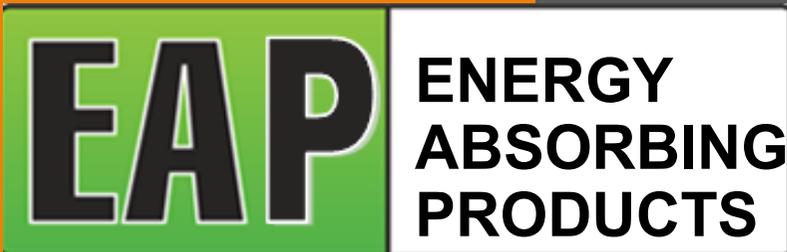




IAS



Designers and manufacturers of



Impact Absorbing Systems Pty Ltd

ABN 92 123 724 854

Level 1, 480 Collins Street
MELBOURNE VIC 3000

PH: 1300 033 333

info@impactabsorbing.com.au



www.impactabsorbing.com.au

01

Energy Absorbing Bollards

02

Decorative Bollards

03

Additional Energy Absorbing Products

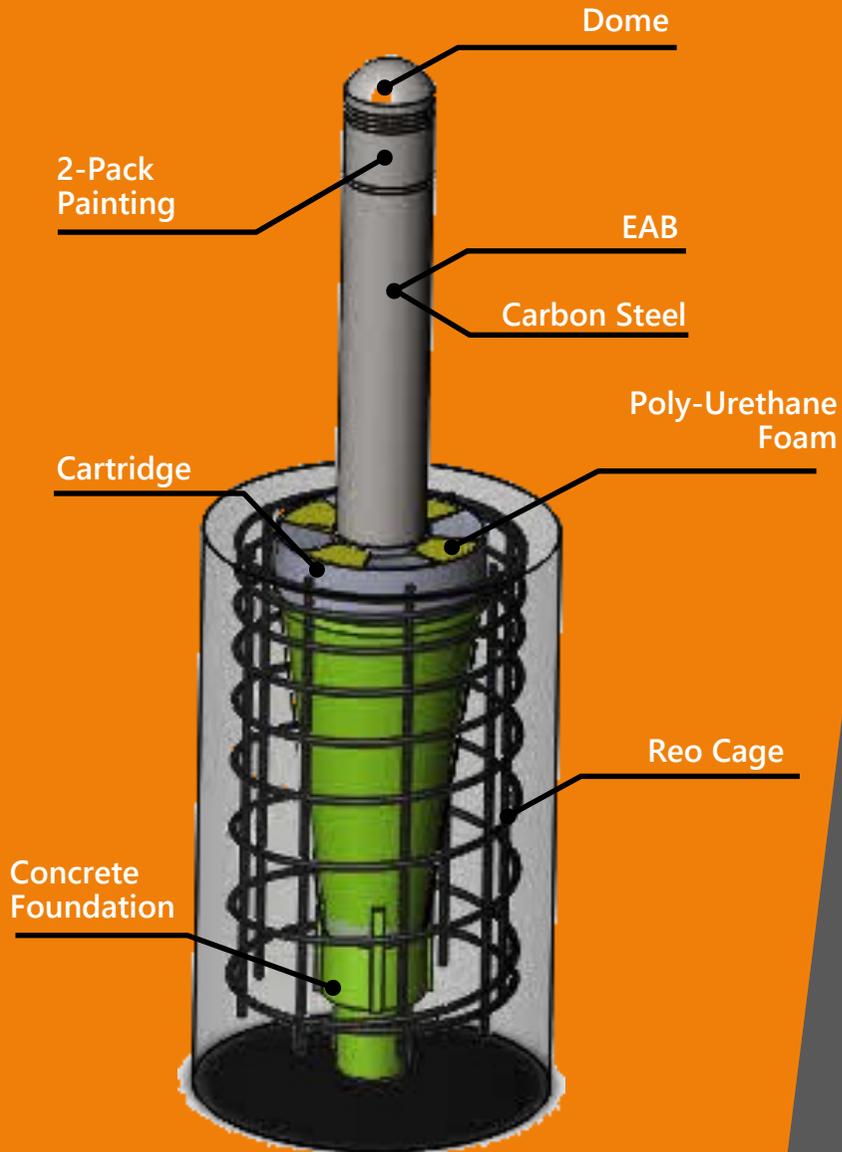


01

Energy Absorbing Products

EAB

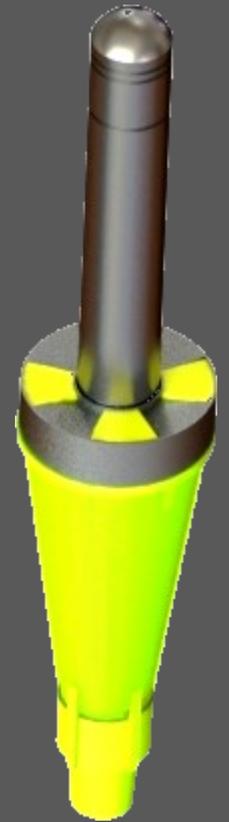
ENERGY ABSORBING BOLLARDS



1 The EAB is manufactured with high grade carbon steel thick walled hollow bar 150mm in diameter, 1,450mm long which is inserted 800mm deep into a foamed cartridge.

2 Available in galvanised, standard 2-pack painted finish and 304 satin stainless steel. Standard colours include black, yellow, heritage green and red.

