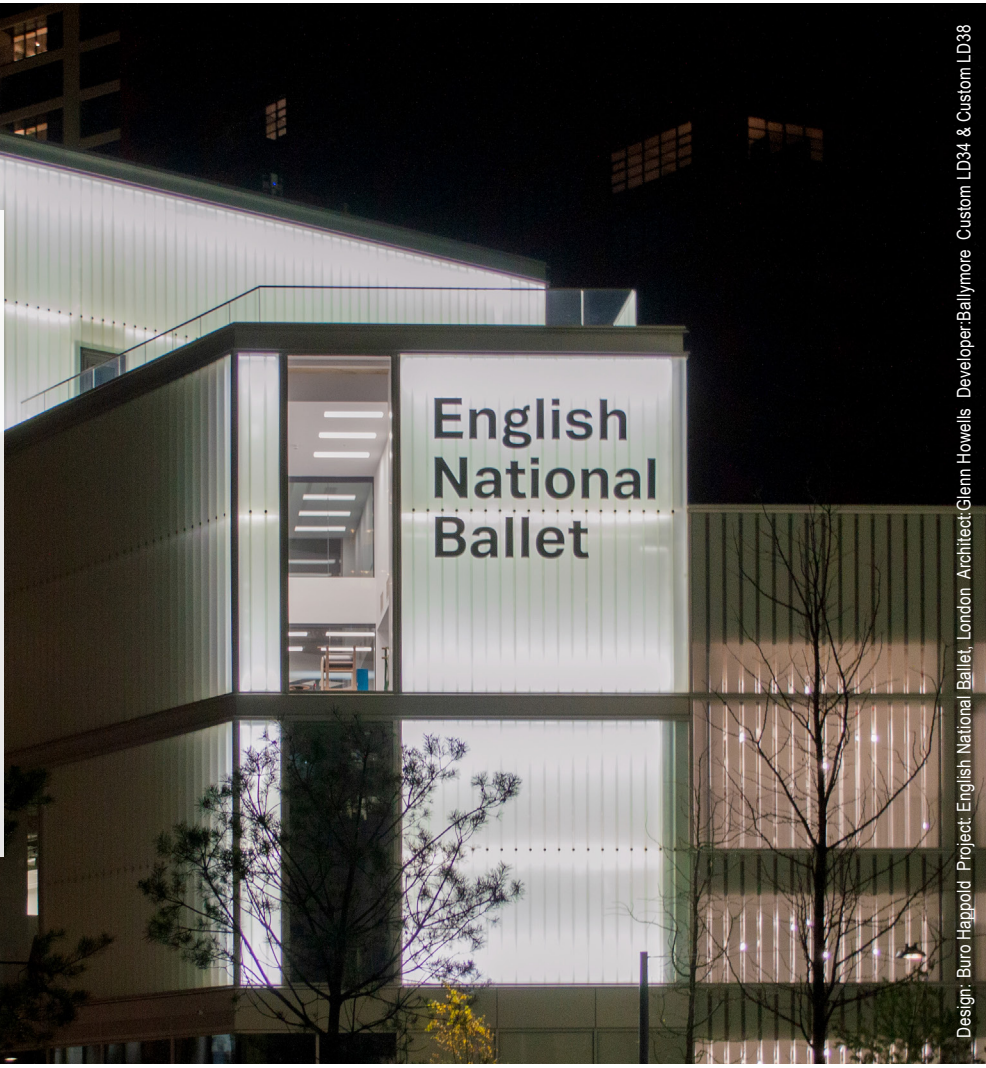


LD34

HIGH-POWER INTERIOR/EXTERIOR IN-GROUND LED LINEAR WALL GRAZER



The LD34 is a low glare, shallow recessed, in-ground, linear wall grazer which offers outstanding continuous wall washing capabilities for interior and exterior projects. It features a fixed 2.5° tilt, integral glare control options and individual cowls over each LED to ensure low glare from the viewer's perspective. Multiple colour temperatures and beam angles are available, as well as accessories including an optional frosted diffusion filter to illuminate even the lowest parts of the wall. With multiple lengths and a compact design, this high-power solution will integrate into harsh environments ensuring long lasting reliability, excellent thermal and light output performance.



