Bollaro	a		HERITAGE		SENTINEL			MANCHESTER		SENTRY	WOBURN		REGENCY		EDGEMINDER	MONARCH	STERLING	VERGEMARKER II		LINSIGI	N 300			LINSIGI	N 230					LINSIG	GN 150					
Produc Selecto	t -			-															20		20					NOENTRY						1			-	This is a summary, please refer to the product brochure for full details on all options available.
Version Type		150	150	Deco	150	150	Deco		150	Visibol	150	75	150	Deco					Heritage	Heritage	Sentinel	Sentinel	Heritage	Heritage	Sentinel		Heritage	Sentinel	Heritage	Sentinel	Sentinel	Sentinel	Sentry	Sentry	Version	Tupo
Dimensions	Height	1004	Visibol	001	1000	Visibol	00/	1010	1105	1105	1004	1000	1000	010	510	000	000	000	1410	Visibol	1410	Visibol	1050	Visibol	1050	Visibol	1000	1000	Visibol	Visibol	1200	Decorative	107/	Visibol	Hoight	Type Dimensions
(mm)	Diameter	1024	1024	921	1030	1030	926	1010	1125	1125	1084	1009	1030	910	510	800	800	938	1419	1419	1419	1419	1352	1352	1352	1352	1098	1098	1098	1098	1300	105	13/0	1376	Height Diameter	(mm)
Material Options	Standard	1/1	1/1	1/1	100	100	100	201	100	100	201	201	100	100	130	170	170	125	304	304	304	304	339	339	339	339	195	195	195	195	195	195	195	195	Standard	Material
	Reflex	v	V	v /	~	V	<i>.</i>	<i>.</i>	~	V	~	~	<i>.</i>	~	~	<i>.</i>	<i>.</i>	_	V	V	V	<b>v</b>	~	V	<i>v</i>	V	<i>.</i>	~	V	V	<i>.</i>	v /	~	<i>v</i>	Reflex	Options
	*ECO	~	_	· ·	v /	_	<i>.</i>	<i>.</i>	~	_	V	V	<i>v</i>	V	~	<i>v</i>	V	V	_	-	-	_	-	_	_	_	<i>.</i>	~	_	_	<i>.</i>	v /	~	_	ECO*	
Fixing Options	PM Permanent	v /	v (	v (	v (	v (	v (	v (	v (		_	_	_	_	v (	_	_	_	v (	v /	v /	v (	v (	v (	v (	v (	v (	v /	v (	v /	v (		v /		PM Permanent	Fixing
	S Socketed	v ./	· ·	v ./	•		· ·	v ./	v l	· ·	· ·		v ./	· ·	•	-	-	-		•		v ./	•	· ·	v ./	· ·	v ./	·	· ·	· ·	· ·		v (	v ./	S Socketed	Options
	AR Anti-ram	v ./	v ./		•	v .	·	·		V	v d	•	·	V	_		_			·	·	·	·		·	v ./	·		v ./	·	v	v ./		v	AR Anti-ram	
	SM Surface	v /	v (	v (	v (	· ·	· ·	v (	v (	· ·	· ·	× /	v (	_	_	•	•	_	· ·	v /	× /	v /	v /	v (	v /	v /	v (	v /	v /	· ·	v (	v (	v /	· ·	SM Surface	
Signage Options	Class ref 1	· ·	·	•	•	4	-	•	•	· ·	· ·	·	v ./	-	1	1	_	_	4	•	•	v ./	•	·	v ./	·	v ./	4	v ./	4	·		•	·	Class ref 1	Signage
	Class ref 2	v (	v /	_	•	· ·	_	•	•	· ·	v /	•	v /	_	· ·	v	_	/	· ·	•	· /	v /	•	v /	v /	v /	v /	· /	v /	· /	v /	v /	· /	v /	Class ref 2	Options
	Decorative band	v	v		• -	v _		•	•	v	v _	•	v _	_	•	_	_	v _	•	•	•	•	•	v ./	•	•	• ./	•	v	•	v _	v	•	• -	Decorative band	I
DDA Compliant		•	•	•	1	1	•	•	•	•		_	./	•	-	_	_	_	•		1	./	•	•	./	./	•	_	•	1	_	• _	_	_		DDA Compliant
		v	v		v	v			v	v	v		v				_		v	v	v	v	v	v	v	v			v	v				_		1

# 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.





## 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.

# 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.





#### 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 forvery low speed impacts. \* ECO version not available



## 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.



