requires adjacent electronic transformer and honeycomb louver. Allow 25 mm clearance above fitting.

FINISHES: **White TBD by Architect**

DIMENSIONS: 90mm H x 92mm Ø W; 83mm Ø W to cut-out

LAMP TYPE & REF: 13.5 watt 2700K LED50-ONE flood 24° 80CRI

POWER: 13.5 watt / 350mA

FIXING METHOD: Recessed within plaster ceiling with flush trim. **Requires skim-coating of ceiling around fitting (see manufacturer's installation instructions).**

COMMENTS: CE Labelled. Circuited to control system.

Specification of Luminaires

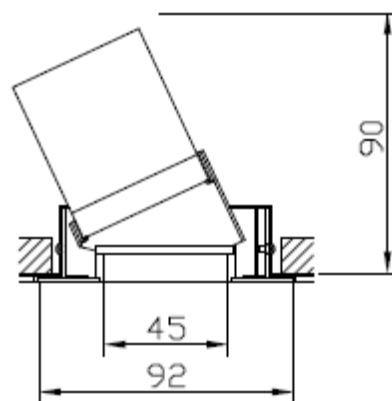
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FITTING CODE **D1**

IMAGE:



ILLUSTRATION:



Cut out 83mm Ø
Trimless Fixture with 9000-PCZ

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FITTING CODE **D2**

LOCATION: Apartment Sitting Room

MANUFACTURER: **Lucifero's**

REFERENCE: **Nyx T50 Tube – LTN54T**

DESCRIPTION: Recessed directional round trimless downlight, light source in recessed position to eliminate glare, honeycomb louver, requires adjacent electronic transformer and honeycomb louver. Allow 25 mm clearance above fitting.

FINISHES: **TBD by Architect**

DIMENSIONS: 130mm H x 55mm Ø W – total recessed
100mm H x 55mm Ø W - semi-recessed

LAMP TYPE & REF: 9 watt LED MR16 flood 25° 12 volt 2700K GU5.3 base
(SORAA ref: SM16-09-25D-927-03-S3) - **NO SUBSTITUTIONS!**

POWER: 9 watt / 12 volt

FIXING METHOD: **Ceiling semi-recessed.**

COMMENTS: CE Labelled. Circuited to control system.

Specification of Luminaires

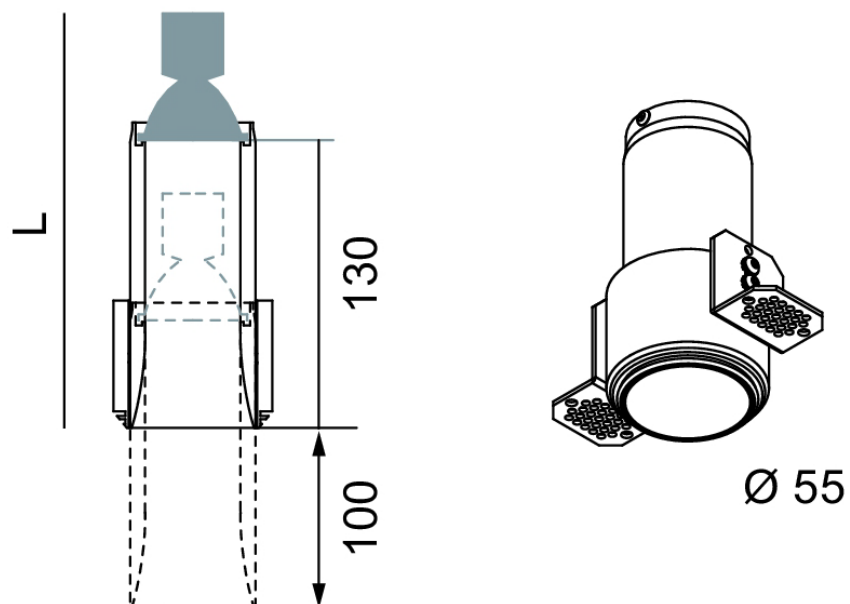
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FITTING CODE **D2**

IMAGE:



ILLUSTRATION:



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FITTING CODE **D3**

LOCATION: Apartment Bedroom

MANUFACTURER: **Lucent**
(Robbie Ormrod – Tel: +44 208 442 0880)

REFERENCE: **FITTING: Prospex Pinhole Edge Accent for LED50 - 91413-A-LED-WH-9000-PCZ + HONEYCOMB LOUVER**
LED MODULE: LED51-27-24

DESCRIPTION: Recessed adjustable accentlight with flush trim plate and die-cast interior baffle to eliminate glare, honeycomb louver, trim installation flush with the ceiling, requires adjacent electronic transformer and honeycomb louver. Allow 25 mm clearance above fitting.

FINISHES: **White TBD by Architect**

DIMENSIONS: 90mm H x 92mm Ø W; 83mm Ø W to cut-out

LAMP TYPE & REF: 13.5 watt 2700K LED50-ONE flood 24° 80CRI

POWER: 13.5 watt / 350mA

FIXING METHOD: Recessed within plaster ceiling with flush trim. **Requires skim-coating of ceiling around fitting (see manufacturer's installation instructions).**

COMMENTS: CE Labelled. Circuited to control system.

Specification of Luminaires

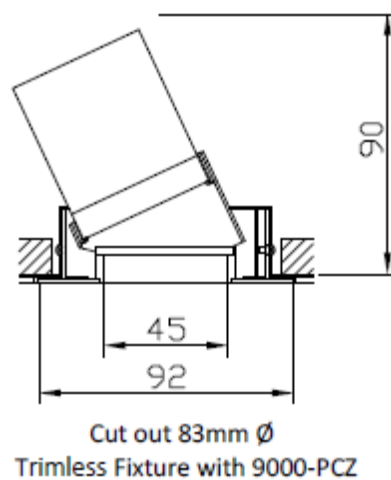
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FITTING CODE **D3**

IMAGE:



ILLUSTRATION:



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FITTING CODE **D4**

LOCATION: Wellness Centre - Showers

MANUFACTURER: **Lucent**
(Robbie Ormrod – Tel: +44 208 442 0880)

REFERENCE: **FITTING: Prospex Pinhole Edge Accent IP54 for LED50 - 91413-A-LED54-WH-9000-PCZ + HONEYCOMB LOUVER**
LED MODULE: LED51-27-24

DESCRIPTION: Recessed adjustable accentlight with flush trim plate and die-cast interior baffle to eliminate glare, honeycomb louver, trim installation flush with the ceiling, requires adjacent electronic transformer and honeycomb louver. Allow 25 mm clearance above fitting.

FINISHES: **White TBD by Architect**

DIMENSIONS: 90mm H x 92mm Ø W; 83mm Ø W to cut-out

LAMP TYPE & REF: 13.5 watt 2700K LED50-ONE flood 24° 80CRI

POWER: 13.5 watt / 350mA

FIXING METHOD: Recessed within plaster ceiling with flush trim. **Requires skim-coating of ceiling around fitting (see manufacturer's installation instructions).**

COMMENTS: CE Labelled. Circuited to control system.

Specification of Luminaires

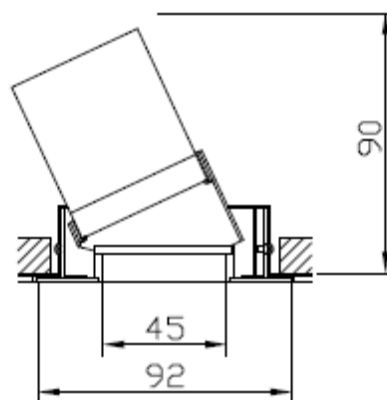
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FITTING CODE **D4**

IMAGE:



ILLUSTRATION:



Cut out 83mm \varnothing
Trimless Fixture with 9000-PCZ

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FITTING CODE **FL1**

LOCATION: Communal Lobby

MANUFACTURER: **Santa & Cole**

REFERENCE: **Tripode G5**

DESCRIPTION: Free standing glowing floor decorative luminaire.

FINISHES: **TBD**

DIMENSIONS: 1680mm H x 620mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

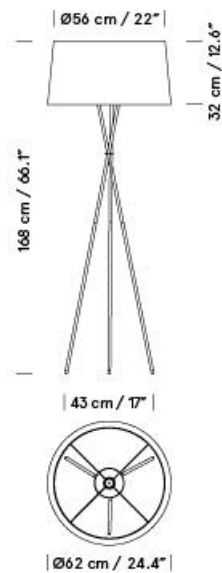
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FITTING CODE **FL1**

IMAGE:



ILLUSTRATION:



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FITTING CODE **FL2**

LOCATION: Communal Lounge Hall

MANUFACTURER: **Santa & Cole (TBD by Architect)**

REFERENCE: **Tripode G5**

DESCRIPTION: Free standing glowing floor decorative luminaire.

FINISHES: **TBD**

DIMENSIONS: 1680mm H x 620mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

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FITTING CODE **FL2**

IMAGE:



ILLUSTRATION:



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FITTING CODE **FL3**

LOCATION: Apartment Living Room

MANUFACTURER: **Santa & Cole (TBD by Architect)**

REFERENCE: **Tripode G5**

DESCRIPTION: Free standing glowing floor decorative luminaire.

FINISHES: **TBD**

DIMENSIONS: 1680mm H x 620mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

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FITTING CODE **FL3**

IMAGE:



ILLUSTRATION:



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FITTING CODE **FL4**

LOCATION: Apartment Studio

MANUFACTURER: **Santa & Cole (TBD by Architect)**

REFERENCE: **Tripode G5**

DESCRIPTION: Free standing glowing floor decorative luminaire.

FINISHES: **TBD**

DIMENSIONS: 1680mm H x 620mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

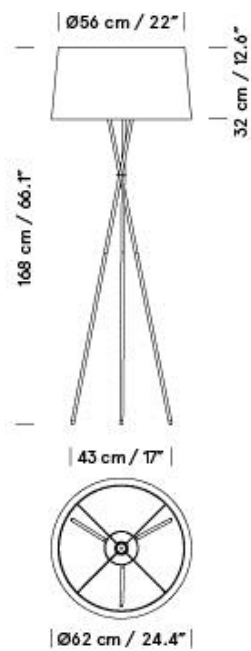
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FITTING CODE **FL4**

IMAGE:



ILLUSTRATION:



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FITTING CODE **FL5 - TBD**

LOCATION: Wellness Centre

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing floor decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

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FITTING CODE **J1**

LOCATION: Various

MANUFACTURER: **TBD**

REFERENCE: **TBD**

DESCRIPTION: Junction box for pendant light power feed.

FINISHES: TBD

DIMENSIONS: TBD

LAMP TYPE & REF:

POWER: 1200W MAX / 5AMP

FIXING METHOD:

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

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FITTING CODE **L1**

LOCATION: Various Joinery

MANUFACTURER: **LED STRIP: Ledridge**
 (Sean Colbert – Tel: (0)116 246 1188)
HOUSING: Taylor lighting

REFERENCE: **LED STRIP: FLRXP1M-24-2700K-LTBD (LED96 series)**
HOUSING: Opal Lid 1413FR1- LTBD + End Caps + Mounting Clip

DESCRIPTION: Surface mounted low voltage linear warm white 2700K LED strip light, 50mm increment, concealed within square extruded profile with opal lens, exact lengths required to be measured on site by Contractor and given to manufacturer prior to order, supplied with remote dimmable 1-10V driver and all miscellaneous components for mounting.

FINISHES: N/A

DIMENSIONS: 14mm W x 13mm H x lengths to be determined on site by contractor and given manufacturer prior to order

LAMP TYPE & REF: Warm white LED 2700K 24 volt 85CRI

POWER: 9.6 watt / 24 volt per meter

FIXING METHOD: Surface mounted in architectural detail.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** EC to coordinate module lengths with field conditions for continuous illumination prior to fitting order. Attention is required to avoid shadows at junctions. **Lengths shall run end-to-end for continuous line of light without interruptions or breaks per the Architect's drawings and following the manufacturer's installation instructions.** To be supplied with all accessories for complete installation.