3 Correct installation of the EAB is critical for their performance under impact conditions. All installers of EABs **MUST** confirm in writing that they have followed the manufacturer's "Installation Instructions" for EABs.



	Carbon Steel Hollow Bar	Cartridge
Diameter (mm)	150 Ø	355 Ø Top 168 Ø Body
Length (mm)	1,450	800
Weight (kgs)	67.5	28.5
Speed Rating (km/h)	60kph	

Energy Absorbing Bollards are non-redirective crash attenuators designed to protect vulnerable pedestrians from out of control vehicles.

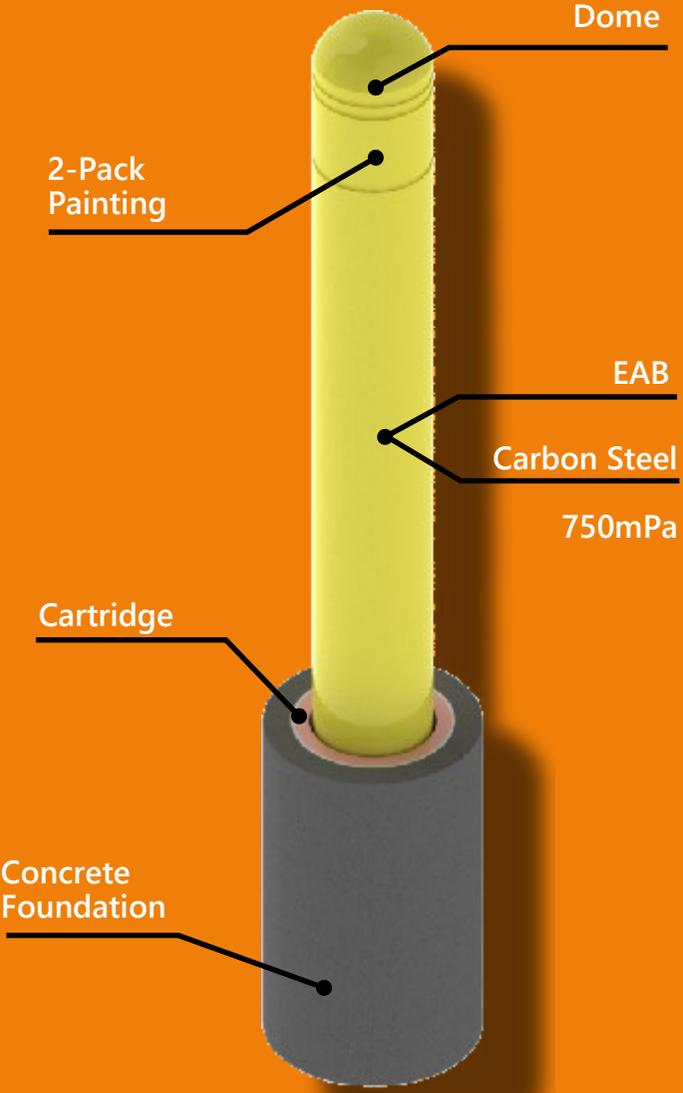


Televised crash testing of Energy Absorbing Bollards

EAB ENERGY ABSORBING BOLLARDS



EAB ENERGY ABSORBING BOLLARDS



Energy Absorbing Bollard 20kph

Our Bollard range for parking facilities. The EAB20.

