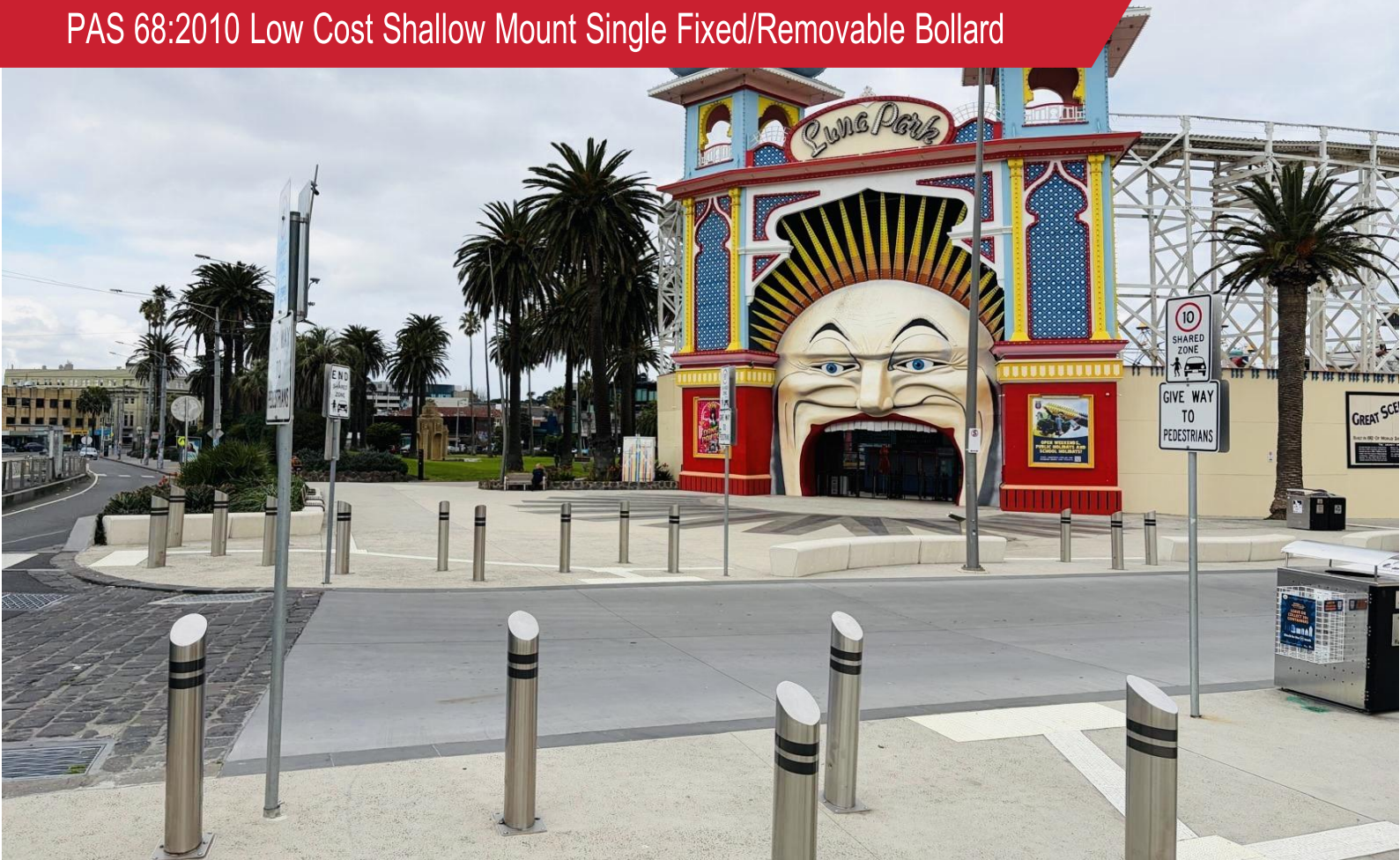


PAS 68:2010 Low Cost Shallow Mount Single Fixed/Removable Bollard



The unique, patented technology TRUCKSTOPPER 7-40 has a small and super lightweight base plate and post assembly (heaviest item in assembly only 46kg). This breakthrough design in a removable single bollard system with shallow footing only 200mm deep stops a 7.5 tonne truck at 40 mph or 64kph at 90 degrees from breaking through security line. If access is needed the bollard can be removed in minutes.

The 200mm footing depth greatly minimises the need to re-divert utilities. The system is the most economical on the market and very aesthetically pleasing as well as small and easy to install. This system is designed to follow changing contours of ground level as well as continuing around corners. If the posts are damaged after an attack they can be removed from the slipper box without removing or replacing the concrete foundation.

The system has also been crash rated for impact at 45° by a 7.2 tonne truck at 40 mph or 64kph, conceding minimal penetration (3.3 metres) as a triple assembly.

