



RS 001 Bollards with red keycheck paving, Fort Retail Park, Manchester

## Static Bollards

Stainless Steel



RS 001 Stainless Steel Bollards, Basingstoke

Rhino stainless steel static bollards provide perimeter protection whilst also adding contemporary style and elegance to the surrounding landscape. Bollards are available in a number of modern styles, with each bollard available in a variety of length and diameter options.

Rhino stainless steel bollards are manufactured from a carefully selected grade of 316L stainless steel (1.4401). Exceptionally strong and requiring very little maintenance, they are ideal for a wide variety of applications including pedestrian walkways and areas of protected parking.

The use of grade 316L (1.4401) stainless steel offers a number of significant advantages:

**Higher resistance to corrosion:** Whilst stainless steel is corrosion resistant, the naturally forming chromium rich oxide film that protects it can be broken down over time by chlorine and chlorides. However, due to the increased levels of nickel in its alloy structure, grade 316L (1.4401) has a much higher resistance to corrosion.

**Greater resistance to pitting and staining:** In comparison with other grades of stainless steel, grade 316L (1.4401) is less susceptible to surface pitting.

**Low Maintenance:** As a result of its quality, grade 316L (1.4401) requires very little maintenance to retain its original appearance. This means that the material provides attractive 'life cost' benefits when compared to alternatives, such as carbon steels.

**Recyclable:** Stainless steel is 100% recyclable. Around 90% of stainless steel is made from recycled scrap. Due to this, stainless steel has much less of an impact on the environment and scarce resources, providing an all round "Green" material for architects to specify.

**See page 11 for specification and fixing options.**

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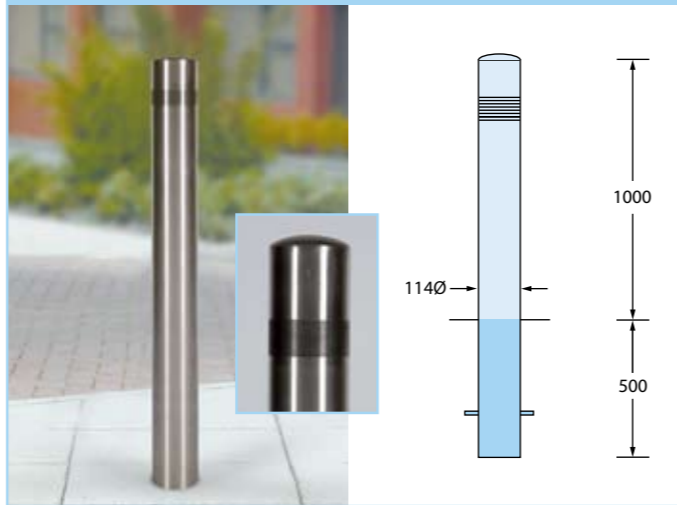
Stainless Steel