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FITTING CODE **L1**

IMAGE:

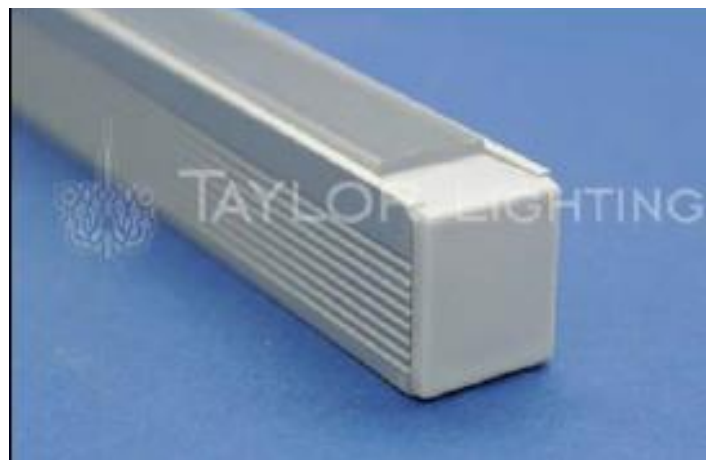
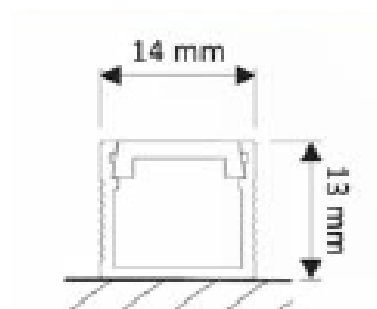


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FITTING CODE **L1A**

LOCATION: Kitchen Joinery

MANUFACTURER: **LED STRIP: Ledridge**
(Sean Colbert – Tel: (0)116 246 1188)
HOUSING: Taylor lighting

REFERENCE: **LED STRIP: FLRCRI90-3000K-LTBD (LED180 series)**
HOUSING: Opal Lid 1413FR1- LTBD + End Caps + Mounting Clip

DESCRIPTION: Surface mounted low voltage linear warm white 2700K LED strip light, 25mm increment, concealed within square extruded profile with opal lens, exact lengths required to be measured on site by Contractor and given to manufacturer prior to order, supplied with remote dimmable 1-10V driver and all miscellaneous components for mounting.

FINISHES: N/A

DIMENSIONS: 14mm W x 13mm H x lengths to be determined on site by contractor and given manufacturer prior to order

LAMP TYPE & REF: Warm white LED 2700K 24 volt 85CRI

POWER: 18 watt / 24 volt per meter

FIXING METHOD: Surface mounted in architectural detail.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** EC to coordinate module lengths with field conditions for continuous illumination prior to fitting order. Attention is required to avoid shadows at junctions. **Lengths shall run end-to-end for continuous line of light without interruptions or breaks per the Architect's drawings and following the manufacturer's installation instructions.** To be supplied with all accessories for complete installation.

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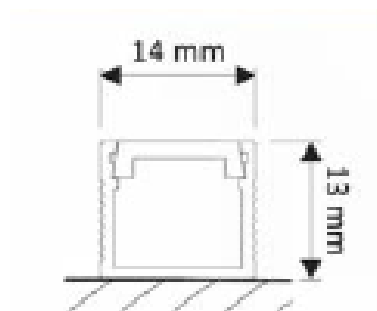
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FITTING CODE **L1A**

IMAGE:



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FITTING CODE **L2**

LOCATION: Various - Bathroom

MANUFACTURER: **LED STRIP: Ledridge**
 (Sean Colbert – Tel: (0)116 246 1188)
HOUSING: Taylor lighting

REFERENCE: **LED STRIP: FLRXP1M-24-2700K-LTBD (LED96 series)-IP44**
HOUSING: Opal Lid 1413FR1- LTBD + End Caps + Mounting Clip

DESCRIPTION: Surface mounted low voltage linear warm white 2700K LED strip light, IP44 rated for wet location, 50mm increment, concealed within square extruded profile with opal lens, exact lengths required to be measured on site by Contractor and given to manufacturer prior to order, supplied with remote dimmable 1-10V driver and all miscellaneous components for mounting.

FINISHES: N/A

DIMENSIONS: 14mm W x 13mm H x lengths to be determined on site by contractor and given manufacturer prior to order

LAMP TYPE & REF: Warm white LED 2700K 24 volt 85CRI

POWER: 9.6 watt / 24 volt per meter

FIXING METHOD: Surface mounted in architectural detail.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** EC to coordinate module lengths with field conditions for continuous illumination prior to fitting order. Attention is required to avoid shadows at junctions. **Lengths shall run end-to-end for continuous line of light without interruptions or breaks per the Architect's drawings and following the manufacturer's installation instructions.** To be supplied with all accessories for complete installation.

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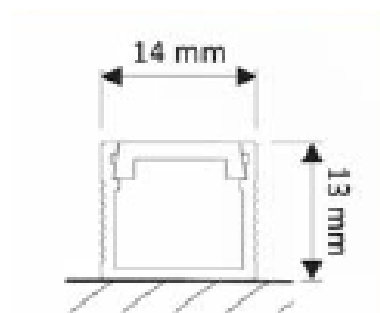
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FITTING CODE **L2**

IMAGE:



ILLUSTRATION:



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FITTING CODE **L6**

LOCATION: Wellness Centre - Ceiling Coves

MANUFACTURER: **Vexica**
 (Mohammad Arrahman Tel: +44 (0)113 2434813)

REFERENCE: **Vex-Domeline-RP-TBD(Length)2700K-90CRI**

DESCRIPTION: Surface mounted low voltage warm white 2700K linear LED strip light with remote phosphor within extruded aluminium profile with dome frosted lens, length(s) to be determined from architectural drawings, remotely located dimmable 1-10V driver.

FINISHES: As standard

DIMENSIONS: 25mm W x 18.5mm H + 9mm (with clip) x LTBD

LAMP TYPE & REF: Warm white LED 2700K 24 volt 90CRI

POWER: 17 watt / 24 volt DC per meter

FIXING METHOD: Surface mounted in architectural detail via concealed clips.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** EC to coordinate module lengths with field conditions for continuous illumination prior to fitting order. Attention is required to avoid shadows at junctions. **Lengths shall run end-to-end for continuous line of light without interruptions or breaks per the Architect's drawings and following the manufacturer's installation instructions.** To be supplied with all accessories for complete installation.

Specification of Luminaires

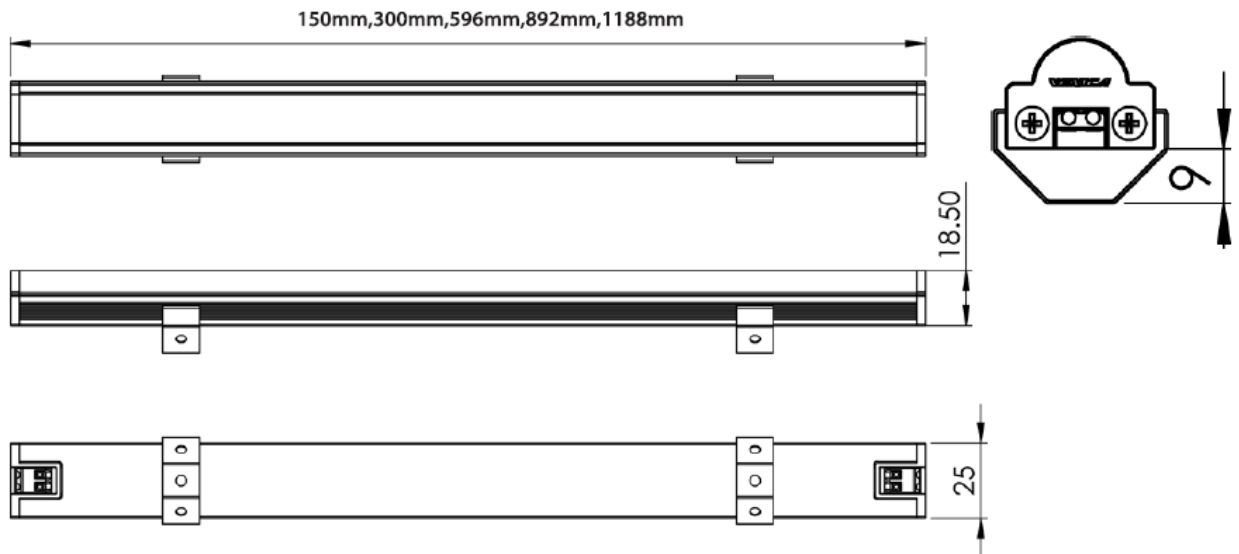
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FITTING CODE **L6**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
Date: 05 April 2016
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FITTING CODE **L7**

LOCATION: Wellness Centre

MANUFACTURER: **LED Linear**
(Lee Shields – Tel: 07795 974603)

REFERENCE: **X00LINE HYD HD25 824/TBD(LENGTH)-10D-C004-IP40**

DESCRIPTION: Surface mounted wall wash warm white 2400K linear LED light strip concealed within aluminum profile, 10° optic cover, exact lengths required to be measured on site by Contractor and given to manufacturer prior to order, supplied with remote 1-10V dimmable driver and all miscellaneous components for mounting.

FINISHES: Aluminium as standard

DIMENSIONS: 19.5mm W x 22.5 H x L lengths to be determined on site by contractor and given manufacturer prior to order

LAMP TYPE & REF: Warm white LED from 2400K 10° optic cover 24 volt 85 CRI

POWER: 25 watt / 24 volt per meter

FIXING METHOD: Surface mounted in architectural detail.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** EC to coordinate module lengths with field conditions for continuous illumination prior to fitting order. Attention is required to avoid shadows at junctions. **Lengths shall run end-to-end for continuous line of light without interruptions or breaks per the Architect's drawings and following the manufacturer's installation instructions.** To be supplied with all accessories for complete installation.

Specification of Luminaires

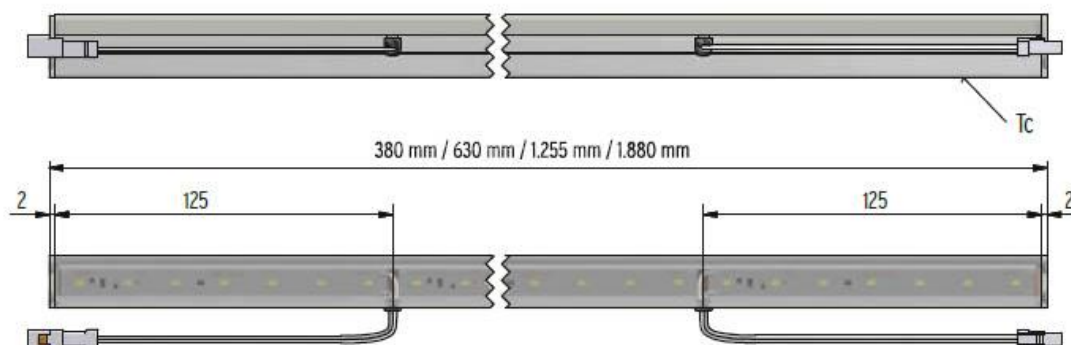
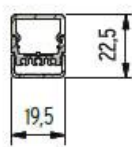
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FITTING CODE **L7**

IMAGE:



ILLUSTRATION:



**Linear-
linse 10°**
Linear
optic 10°

19,5 x 20

Specification of Luminaires

Project: Fitzjohns Avenue
 Architect: Sergison Bates Architects
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FITTING CODE **L9**

LOCATION: Wellness Centre – Steam Room, Sauna, Pool, Treatment Room

MANUFACTURER: **LED Linear** (Lee Shields Tel: +44 (0)1494 471340)

REFERENCE: **VarioLED Flex PHOBOS SV IP68 W824/A SV IP68
 + 1-10V dimmable driver + mounting plates**

DESCRIPTION: Surface mounted linear diffuse profile using translucent opal flexible polymer for smooth shadow-less light distribution using constant pitch warm white LED lighting system with warm white 2700K LED, IP68 rated. Flexible with 150mm minimum bending radius. Requires remote dimmable driver 1-10V (to be supplied by manufacturer).