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres

*"New Technology
breakthrough - foundation
only 200mm deep"*

TRUCKSTOPPER 7-40

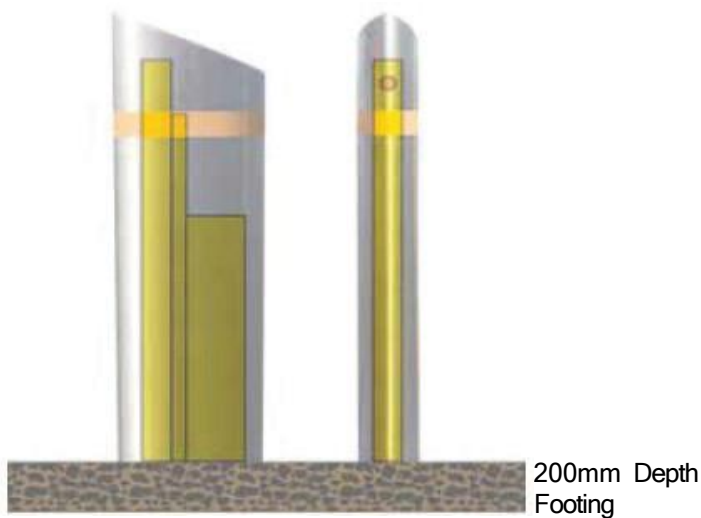
(PAS68:2010) V/7500 (N2)/64/90:7.1/14.8
(IWA 14:2013) V/7200 (N2A)/64/45:3.3

PAS 68 Low Cost Shallow Mount Single Fixed/Removable Bollard



Spring bollard cover
side view

Spring bollard front
side view



Foundation only 200mm deep x 900mm wide x 1200mm long
Tested and passed as a single removable bollard

SPECIFICATION

- ▶ Height above ground:
900mm
- ▶ Footing Depth:
Only 200mm
- ▶ Options:
Stainless steel & mild steel
shroud available

*Safetyflex also offer a selection
of shrouds and street furniture.
Details available on request.*



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
RABBITPOLE & CRASH PPMFC

PSSA
Partnership Security Systems Association
AUSTRALIAN ASSOCIATION

ASIAL
AUSTRALIAN SECURITY ASSOCIATION
ASSOCIATION LIMITED

SWING GATE CHALLENGER

(BSI PAS68:2013) V/7500[N2]/64/90:1.1/0.0

ONLY 1.1M OF PENETRATION AND ZERO DEBRIS

Eagle is one of the UK's leading providers of PAS68 & IWA-14 tested gates, blockers and barriers with over 25 years experience of designing and delivering practical, cost effective and quality British solutions to thousands of organisations.

With a level of expertise that is unsurpassed in the industry, Eagle are at the forefront of product innovation, quality and standards. Ezi maintain a network of specialist technicians in Australia who are experts in the upkeep and maintenance of your system through its life.

KEY FEATURES

- ▶ Available as a manual double leaf swing gate with opening of up to 8.0m
- ▶ Available as an automated single leaf swing gate with opening of up to 6.0m
- ▶ Very secure with height of up to 3.6m
- ▶ Opening and closing speed of 25-35 seconds
- ▶ Full PLC Control
- ▶ Galvanised and powder coated
- ▶ Smooth and quiet operation
- ▶ Low maintenance with moving parts

FEATURES & DETAILS

- ▶ Eagle Fibre technology
- ▶ Very low penetration
- ▶ Shallow foundation
- ▶ Tested at 8m clear opening
- ▶ Robust and rigid
- ▶ Can swing in both directions
- ▶ Various designs available
- ▶ 240V 16A supply
- ▶ PLC design available with frequency inverter speed control
- ▶ 24V or 3 phase motor available
- ▶ Heavy duty hinges
- ▶ Manual over-ride system
- ▶ Protected with CAT3 safety edges
- ▶ Gate safety standard EN13241-1
- ▶ Hi/Lo safety photocells across threshold

SWING GATE CHALLENGER VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N2	64	90	1.1



CLAW MOBILE HOSTILE VEHICLE BARRIER (BSI PAS68:2013) (IWA 14-1:2013)

PEACE OF MIND FOR ANY EVENT



CLAW is a portable hostile vehicle barrier that can be readily deployed for short term events or used for more permanent applications.

CLAW is unobtrusive by design and can be deployed amongst crowds who would be oblivious to the nature of its use. The option to sign post CLAW provides a unique advertising opportunity for your company and or event. Likewise, CLAW can be used for directional signage to channel pedestrian movement or for directing vehicles.

CLAW has been tested to a rigorous range of crash tests for compliance to recognised international standards.

FEATURES

- ▶ Surface Mounted - no ground anchors
- ▶ Can be sign posted for advertising or directional signage
- ▶ Pedestrian friendly
- ▶ Does not require jointing to adjacent units
- ▶ Non-hostile or threatening feel to people
- ▶ Mobile hostile vehicle barrier crash test certified to PAS68:2013 and IWA14-1:2013 recognised international standards

CLAW MOBILE HOSTILE VEHICLE BARRIER PERFORMANCE CLASSIFICATION

CLASSIFICATION	VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
PAS68:2013	V/1500KG	M1	64	90	3.9
PAS68:2013	V/3500KG	N1	64	90	7.3
IWA14-1:2013	V/1500KG	M1	64	90	4.7
IWA14-1:2013	V/3500KG	N1	64	90	8.2

CLAW MOBILE HOSTILE VEHICLE BARRIER (BSI PAS68:2013) (IWA 14-1:2013)

