



Typical protective PAS68 bollard foundations consist of a combination of concrete and steel reinforcement, with some product available requiring up to 1000mm of depth below ground. However, for many sites requiring safety and protection, the existence of underground utilities and cramped building foundations can prohibit this level of excavation without serious disruption.

Marshalls helps tackle the shallow excavation problem with the RhinoGuard™ 25/40 Shallow Mount Protective Bollard, requiring up to 75% less excavation than some standard PAS68 systems, resulting in a cost effective installation and less time spent on site. Our successfully crash tested RhinoGuard™ technology is built into the core, with a sleeve being placed over it to provide a more attractive finish in all locations where aesthetics and safety are key.

If the application requires protective bollards of standard depth and of a 25/40 PAS68 rating, Marshalls is able to provide you with the version of the RhinoGuard™ 25/40 Protective Bollard.

The difference is only visible under the ground, meaning the installation will not compromise aesthetics at any cost. It is a perfect solution for sites where medium-sized vehicles can be viewed travelling at average speeds up to 40mph.

For sleeve style options please see page 6.

RhinoGuard™ 25/40

Standard and Shallow Mount Protective Bollard

Product Name	Excavation depth (mm)	Core Diameter (mm)	Height Above Ground (mm)(FGL)	Core Weight (Kg)	Sleeve diameter	Finish
RhinoGuard™ 25/40 Protective Bollard	600	Ø168	1000	180	Ø194, Ø204	Steel/ Powder Coated
	600	Ø168	1000	180	Ø204	Stainless Steel
	600	Ø168	1000	180	Various	Ferrocast
RhinoGuard™ 25/40 Shallow Mount Protective Bollard	152	Ø168	1000	340 to360	Ø194	Steel/ Powder Coated
	152	Ø168	1000	340 to360	Ø204	Stainless Steel
	152	Ø168	1000	340 to360	Various	Ferrocast

*Cap and Core finish also available. For further information, please contact our sales office on 0370 600 2425.

Test 1
Vehicle: Unladen 2.5 tonne 4x4 utility vehicle
Vehicle Speed: 40mph (64km/h)

PAS 68 Classification Code: Standard Bollard
PAS 68:2007:V/2500(M2)/64/90:0.0/0.0

PAS 68 Classification Code: Shallow Mount
PAS 68:2010:V/2500(M2)/64/90:2.3/0.0