Design: Buro Happold | Project: English National Ballet, London | Architect: Glenn Howells | Developer: Ballymore | Custom LD34 & Custom LD38

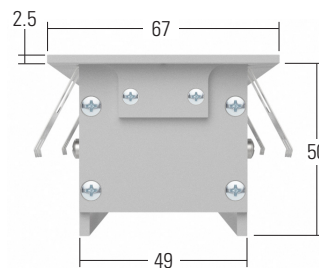
KEY FEATURES

- > Linear C1 engine featuring NICHIA LED delivering up to 3263lm
- > Lengths to a maximum of 1350mm with LED spacings of 50mm and 75mm
- > Toughened glass top to ensure longevity and resilience against external impact. IK08
- > A modular approach keeps spacing maintained across multiple lengths, ensuring no dark spots
- > Compact design with only a 55mm recess depth required
- > Aluminium extrusion, anodised to a thickness of 25 microns
- > LED fixed at a 2.5° tilt with a choice of beam angles and superb wall grazing capabilities using the 15° x 60° beam
- > Range of glare control options including individual LED cowls to ensure low glare from all directions
- > Optional frosted diffusion filter to illuminate lower parts of the wall
- > First fix concrete housing or spring clip fixing options available
- > Switched, 0-10V, Casambi, DMX, DALI and Mains dimmable drivers available



DIMENSIONS

Dimensions in mm

For fitting dimensions please go to page 3.



WHITE LED ENGINE SPECIFICATION

Engine	 Linear C1		
Beam angles	12°, 31°, 48°, 12° x 36°, 15° x 60°		
LED manufacturer	NICHIA		
Colour temperature	2200K / 2700K / 3000K / 4000K / 5000K		
Current	350mA	500mA	700mA
LED power (Max)**	1.0W (1.1W)	1.5W (1.6W)	2.1W (2.3W)
Forward voltage (V ₁₀₀)	3V	3.2V	3.4V
Delivered lumens (L ₁₀₀)* per metre			
50mm spacing	1710	2420	3263
75mm spacing	1137	1609	2170
Delivered lm/Circuit W	78	75	70
CRI (Typ)	93		
Colour consistency	2SCDM		
Peak intensity	18,058 cd		
LED lumens (per LED)	133	187	206
Source lm/W	136	129	98
LOR	0.79		
TM30	RF85 RG98		
UGR rating	UGR unavailable for asymmetric light distribution		
BUG rating ('downlight' mounted)	B0- U4- G0	B0- U4- G0	B0- U4- G0
LED lifetime	L90B5 at 90,000hrs		
Applications			

This data is based on an LD34-C1-700-LW30-NB

*Lumen output data applies to all colour temperatures

**indicates the nominal power for the LED run at that particular current and includes losses associated with using an 85% efficient driver

MECHANICAL

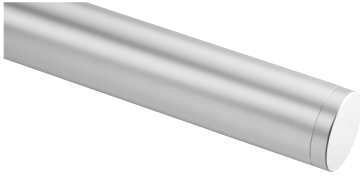
Ambient temperature	-20° to 45° (350mA, 500mA) or -20° to 35° (700mA)
Glass	Low iron glass, 8mm thick
Materials	Silver anodised aluminium body & end caps, polycarbonate cover and cowls
Weight of product	3.4kg per/m
Static load	1500kg
IP rating	IP67
IK rating	IK08
Wiring	In-series constant current wiring. Pre-wired cable at a length of 2m which can be specified up to 10m at extra cost

ENVIRONMENTAL

TM65	Available on request
TM66	2.1

AVAILABLE FINISHES

LD34 has been designed for extreme environments therefore only high quality materials and finishes are used to ensure long lasting reliability. All parts are silver anodised to a minimum thickness of 25 microns which offers high protection in all external environments. Though we offer paint finishes, we do not recommend using them in high-traffic areas.