FINISHES: White

DIMENSIONS: 10mm W x 20.5mm H, lengths to be determined on site by contractor and given manufacturer prior to order

LAMP TYPE & REF: Warm white LED 2700K 24 volt 85CRI

POWER: 10 watt / 24 volt DC per meter

FIXING METHOD: Surface mounted in architectural detail.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** EC to coordinate module lengths with field conditions for continuous illumination prior to fitting order. Attention is required to avoid shadows at junctions. **Lengths shall run end-to-end for continuous line of light without interruptions or breaks per the Architect's drawings and following the manufacturer's installation instructions.** To be supplied with all accessories for complete installation.

Specification of Luminaires

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FITTING CODE **L9**

IMAGE:

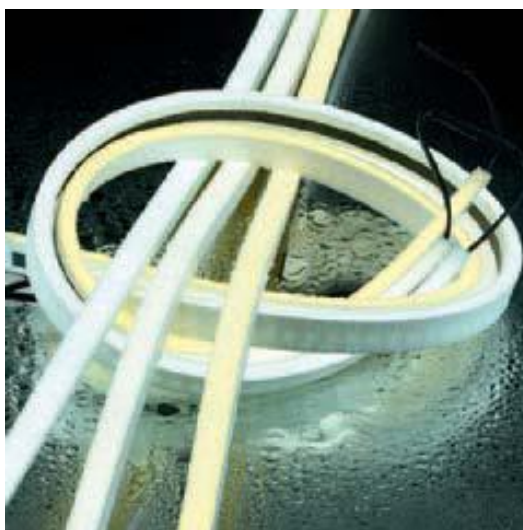
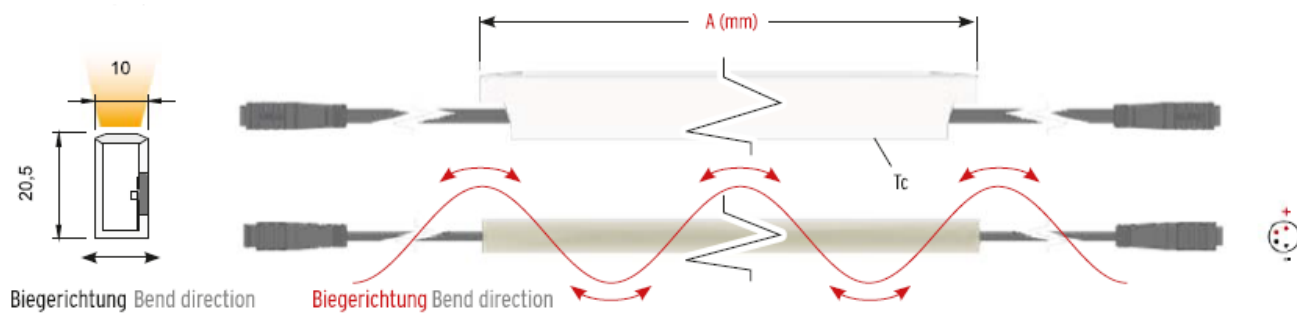


ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
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FITTING CODE **L7, L9 – D60 DRIVER**

LOCATION: Throughout

MANUFACTURER: **MW Mean Well (www.meanwell.com)**

REFERENCE: **DRIVER HLG-60H**
Sub-controller: eldoLED – LIN211D1-LN

DESCRIPTION: Remotely located LED driver, in nearby ventilated, accessible cavity.
Driver requires a 1-10V sub-controller in order to dim.

FINISHES: N/A

DIMENSIONS: 61.5mm W x 36.8mm H x 171mm L

LAMP TYPE & REF:

POWER: 60 watt / 24V DC

FIXING METHOD: Surface mounted in remotely, accessible, ventilated cavity.

COMMENTS: **Fitting comes wired with 0.25mm² cable thickness with 2 meters distance to the fitting from driver.**
0.75mm² is maximum cable thickness with 8 meters maximum distance to the fitting from driver. Recommended to use junction box to run several drivers/meters of tape.

ILLUSTRATION:

Specification of Luminaires

Project: Fitzjohns Avenue
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FITTING CODE **L7, L9 – D100 DRIVER**

LOCATION: Throughout

MANUFACTURER: **MW Mean Well (www.meanwell.com)**

REFERENCE: **DRIVER HLG-100H**
Sub-controller: eldoLED – LIN211D1-LN

DESCRIPTION: Remotely located LED driver, in nearby ventilated, accessible cavity.
 Driver requires a 1-10V sub-controller in order to dim.

FINISHES: N/A

DIMENSIONS: 68mm W x 38.8mm H x 220mm L

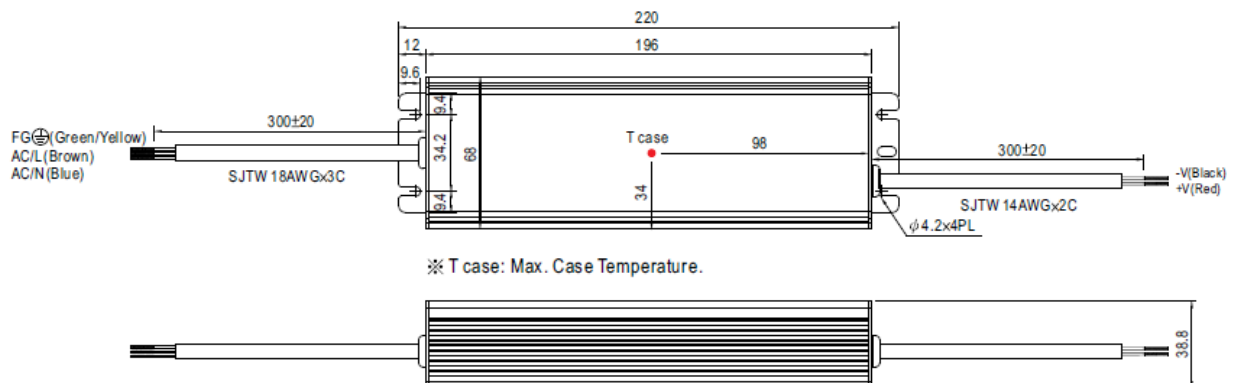
LAMP TYPE & REF:

POWER: 100 watt / 24V DC

FIXING METHOD: Surface mounted in remotely, accessible, ventilated cavity.

COMMENTS: **Fitting comes wired with 0.25mm² cable thickness with 2 meters distance to the fitting from driver.**
0.75mm² is maximum cable thickness with 8 meters maximum distance to the fitting from driver. Recommended to use junction box to run several drivers/meters of tape.

ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
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FITTING CODE **L6 - 60W Driver**

LOCATION: Wellness Centre - Ceiling Coves

MANUFACTURER: **MW Mean Well (www.meanwell.com)**

REFERENCE: **DRIVER LPF-60D-24**

DESCRIPTION: Remotely located LED driver, in nearby ventilated, accessible cavity, 1-10V dimmable.

FINISHES: N/A

DIMENSIONS: 43mm W x 32mm H x 162.5mm L

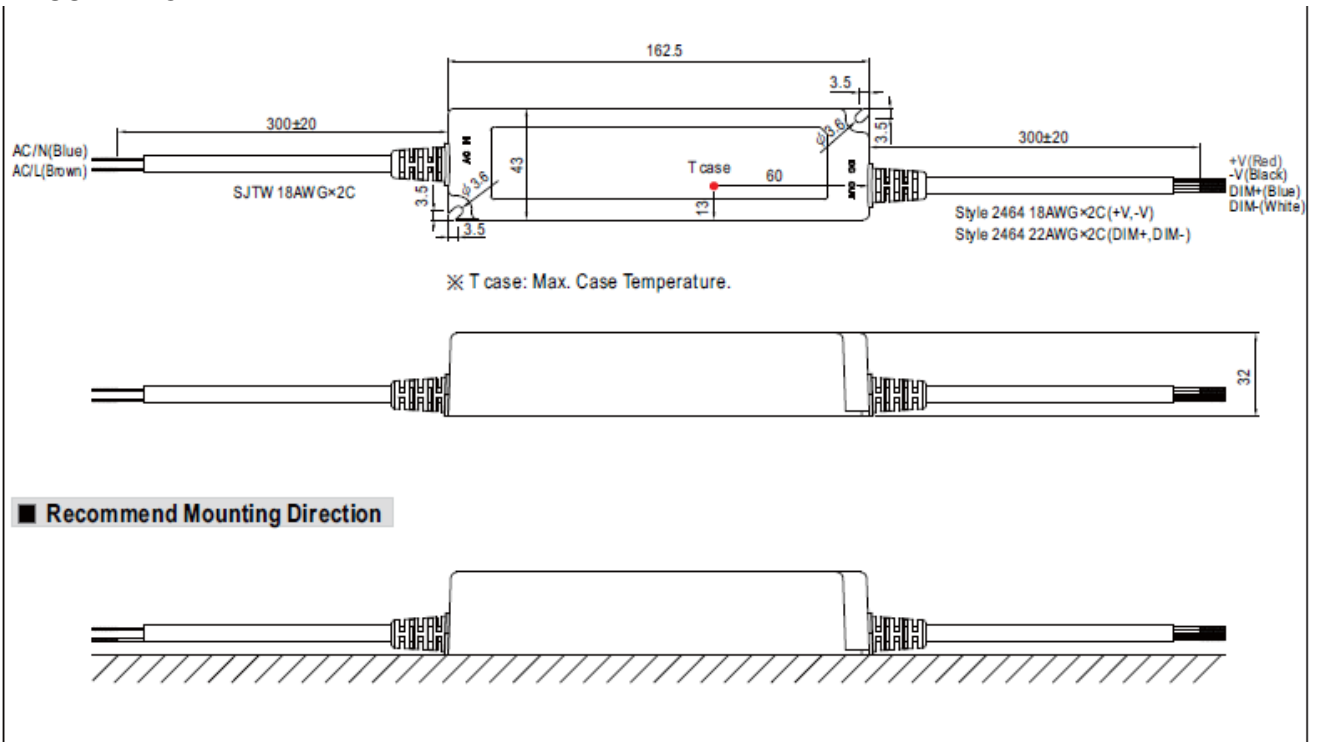
LAMP TYPE & REF:

POWER: 60 watt / 24V DC

FIXING METHOD: Surface mounted in remotely, accessible, ventilated cavity.

COMMENTS:

ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
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FITTING CODE **L6 - 90W Driver**

LOCATION: Wellness Centre - Ceiling Coves

MANUFACTURER: **MW Mean Well (www.meanwell.com)**

REFERENCE: **DRIVER LPF-90D-24**

DESCRIPTION: Remotely located LED driver, in nearby ventilated, accessible cavity, 1-10V dimmable.