PEACE OF MIND FOR ANY EVENT



Test 1. IWA 14-1:2013 V/1,500(M1)/64/90:4.7/0 and PAS68:2013 V/1500(M1)/64/90:3.9/0

Crash test 1 Frame A



Crash test 1 Frame B



Crash test 1 Frame C



Crash test 1 Frame D



Test 2. IWA 14-1:2013 V/3,500(N1)/64/90:8.2/0 and PAS68:2013 V/3500(N1)/64/90:7.3/0

Crash test 2 Frame A



Crash test 2 Frame B



Crash test 2 Frame C



Crash test 2 Frame D



Ezi Security Systems
SERIOUS SECURITY IS EZI

VSV
VOLKMANN
STRASSEN- UND VERKEHRSSICHERUNG

PSSA
Partnership Security Suppliers Association

ASIAL
ASIAN SECURITY ASSOCIATION

TRUCKSTOPPER 17

(BSI IWA14-1:2013) V/7200[N2A]/64/90:1.7

IWA 14-1 LOW COST SHALLOW MOUNT SINGLE FIXED/REMOVABLE BOLLARD



TRUCKSTOPPER 17 is the new addition to Safetyflex's 40mph/64kph shallow mount range with a new and improved penetration distance of just 1.7 metres. With just 200mm of foundation depth required, Truckstopper 17 is one of the shallowest single tested, low penetration distance bollards on the market today.

The shallow foundation reduces the need to re-divert utilities, making for a more cost-effective installation and reducing time on site. This patent protected design is the latest technological breakthrough from Safetyflex with a small foundation footprint which utilises our patented military-grade spring steel which has the ability to stop a 7.2 tonne truck travelling at 40mph/64kph with no damage to the internal bollard allowing for it to be reused.

The versatile Truckstopper 17 is available as a static or removable option and can be integrated with bespoke street furniture designs; including planters, benches and litterbins for a more discreet HVM solution.

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres

*"New Technology
breakthrough - foundation
only 200mm deep"*

TRUCKSTOPPER 17 IWA14-1 VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	FOOTING DEPTH
V/7200KG	N2A	64	90	1.7	200



TRUCKSTOPPER 17

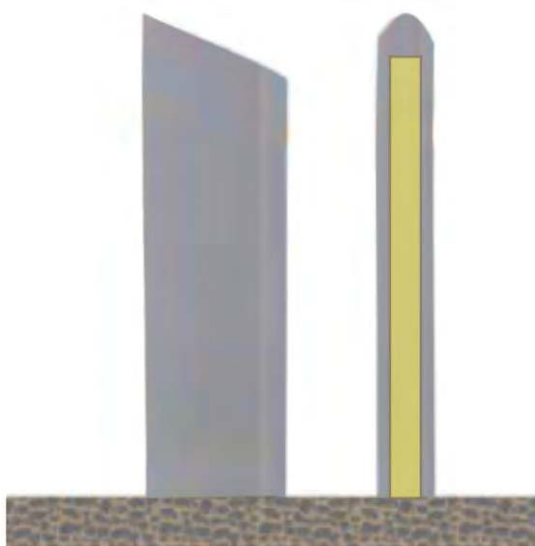
(BSI IWA14-1:2013) V/7200[N2A]/64/90:1.7

IWA 14-1 LOW COST SHALLOW MOUNT SINGLE FIXED/REMOVABLE BOLLARD



Spring Bollard Cover
Side View

Spring Bollard Cover
Front view



200mm
Depth Footing

Foundation only 200mm deep x 1400mm wide x 1600mm long
Tested and passed as a single removable bollard

SPECIFICATION

- **Height above ground:**
950mm
- **Footing Depth:**
Only 200mm
- **Options:**
Stainless steel & mild steel
shroud available

*Safetyflex also offer a selection
of shrouds and street furniture.
Details available on request.*



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
RADIUS & CRASH FENCES

PSSA
Perimeter Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRIES
ASSOCIATION

FIX BLOCK 40

SHALLOW MOUNT HVM PROTECTION



Designed for modern public spaces, this shallow-foundation hostile vehicle mitigation solution delivers proven protection without the cost, disruption, or visual impact of traditional barrier systems. It offers a smarter, more flexible approach to security for environments where safety must work seamlessly alongside everyday public life.

We are specialized in building unique digital experiences for our clients, from websites to special purpose applications. We also help businesses reach wider audiences through managed digital marketing. We help companies destroy network viruses and avoid future casualties.

Independently crash tested at MIRA to the new ISO 22343-1, the system has been proven to stop a 7.5 tonne vehicle, impact loadings to 7.2 tonne, at 40mph, 64kph, with no penetration. The shallow foundation design reduces installation time and groundworks, helping projects stay on programme and within budget.

With a choice of finishes and discreet cover options, including planter and street-furniture designs, the solution blends naturally into public realm, retail, leisure, and transport settings, while still providing robust protection for higher-risk sites such as airports, police stations, government buildings, data centres, and critical infrastructure.