EAB20s are also non-redirective crash attenuators, designed to arrest a **1.6 ton** errant vehicle travelling at car park speeds of **20kph**. Commonly used for parking facilities and very slow traffic areas.

Ultimate Control and Protection for Parking Facilities

Typical non-compliant bollards are surface mounted or buried **200-300mm** below the ground and frequently with no concrete or steel reinforcement. This renders them incapable of stopping vehicles even at speeds of **5-10kph**. They can also be dangerous when impacted by an out-of-control vehicle as they become flying projectiles and possibly injure pedestrians.

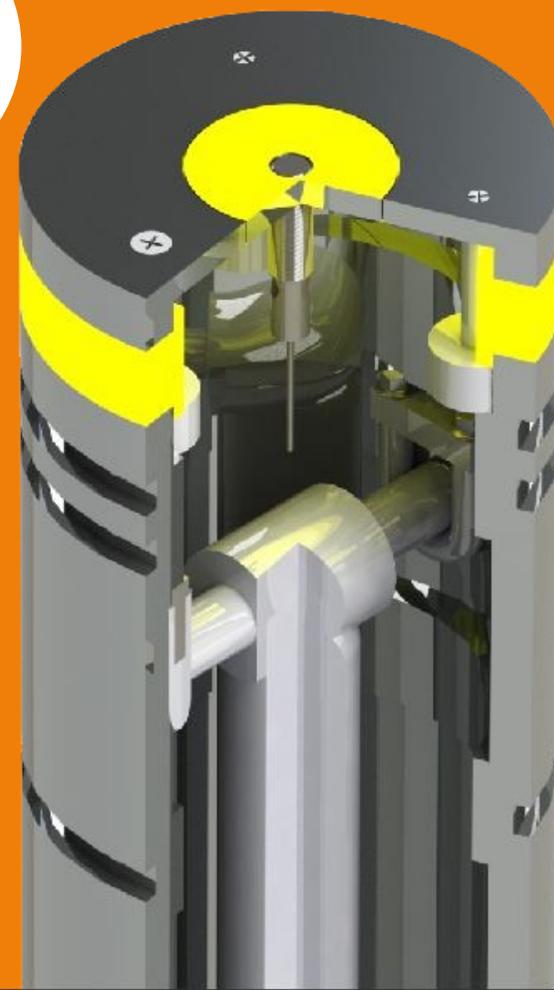


Controller Options

Retractable Energy Absorbing Bollards- Hydraulic (EAB-RH). These bollards incorporate all safety features of the EAB with additional retraction and extension capabilities. They have the ability to be controlled in a number of variations and could be integrated to your existing building controllers and systems. The EAB-RH is a world class product manufactured and designed in Australia.

Dimensions

	Carbon Steel Hollow Bar	Cartridge
Diameter (mm)	150 Ø	355 Ø Top 168 Ø Body
Length (mm)	1,450	1,700
Weight (kgs)	67.5	28.5
Speed Rating (km/h)	60kph	