FINISHES: N/A

DIMENSIONS: 61mm W x 36mm H x 161mm L

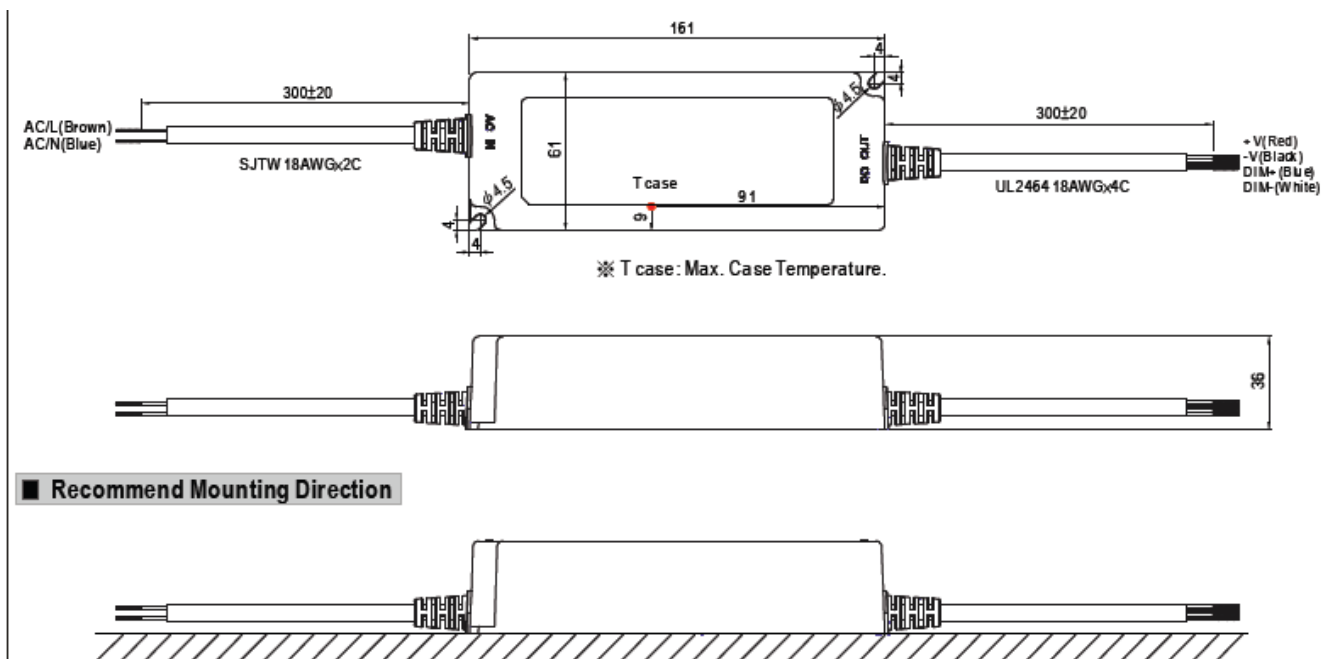
LAMP TYPE & REF:

POWER: 90 watt / 24V DC

FIXING METHOD: Surface mounted in remotely, accessible, ventilated cavity.

COMMENTS:

ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
 Architect: Sergison Bates Architects
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FITTING CODE **L6 - 120W Driver**

LOCATION: Wellness Centre - Ceiling Coves

MANUFACTURER: **MW Mean Well (www.meanwell.com)**

REFERENCE: **DRIVER PWM-120D-24**

DESCRIPTION: Remotely located LED driver, in nearby ventilated, accessible cavity, 1-10V dimmable.

FINISHES: N/A

DIMENSIONS: 63mm W x 37.5mm H x 191mm L

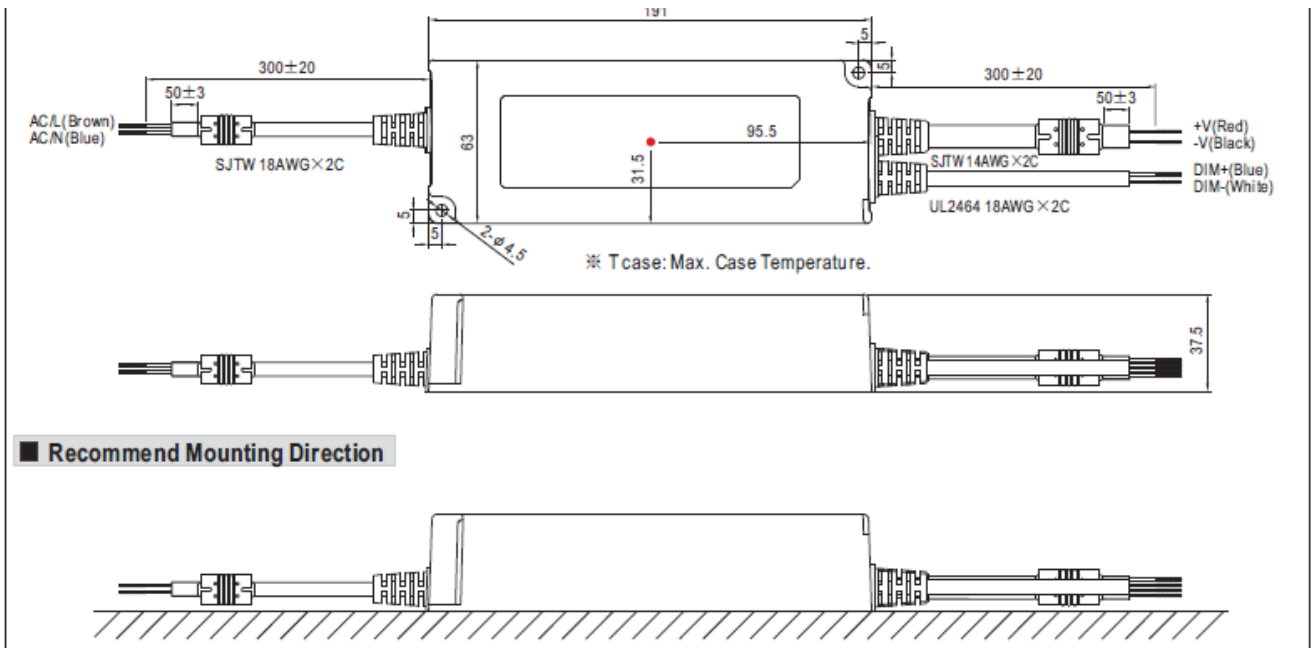
LAMP TYPE & REF:

POWER: 120 watt / 24V DC

FIXING METHOD: Surface mounted in remotely, accessible, ventilated cavity.

COMMENTS:

ILLUSTRATION:



Specification of Luminaires

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Architect: Sergison Bates Architects
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FITTING CODE **P3**

LOCATION: Apartment Dining

MANUFACTURER: **Santa & Cole**

REFERENCE: **M68**

DESCRIPTION: Pendant mounted decorative luminaire.

FINISHES: **Polished Aluminium**

DIMENSIONS: 220mm H x 460mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

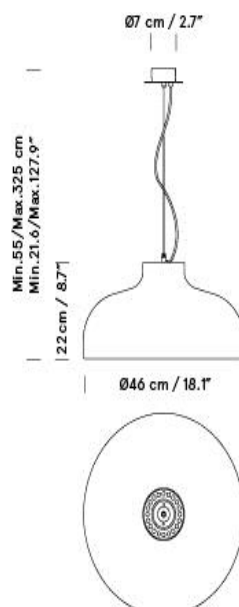
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FITTING CODE **P3**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **P4**

LOCATION: Apartment Gallery

MANUFACTURER: **Santa & Cole**

REFERENCE: **M68**

DESCRIPTION: Pendant mounted decorative luminaire.

FINISHES: **Polished Aluminium**

DIMENSIONS: 220mm H x 460mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

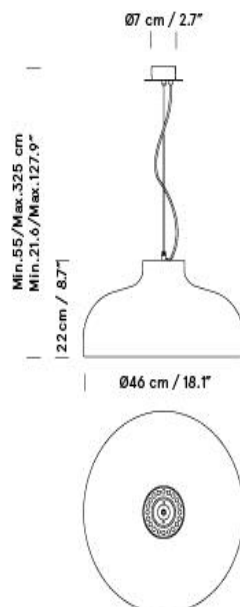
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FITTING CODE **P4**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **P7 (TBD)**

LOCATION: Wellness Centre – Gym

MANUFACTURER: **LTS - Fagerhult**

REFERENCE: **Lichtkanal 70 pendant profile | direct/indirect
LKDI 001 AG-AK (profile)- LKDI 090.101.1 (end cap) + LKDI
090.103/3 (wire-rope suspension with feeder)**

DESCRIPTION: Suspended direct and indirect LED linear profile with seamless opal diffuser. Warm white 2700K. Custom lengths.

FINISHES: **TBD by Architect**

DIMENSIONS: 70mm W x 130mm H x L (exact length TBD)

LAMP TYPE & REF: **38 W, 3000 K, 1405 mm, 2330 lm LKDIL 010.30.50 (down) (TBD)
45 W, 3000 K, 1405 mm, 3685 lm LKML 010.30.50 (uplight) (TBD)**

POWER: 2 x 38W / 240 volt – down **(TBD)**
2 x 45 W / 240 volt – uplight **(TBD)**

FIXING METHOD: Ceiling suspended.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

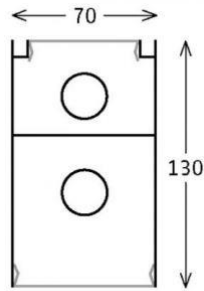
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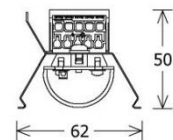
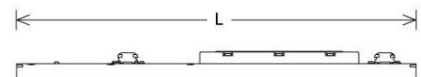
IMAGE:



ILLUSTRATION:



ACCESSORIES:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **P9**

LOCATION: Wellness Centre- Reception

MANUFACTURER: **Glashutte Limburgh**

REFERENCE: **45 485.4 (4425) Pendant Luminaire**

DESCRIPTION: Hand blown opal glass pendant globe. Satin matt and metal fitter.

FINISHES: **TBD by Architect**

DIMENSIONS: 200mm Ø

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

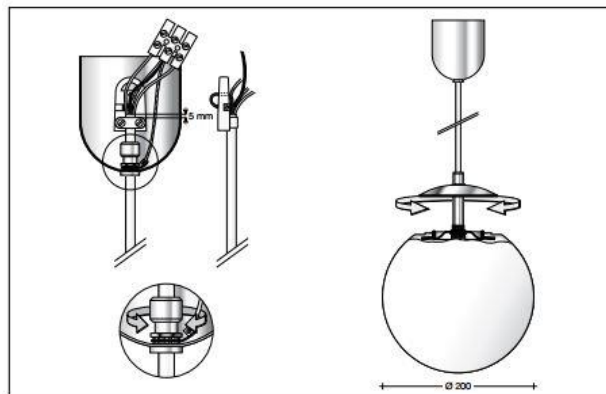
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FITTING CODE **P9**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
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FITTING CODE **P12**

LOCATION: Communal Entrance Lobby

MANUFACTURER: **Cameron Design House**
(Matt Holleman – Tel: 07454 957240)

REFERENCE: **TBD by Cameron Design House**

DESCRIPTION: Pendant mounted bespoke decorative circular luminaire, dimmable.

FINISHES: **TBD by Architect**

DIMENSIONS: 1500mm Ø

LAMP TYPE & REF: 40 watt Halogen capsule - Allow

POWER: 250 watt / 240 volt

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

IMAGE: INDICATIVE ONLY



Specification of Luminaires

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Architect: Sergison Bates Architects
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FITTING CODE **P13**

LOCATION: Grand Stair

MANUFACTURER: **Glashutte Limburgh**

REFERENCE: **45 485.4 (4425) Pendant Luminaire**

DESCRIPTION: Hand blown opal glass pendant globe. Satin matt and metal fitter.

FINISHES: **TBD by Architect**

DIMENSIONS: 200mm Ø

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

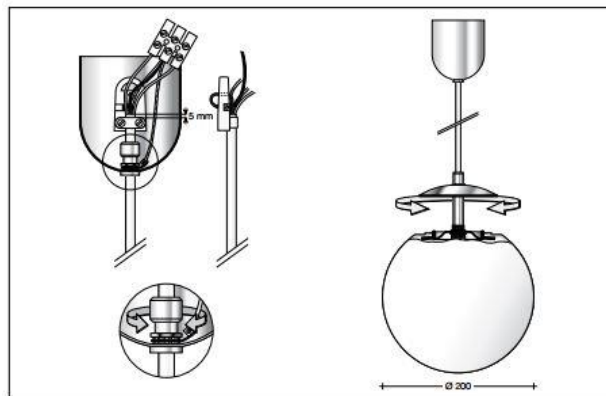
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FITTING CODE **P13**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **P16**

LOCATION: Wellness Centre-Reception Hall

MANUFACTURER: **Glashutte Limburgh**

REFERENCE: **56 390.2 (5388) Pendant Luminaire**

DESCRIPTION: Hand blown opal glass and metal housing. Screw neck and black flex suspension. Metal fitter and canopy.