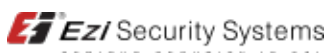
Block Measurements	2000mm L x 800mm W x 800mm (from FFL)
Block Spacing	3200mm Centre to Centre
Foundation Depth	200mm
Crash Test Rating	ISO 22343-1:2023 Barrier V/7200[N2A]/64/90:0.0/12.3
Minimum array	One

FINISHES

- ▶ Standard concrete finish with option to clad in alternative finishes. Please contact us for more details

APPLICATIONS

- ▶ Public Realm
 - Stadiums
 - Retail parks
 - Leisure attractions
 - Critical infrastructure
 - Police stations
 - Government buildings
 - Data Centres
 - Shopping Centres
 - Airports



FIX BLOCK 40

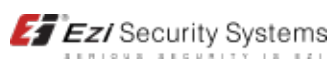
SHALLOW MOUNT HVM PROTECTION



OPTIONAL COVERING



ISO 22343-1:2023 Barrier V/7200[N2A]/64/90:0.0/12.3



FIX BLOCK 50

SHALLOW MOUNT HVM PROTECTION



Designed for modern public spaces, this shallow-foundation hostile vehicle mitigation solution delivers proven protection without the cost, disruption, or visual impact of traditional barrier systems. It offers a smarter, more flexible approach to security for environments where safety must work seamlessly alongside everyday public life.

Independently crash tested at MIRA to the new ISO 22343-1, the system has been proven to stop a 7.5 tonne vehicle, impact loadings to 7.2 tonne, at 50mph, 80kph, with no penetration. The shallow foundation design reduces installation time and groundworks, helping projects stay on programme and within budget.

With a choice of finishes and discreet cover options, including planter and street-furniture designs, the solution blends naturally into public realm, retail, leisure, and transport settings, while still providing robust protection for higher-risk sites such as airports, police stations, government buildings, data centres, and critical infrastructure.

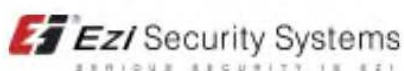
FINISHES

Standard concrete finish with option to clad in alternative finishes. Please contact us for more details

APPLICATIONS

Public Realm
Stadiums
Retail parks
Leisure attractions
Critical infrastructure
Police stations
Government buildings
Data Centres
Shopping Centres
Airports

Block Measurements	2000mm L x 800mm W x 930mm H (from FFL)
Block Spacing	3200mm centre to centre
Foundation Depth	300mm
Crash Test Rating	ISO 22343-1:2023 Barrier V/7200[N2A]/80/90:0.0/0.0
Minimum array	One block



FIX BLOCK 50

SHALLOW MOUNT HVM PROTECTION

INDEPENDENT ISO 22343-1:2023 CRASH TESTING — HORIBA MIRA PROVING GROUND

CRASH TEST GALLERY



Fix Block 50 positioned ahead of a 7.5 tonne MAN rigid test vehicle prior to impact



Fix Block 50 shallow-mount unit with cast identification and corner impact markers



Post-impact: the cab is arrested on the block with no penetration of the barrier



Post-impact wide view showing the vehicle brought to a complete, inoperable stop

VEHICLE STOPPED • NO PENETRATION • RENDERED INOPERABLE ON IMPACT

 **Ezi Security Systems**
SERIOUS SECURITY IS EZI

 **PSSA**
Professional Security Systems Association

 **ASIAL**
ASIAN SECURITY ASSOCIATION

PAS68 CYCLE RAIL

(BSI PAS68) V/7300[M1]/48/15:0.0 (BSI PAS68) V/7500[N2]/64/15:0.0
(BSI PAS68) V/7300[M1]/48/90:1.5 (BSI PAS68) V/7500[N2]/6/90:2.6

HEIGHT ABOVE GROUND OF 750MM



Eagle Automation have a range of PAS68 tested products that support the street furniture scene. Our cycle hoop module is highly versatile and it can be used to create planters, railing systems and other similar products.

MODEL APT20CR

A zero penetration short height cycle hoop tested with the M1 3.5ton vehicle at 48kph. This product was extensively tested at 2 angles. Designed to complement existing street furniture. Shallow depth foundation of just 250mm. Available in a variety of heights (minimum 750mm above ground) . Available with gaps between 800mm and 1200mm. Suitable for securing bikes, scooters and motorcycles. Galvanised, painted or stainless steel finish.

MODEL APT40CR

A zero penetration cycle hoop tested with the N2 7.5ton vehicle at 64kph. This product was extensively tested at 2 angles. Designed to complement existing street furniture. Impact tested and approved at 7.5 tonne 40mph Shallow depth foundation of just 250mm. Height above ground 1000mm. Available with gaps between 800mm and 1200mm. Suitable for securing bikes, scooters and motorcycles. Galvanised, painted or stainless steel finish.

