



# Night Owl



Type		Illuminated One-Piece	Non-illuminated One-Piece	Non-illuminated Two-Piece
Dimensions (mm)	Height	1037	1037	1037
	Width / Depth	395 / 110	395 / 110	395 / 110
	Sign face	300 dia	300 dia	300 dia
	Base	320 x 320	320 x 320	320 x 320
Material		One piece reflex/rigid polymer composite	One piece reflex/rigid polymer composite	Reflex base, rigid polymer bollard
Passively safe	PM Permanent	BS EN 12767:2007 100 NE4.	BS EN 12767:2007 100 NE4.	BS EN 12767:2007 100 NE4.
Conspicuity	Type	Full Cube, Microprismatic Retroreflective Material to EAD 120001 - 00 - 0106 Class 3	Full Cube, Microprismatic Retroreflective Material to EAD 120001 - 00 - 0106 Class 3	Full Cube, Microprismatic Retroreflective Material to EAD 120001 - 00 - 0106 Class 3
	Area front	0.16m <sup>2</sup>	0.16m <sup>2</sup>	0.16m <sup>2</sup>
	Area side	0.045m <sup>2</sup>	0.045m <sup>2</sup>	0.045m <sup>2</sup>
	Lighting	Source	Cree LED powered by Zeta 240V - 6.65 Watts Circuit power factor 6.4	
	Photocell	55 Lux, Switching ratio:0.5 Typical burn hours 4115		
UMSUG	Charge code	40 0007 0006 100		
Fixing		Attach to in-ground Duct Box Retrofit to other base boxes with adaptor plates	Concrete-in Surface mount Retrofit to existing base boxes with adaptor plates	Concrete-in Surface mount Retrofit to existing base boxes with adaptor plates



## Night Owl™

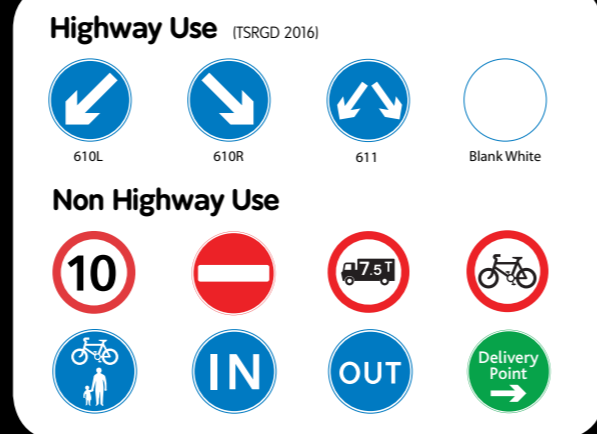
All plastic, recyclable, passively safe, self-righting 'Keep Left' bollards that minimise the consequences of collisions for the driver and reduce the cost of repair and maintenance for the authority.

Available in both illuminated and non-illuminated formats, Night Owl has passed BS EN 12767:2007 & BS 8442:2006, 'Retro Reflective Self Righting Bollards' which require products to remain intact, returning to an upright position after a high speed impact, without reducing the speed of the vehicle by more than 3km/h.

Night Owl has particular application as a Keep Left bollard providing a durable, low maintenance, energy efficient, reduced carbon footprint solution for traffic islands and pedestrian refuges.

See the Night Owl brochures for detailed information.

Night Owl is a Trademark of Leafield Environmental Ltd



## The Equality Act 2010 (Supersedes the Disability Discrimination Act (DDA))

The Equality Act 2010 seeks to ensure that public spaces and buildings are accessible to all. Bollards are an important safety feature of urban landscapes and the principles of the Act apply in their design and use. We have an extensive range of products with banding and customization options that with the consideration of colour and contrast, comply with guidance contained within the Equalities Act 2010.



### About Leafield Environmental

We are an award winning UK manufacturer and a specialist producer of solutions for the needs of the Litter, Recycling, Highways, Food Processing, Water, and Agricultural markets.

Our customers include the country's leading Companies, Universities and Public Sector institutions.

#### Environmental - ISO 14001

We care about the environment and our business has in place Environmental Management Systems that have been certified and comply with BS EN ISO 14001:2015.

#### Quality & Service - ISO 9001

Certified to BS EN ISO 9001:2015, ensuring that our customers receive a consistently high level of quality and service.

#### Health & Safety

We put the occupational Health and Safety of our staff first and we are an BS OHSAS 18001:2007 accredited employer.

#### Sustainability

Our products are principally manufactured using Medium Density Polyethylene (MDPE) which is 100% recyclable at the end of the product service life.



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### Email us...