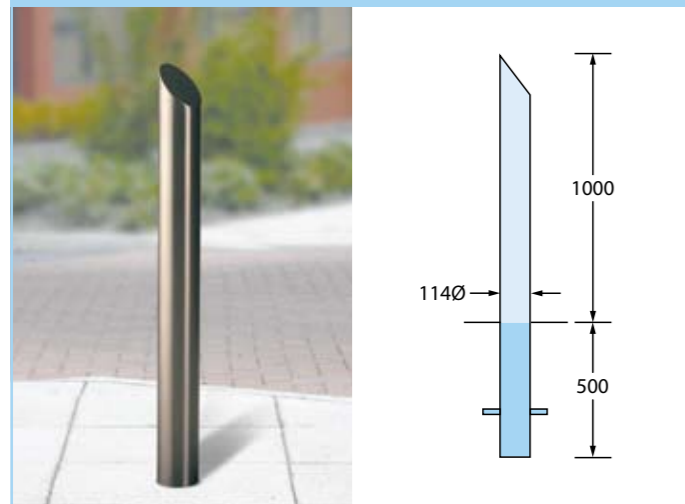
RS 001



RS 002



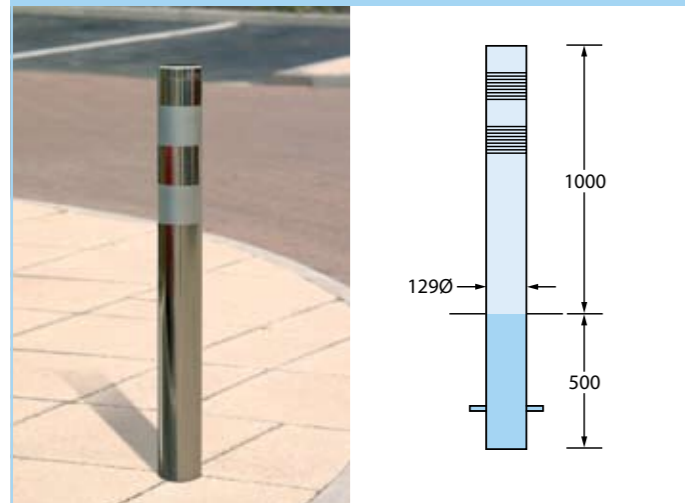
RS 004



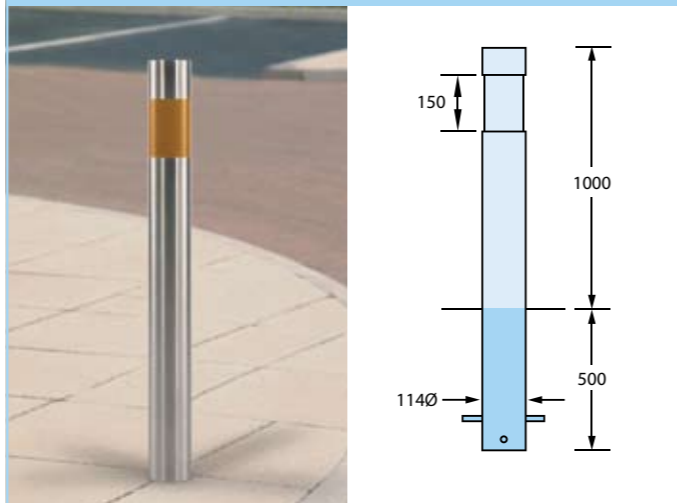
RS 005



RS 007



RS 150



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M3 FLAT TOP BOLLARD



M3 MITRE TOP BOLLARD



Product Description	Product Reference	Diameter (mm)	Height			Weight (kg)	Standard Finish	Length		Options				Utility Options		
			Overall Height (mm)	HAG (mm)	HAG (mm)			Length 1250 HAG 900	Length 1800 HAG 1200	Reinforced	Anti Ram	Lift Out & Lockable	Base Plate	Hazard Banding	Stainless Steel Bezel	Water Standpipe
Semi dome top SS bollard	RS001	101	1500	1000	7	Brushed Satin	■	■	■	■	■	■	■	■	■	■
	<b>RS001*</b>	<b>114</b>	<b>1300</b>	<b>1000</b>	<b>9</b>	<b>Brushed Satin</b>	■	■	■	■	■	■	■	■	■	■
	RS001	129	1500	1000	12	Brushed Satin	■	■	■	■	■	■	■	■	■	■
	RS001	154	1500	1000	15	Brushed Satin	■	■	■	■	■	■	■	■	■	■
Semi dome top engraved bollard	<b>RS002</b>	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>9</b>	<b>Brushed Satin</b>	n/a		■	■	■	■	■	■	■	■
Mitre top ss bollard	RS004	101	1500	1000	7	Brushed Satin	■	■	■	■	■	■	■	■	■	■
	<b>RS004</b>	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>9</b>	<b>Brushed Satin</b>	■	■	■	■	■	■	■	■	■	■
	RS004	129	1500	1000	12	Brushed Satin	n/a		■	■	■	■	■	■	■	■
	RS004	154	1500	1000	15	Brushed Satin	n/a		■	■	■	■	■	■	■	■
Flat top SS bollard	<b>RS005</b>	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>9</b>	<b>Brushed Satin</b>	■	■	■	■	■	■	■	■	■	■
Flat top matt band SS bollard	RS007	101	1500	1000	7	Bright Polish	n/a		■	■	■	■	■	■	■	■
	<b>RS007</b>	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>10</b>	<b>Bright Polish</b>	■	■	■	■	■	■	■	■	■	■
	RS007	129	1500	1000	12	Bright Polish	n/a		■	■	■	■	■	■	■	■
	RS007	154	1500	1000	15	Bright Polish	n/a		■	■	■	■	■	■	■	■
Flat top Bollard with single DDA Band	RS150	101	1500	1000	7	Brushed Satin			■	■	■	■	■	■	■	■
	<b>RS150</b>	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>9</b>	<b>Brushed Satin</b>			■	■	■	■	■	■	■	■
	RS150	129	1500	1000	12	Brushed Satin			■	■	■	■	■	■	■	■
	RS150	154	1500	1000	15	Brushed Satin			■	■	■	■	■	■	■	■
M3 Flat Top SS Bollard	89	1500	1000	9	Brushed Satin	■	■	■	■	■	■	■	■	■	■	■
	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>10</b>	<b>Brushed Satin</b>	■	■	■	■	■	■	■	■	■	■	■
	168	1500	1000	16	Brushed Satin	■	■	■	■	■	■	■	■	■	■	■
M3 45 Mitre top SS bollard	89	1500	1000	8	Brushed Satin	■	■	■	■	■	■	■	■	■	■	■
	<b>114</b>	<b>1500</b>	<b>1000</b>	<b>9</b>	<b>Brushed Satin</b>	■	■	■	■	■	■	■	■	■	■	■
	168	1500	1000	15	Brushed Satin	■	■	■	■	■	■	■	■	■	■	■