SILVER ANODISED
(SUPPLIED AS STANDARD FINISH)



**POWDER COAT PAINT FINISH
CLASSIC BRONZE**
(YM262E)



**POWDER COAT PAINT FINISH
BLACK**
(RAL 9005)



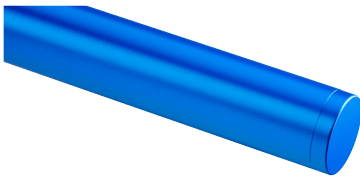
**POWDER COAT PAINT FINISH
GUN METAL GREY**
(RAL 7021)



**POWDER COAT PAINT FINISH
TEXTURED FIR GREEN**
(RAL 6009)



**POWDER COAT PAINT FINISH
WHITE**
(RAL 9016)

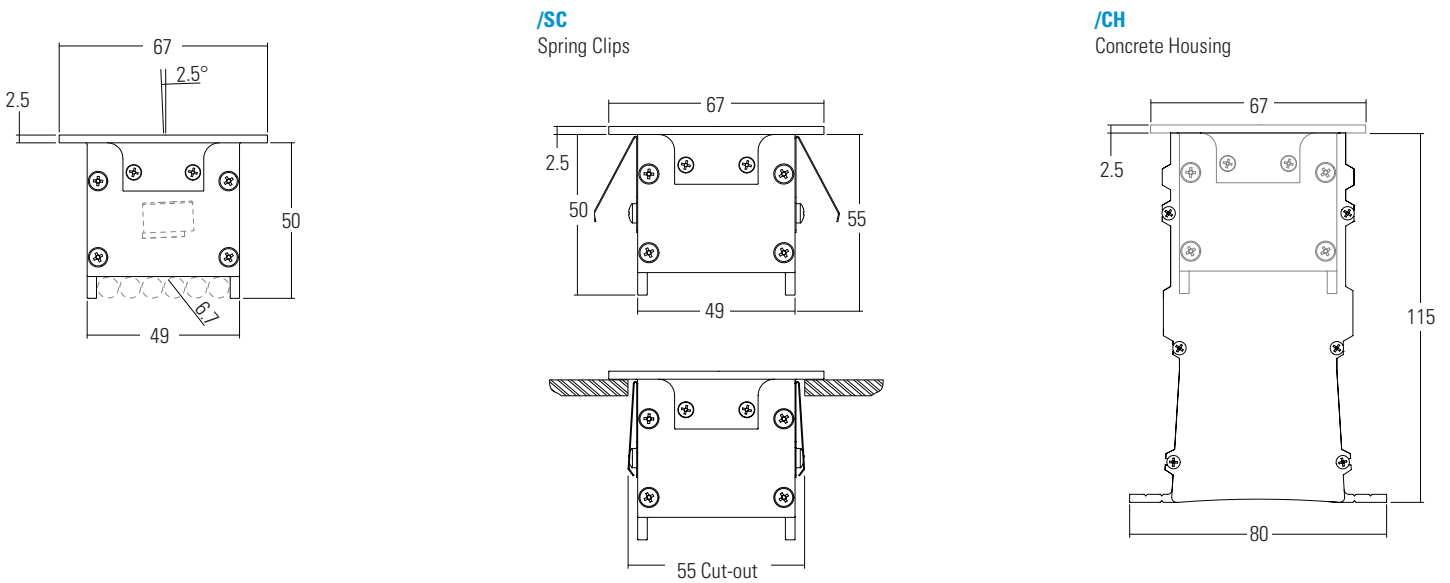


**POWDER COAT PAINT FINISH
RAL**



DIMENSIONS & FIXING OPTIONS

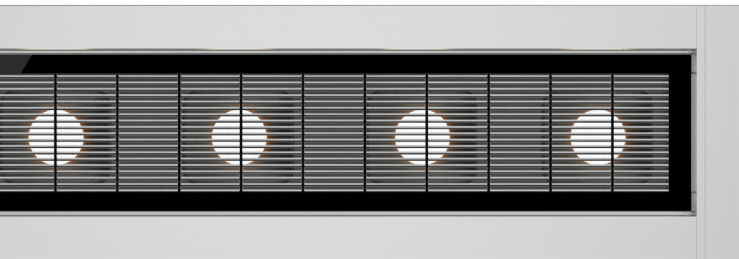
Dimensions in mm



ACCESSORIES

/GL

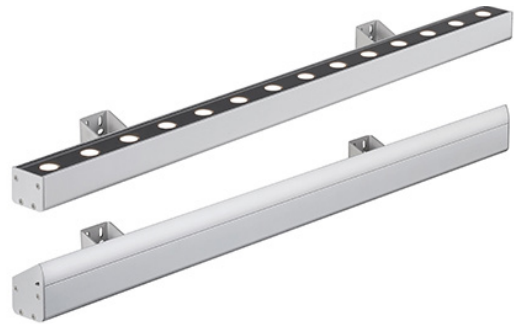
Anti-glare louvre. LD34 can be supplied with a glare louvre however the /GS40 is recommended as it provides the same amount of glare protection and delivers a better lit effect on the wall. Please note this is always supplied in a black finish, and is supplied as standard with the louvre positioned to reduce glare when looking at the lit surface.