FINISHES: **TBD by Architect**

DIMENSIONS: 50mm Ø and 240mm H

LAMP TYPE & REF: 6 watt warm white 2700K LED E14 base **470 lumens - ALLOW**
(Osram Ref: PARATHOM CLASSIC B 40 ADV 6 W/827 E14 FR)

POWER: 6 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

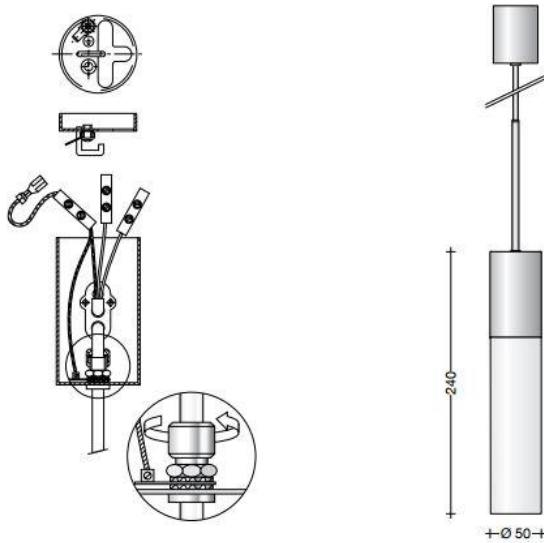
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FITTING CODE **P16**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **P17**

LOCATION: Wellness Centre

MANUFACTURER: **Glashutte Limburgh**

REFERENCE: **45 485.4 (4425) Pendant Luminaire**

DESCRIPTION: Hand blown opal glass pendant globe. Satin matt and metal fitter.

FINISHES: **TBD by Architect**

DIMENSIONS: 200mm Ø

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

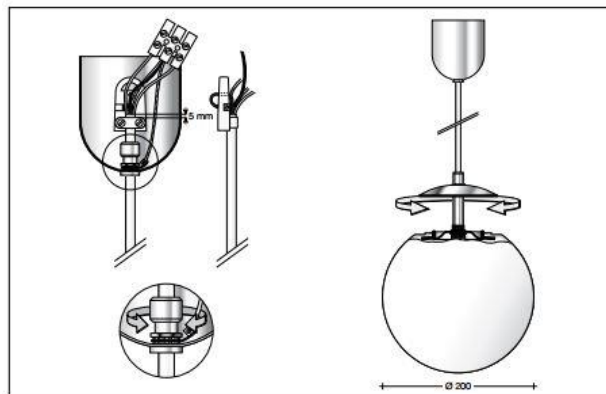
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FITTING CODE **P17**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **P18**

LOCATION: Wellness Centre- Hall

MANUFACTURER: **Glashutte Limburgh**

REFERENCE: **56 547 (5547) Pendant Luminaire**

DESCRIPTION: Aluminium luminaire housing and metal canopy, white enamel finish.
Hand blown opal glass.

FINISHES: **White Enamel**

DIMENSIONS: 560mm Ø x 142mm H and 4000mm suspension

LAMP TYPE & REF: 40 watts warm white **3000K 4150lm.**

POWER: 40 watt / 240 volt Allow

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

FITTING CODE **P18**

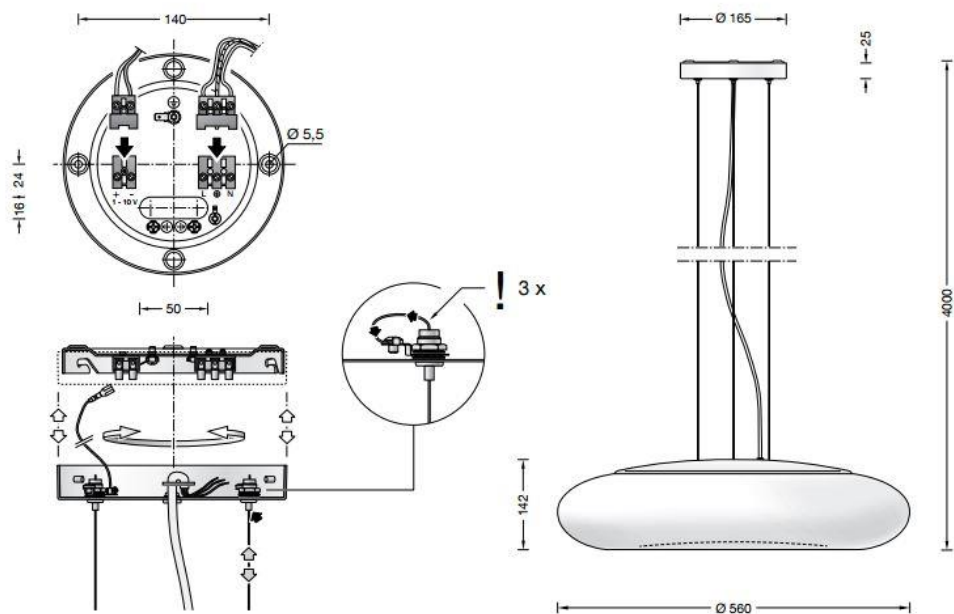
Specification of Luminaires

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IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **S1**

LOCATION: Social Kitchen

MANUFACTURER: **Glashutte Limburgh**

REFERENCE: **8785 Recessed Luminaire**

DESCRIPTION: Ceiling recessed decorative fitting with GX 24q-3 lamp base, dimmable.

FINISHES: Opal Glass

DIMENSIONS: 115mm H x 240mm Ø W - 215mm Ø W to cut-out

LAMP TYPE & REF: Warm white 2700K compact fluorescent
Osram Ref: DULUX D/E 26 W/827

POWER: 26 watt / 240 volt

FIXING METHOD: Ceiling recessed.

COMMENTS: CE Listed. Circuited to control system.

**2 cable entries for through-wiring for main cables up to Ø 10.5mm.
Electronic ballast (EEI=A2) 220-240V**

Specification of Luminaires

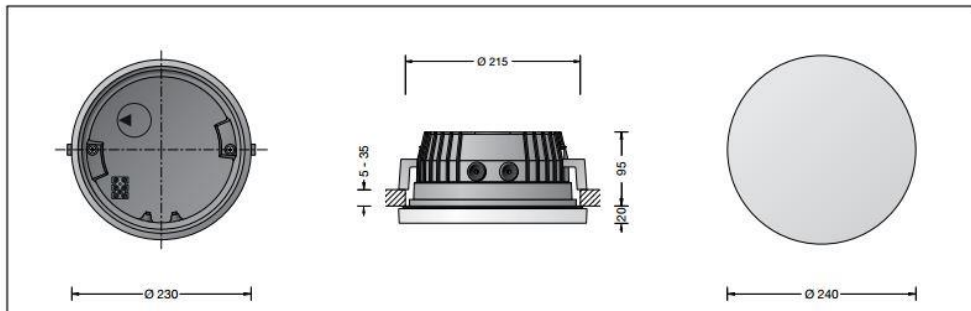
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FITTING CODE **S1**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **S2**

LOCATION: Main Entrance

MANUFACTURER: **Mawa Design**

REFERENCE: **Eintopf Ceiling Lamp – Brass Finish**

DESCRIPTION: Ceiling mounted decorative fitting with E27 lamp base, dimmable.

FINISHES: Brass

DIMENSIONS: 60mm H x 80mm Ø W

LAMP TYPE & REF: 4.3 watt warm white 2700K LED E27 base **470 lumens**
(Philips ref: Classic LED CLA LEDBulb ND 4.3-40W E27 WWST64CL)

POWER: 4.3 watt / 240 volt

FIXING METHOD: Ceiling mounted.

COMMENTS: CE Listed. Circuited to control system.

IMAGE:



Specification of Luminaires

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Architect: Sergison Bates Architects
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FITTING CODE **SC1**

LOCATION: Communal Entrance Lobby

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire - 8493 Opal Glass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Polished Brass**

DIMENSIONS: 220mm H x 200mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 20 watt / 240 volt Allow

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

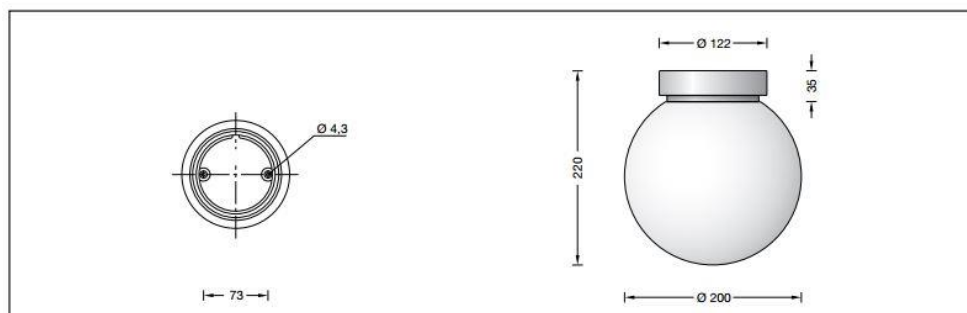
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FITTING CODE **SC1**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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Architect: Sergison Bates Architects
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FITTING CODE **SC2**

LOCATION: Communal Lobby

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire - 8493 Opal Glass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Polished Brass**

DIMENSIONS: 220mm H x 200mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

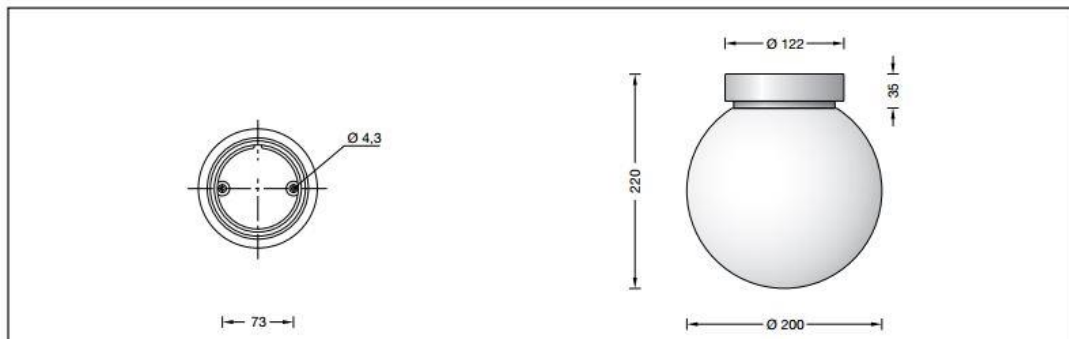
Project: Fitzjohns Avenue
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FITTING CODE **SC2**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
Date: 05 April 2016
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FITTING CODE **SC3**

LOCATION: Communal Lobby

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire - 8493 Opal Glass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Polished Brass**

DIMENSIONS: 220mm H x 200mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

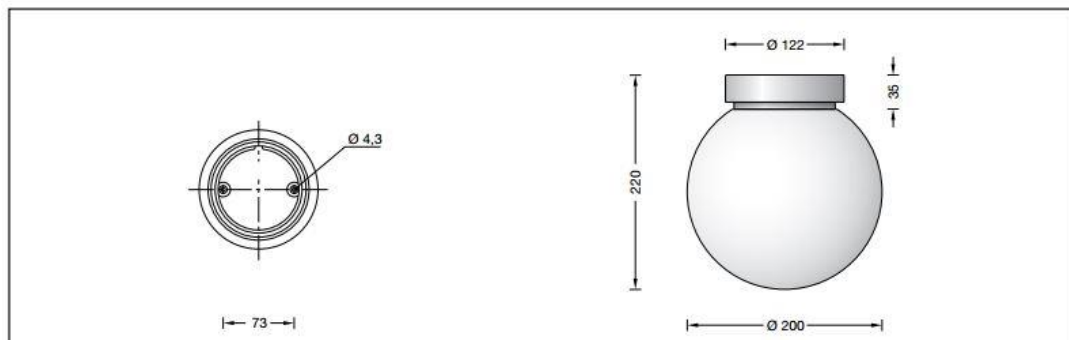
Project: Fitzjohns Avenue
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FITTING CODE **SC3**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
Date: 05 April 2016
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FITTING CODE **SC4**