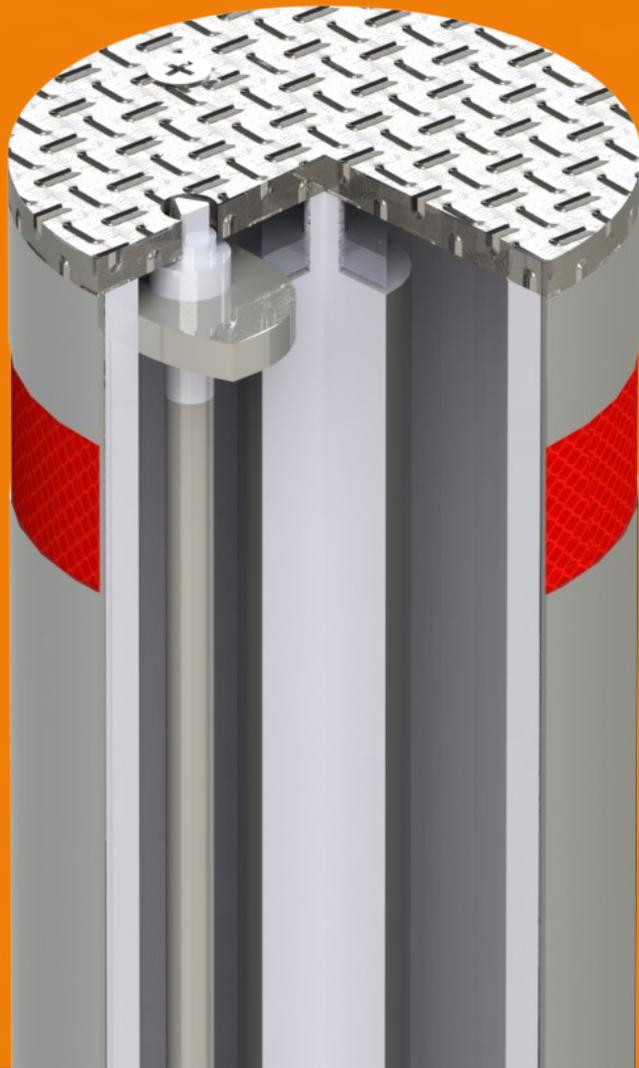


Retractable Hydraulic

EAB

ENERGY ABSORBING BOLLARDS

Retractable Gas Strut



	Carbon Steel Hollow Bar	Cartridge
Diameter (mm)	150 Ø	355 Ø Top 168 Ø Body
Length (mm)	1450	1600
Weight (kgs)	67.5	28.5
Speed Rating (km/h)	60kph	



EAB-GS

Manually Retractable Energy Absorbing Bollards (EAB-GS).

This series of bollards are:

- *Cost-effective*
- *Low maintenance*
- *Energy-absorbing*
- *Life-saving*

All of the attributes that the EABs have in a cost effective, manually retractable implementation. They can be locked and unlocked with a specifically designed security key and require minimal maintenance.

EAB

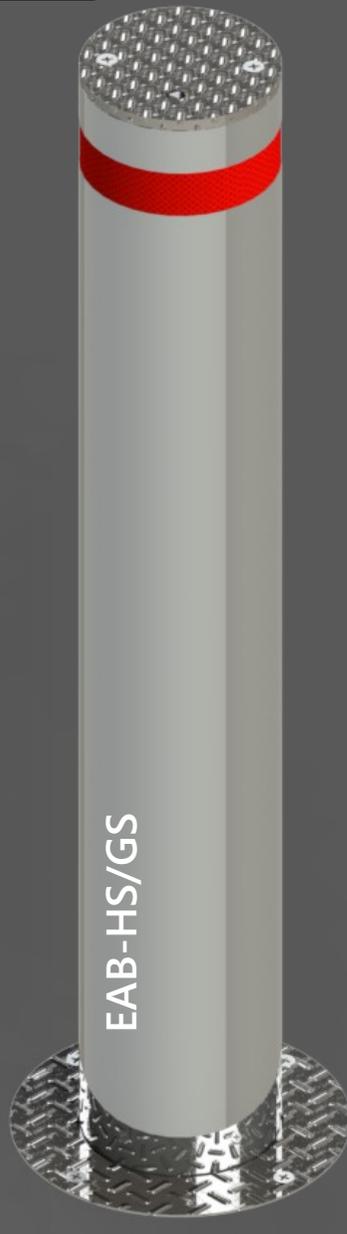
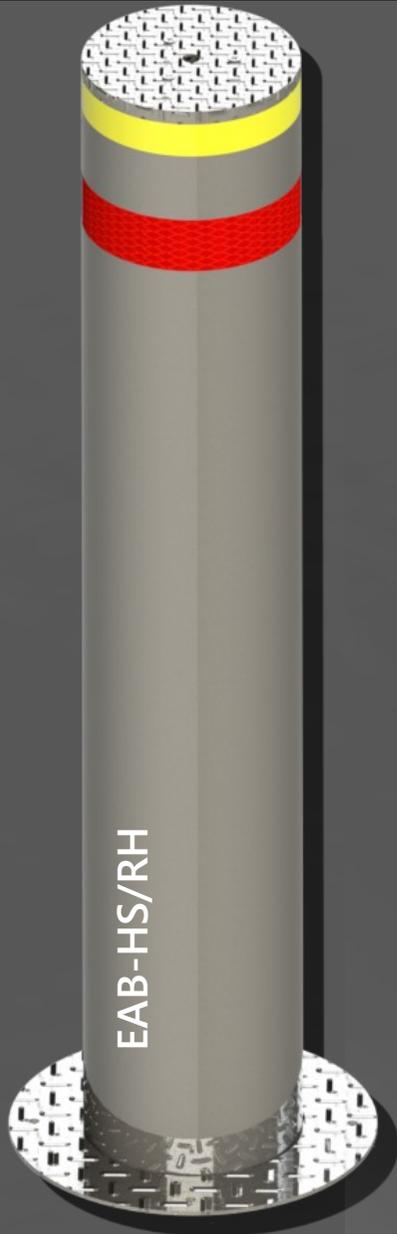
ENERGY
ABSORBING
BOLLARDS