SIMILAR PRODUCTS

LD38

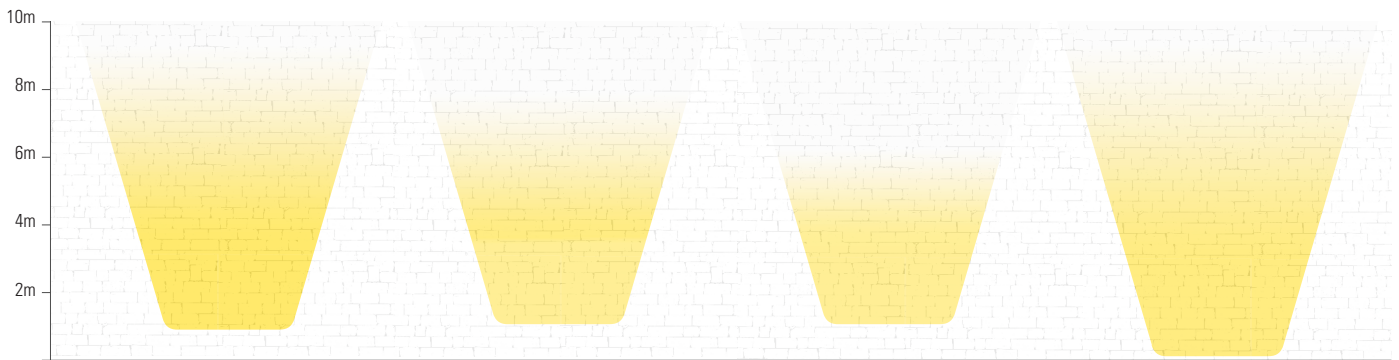
LD34 has been designed alongside our interior wall grazer LD38 to enable seamless integration of both products throughout a project. Please see the website for more details.



LD34MI

Same specification as the LD34 but with a mains-in connection system to allow for easier, quicker and a more cost effective installation on-site. Set lengths available only.

LIGHT DISTRIBUTION AND GLARE SHIELD OPTIONS



Please note this is a graphical guide to the expected light output, refer to the photometric files for more detailed data.

LD34

No glare shield for maximum lumen output. Deep recessed optic and matt black cowl aids in glare reduction.

/GS40

Teamed with the 2.5° fixed tilt the 40% glare shield provides glare protection with only a 28% reduction in lumens.

/GS50

Half glare shield. For an increased cut-off angle and greater glare control. Not available with Wide Beam optics.

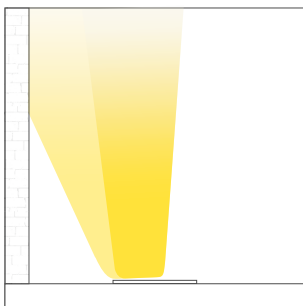
/GS40 with /FD

40% glare shield and diffusion film combination. The aperture allows the main punch of the beam to leave the fitting, providing glare protection from one side and moving the start of the beam down to the floor on the other.