LOCATION: Grand Stair

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire - 8493 Opal Glass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Polished Brass**

DIMENSIONS: 220mm H x 200mm Ø W

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

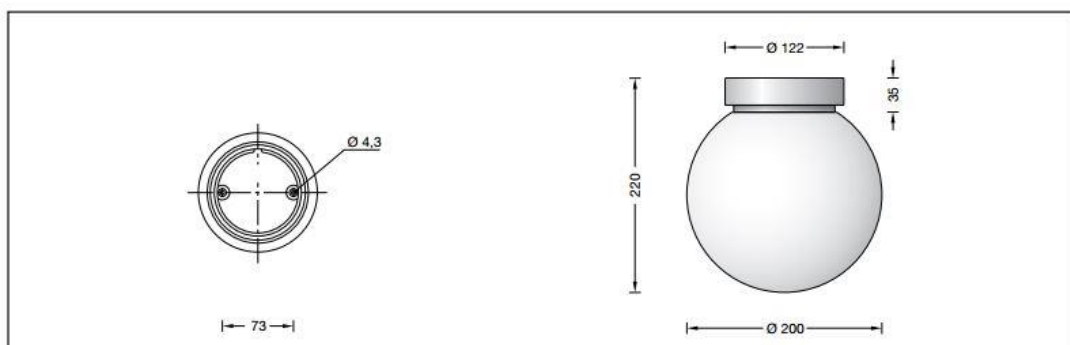
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FITTING CODE **SC4**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **SC6**

LOCATION: Apartment Dining/Lobby

MANUFACTURER: **CTO Lighting**

REFERENCE: **Array Twin Wall**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Polished Brass – Opal Glass**

DIMENSIONS: 400mm H x 650mm W

LAMP TYPE & REF: G9 Mains Halogen x 2

POWER: 50 watt / 240 volt Allow

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **SC6**

IMAGE:

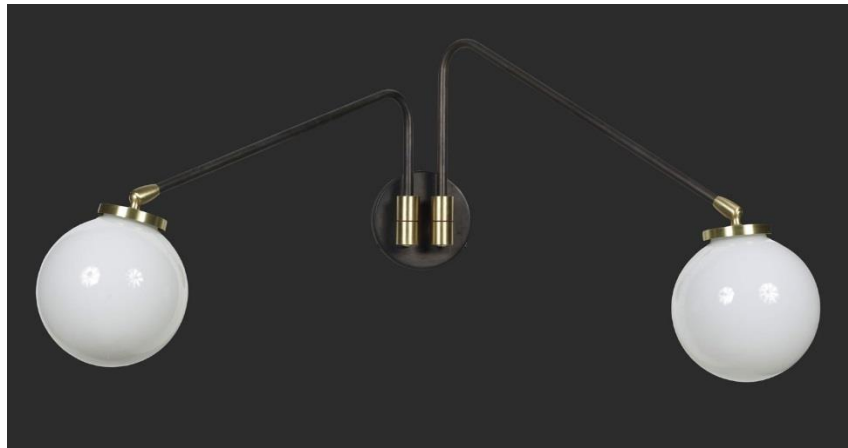
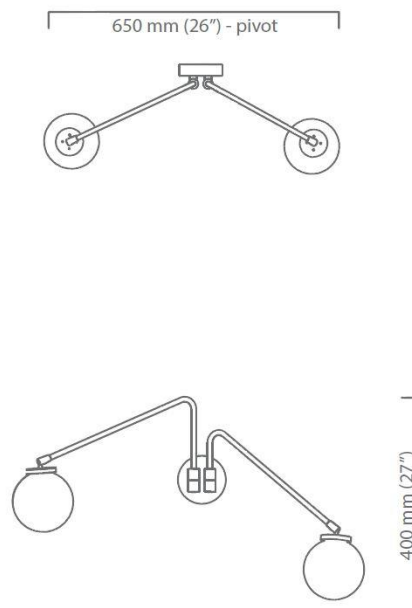


ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **SC7**

LOCATION: Apartment Bedroom

MANUFACTURER: **CTO Lighting**

REFERENCE: **Big Bulb Opal Wall - Polished Brass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Polished Brass**

DIMENSIONS: 200mm W x 600mm H

LAMP TYPE & REF: Tungsten Halogen G9

POWER: 30 watt / 240 volt Allow

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
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FITTING CODE **SC7**

IMAGE:

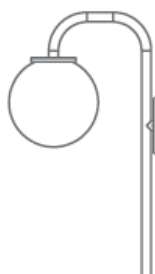


ILLUSTRATION:

200 mm (8")



120 mm (5")



360 mm (14")

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **SC8**

LOCATION: Apartment Bathroom

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire - 6996 Hand-Blown Glass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Gold Finish**

DIMENSIONS: 235mm H x 95mm W

LAMP TYPE & REF: 33W 240V Tungsten Halogen G9 base

POWER: 33 watt / 240 volt

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

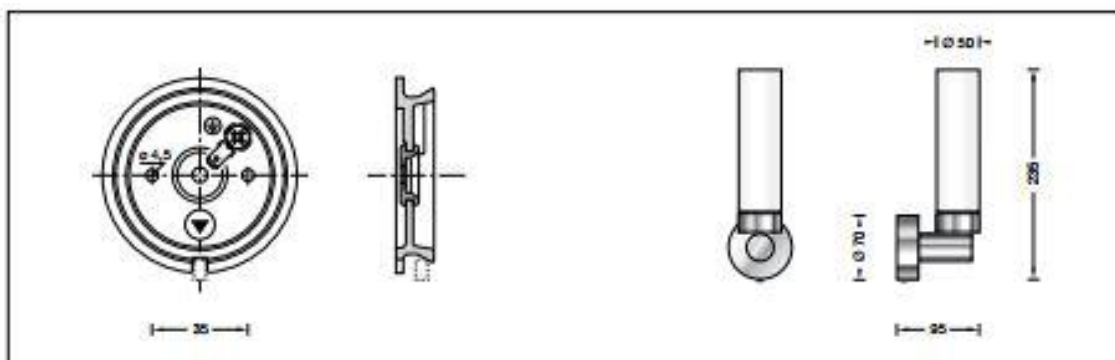
Project: Fitzjohns Avenue
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FITTING CODE **SC8**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
Date: 05 April 2016
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FITTING CODE **SC12**

LOCATION: Wellness Centre – Pool Area

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire – 50 067.2 Hand-Blown Glass**

DESCRIPTION: Free radiating LED **IP65** wall luminaire with hand blown three-ply opal glass. Metal housing, stainless steel finish

FINISHES: **Stainless Steel**

DIMENSIONS: 500mm H x 80mm W x 115mm D

LAMP TYPE & REF: 20W LED warm white **3000K 2300lm**

POWER: 20 watt

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

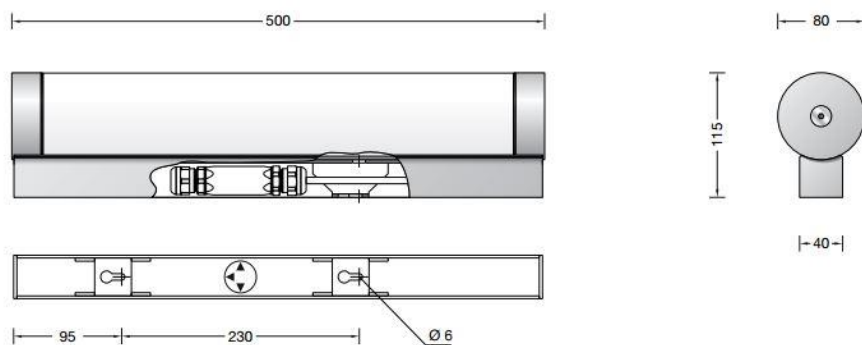
Project: Fitzjohns Avenue
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FITTING CODE **SC12**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
Date: 05 April 2016
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FITTING CODE **SC14**

LOCATION: Wellness Centre – Changing Rooms

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire - 6996 Hand-Blown Glass**

DESCRIPTION: Wall mounted decorative luminaire.

FINISHES: **Gold Finish**

DIMENSIONS: 235mm H x 95mm W

LAMP TYPE & REF: 33W 240V Tungsten Halogen G9 base

POWER: 33 watt / 240 volt

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

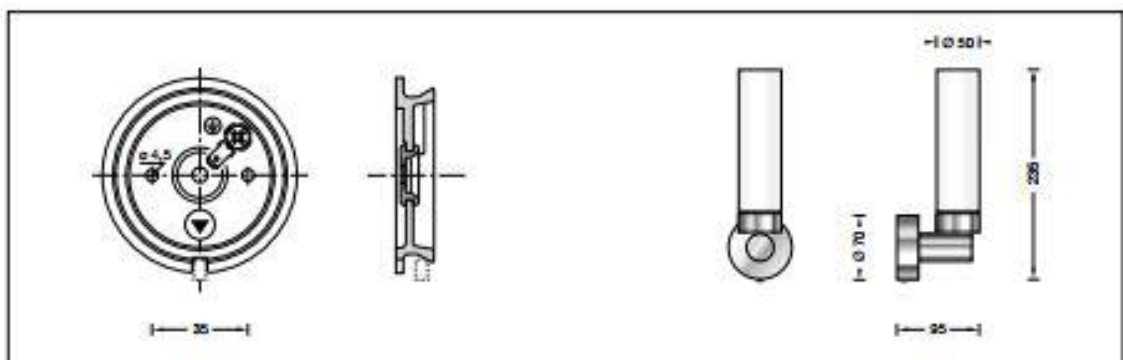
Project: Fitzjohns Avenue
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FITTING CODE **SC14**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **SC15**

LOCATION: Wellness Centre – Treatment Room

MANUFACTURER: **Glashutte Limburg**

REFERENCE: **Wall Luminaire – 78 613.4 Hand Blown opal glass**

DESCRIPTION: Shielded luminaire made of painted metal back plate. Upward and Downward component.

FINISHES: **Brass**

DIMENSIONS: 80mm H x 400mm W x 115mm D

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 2 x 17 watt / 240 volt

FIXING METHOD: Wall mounted.

COMMENTS: CE Listed. Circuited to control system.

Specification of Luminaires

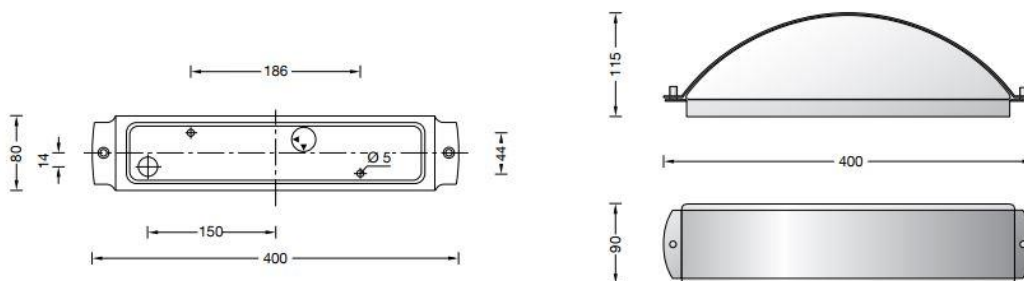
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FITTING CODE **SC15**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
Date: 05 April 2016
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FITTING CODE **TL1**

LOCATION: Apartment Bedroom

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing table decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **TL2**

LOCATION: Apartments

MANUFACTURER: **TBD by Architect**

REFERENCE: Free standing table decorative luminaire.

DESCRIPTION: **TBD by Architect**

FINISHES: **TBD by Architect**

DIMENSIONS: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

LAMP TYPE & REF: 17 watt / 240 volt Allow

POWER: Free standing.