HS

High Security Series

PAS 68 Compliant

Able to stop a 7.5
Ton vehicle (HGV)
moving at 48kph



Our tested High Security Bollards Series. Three products able to stop a 7.5 ton Heavy Goods Vehicle (HGV), travelling at 48kph while decelerating the truck, saving pedestrians and potentially its occupants. Tested within the PAS-68 parameters, the EAB-HS is ideal for high security buildings and assets. This bollard range will stop a terrorist act before it can inflict damage or harm.



02

Decorative Bollards

Stainless Steel Semi—Automatic Bollards



Semi-Automatic Bollard can be extended and retracted manually using a security key. No power source required adds greatly to it's advantage. The 304 Stainless Steel body will give them exceptionally long life. Low maintenance and a very reliable bollard series.

Operation



1. Insert Key and turn



2. Bollard will extend on its own



3. Bollard will lock in place



4. Insert Key and turn



5. Push the bollard down with hand



6. Bollard will lock itself once it reaches the bottom limit

Specifications

Bollard Material:	304 Stainless Steel
Bollard Diameter:	168mm Ø & 219mm Ø
Bollard Height:	600mm
Bollard Thickness:	4mm
Bollard Finish:	Satin Finish
Hole Depth:	270mm Ø x 700mm D

Retractable Bollards are an everyday sight in today's metropolitan areas. More councils and government agencies are choosing bollards to separate pedestrians from out of control vehicles



Bollards

Stainless Steel Full Automatic Bollards



Fully-Automatic Hydraulic Bollards are designed to be extended and retracted at the push of a button. A range of options for control from a conventional manual switch to a convenient mobile app. Can be programmed to suit a custom function.