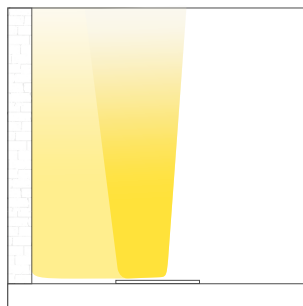
FROSTED DIFFUSION FILM

/FD

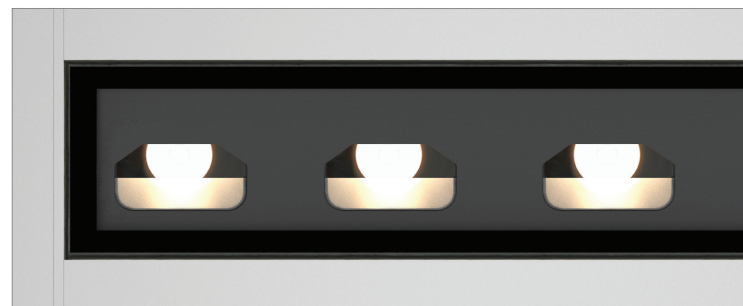
This accessory is particularly useful when the LD34 needs to be placed further away from the lit surface. It provides a smooth consistent beam that starts as close to the bottom of the lit surface as possible. The frosted diffusion film can be specified with any of the glare shield options but we recommend using it with the /GS40 for best results.



/GS40

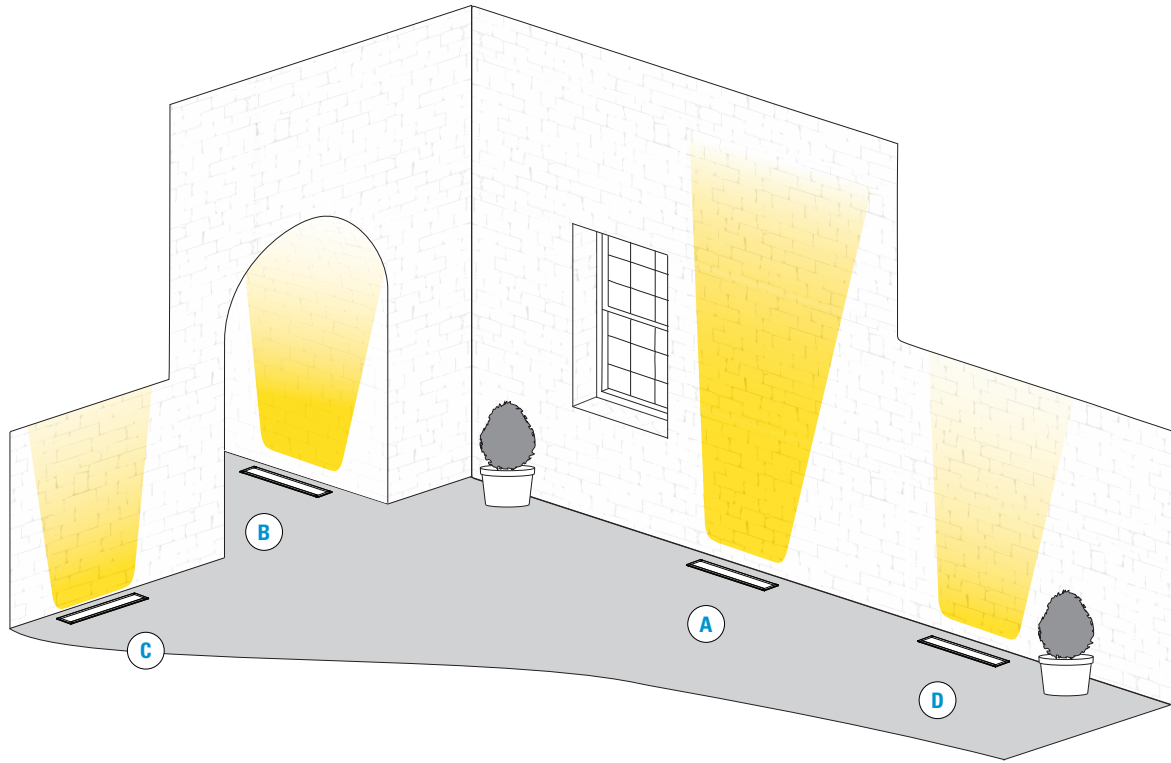


/GS40 with /FD



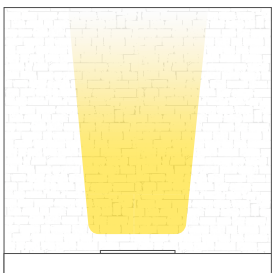
INSTALLATION GUIDE

Below is a luminaire positioning guide. Every project and lighting scenario will be different but the table below is to be used as a starting point for any wall wash design. Please use our photometric files to further test the desired effect for your application which are available to download on the LD34 product page on our website.