\* RS001 with 114mm diameter is also available with a total length of 1500mm

\* Please turn to pages 11 and 12 for specification and customisation options

\*\* Products in bold text indicate standard option.

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RS 001 lift out lockable bollards with Sineu Graff Diamond Point Elliptical litter bins and bespoke cycle parking on Conservation Paving, Crown Point, Denton

## Specification options

Rhino Stainless Steel Static bollards are available with a variety of specification options to meet the requirements of any application:

**Standard:** Ideal for demarcation purposes, standard bollards provide visual separation between vehicle and pedestrian areas. Standard Rhino stainless steel bollards feature a 2mm wall thickness, with the exception of the M3 Flat and Mitre top bollards, which feature a greater 6mm thick wall for increased strength.

**Reinforced:** A galvanised steel tube is added for increased internal strength. Suitable for areas where there is a higher risk to pedestrians or premises from moving vehicles.

**Anti Ram:** Reinforced with two internal steel tubes to further increase the strength of the bollard. This specification is ideal for ram-raid deterrence and preventing vehicles from penetrating beyond the bollard.

**Reinforced Anti Ram:** Bollards are reinforced with three mild steel tubes for areas requiring maximised ram-raid protection.

## Fixing Options

**Root Fixing:** Rhino 1000mm bollards are supplied with a 500mm root depth as standard, with the exception of the 114mm diameter RS 001 bollard, which has a 300mm root. The root is placed underground and secured using concrete. A cross bar keys into the concrete for added strength, ensuring that the bollard cannot be moved or twisted. Differing heights are also available, however the required root depths differ dependent on the option selected. Specific lengths are also available on request.

**Base Plate:** Bollards can be supplied complete with an integral base fixing plate which is attached to the ground using bolts. This option is ideal for applications where ground excavation is not an option.

**Lift out and Lockable:** Removable bollards allow temporary vehicle access and can be replaced when works are complete.

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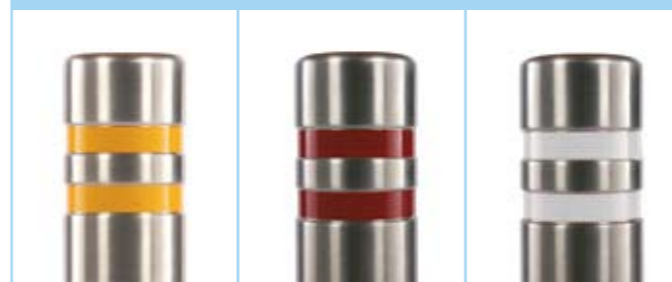
## FINISHES



### Finishes

- Rhino stainless steel static bollards are supplied with a satin polished finish with the exception of the RS 007, which is supplied with a bright polished finish and two etched bands.

## HAZARD BANDING



### Hazard Banding:

- For increased visibility and safety.
- Rhino stainless steel bollards are available with an option of Class Ref 2 reflective hazard banding for increased visibility and safety.
- Banding is available in a choice of three standard colour options; amber, red and white. Additional options are also available on request.

## OPTIONAL EXTRAS



### Stainless Steel Bezel

- Stainless steel bezels are available in a brushed satin finish in standard diameters.
- The bezel is ideal for applications where the bollards are installed into existing paving, ensuring that any gaps or cracking caused during installation are completely hidden from view.



RS 001 Bollards with Marshalls Harvest Buff Tegula Paving