

# PRODUCT SPECIFICATION

**ELEMENT SURFACE** 







# INTRODUCTION

The Element Surface is suitable for surface mounting to solid ceilings, suspended ceilings and conduit systems and is available in both standalone or continuous run variants. Offering excellent efficiency with a microprism diffuser, the Element Surface is suitable for applications requiring glare compliance in accordance with BSEN 12464 for use in offices, schools and other areas where computer screens are in constant use.

With a wide range of lumen packages, optional integral daylight and presence detection sensors and wireless variants allowing grouped operation and centralised reporting of emergency and mains faults without the need to install additional cabling, the Element Surface offers flexibility with minimal ongoing maintenance costs. The Element Surface is also available in a range of dimmable and lithium emergency variants as well as white, black or grey housing colours.

We offer a range of wireless control systems providing localised grouping and control as well as comprehensive wireless solutions allowing both standard and emergency luminaires to be centrally monitored.



CE IP20 TM21: L90>60K HOURS / L80>90K HOURS 3 STEP MACADAM ELLIPSE

# **APPLICATION**

- > Commercial / Offices
- > Education

> Office

### **SPECIFICATION**

#### CONSTRUCTION

- > Housing: 0.7mm CR4 steel
- > Finish: Polyester powder painted BS 00E55 matt white 60% gloss
- > Finish: Polyester powder painted RAL 9006 matt grey
- > Finish: Polyester powder painted RAL 9005 matt black
- > Diffuser: Combined 2mm high transmission opal polycarbonate TP(a) rated and 2mm microprism anti glare PMMA

#### **PERFORMANCE**

- > Part L2 compliant
- > BSEN 12464-1:2011 3000 Candela 65° and UGR 19 compliance
- > 3SCDM Three step Macadams ellipse
- > TM21: L90>60K Hours / L80>90K Hours
- > Up to 118 luminaire lumens per circuit Watt

#### **ENVIRONMENTAL**

- > Designed to allow simple replacement of components with commonly available tools in compliance with the Eco Design Directive, please see the installation leaflet for maintenance instructions.
- > Powered by European branded drivers and emergency modules ensuring replacement parts are easily sourced.
- > Every luminaire is labelled with a unique ID number allowing easy identification of spare parts for the lifetime of the product.
- Contains no single use plastics or polystyrene packaging.
- > Supplied in plain card boxes with paper tape ensuring packaging is easily recycled.
- > Designed to allow simple disassembly for end of life recycling.
- > UK based manufacturing providing local support throughout the product lifetime and minimising transportation miles.

#### **EMERGENCY**

- > Available with optional standard, self test and autotest integral emergency with lithium batteries for extended warranty and lifetime.
- > Optional Reacta-Link wireless emergency for automated centralised reporting.
- > Optional Reacta-Control wireless emergency for automated centralised reporting.
- > Optional central battery changeover relay

#### **CONTROL**

- > Optional Integral R44 presence and daylight sensor
- > Optional Integral Reacta-Air wireless presence and daylight regulations sensor
- > Optional integral Reacta-Link for integration with Reacta-Link wireless installations
- > Optional integral Reacta-Control for integration with Reacta-Control wireless installations

#### INSTALLATION

- > Suitable for conduit installation
- > Suitable for surface installation

#### **VARIATIONS**

- > Available with a wide range of colour temperatures and renderings
- > Available in a range of housing sizes and lumen outputs
- > Available in white, black or grey finishes

# **IMAGES**

#### **PRODUCT IMAGES**



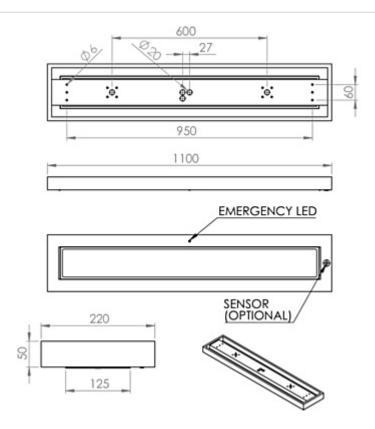
Element Surface

# **TECHNICAL**

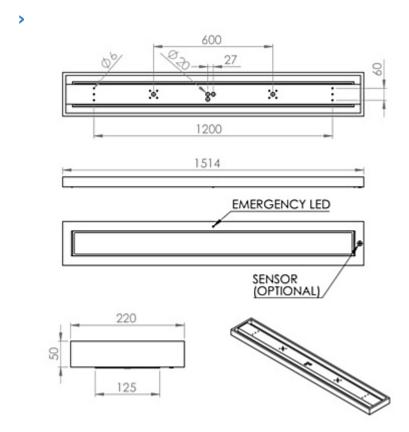
# **ELEMENT SURFACE DESIGN CONSIDERATIONS**

- Autotest LA3 emergency and DALI Dimming will use common DALI BUS Cable. LA3 emergency can not be combined with other dimming types.
- Integral sensors are only available in the luminaire, one required per luminaire.