Options for Control



Mobile App



Control Switch



Integrable with existing system



Desktop & Web App

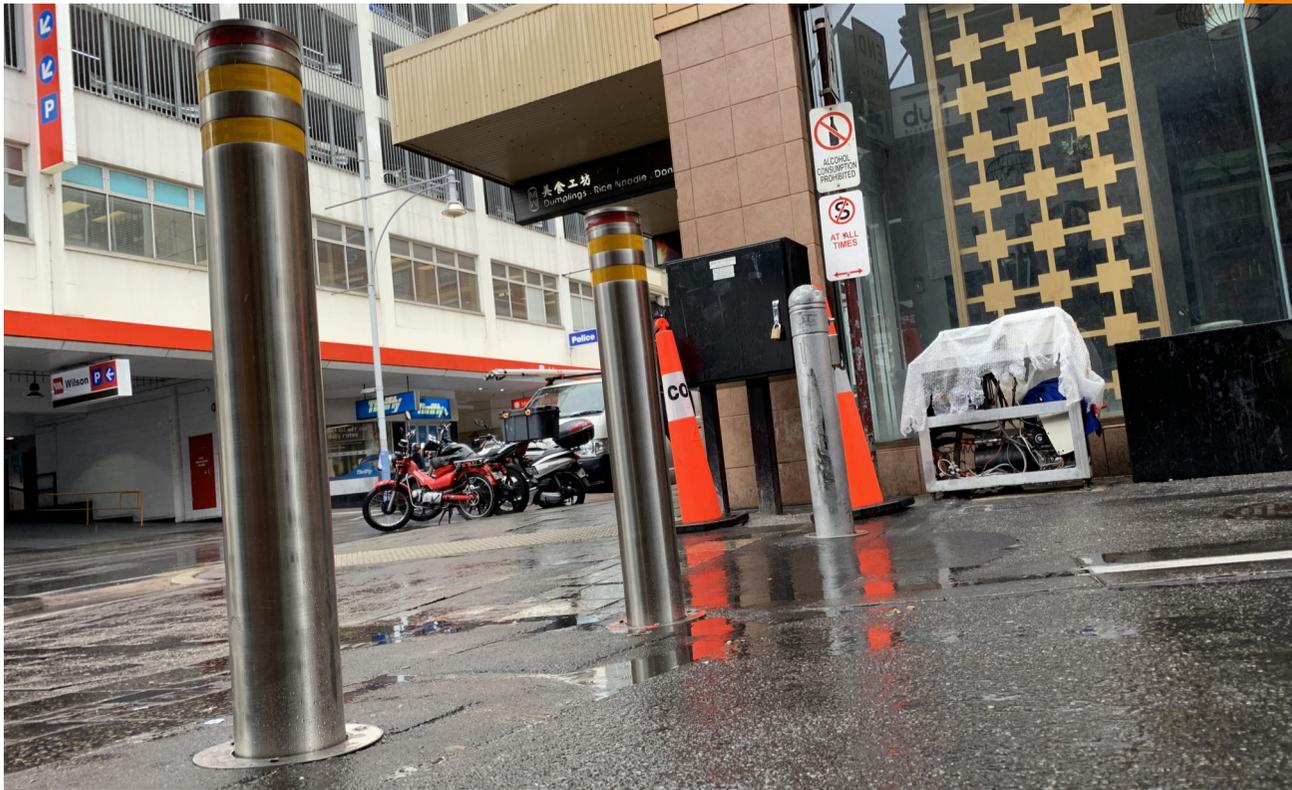


Tap Card System



Specifications

Bollard Material:	304 Stainless Steel
Bollard Diameter:	168mm Ø & 219mmØ
Bollard Height:	600mm
Bollard Thickness:	4mm
Bollard Finish:	Satin Finish
Hole Depth:	270mm Ø x 700mm



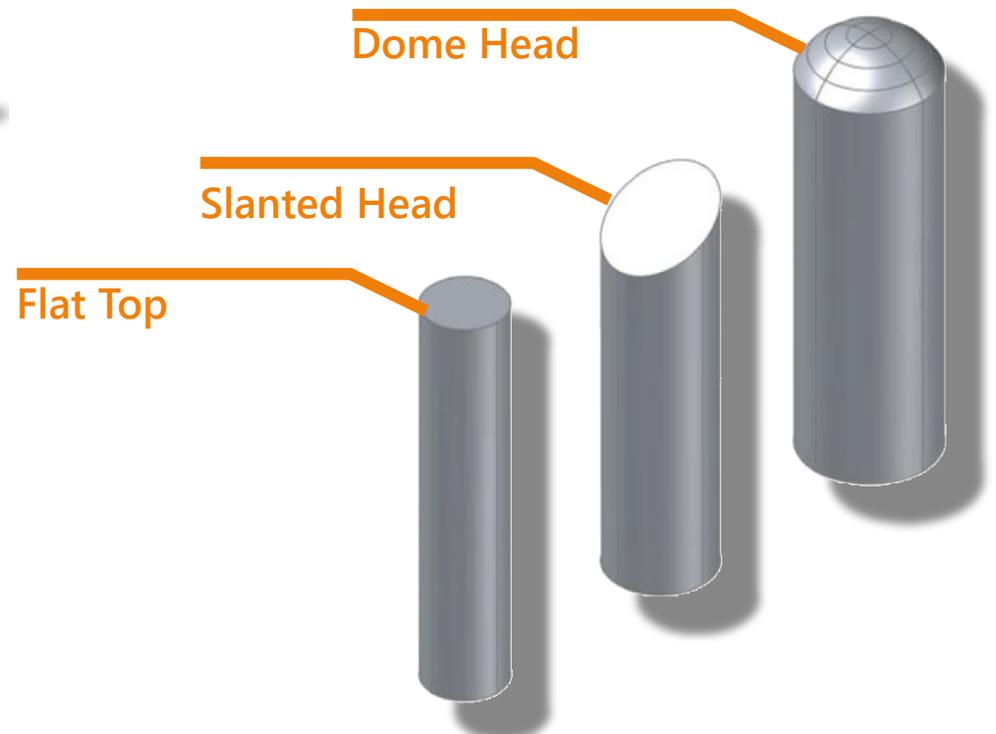
**Expert EAB
Installation**
Enhances the scene!
Generates a feeling of safety to
the community

