

# Crash-Rated Bollards

## ENGINEERED PERIMETER PROTECTION

RELIANCE FOUNDRY  
— SINCE 1925 —

Crash-rated bollards have proven their stopping power in rigorous third-party tests. When installed as directed, they offer security against vehicle accident or attack. Protect people and property with a well-constructed perimeter.

*Removable and fixed models are available.*



### ACCIDENT PROTECTION

#### THE ASTM C40 BOLLARD

- Stops a 2,430-pound vehicle (passenger car) moving 40 mph
- Halts vehicle within 3.3 feet (P1 penetration)
- Excellent for areas with curbs, speed bumps, or parking stops where vehicle speeds are slow due to environmental design
- Improved parking lot protection against accidents due to inattention and pedal confusion.



### MEDIUM SECURITY

#### THE K4 / ASTM M30 BOLLARD

- Stops a 15,000-pound vehicle (medium-duty truck) moving 30 mph
- Halts vehicle within 3.3 feet (P1 penetration)
- May be used in anti-ram raid and anti-terrorist perimeters where there is no open road offering an acceleration zone
- Most popular choice for securing against vehicle accident in urban traffic



### ANTI-TERRORIST PROTECTION

#### THE K12 / ASTM M50 BOLLARD

- Stops a 15,000-pound vehicle (medium-duty truck) moving 50 mph
- Halts vehicle within 4 feet (P2 penetration)
- Security for locations with long stretches of open road
- Two adjacent halt vehicles within 3.3 feet (P1 penetration)
- Popular at government buildings, high security installations, and commercial organizations vulnerable to ram-raid attack

## EASY INSTALLATION

1

Before you dig, check for underground utilities. Learn and follow relevant municipal codes.

2

Dig to specified dimensions below frost line.

3

Set a brace or block at the base of the excavation. Set and plumb the bollard.

4

Pour concrete and let cure.

*No specialized installation knowledge necessary. Detailed install instructions available on website.*

## CHOOSING THE RIGHT IMPACT PROTECTION

- RISK** — Are you securing against accident or deliberate attack?
- TRAFFIC PATTERN** — What are likely accident scenarios? A sharp curve in an arterial presents a higher impact risk than a light-controlled one-way street, even one with high traffic volume.
- TRAFFIC SPEED** — Consider what is typical and possible. Areas with speed bumps, trees, fences, or switchback turns offer less threat than long stretches of empty road.
- OTHER BARRIERS** — A mix of security and crash-rated barriers offer value and protection.



## Architectural and Decorative Covers

*Beauty and Strength, Together.*

Choose from a range of architectural covers to complement your site. Create a consistent look when using a combination of fixed, removable, security, and crash-rated bollards around the perimeter. Available in cast iron, steel, stainless steel, or plastic. Customize by choosing from a range of colors and finishes.