FIXING METHOD: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

COMMENTS: **TBD by Architect**

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **TL3**

LOCATION: Wellness Centre

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing table decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **TL4 - TBD**

LOCATION: Wellness Centre-Guest Suite

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing table decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **TL5 (TBD)**

LOCATION: Wellness Centre – Reception

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing table decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **TL6 (TBD)**

LOCATION: Concierge

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing table decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **TL7 - TBD**

LOCATION: Ground Floor

MANUFACTURER: **TBD by Architect**

REFERENCE: **TBD by Architect**

DESCRIPTION: Free standing table decorative luminaire.

FINISHES: **TBD by Architect**

DIMENSIONS: **TBD by Architect**

LAMP TYPE & REF: 17 watt warm white 2700K LED E27 base **1521 lumens - ALLOW**
(Philips ref: Master LEDbulb D 17-75W E27 2700K)

POWER: 17 watt / 240 volt Allow

FIXING METHOD: Free standing.

COMMENTS: CE Listed. Circuited to control system.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **W2**

LOCATION: Wellness Centre – Changing Rooms

MANUFACTURER: **Lucifer Lighting**

REFERENCE: **Stealth - SSL-ALED-2.7K-TBD(FINISH)-NL
SSL-BB - Aluminium back box**

DESCRIPTION: Wall recessed low voltage LED step light with low glare aperture and sealed spread lens, IP65 for wet location, requires aluminium back box, remotely located dimmable 1-10V driver.

FINISHES: TBD by Architect

DIMENSIONS: 66mm W x 70mm H x 41mm recess depth

LAMP TYPE & REF: 3 watt warm white 2700K LED 80 CRI

POWER: 3 watt / 12 volt AC

FIXING METHOD: Wall recessed.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.**

Specification of Luminaires

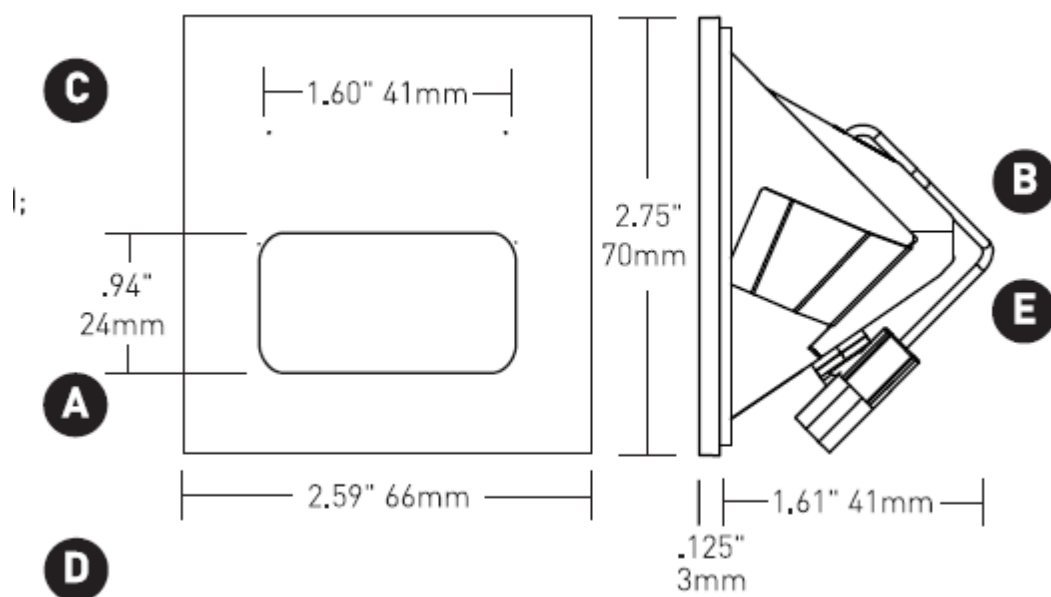
Project: Fitzjohns Avenue
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FITTING CODE **W2**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **XB1**

LOCATION: Landscape

MANUFACTURER: **Wever & Ducre**

REFERENCE: **Bollard – Getton 2.0/717674D4**

DESCRIPTION: Exterior rated ground mounted LED bollard, IP65 housing made of die-cast aluminium with clear glass and integral driver, phase-cut dimmable.

FINISHES: Aluminium Powder Coated

DIMENSIONS: 600mm H x 120mm Ø W

LAMP TYPE & REF: 8 watt Warm White 3000K LED 80CRI

POWER: 8 watt / 240 volt

FIXING METHOD: Ground mounted.

COMMENTS: Circuited to dimming system. CE Labelled.

Electrical Contractor to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **XB1**

IMAGE:

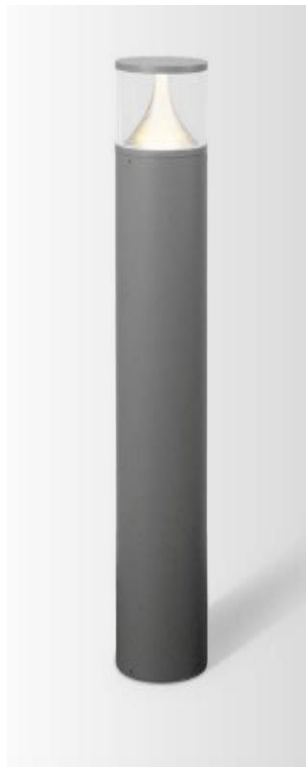
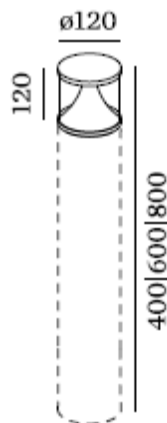


ILLUSTRATION:



Specification of Luminaires

Project: Fitzjohns Avenue
 Architect: Sergison Bates Architects
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FITTING CODE **XP1**

LOCATION: Landscape

MANUFACTURER: **EcoLED Light**
 (EcoLED - Tel: 020 8492 7633)

REFERENCE: **FITTING: ZEP3 - Z3-SW-S-4-27-80-30X60-V**
DRIVER: HAR33W1000MA1-10VD (One driver per 6 fittings)

DESCRIPTION: Ground recessed low voltage IP68 warm white LED path light with 30° x 60° beam angle, remotely located dimmable 1-10V driver.

FINISHES: Stainless Steel

DIMENSIONS: 62mm Ø W x 45mm recess depth, 42mm Ø W to cut-out

LAMP TYPE & REF: 3.6 watt warm white 2700K LED 30°x60° 80CRI
 107 lumens with 29.7 lm/w

POWER: 3.6 watt / 1000mA

FIXING METHOD: In ground recessed.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.** To be supplied with all accessories for complete installation.

Specification of Luminaires

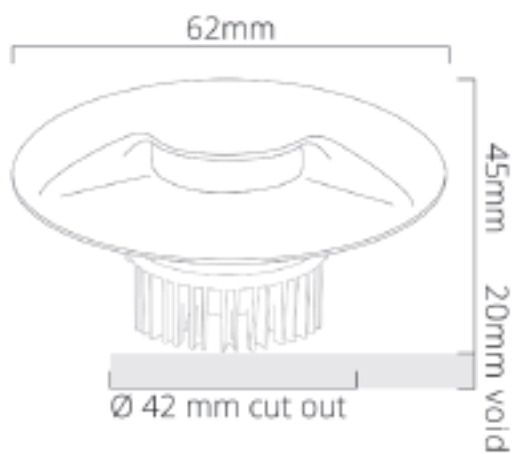
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FITTING CODE **XP1**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **XS1**

LOCATION: Landscape

MANUFACTURER: **Ecosense**
(Lee Shields – Tel: 07795 974603)

REFERENCE: **Floodlight Bullet Mini - BUL-S-30-220-IC-BK-11 + BUL-S-45S-BK (45° Snoot) + BUL-S-LSD-60, 80 (Optical Lenses 60° & 80°) + SPIKE**

DESCRIPTION: Spike mounted adjustable IP66 3500K LED spotlight with cover lens and integral dimmable 1-10V driver.

FINISHES: Black

DIMENSIONS: 125mm H x 223mm W

LAMP TYPE & REF: 10.9 watt White LED 3000K 60°x 80°

POWER: 10.9 watt / 240 vac

FIXING METHOD: Spike mounted.

COMMENTS: Circuited to dimming system. CE Labelled. Dimmable through ELV or TRIAC dimming hardware.

Specification of Luminaires

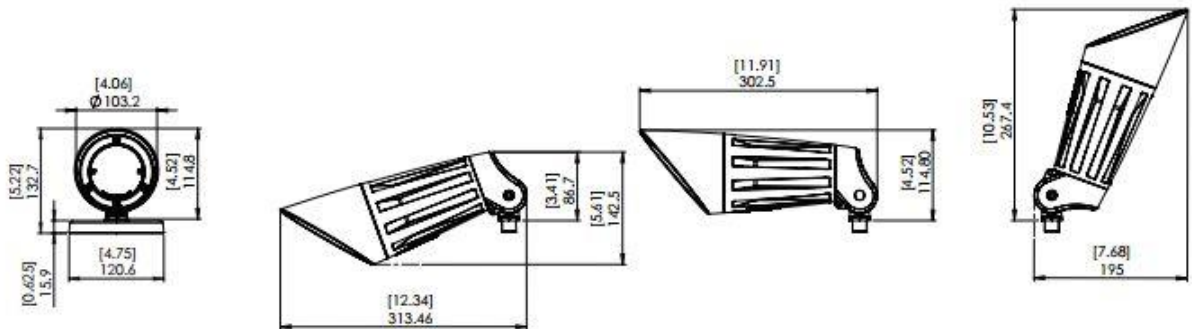
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FITTING CODE **XS1**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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FITTING CODE **XS2**

LOCATION: Landscape

MANUFACTURER: **Solar Centre**

REFERENCE: **Selene Solar Landscape Spotlights**

DESCRIPTION: Spike mounted adjustable solar power LED spotlight with integral solar panel.

FINISHES: Black

DIMENSIONS: 400mm H (with spike) x 90mm W x 170mm D

LAMP TYPE & REF: 3 x white LED

POWER: 1W / 5V/200mA

FIXING METHOD: Spike mounted.

COMMENTS:

Specification of Luminaires

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Architect: Sergison Bates Architects
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FITTING CODE **XS2**

IMAGE:



Specification of Luminaires

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Architect: Sergison Bates Architects
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FITTING CODE **XS3**

LOCATION: Exterior Private Terrace

MANUFACTURER: **Lightscape Projects**

REFERENCE: **LEDStar3 - 4507010-928-30-2A + 247-0141-4 (GROUND SPIKE)**

DESCRIPTION: Surface mounted adjustable low voltage IP67 LED spotlight with cover lens, remotely located dimmable 1-10V driver.

FINISHES: Black TBC with Architect

DIMENSIONS: 105mm H x 87mm Ø W x 111mm L

LAMP TYPE & REF: Warm white LED 2700K 700mA **30°** 93 CRI

POWER: 7.67 watt / 700mA

FIXING METHOD: Surface mounted.

COMMENTS: CE Labelled. Circuited to control system.