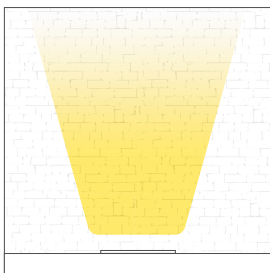


Option	Code	Description	Use
(A)	LD34	Standard LD34	The standard LD34 can be used when maximum output is required. This option achieves a throw of up to 20m. Even without the presence of a glare shield the cowls over each optic provide a good amount of glare control.
(B)	/GS50	Glare shield with 50% optic coverage	This option has been designed for use when glare control is the priority and is ideal for narrow corridors and walkways. Not available with Wide Beam optics.
(C)	/GS40/FD	Glare shield with 40% optic coverage and linear diffusion strip.	This option has been designed to lower the starting position of the beam on the lit surface. This is useful for lighting low walls or when the fitting must be placed further away from the lit surface.
(D)	/GS40	Glare shield with 40% optic coverage	Ideal for use in walkways and arches where glare control is needed as well as a good punch up the wall.

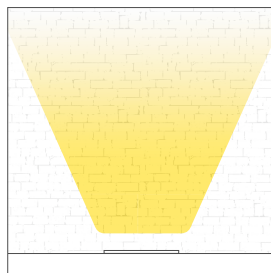
BEAM ANGLE OPTIONS



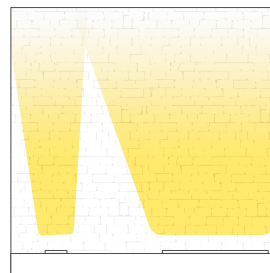
/NB
Narrow Beam
12°



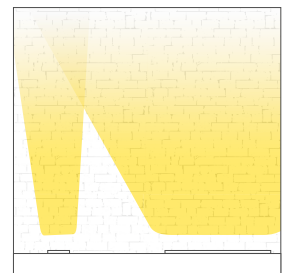
/MB
Medium Beam
31°



/WB
Wide Beam
48°

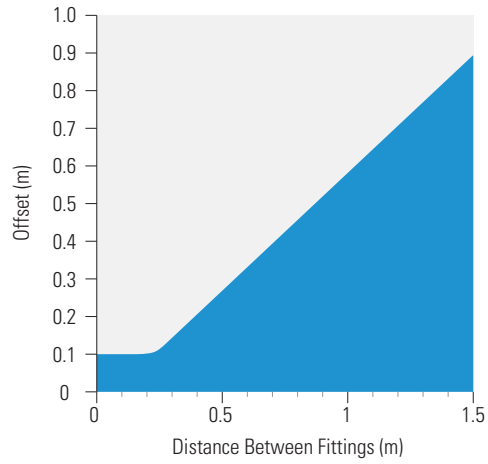
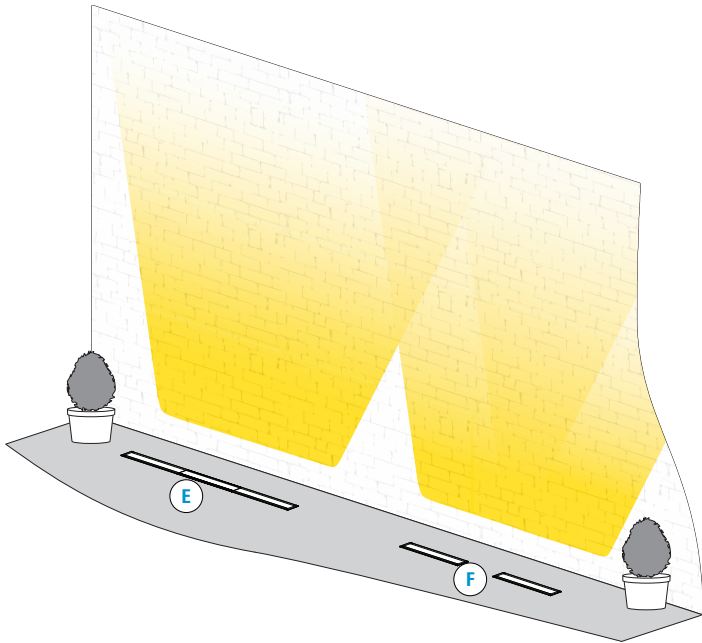


/OB
Oval Beam
12° x 36°



/EOB
Extra Oval Beam
15° x 60°

PRELIMINARY PRODUCT SPACING GUIDE



When spacing fittings further apart, the use of /EOB and possibly /FD is recommended depending on the offset and desired lit effect. The graph below shows recommended offsets and their corresponding spacings.