SPECIFICATIONS

- ▶ **Height above ground**
APT20CR - 750mm
APT40CR - 1050mm
- ▶ **Shallow foundation**
2000mm x 2000mm x 250mm
- ▶ **Supplied as a pair with integral connections**
- ▶ **No re-bar required**



CYCLE RAIL PAS68 VEHICLE PERFORMANCE CLASSIFICATION

MODEL	VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	25KG+ DISPERSION
APT20CR	V/7300KG	M1	48	15	0.0	0.0
APT20CR	V/7300KG	M1	48	90	1.5	0.0
APT40CR	V/7500KG	N2	64	15	0.0	0.0
APT40CR	V/7500KG	N2	64	90	2.6	0.0



ENTRAQUICK FOLDING GATE I

STATE OF THE ART FOUNDATION AND REINFORCEMENT



Our EntraQuick® quick folding gate is a TÜV type-tested, trackless bi-hinged gate, which is ideally suited to keep your driveways secured and pedestrian safe. Due to its trackless design, it offers high-speed capability allowing a quick opening and closing after every vehicle entry or exit. This makes it efficiently support smooth workflows in everyday operation, practically on train railways and busy parking lots.

EntraQuick® provides full-height perimeter protection in its closed position. EntraQuick Folding Gate offers trackless and unobstructed security for each entry or exit situation. It's fully cantilevered and has been designed with rationality in mind. This product is also known as a smart security solution designed as a combination of a barrier and a gate.

EntraQuick® is particularly stable and doesn't require an additional floor lock in the closed position. Due to its solid bar infill and the ingenious lever kinematics, no run-back area is required for this solution.

EntraQuick® Folding Gates can be installed easily and quickly thanks to pre-assembled drive posts and folding leaf units. It is driven by two AC motors. The gate leaves fold open inwards towards the secure site and each leaf can be opened separately if required.

The quick folding gates are perfect substitutes for the combined sliding gate and barrier installation at access points. In combination with the Ezi turnstiles, it creates a vehicle access point with pedestrian separation.



STANDARD TECHNICAL SPECIFICATIONS

Dimensions	Clear Width (CW): from 3000 - 6000 mm in 500 mm increments Distance between posts: CW + 520 mm Gate height (incl. 100 mm ground clearance): 2050 or 2450 mm Foundation depth: 900 mm Foundation top edge: 200 mm below finished floor level Optional: alternative floor recess for up to 200 mm lowered foundation
Opening Direction	Opening inwards Optional: opening outwards
Opening Angle	90° maximum opening
Gate Leaves	Gate leaves frame made of rectangular hollow section RHS 80x60x3
Gate Infill	Bar infill made of rectangular hollow section RHS 30x20 with a clear distance of max. 120 mm
Anti-Climbing Device	Serrated top rail



ENTRAQUICK FOLDING GATE I

STATE OF THE ART FOUNDATION AND REINFORCEMENT



STANDARD TECHNICAL SPECIFICATIONS

Gate Posts	Drive posts made of square hollow section SHS 200x6 complete with welded-on top plate and base plate to bolt onto foundation. Optional: Post(s) fitted with fence connection system	Control Devices	Induction loops, additional light beam in light beam posts at HGV height, additional key switch OPEN/ CLOSE / STOP, key switch OPEN / CLOSE / EMERGENCY STOP, key switch ON / OFF for automatic closing etc., key switch partial opening, key switch fire brigade, remote control with hand held transmitter, table top push button, timer, code key pad, card reader, intercom system
Locking	Locking via drive system and mechanical locking device consisting of gate reception fork on one folding gate leaf and infeed rollers on the other folding gate leaf.	Signalling Devices (Optional)	Flashing permanent light or rotating beacon (LED), LED spot light, traffic light
Operating Speed	Up to 1.0 m/s (double leaf, depending on CW)	Status Indication (Optional)	Potential-free contacts "Gate open/closed"
Drive Unit	Drive unit systems consisting of gearbox motor, base plate, drive arm, manual release, limit switches, limit switch cams and drive unit cover. Motor: 0.25 kW, 3~ 230 V Δ, 50 Hz	Finish	Hot-dip galvanised finish or hot-dip galvanised and powder-coated in Standard RAL colour 6005, 7016, 7030, 7035 or 9010 Optional: all other RAL colours
Emergency Operation (Power Failure)	Manual operation following removal of padlock and release of drive arm	Control Unit	Control unit WE-Tronic II complete with 2 nos. frequency converters 0.75 kW in control box HxWxD=600x400x210 mm, prepared for automatic functions, control voltage 24 V DC.
Supply Voltage	230 V (1Ph + N + PE), 50 Hz	Control Box	Fitted with rain cover and mounted to one of the drive posts Optional: for wall installation inside a building, max. distance 50 m Optional: installed in separate outdoor cabinet HxWxD=1200x600x400 mm incl. 200 mm high socket, max. distance 50 m
Control Device	1 no. key switch "Open-Stop-Close" in one of the drive posts (on the outside for opening direction inwards and on the inside for opening direction outwards respectively)	Weight	Approx. 650 kg for maximum applicable dimension
Safety Devices	Safety edges to stop and reverse the gate by approx. 10 cm in opposite direction on contact. 4 nos. horizontal safety edges on bottom rails 2 nos. vertical safety edges on front side stiles Light beam between drive posts at car and HGV height as well as in separate light beam posts on the side of the folded gate leaves at car height	Foundation	Reinforced foundation according to manufacturer's instructions
Certification	Type-tested by notified body TÜV Nord		

ENTRAQUICK FOLDING GATE II

STATE OF THE ART FOUNDATION AND REINFORCEMENT



Our EntraQuick® quick folding gate is a TÜV type-tested, trackless bi-hinged gate, which is ideally suited to keep your driveways secured and pedestrian safe. Due to its trackless design, it offers high-speed capability allowing a quick opening and closing after every vehicle entry or exit. This makes it efficiently support smooth workflows in everyday operation, practically on train railways and busy parking lots.

