

Introducing trees and planting into urban landscapes provides numerous benefits, with research showing positive effects on social and environmental well-being, evoking a sense of pride of place within communities.

To facilitate the integration of attractive planting into our public spaces whilst also mitigating the threat of vehicle-borne attacks, Marshalls has developed and impact tested a high strength steel frame, designed to fit inside a range of planters.

The RhinoGuard™ 75/50 Planter Frame provides architects and designers with an ideal alternative to the more traditional methods of hostile vehicle mitigation, offering exceptional levels of security along with the benefits of introducing planting to urban spaces.

The design of the RhinoGuard™ frame allows for the root ball of a medium sized tree to be contained inside the planter, providing landscape architects with the freedom they require to introduce creative planting solutions into the built environment. The high strength frame is designed to fit seamlessly inside a range of cosmetic planter styles in various materials, providing a design-led, high performance security solution that can both aesthetically enhance and protect any scheme.

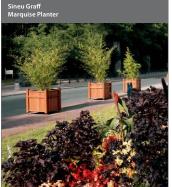
Planters are available in both traditional and contemporary designs, with a variety of material options, including concrete, timber and steel. For larger schemes, the frame also provides an ideal opportunity for completely bespoke solutions.















Product Name	Excavation depth (mm)	Height Above Ground (mm)(FGL)	Width (mm)	Finish
RhinoGuard™75/50 Protective Planter Frame	950	955	952	Powder Coated
RhinoGuard™ 75/50 Protective Planter Frame with Giove Planter	950	1090	2000	Precious Stone

## Test 1 (frame)

Vehicle: Fully laden 7.5 tonne two axle rigid N2 lorry Vehicle Speed: 40mph (64km/h)

PAS 68 Classification Code: PAS68:2010:V/7500(N2)/64/90:0.0/0.0

## Test 2 (frame)

Vehicle: Unladen 7.5 tonne two axle rigid N3 lorry (empty 18 tonner) Vehicle Speed: 50mph (80km/h)

PAS 68 Classification Code: PAS68:2010:V/7500(N3)/80/90:1.7/0.0

Test 3 (frame with Giove planter)

Vehicle: Unladen 7.5 tonne two axle rigid N3 lorry (empty 18 tonner) Vehicle Speed: 50mph (80km/h)

PAS 68 Classification Code: PAS68:2010:V/7500(N3)/80/90:3.8/35.5