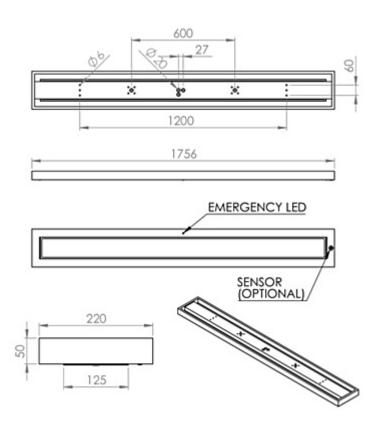
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Element Surface 1200



Element Surface 1500



Element Surface 1800

#### WARRANTY

At Dextra our commitment to service has been at the forefront throughout our history spanning more than forty years in the UK lighting market. Our service ethos extends beyond design and delivery, we believe supporting your installation throughout the warranty period is equally crucial, whilst the strength and longevity of Dextra Group provides peace of mind that our warranty will be supported throughout.

The Dextra range is supplied with a five year warranty commencing from the date of delivery. During the first three years defects will be repaired on site and the warranty will include both parts and labour. For the final two years drivers, emergency modules, wireless modules, sensors and LED circuits will be supplied free of charge to replace defective components, labour and other associated costs are not included.

Certain ranges and components are subject to exemptions:

• Lithium batteries are provided with a five year warranty. During the first three years defects will be repaired on site and the warranty will include both parts and labour. For the final two years replacement batteries will be supplied free of charge to replace defective components. Five year warranty became effective as of 03/02/25, Lithium emergency luminaires supplied prior to this date are supported with a three year on site warranty only. Labour and other associated costs are not included. Nickel Metal Hydride and Nickel Cadmium batteries are provided with a one year warranty for parts and labour.

• Emergency luminaires including AME LED, EXI LED, EXI LED, EXI Track, HBE LED, HBE2 LED, OAT2 LED, OEZ LED and Twinspot with Nickel Metal Hydride batteries are supplied with a one year warranty for parts and labour. Lithium variants of these ranges are supplied with a three year warranty for parts and labour with the exception of the AME2, EXI3, HBE3 and TWS IP65 L7 ranges which are supplied with a one year parts and labour warranty. TWS IP65 L7 in autotest and wireless variants are supplied with the standard three year lithium battery warranty.

- Protec Micro, PTECF7 Fire Rated Downlights, Serenus and the Opus Sconce are provided with a five year replacement luminaire only warranty. Protec FR Fire Rated Downlights are provided with a 2 year replacement luminaire only warranty.
- Controls systems such as standalone sensors, switches, marshalling boxes and cabling are provided with a one year warranty for both parts and labour. DALI control systems are provided with a two year warranty for both parts and labour.
- LEDextra ranges are supplied with a three year parts or replacement luminaire only warranty with the exception of the IMPR RGBW, the Runway RBGW, the MOD RGBW, Tanek RGBW and the DexRing. These five ranges are supplied with our standard five year warranty during which defects within the first three years will be repaired on site and the warranty includes both parts and labour. For the final two years free of charge replacement components only will be supplied to rectify any failures but labour and other associated costs are not included.
- LEDEX ranges are supplied with a three year replacement luminaire only warranty.
- The Decorative Pendant ranges, Bebo, Dene, Nova, Fino and Stix are supplied with a 3 year replacement luminaire only warranty.

All warranties are subject to correct use of the product and will be invalidated by misuse, for example incorrect installation, unsuitable environmental conditions or incorrect maintenance. It is the duty of the customer to ensure that all the fault lies with the luminaire prior to requesting replacement parts or site repairs. In the event that no defect is found with the product our costs for attending site will be recharged to the customer and credit will not be issued against returned products. No consequential losses incurred resulting from any defect with our product will be reimbursed.

Given the nature of LED technology a small percentage of LEDs may fail during the lifetime of a luminaire, this does not cause a reduction in lumen output. As such LED luminaires are only deemed to be faulty for warranty purposes when in excess of ten percent of LEDs have failed in a single luminaire.

On site repair of products under warranty will be undertaken during normal working hours, 9am to 5pm Monday to Friday, and will require unrestricted access to luminaires. Where required Dextra will provide access equipment to carry out repairs at height, should luminaires have been installed in locations where reasonable provision for maintenance access has not been made we reserve the right to supply replacement product only. On site warranty repairs will only be undertaken on the mainland of the UK and Ireland, in all other locations replacement product only will be provided.

If you require any assistance with regards to our products please contact our Customer Services department on 01747 858100.