EntraQuick® provides full-height perimeter protection in its closed position. EntraQuick Folding Gate offers trackless and unobstructed security for each entry or exit situation. It's fully cantilevered and has been designed with rationality in mind. This product is also known as a smart security solution designed as a combination of a barrier and a gate.

EntraQuick® is particularly stable and doesn't require an additional floor lock in the closed position. Due to its solid bar infill and the ingenious lever kinematics, no run-back area is required for this solution.

EntraQuick® Folding Gates can be installed easily and quickly thanks to pre-assembled drive posts and folding leaf units. It is driven by two AC motors. The gate leaves fold open inwards towards the secure site and each leaf can be opened separately if required.

The quick folding gates are perfect substitutes for the combined sliding gate and barrier installation at access points. In combination with the Ezi turnstiles, it creates a vehicle access point with pedestrian separation.



STANDARD TECHNICAL SPECIFICATIONS

Control Devices	Induction loops, additional light beam in light beam posts at HGV height, additional key switch OPEN/ CLOSE / STOP, key switch OPEN / CLOSE / EMERGENCY STOP, key switch ON / OFF for automatic closing etc., key switch partial opening, key switch fire brigade, remote control with hand held transmitter, table top push button, timer, code key pad, card reader, intercom system
Signalling Devices (Optional)	Flashing permanent light or rotating beacon (LED), LED spot light, traffic light
Status Indication	Potential-free contacts "Gate open/closed"
Finish	Hot-dip galvanised finish or hot-dip galvanised and powder coated in Standard RAL colour 6005, 7016, 7030, 7035 or 9010 Optional: all other RAL colours
Weight	Approx. 1100 kg for maximum applicable dimension
Foundation	Reinforced foundation according to manufacturer's instructions



ENTRAQUICK FOLDING GATE II

STATE OF THE ART FOUNDATION AND REINFORCEMENT



STANDARD TECHNICAL SPECIFICATIONS

Dimensions	Clear Width (CW): from 2000 - 5000 mm in 500 mm increments Distance between posts: CW + 400 mm Gate height (incl. 100 mm ground clearance): 2050 mm, 2550 mm (only for CW ≤ 4000 mm) or 3050 mm (only for CW ≤ 4000 mm) Foundation depth: 900 mm Foundation top edge: 200 mm below finished floor level Optional: alternative floor recess for up to 200 mm lowered foundation	Drive Unit	Drive unit system consisting of gearbox, motor, base plate, drive pulley, drive belt, drive arm, manual release, limit switches, limit switch cams and drive unit cover Motor: 0.37 kW, 3~ 230 V Δ, 50 Hz
		Emergency Operation (Power Failure)	Manual operation following removal of padlock and release of drive arm
Opening Direction Viewed from outside	Left hand, opening inwards or right hand, opening inwards. Optional: Left hand, opening outwards or right hand, opening outwards	Control Unit	Control unit WE-Tronic II complete with frequency converter 0.75 kW in control box HxWxD=600x400x210 mm, prepared for automatic functions, control voltage 24 V DC.
Opening Angle	90° maximum opening	Control Box	Fitted with rain cover and mounted to drive post Optional: for wall installation inside a building, max. distance 50 m Optional: installed in separate outdoor cabinet HxWxD=1200x600x400 mm incl. 200 mm high socket, max. distance 50 m
Gate Leaves	Gate leaf frame made of square hollow section SHS 100x5 (inner/leading gate leaf) and SHS 100 x 4 (outer/trailing gate leaf) respectively.	Supply Voltage	230 V (1Ph + N + PE), 50 Hz
Gate Infill	Bar infill made of square hollow section SHS 30 with a clear distance of max. 120 mm.	Control Device	CONTROL DEVICE: 1 no. key switch "Open-Stop-Close" in drive or receiving post
Anti-Climbing Device (Optional)	Serrated top rail or steel spikes D18, 100 mm long, centre distance max. 80 mm (from 2550 mm gate height)	Safety Devices	Safety edges to stop and reverse the gate by approx. 10 cm in opposite direction on contact. 3 nos. horizontal safety edges on bottom rails 1 no. vertical safety edge on front side stile Light beam between drive post and receiving post at car and HGV height as well as in separate light beam posts on the side of the folded gate leaf at car height 1 no. active infrared presence detector (for EntraQuick® with 2050 mm gate height)
Gate Posts	Drive and receiving post made of square hollow section SHS 260x10 complete with welded-on top plate and base plate to bolt onto foundation. Optional: Post(s) fitted with fence connection system	Certification	Type-tested by notified body TÜV Nord

TRUCKSTOPPER 9-50

(BSI IWA 14-1:2013) V/7200[N3C]/80/90:10.5

SUPER SHALLOW FOUNDATION ONLY 200MM DEEP



AT LAST A NEW DESIGN THAT DOES ALL THIS...