Decorative Bollards Series



A range of fully customised 304 Stainless Steel Bollards with a range of sizes and heights to customer's specifications and requirements. Including 316L stainless steel material for corrosion high risk areas.

Bollard Top Options



Features

- A range of Bollard Tops
- Different Cylinder Sizes
- 2 Base / Flange Designs
- Reflective Tape
- Custom Logo / Design Engraving
- Satin, Mirror or Gold Plated Finish

Bollard Dimensions Chart

Diameter (mm)	Thickness (mm)						Height
	2.0	3.0	4.0	5.0	7.0	8.0	
76	■	■	■	■	■	■	600 ~ 1500mm
89	■	■	■	■	■	■	
102	■	■	■	■	■	■	
114	■	■	■	■	■	■	
141	■	■	■	■	■	■	
159	■	■	■	■	■	■	
168	■	■	■	■	■	■	
219	■	■	■	■	■	■	
273	■	■	■	■	■	■	
324	■	■	■	■	■	■	

Additional Features



Custom Engraved Logos
& Machined Grooves



Customers can choose to engrave their own logo or add a municipal emblem on the bollards. Other decorative options are also available.

Impact Absorbing System Pty Ltd

Level 1, 480 Collins Street
MELBOURNE VIC 3000

PH: 1300 033 333

info@impactabsorbing.com.au

www.impactabsorbing.com.au



03

*Additional Energy Absorbing
Product Range*

Energy Absorbing End Terminal EAET

EAET

ENERGY
ABSORBING
END TERMINALS

- Complies to test criteria AS/NZS:1999—Non re-directive crash attenuator
- Designed to arrest a 1,600kg errant motor vehicle travelling at speeds up to **60 kph**
- Deforming—Energy Absorbing Bollard protects the vehicle occupants
- Ideal for non gating & limited space applications
- EAET is easily replaced after impact and can be retro-fitted to existing end terminals.
- Anchored End Terminal facilitates downstream quadrail to re-direct impacting vehicles.



Energy Absorbing Crash Cushions



Our patented Energy Absorbing Crash Cushion (Pole/Tree Buffer) is used to protect vehicle occupants in a collision with fixed roadside objects including trees, light poles, concrete walls, bridge rails and power poles.

Strategically slotted steel tubes provide controlled crumpling and energy absorption to an errant vehicle during impact safely decelerating the vehicle reducing injury potential for the occupants.



Energy Absorbing Street Light Poles

The most common light pole in use is a slip based light pole. This type of light pole disconnects from the base during a collision. Typically, this type of light pole is applied to outer metropolitan areas, with no pedestrian traffic.

EASLP is designed to wrap around the errant motor vehicle safely decelerating the vehicle until it fully stops; while keeping the light pole vertical and preventing it to fall on the pedestrians or impact other road users.



EASLP test photo. A car travelling at 60kph has been arrested by the Energy Absorbing Light Pole and is supporting the EASLP against the vehicle.

Energy Absorbing Street Light Poles



For additional information
please contact:



Impact Absorbing Systems Pty Ltd

Level 1, 480 Collins Street
MELBOURNE VIC 3000

PH: 1300 033333

Info@impactabsorbing.com.au