(+44) 01747 858100 Page 6 of 10 www.dextragroup.co.uk

# ORDER CODES

# **LUMINAIRE**

# Element Surface Standalone

Code	Description	Power	Llm/W	
ELS 12L30	Element Surface, 1200mm, 2,328llm, Microprism, Colour 84	17.7W	131	
ELS 12L40	Element Surface, 1200mm, 3,104llm, Microprism, Colour 84	24.5W	127	
ELS 15L37	Element Surface, 1500mm, 2,871llm, Microprism, Colour 84	20.1W	143	
ELS 15L50	Element Surface, 1500mm, 3,879llm, Microprism, Colour 84	27.2W	143	
ELS 15L55	Element Surface, 1500mm, 4,270llm, Microprism, Colour 84	29.8W	143	
ELS 15L60	Element Surface, 1500mm, 4,656llm, Microprism, Colour 84	35.6W	131	
ELS 18L45	Element Surface, 1800mm, 3,492llm, Microprism, Colour 84	25.3W	138	
ELS 18L60	Element Surface, 1800mm, 4,656llm, Microprism, Colour 84	32.9W	142	
ELS 18L75	Element Surface, 1800mm, 5,820llm, Microprism, Colour 84	41.6W	140	

# Element Surface Continuous Run

Code	Description	Power	Llm/W
ELS 12L30 ST	Element Surface Start, 1200mm, 2,328llm, Microprism, Colour 84	17.7W	131
ELS 12L30 TW	Element Surface Through, 1200mm, 2,328llm, Microprism, Colour 84	17.7W	131
ELS 12L30 ER	Element Surface End, 1200mm, 2,328llm, Microprism, Colour 84	17.7W	131
ELS 12L40 ST	Element Surface Start, 1200mm, 3,104llm, Microprism, Colour 84	24.5W	127
ELS 12L40 TW	Element Surface Through, 1200mm, 3,104llm, Microprism, Colour 84	24.5W	127
ELS 12L40 ER	Element Surface End, 1200mm, 3,104llm, Microprism, Colour 84	24.5W	127
ELS 15L37 ST	Element Surface Start, 1500mm, 2,871llm, Microprism, Colour 84	20.1W	143
ELS 15L37 TW	Element Surface Through, 1500mm, 2,871llm, Microprism, Colour 84	20.1W	143
ELS 15L37 ER	Element Surface End, 1500mm, 2,871llm, Microprism, Colour 84	20.1W	143
ELS 15L50 ST	Element Surface Start, 1500mm, 3,879llm, Microprism, Colour 84	27.2W	143
ELS 15L50 TW	Element Surface Through, 1500mm, 3,879llm, Microprism, Colour 84	27.2W	143
ELS 15L50 ER	Element Surface End, 1500mm, 3,879llm, Microprism, Colour 84	27.2W	143
ELS 15L55 ST	Element Surface Start, 1500mm, 4,270llm, Microprism, Colour 84	29.8W	143
ELS 15L55 TW	Element Surface Through, 1500mm, 4,270llm, Microprism, Colour 84	29.8W	143
ELS 15L55 ER	Element Surface End, 1500mm, 4,270llm, Microprism, Colour 84	29.8W	143
ELS 15L60 ST	Element Surface Start, 1500mm, 4,656llm, Microprism, Colour 84	35.6W	131
ELS 15L60 TW	Element Surface Through, 1500mm, 4,656llm, Microprism, Colour 84	35.6W	131
ELS 15L60 ER	Element Surface End, 1500mm, 4,656llm, Microprism, Colour 84	35.6W	131
ELS 18L45 ST	Element Surface Start, 1800mm, 3,492llm, Microprism, Colour 84	25.3W	138
ELS 18L45 TW	Element Surface Through, 1800mm, 3,492llm, Microprism, Colour 84	25.3W	138
ELS 18L45 ER	Element Surface End, 1800mm, 3,492llm, Microprism, Colour 84	25.3W	138
ELS 18L60 ST	Element Surface Start, 1800mm, 4,656llm, Microprism, Colour 84	32.9W	142
ELS 18L60 TW	Element Surface Through, 1800mm, 4,656llm, Microprism, Colour 84	32.9W	142
ELS 18L60 ER	Element Surface End, 1800mm, 4,656llm, Microprism, Colour 84	32.9W	142
ELS 18L75 ST	Element Surface Start, 1800mm, 5,820llm, Microprism, Colour 84	41.6W	140
ELS 18L75 TW	Element Surface Through, 1800mm, 5,820llm, Microprism, Colour 84	41.6W	140
ELS 18L75 EW	Element Surface End, 1800mm, 5,820llm, Microprism, Colour 84	41.6W	140
Please refer to the Ele	ment Design Consideration notes in the Technical section pric	or to placing your o	order.