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# Highways

product selector  
brand new solutions for tomorrow's world

exemplary  
design  
and  
quality



# Bollard Product Selector



Version		150	150	Deco	150	150	Deco		150	Visibol	150	75	150	75	Deco				Heritage	Heritage	Sentinel	Sentinel	Heritage	Heritage	Sentinel	Sentinel	Heritage	Sentinel	Heritage	Sentinel	Sentinel	Sentinel	Sentry	Sentry	Version
Type		Visibol			Visibol															Visibol		Visibol		Visibol		Visibol		Decorative		Visibol			Type		
Dimensions (mm)	Height	1024	1024	921	1030	1030	926	1010	1125	1125	1084	1009	1030	955	910	510	800	800	1419	1419	1419	1419	1352	1352	1352	1352	1098	1098	1098	1098	1300	1196	1376	1376	Height
	Diameter	171	171	171	166	166	166	201	166	166	185	185	166	166	166	130	170	170	364	364	364	364	339	339	339	339	195	195	195	195	195	195	195	195	Diameter
Material Options	Standard	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Standard
	Reflex	✓	-	✓	✓	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	✓	✓	-	-	✓	✓	✓	-	Reflex	
	*ECO	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	ECO*
Fixing Options	PM Permanent	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	PM Permanent
	S Socketed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	S Socketed
	AR Anti-ram	✓	-	✓	✓	-	✓	✓	✓	-	✓	✓	✓	✓	-	-	✓	✓	✓	-	✓	-	✓	-	✓	-	✓	✓	-	✓	✓	✓	-	AR Anti-ram	
	SM Surface	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SM Surface
Signage Options	Class ref 1	✓	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Class ref 1
	Class ref 2	✓	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Class ref 2
	Decorative band	✓	✓	✓	-	-	✓	✓	✓	✓	-	-	-	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Decorative band
The Equality Act 2010 compliant	✓	✓	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	The Equality Act 2010 compliant
Single or Double Sign Face Options	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Single or Double Sign Face Options

## Fixing options

**Permanent Fixing (PM)**  
For permanent fixing the bollard base is concreted in below ground. The bollard is supplied as a single unit with a moulded-in anchor section that is set into the concrete ensuring that the bollard cannot be removed.



**Anti-Ram Fixing (AR)**  
The bollard is supplied as a "sleeve" that sits over a robust steel tube core that is permanently concreted into the ground. Effective as a deterrent only to "ram raiding" (not PAS 68 classified) and also enhances pedestrian safety within high risk areas.



**Socketed Fixing (S)**  
This two piece system allows the bollard to be quickly removed to allow immediate access or replacement. The bollard comes with a moulded-in "bayonet" end that fixes (by rotating through 90 degrees) into a lockable base unit that has been set in concrete below ground level. A blanking cap is available for when the bollard is removed. Where reflex material is specified the product is only suitable for very low speed impacts.



**Surface Fixing (SM)**  
The bollard is supplied with an integral circular base with four bolt holes for quick and easy fixing onto a suitable concrete base. Ideal in a wide range of situations and particularly suitable for multi-storey car parks, bridges and any situation where below ground services or membranes might be vulnerable. Where reflex material is specified the product is only suitable for very low speed impacts. \* ECO version not available

## Material options

**Reflex (Self Righting)**  
Reflex bollards are manufactured from a tough and durable material, which enables the products to withstand impact from any direction and return to an upright position and continue in service.

Specify Reflex material for vulnerable locations where conventional bollards would otherwise require frequent replacement.

Where reflex material is specified with either a Socketed or Surface Fixing the product is only suitable for very low speed impacts.



**ECO**  
ECO bollards are manufactured using a combination of 50% chipped plastic bottles and 50% regular polymer. Using chipped material reduces the environmental impact of re-processing to the absolute minimum.

ECO bollards are available in black or an attractive stone effect finish which, due to the nature of the material, will vary slightly.

**Standard**  
Standard Moulded Polyethylene (PE) is extremely durable with outstanding impact, fracture and shatter resistance properties tested to BS2782. PE is also 100% recyclable allowing the material to be reused at the end of the bollard in-service life.



## Reflective Banding

**Class ref 1 Engineering Grade**  
**Applications:** Non Highway traffic signs, emblems, street name plates and other general signage.  
**Benefits:** Provides good level of reflective performance, appearing both bright and legible in daylight and at night. 7 year effective performance life.

**Class ref 2 High Intensity**  
**Applications:** Highway traffic safety applications where night time visibility is paramount.

**Benefits:** Provides high level of reflective performance. Class 2 material is approximately 3.5 times brighter than Class 1 material and provides a 10 year effective performance life.

Aluminium backed British Standard Reflective Banding (BS EN 12899-1 2001)

Decorative/Non-reflective gold/silver banding personalised sign faces and bands available



## Decorative Banding

Gold and Silver metallic decorative banding is available as a standard optional extra to add a stylish and traditional look particularly in heritage or prestige environments. If there is a special requirement to use coloured or reflective material on the decorative band this may also be possible by quotation subject to quantities and lead times.