Note: These are estimated results please use photometric data to verify.

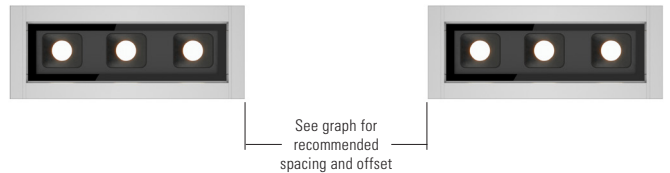
E

LD34 features the ability to create outstanding continuous wall washing capabilities, by seamlessly connecting multiple fittings while maintaining consistent LED spacing.



F

LD34 can be supplied with an extra oval beam /EOB. This 15° x 60° optic and film combination allows fittings to be spaced apart from each other but still produce a consistent lit effect.

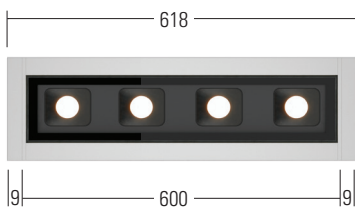


LENGTH GUIDE

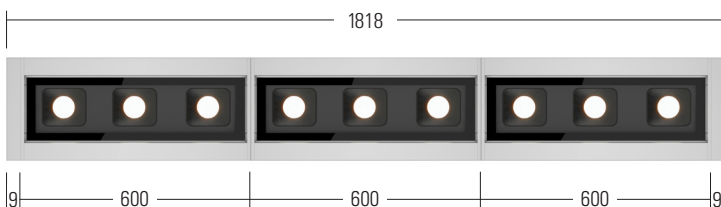
Dimensions in mm

The LD34 is available in 7 set lengths to enable maximum flexibility, 150mm, 350mm 450mm, 600mm, 750mm, 1050mm and 1350mm, with LED's spaced at 50mm and 75mm. When selecting a length please note that a total of 18mm will be added to a single length or total run length to account for the flanged end cap.

Single length example:



In-line length example:




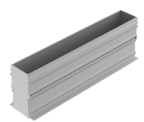






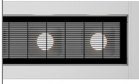





ORDER CODES & OPTIONS

Example: LD34-C1-700 / LW30 / 50 / OB / Silver / SC / GS40 / 600mm

Light Engine & Drive Current	LED Colour	LED Spacing	Beam Angle	Finish	Fixing	Accessory	Length (Up to 1350mm)

WHITE LED ENGINES

LINEAR C1 ENGINE

LED Power	LED Current	LED Colour	LED Spacing	Beam Angle	Finish	Fixing	Accessory	Length	
1.2W LED at 350mA	LD34-C1-350	Super Warm White (2200K)	/LW22	50mm /50	12° Narrow spot /NB				150mm /150
1.7W LED at 500mA	LD34-C1-500	Extra Warm White (2700K)	/LW27	75mm /75	31° Medium /MB	Silver Anodised	/CH	/FD	300mm /300
2.4W LED at 700mA	LD34-C1-700	Warm White (3000K)	/LW30	48° Wide /WB		Paint Finish Classic Bronze (YM262E)	/SC		450mm /450
		White (4000K) - on request	/LW40	12° x 36° Oval Beam /OB		Paint Finish Black (RAL 9005)	/GS40		600mm /600
		Cool White (5000K)	/LW50	15° x 60° Extra Oval Beam /EOB		Paint Finish Black (RAL 9005)	/GS50 (Not available with Wide Beam optics)		750mm /750
						Paint Finish Gunmetal Grey (RAL 7021)	/GL		1050mm /1050
						Paint Finish Textured Fir Green (RAL 6009)			1350mm /1350
						Paint Finish White (RAL 9016)			
						Paint Finish - RAL			

*Add 18mm to the lengths above when supplied as a single length as flanged end caps are supplied fitted to product.

Drivers
Use with 350mA, 500mA & 700mA constant current LED drivers. We have a range of dimmable LED drivers DMX and DALI compatible. Please see the downloads section on our website