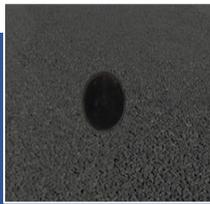


SMART IMPACT RECOVERY SYSTEM

Making bollards re-usable impact after impact



SAFER, MORE SUSTAINABLE BOLLARDS. ZERO WASTE



CLEANER, SAFER

MORE SUSTAINABLE CITIES

MAKE BOLLARDS IMPACT RESISTANT

for virtually maintenance-free developments

When a normal in-ground or surface mounted bollard is impacted by a vehicle the impact force will either bend the bollard or disturb the foundations (either way both the bollard and foundations need replacing).

Now you can install bollards using the Impact Recovery System. Streetscapes remain in pristine condition and bollards become impact resistant, removable and re-usable impact after impact.

Impact Resistant

The Impact Recovery System uses two shock absorbing rings to absorb the impact force, making both the bollard and the surrounding foundations re-usable impact after impact

Bollards Self-recover

Unlike dangerous spring-loaded mechanisms, Smart Bollards remain secure and rigid (cannot be deflected by hand). When impacted by a vehicle the Impact Recovery Rings absorb the impact force allowing the bollard to deflect up to 20 degrees and slowly self-recover.

Altering resistance against impact

The strength of the internal core determines the resistance against damage when impacted by a vehicle.

- For less vehicle damage (Medium gauge core)
- For less damage to bollards, (Heavy gauge core)
- To stop a vehicle in its tracks, (Solid steel core)



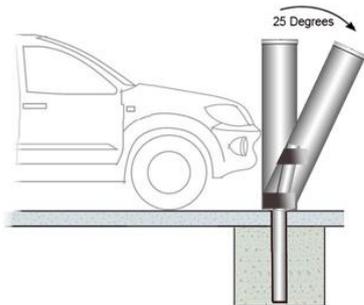


EFFICIENT

MORE SUSTAINABLE CITIES

REMOVABLE AND RE-USABLE

costing a fraction to maintain



If badly impacted (deflects beyond 20 degrees) the same bollard can be re-instated on the same foundations by re-using the Smart Impact Recovery Rings time and time again. The only damage can be to the internal core, which bends at ground level and is easily replaceable.

Replacing damaged bollards

No digging or heavy labour. A security stud is removed, and the bollard cover is simply slipped off the Impact Recovery System. The internal core can be easily replaced and the same bollard re-instated (re-using the Impact Recovery Rings) time and time again.



In-ground or surface mount

You can surface mount bollards or secure them in-ground from 150 - 650 mm depth. Foundations and Smart components are re-usable impact after impact



COMPONENTS

All you need are two shock absorbing Impact Recovery Rings. (re-usable impact after impact, year after year)

Surface Mount:

Re-usable Heavy-Duty base Plate with 6 holes to evenly distribute impact force (internal core is removable from base plate using an Allen key)



In-ground

150 mm (solid concrete footpaths, traffic islands and carparks), 350 mm (standard depth) or 650 mm (for high impact or safe-stop bollards)

Smart Sustainable Foundations use a self-locking mechanism to secure bollards (no breakable components). The internal core is removable from the ground socket using a leverage tool operated from a standing position. Sockets can be capped. All components re-usable impact after impact.



Secure Durable Plastic or Steel Bollards

You can secure a standard 150 mm (165 OD) Steel Bollard or a 150 mm Plastic (almost any colour including stone look) and we have designer caps/ designer bollard covers. Or you can purchase our Impact Recovery System to install your own everyday 150 NB/ 165 OD Steel bollards.



BOLLARD	DEPTH	LOW IMPACT	MEDIUM IMPACT	HIGH IMPACT	DEFLECTION
150 Plastic/ Steel	Surface Mount	Medium Gauge			20 Degrees
150 Plastic/ Steel	In-ground 150 mm	Medium Gauge			20 Degrees
150 Plastic/ Steel	In-ground 350 mm	Medium Gauge	Heavy Duty		20 Degrees
150 Plastic/ Steel	In-ground 650 mm	Medium Gauge	Heavy Duty	Solid Core	20 Degrees
Safety Bike Path	In-ground 350 mm	Medium Gauge	Heavy Duty	Solid Core	20 Degrees
Safe-stop	In-ground 650 mm			Solid Core	20 Degrees
Safe-stop Rigid	In-ground 650 mm			Solid Core	0 Degrees

Solid core will bring a passenger vehicle to a stop. For ram raid bollards refer to Sure-stop bollards.

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