- ▶ Shallow foundation only 200mm deep - Reducing the need to re-divert utilities
- ▶ Bollard overall height out of the ground is only 950mm
- ▶ This bollard can be fixed or removable
- ▶ Comes in break down kits allowing for ease of transport and installation - keeping costs down
- ▶ Very aesthetically pleasing

This new Anti Terrorist Bollard, has been designed with the added advantage that the slipper box (or post socket box) can be moved separately and is not rigid. The box can be swivelled around a corner of 90 degrees or more if needed and can adapt to an up and down sloping surface without having to change the box design.

FOUNDATION
200MM DEEP

ONLY
950MM HIGH

REMOVABLE
BOLLARD

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres



TRUCKSTOPPER 9-50 VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7200KG	N3C	80	90	10.5

Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
BARRIERS & CRASH FENCES

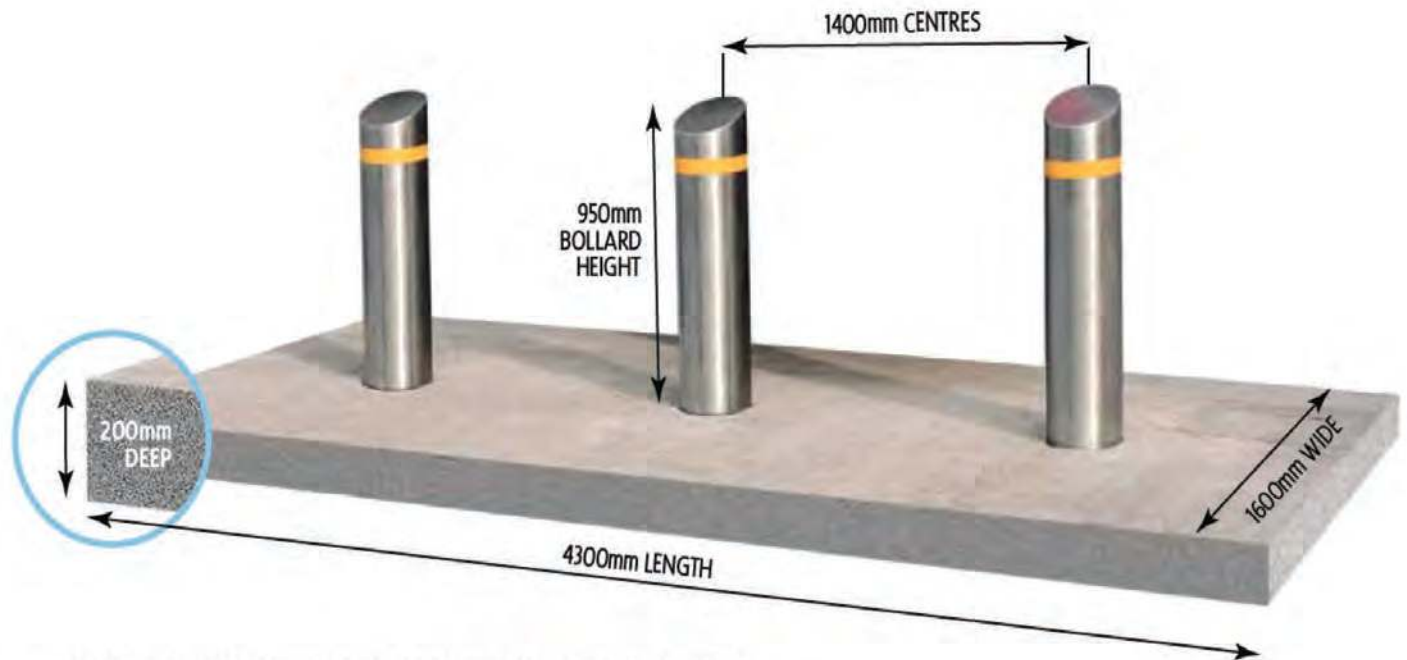
PSSA
Perimeter Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION

TRUCKSTOPPER 9-50

(BSI IWA 14-1:2013) V/7200(N3C)/80/90:10.5

SUPER SHALLOW FOUNDATION ONLY 200MM DEEP



FOUNDATION SIZE FOR THREE BOLLARD RUN

International Patents applied for



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
RABBITS & CRASH FENCES

PSSA
Perimeter Security Suppliers Association
MEMBER

ASIAL
AUSTRALIAN SECURITY ASSOCIATION
MEMBER

EZI TRUCKSTOPPER[™] (BSI PAS68) V/7500/80/90:5.3/2.0

A TOTAL SOLUTION TO ALL PORTAL SECURITY RISKS

The Ezi TruckStopper[™] and TruckStopper[™] RDSM (Rapid Deployment Shallow Mount) are the ultimate sliding gate systems. Both TruckStopper[™] gate systems are specifically designed to stop all threats, from pedestrians to speeding trucks.

The unique design of the TruckStopper[™] affords true bi-directional impact protection and is therefore ideal for all critical infrastructure applications. It has obvious applications ranging from correctional facilities, public utilities, administration centres, critical defence sites, courts, customs/border control, airports, refineries and many other designated high risk areas.

Because the TruckStopper[™] is essentially a cantilever design, the system is capable of high speed opening and closing times with unrivalled reliability. Accordingly, the Ezi TruckStopper[™] is capable of variable opening and closing speeds of up to 1.5 metres per second.