Specification of Luminaires

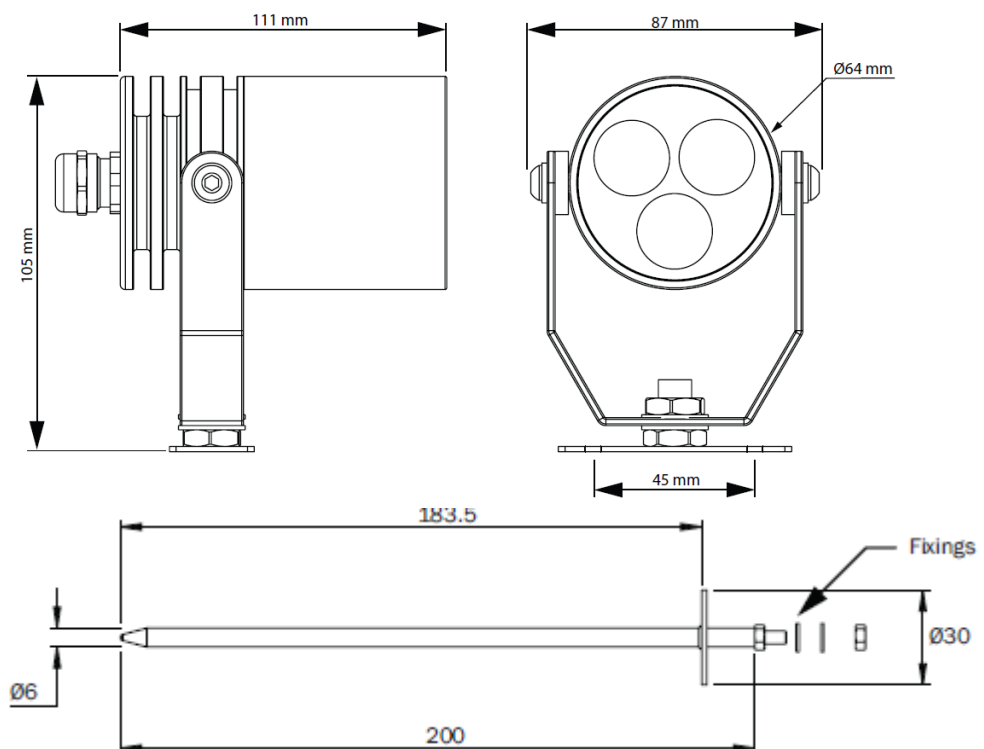
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FITTING CODE **XS3**

IMAGE:



ILLUSTRATION:



Specification of Luminaires

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 Architect: Sergison Bates Architects
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FITTING CODE **XS3 - D36 DRIVER**

LOCATION: Exterior Private Terrace

MANUFACTURER: **Lightscape Projects**

REFERENCE: **42143-30**

DESCRIPTION: LED 1-10V dimmable driver, IP66. One driver can be used for 4 no. of type XS2. Maximum distance from the fitting is 153M when using 0.75mm cable.

FINISHES: N/A

DIMENSIONS: 132mm W x 90mm H x 223mm L

LAMP TYPE & REF:

POWER: 36 W / 700mA

FIXING METHOD:

COMMENTS:

ILLUSTRATION:

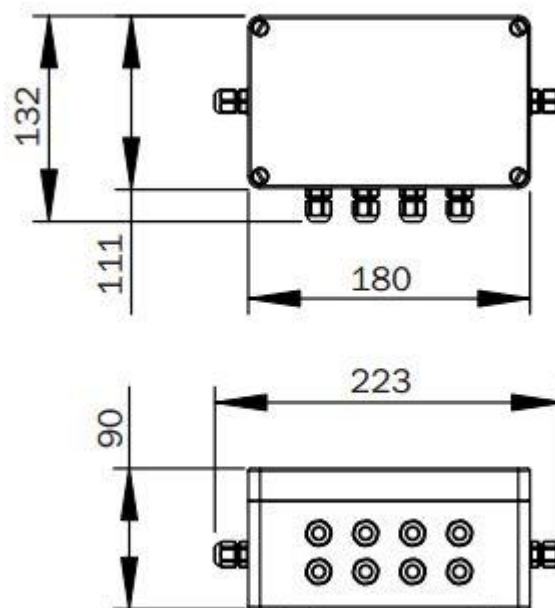


Fig.3 8 Output Example

Specification of Luminaires

Project: Fitzjohns Avenue
Architect: Sergison Bates Architects
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FITTING CODE **XW1**

LOCATION: Landscape

MANUFACTURER: **Concord – Havells Sylvania - Simes**

REFERENCE: **Skill Rectangular Wood L.9240W/20 + Installation Recess Box**

DESCRIPTION: Wall recessed low voltage LED step light with low glare aperture, oiled TEAK wood finish 8mm thick. IP65 for exterior location, requires installation recess box, integral dimmable 1-10V driver.

FINISHES: Burnished Bronze/Teak Wood TBD by Architect

DIMENSIONS: 270mm W x 115mm H x 35mm

LAMP TYPE & REF: 13.5 watt warm white 3000K LED 90 CRI

POWER: 13.5 watt / 240 volt

FIXING METHOD: Wall recessed.

COMMENTS: CE Listed. Circuited to control system. Remote 1-10V dimmable drivers to be located in nearby, accessible, well-ventilated cavity and not exceeding distance recommended by manufacturer. Electrical Contractor (EC) to verify LED drivers are compatible with dimming system (dimmable down to 1% without flickering or stepping). **EC to wire all dimmable LED equipment with additional wiring for 1-10V dimming compatibility.**

Specification of Luminaires

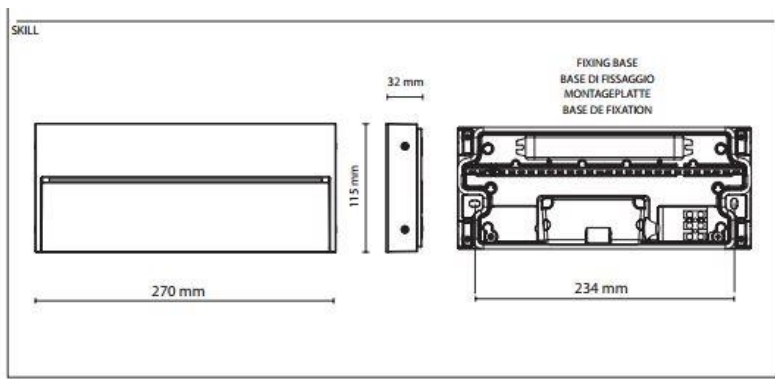
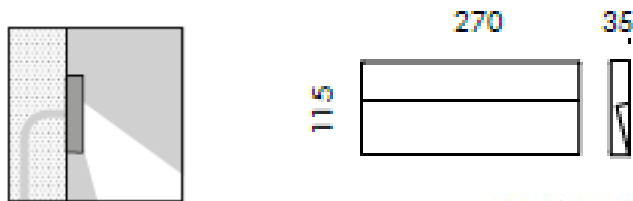
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FITTING CODE **XW1**

IMAGE:

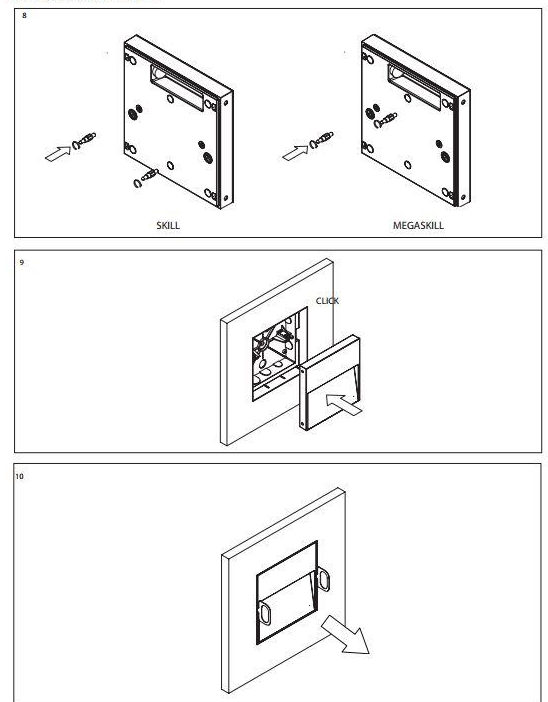


ILLUSTRATION:



INSTALLATION WITH RECESS BOX
 INSTALLAZIONE CON CASSAFORMA
 INSTALLATION AVEC BOÎTE

S I M E S



Specification of Luminaires

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DESIGN LIGHTING LEVELS

All fluorescent and compact fluorescent lamps are fitted with high frequency ballasts. In order to meet the criteria in BREEAM New Construction 2014, Illuminance (lux) levels are to be in accordance with the above design parameters and specifically illuminance levels in accordance with the SLL Code for Lighting 2012. As well as principal functional areas, this includes all ancillary areas such as store rooms, cold stores, plant and control rooms, toilet, washroom and shower areas, circulation areas, corridors and stairwells, indoor car parks (where applicable).

Sports Hall **500 lux**
Admin and offices **300 lux**
Kitchen **500 lux**
Store rooms **100 lux**
Changing Rooms **200-250 lux**
Toilet/Washroom Areas **200-250 lux**
Circulation **150-200 lux**
Dining **200 lux**

For areas where computer screens are regularly used, the lighting design must comply with CIBSE Lighting Guide 7 sections 3.3, 4.6, 4.7, 4.8 and 4.9. This gives recommendations highlighting:

- a. Limits to the luminance of the luminaires to avoid screen reflections. (Manufacturers' data for the luminaires should be sought to confirm this.)
- b. For uplighting, the recommendations refer to the luminance of the lit ceiling rather than the luminaire; a design team calculation is usually required to demonstrate this.
- c. Recommendations for direct lighting, ceiling illuminance, and average wall illuminance.

Wall lighting is to ensure that the walls do not appear dark in relation to the working plane. In accordance with CIBSE LG7 the average wall illuminance above the working plane, from both the direct and reflected components, should be at least 50% of the average horizontal illuminance on the working plane. The average illuminance on the ceiling should be at least 30% of that on the working plane.

Specification of Luminaires

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LIGHTING ZONES AND CONTROLS

Lighting controls should comply as follows

- All building user lighting controls are to be clearly labelled and identify which zone of lights are controlled by the switch; the labelling must be engraved and form either a part of the light switch or positioned securely next to the switch. In addition, there should be signs to request that lights be turned off when the space is not occupied.

Lighting zoning should comply as follows:

- Workstations adjacent to windows/atria and other building areas separately zoned and controlled
- Library spaces: separate zoning of stacks, reading and counter areas
- Dining, restaurant, café areas: separate zoning of servery and seating/dining areas
- Bar areas: separate zoning of bar and seating areas
- Wards/bedded areas: zoned lighting control for individual bed spaces and control for staff over groups of bed spaces
- Treatment areas, dayrooms, waiting areas: zoning of seating and activity areas and circulation space with controls accessible to staff.

V41 External Lighting

100.010 PERFORMANCE OBJECTIVES

Design and install the installations to achieve the following BREEAM credits:

Hea 01 – Visual Comfort

- One Credit – Internal and External Lighting Level, zoning and control

Ene 03 – External Lighting

- One Credit – Energy efficient light fittings

Tra 03 – Cycle Facilities

- One Credit – Cycle Storage

Pol 04 – Reduction of Night Time Light Pollution

- One Credit – Reduction of Light Pollution

100.020 DESIGN PARAMETERS

BS 5489-1:2013 Lighting of roads and public amenity areas

BS EN 12464-2:2014 Light and lighting - Lighting of work places - Part 2: Outdoor work places

BREEAM Credit References Hea 01 – Visual Comfort

ILE Technical Report 5 – The Brightness of Illuminated Advertisements, 2015

Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2011

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All external lighting located within the construction zone is designed to provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately, especially during the night. To demonstrate this, external lighting provided is in accordance with BS 5489-1:2013 Lighting of roads and public amenity areas and BS EN 12464-2:2014 Light and lighting - Lighting of work places - Part 2: Outdoor work places.

Outdoor work places. The lighting will also be controlled to avoid out-of-hours use and operation during daylight hours, where there is sufficient daylight in or around the facility.

- The average initial luminous efficacy of the external light fittings within the construction zone is not less than 60 luminaire lumens per circuit Watt.
- All external light fittings are automatically controlled for prevention of operation during daylight hours and presence detection in areas of intermittent pedestrian traffic.
- The external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the ILP Guidance notes for the reduction of obtrusive light, 2011. Buildings located in Scotland must comply with the light pollution criteria in the guidance note 'Controlling Light Pollution and Reducing Lighting Energy Consumption'. This can be demonstrated via completion of the checklists in Annexes B and C of the guidance note by a relevant member of the design team.
- All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00.
- If safety or security lighting is provided and will be used between 23:00 and 07:00, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 2 of the ILP's Guidance notes.