# **DIMMING**

Code	Description
А	DALI Digital Addressable Lighting Interface

# CONTROLCodeDescriptionR44Reacta 44, Presence & Daylight, 2.5-7MRASReacta-Air Bluetooth, Wireless, Presence & Daylight, 2.5-3MRLIReacta-Link, Wireless Enabled LuminaireRLSReacta-Link Wireless, Presence & Daylight, 2.5M-5MRCReacta-Control, Wireless Enabled LuminaireRCSReacta-Control Wireless, Presence & Daylight, 2.5-4M

# **EMERGENCY**

Code	Description
LE3	Lithium Standard Emergency 3 Hour
LS3	Lithium Selftest Emergency 3 Hour
LA3	Lithium Autotest Emergency 3 Hour
LSTR	Lithium Reacta-Link Emergency 3 Hour
LA3RC	Lithium Reacta-Control Emergency 3 Hour
СВ	Central Battery, Please Specify 50V, 110V or 230V when Ordering

# **MISCELLANEOUS**

Code	Description
C**	Select Colour Temperature and Rendering; C83, C84, C85, C865, C93, C94
BL	Black Finish
GY	Grey Finish
LSF	Low Smoke Zero Halogen

# **Element Surface Installation**



#### 220-240V / 50-60Hz IP20

Terminal Labelling:

L1 E (1) N Emergency

Dimming

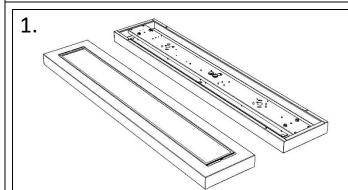
Switched Live Earth Neutral

Emergency
L2 Unswitched Live
DA/AT3 DALI Autotest
DA/AT3 DALI Autotest

-/D1/DA Analogue/DSI/DALI +/D2/DA Analogue/DSI/DALI L3 Switch Dim / Corridor Function

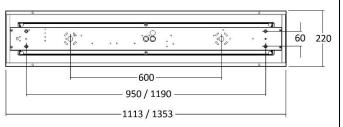


WARNING: Luminaire must be earthed. Risk of electric shock from LED boards if operated with removed. Installation / operation outside of luminaires intended scope invalidates warranty. Suitable only for domestic / light industrial / industrial applications within the scope of EN55015. Tested to compliance with BSEN 60598: specification for general requirements and tests. Must be installed by a suitably qualified person in accordance with all relevant legislation. Ambient operating temperature of 0°C to 25°C. If maximum operating temperature is exceeded luminaire will automatically dim / switch off. Terminal blocks are rated to 16A unless stated otherwise. The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person. LUMINAIRES WITH EMERGENCY PACK: When supply is isolated battery output terminals may be live if battery is connected. Isolate mains and battery before servicing. Emergency luminaires require unswitched live connection taken from same phase as switched supply. When unswitched supply is connected status indicator illuminates green, when unswitched supply is disconnected indicator extinguishes and luminaire operates in emergency mode. 24 hour charge period required before undertaking full discharge test. Emergency test sheets provided should be used to record all emergency tests. Batteries should be replaced when 3 hour duration is not met. Excessive switching of permanent live may result in premature battery failure. Battery electrolyte can be harmful to eyes / open wounds, do not puncture, if electrolyte touches skin / eyes flush with water. Do not incinerate batteries.



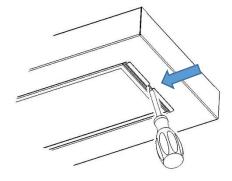
Product can be supplied in various sizes – always check application area is suitable and any necessary fixings are available (not supplied with luminaire!)

2.



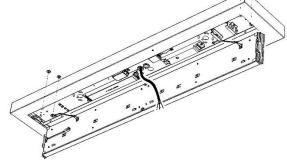
In addition to standard 'besa' mounting holes, 6mm holes are found on centreline + primary fixings shown at 60mm in above diagram – prepare mounting surface accordingly...

3.

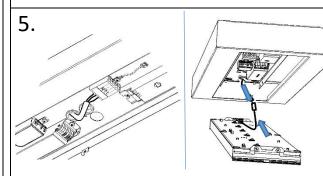


Prior to mounting main housing, detach centre optic using a flat-headed screwdriver (one end has notch in housing for this!!)... centre optic will hang on tethers

4.



Offer luminaire up – feed power cable(s) through preferred entry hole.... Secure housing to mounting surface in prepared fixing locations..



(1)Make electrical connection to appropriate terminals (markings will vary depending on variant)
– (2) Connect optic 2-pole lead

6. (1) (2)

Locate optic on to edge (1).... Offer up – ensuring all cable & tethers are not trapped – until Clip (2) clicks in to place. Test for operation