All mechanicals and electronics are above ground for ease of installation, maintenance and reliability under all conditions. Its state of the art electronics provide a true 100% duty cycle product with reliability through proven industrial quality components, PLC (programmable logic control), and UPS (uninterrupted power supply) as a back-up.

All TruckStopper[™] gates have an array of sophisticated safety devices designed to protect people and vehicles. These safety systems will affect a complete stop within 300mm from full speed operation. However, the safety system can be immediately overridden in the event of an emergency by the use of a button, switch or joystick control.

Like other Ezi designs, the gate is of a modular design comprising of two buttresses, back rail and battering ram (gate frame). Our main support and rolling platform are well balanced and provides smooth and efficient operations. The drive buttress access door has various anti tamper controls installed and has a SCEC approved lock for added confidence and security.

The flexibility of the TruckStopper[™] design allows it to be modified to cater for specific top of gate requirements, such as electric fence applications, anti pedestrian/climbing barriers, and walls of up to four metres in height.

The TruckStopper[™] may also be utilised as a stand alone anti-vehicle barrier and is ideal for sanitation portal protection, with or without top of gate barriers.

Another significant benefit of the Ezi TruckStopper[™] is that all footing and civil works are performed off the road thereby avoiding roadway closures which can be inconvenient and costly to your business. Indeed, being a cantilever design, the system is unaffected by road crowns, kerbs or falls for drainage on roads.

A crash tested and proven design the TruckStopper[™] and TruckStopper[™] RDSM (rapid deployment shallow mount) have both been the subject of rigorous design appraisal and testing regimes by government agencies in Australia and the UK. A test in November 2004 of a speeding 7.26 ton truck in NSW proved the absolute effectiveness of the TruckStopper[™] gate system. The test vehicle, an ex NSW Fire Truck, was completely stopped within 800mm from a full throttle collision at 67.5kph. As a consequence of this successful test and other system evaluations, the TruckStopper[™] gate system has been given SCEC approval by the Australian Government.

A subsequent series of tests were also conducted at the TRL Test facility at Crowthorne UK in 2005. These tested the new TruckStopper[™] RDSM (rapid deployment shallow mount) gate system. In two tests the gate systems were bolted into shallow concrete only 150mm thick. Both tests were outstanding successes as TruckStopper[™] RDSM destroyed a 7.5 ton truck speeding at 82.3kph.

This test was an absolute world first and proved beyond doubt the viability of the rapid deployment capabilities of the TruckStopper[™] RDSM system. These successful tests resulted in the UK Government endorsement of the system. The real beauty of the TruckStopper[™] RDSM system is that the gate can be easily moved from one site to another on the back of a truck. Used in conjunction with temporary fencing or barriers, the TruckStopper[™] RDSM can be quickly installed to control both traffic and pedestrians for special event/s or heightened risk scenario.

The TruckStopper[™] and TruckStopper[™] RDSM systems are fully compatible with all access control systems. The Ezi TruckStopper[™] already protects many significant government and private industry assets.



EZI TRUCKSTOPPER

(BSI PAS68) V/7500/80/90:5.3/2.0

A TOTAL SOLUTION TO ALL PORTAL SECURITY RISKS



STANDARD TECHNICAL SPECIFICATIONS

Gate width	3 metres to 6 metres (variable)	Main roller	Zinc plated, mild steels (150 ton rated)
Bottom gate height	1015mm standard	Motor release	Bolted bracket
Gate clearance	185mm nominal	Motor	4KW, 240V, three phase brake motor (50Hz)
Top fence height	2000mm	Gearbox	Helical (ratio's variable)
Erected system height	3200mm nominal	Brake	Electromagnetic, 240V power to release
Gate frame	Beam	Drive cog	120mm brass, 100mm wide
Receiver buttress	100mm RHS	Drive rack	50mm sq zinc plated mild steel
Drive buttress	100mm RHS	Control logic	True PLC, 24V DC with expansion unit
Gate buttress height	1200mm nominal	Drive logic	VSD 240V single phase to 240V three phase
Gate buttress cladding	Sheet metal (3.0mm)	Power supply	Regulated 240V to 24V DC
Gate buttress length	2460mm	Control enclosure	IP56, mild steel, painted, 700 x 500 x 250
Gate buttress width	1200mm	Position sensing	Proximity sensors, NPN 24V DC
Access door	5.0mm sheet metal gas strut	Safety (pedestrian)	Photo beam set (transmit and receiver type)
Gate back rail	Twin 150 C Channels	Safety (vehicle)	Inductive loops & detectors, 24v DC, fail safe
Gate finish	Sand blasted 2 pack painted to clients requested	Gate duty cycle	True 100% cycling as per Ezi's standard
Gate bearings	Fully sealed, 40t rating each	Power requirement	240V, 32 amp supply
Guide rollers	Black PVC nylon	Strobe light	Orange, 24V DC
Piezo	24V DC (pulsing) backup power supply UPS up to 20 full cycles		

 **EZI Security Systems**
SERIOUS SECURITY IS EZI

 **PSSA**
Partner Security Suppliers Association

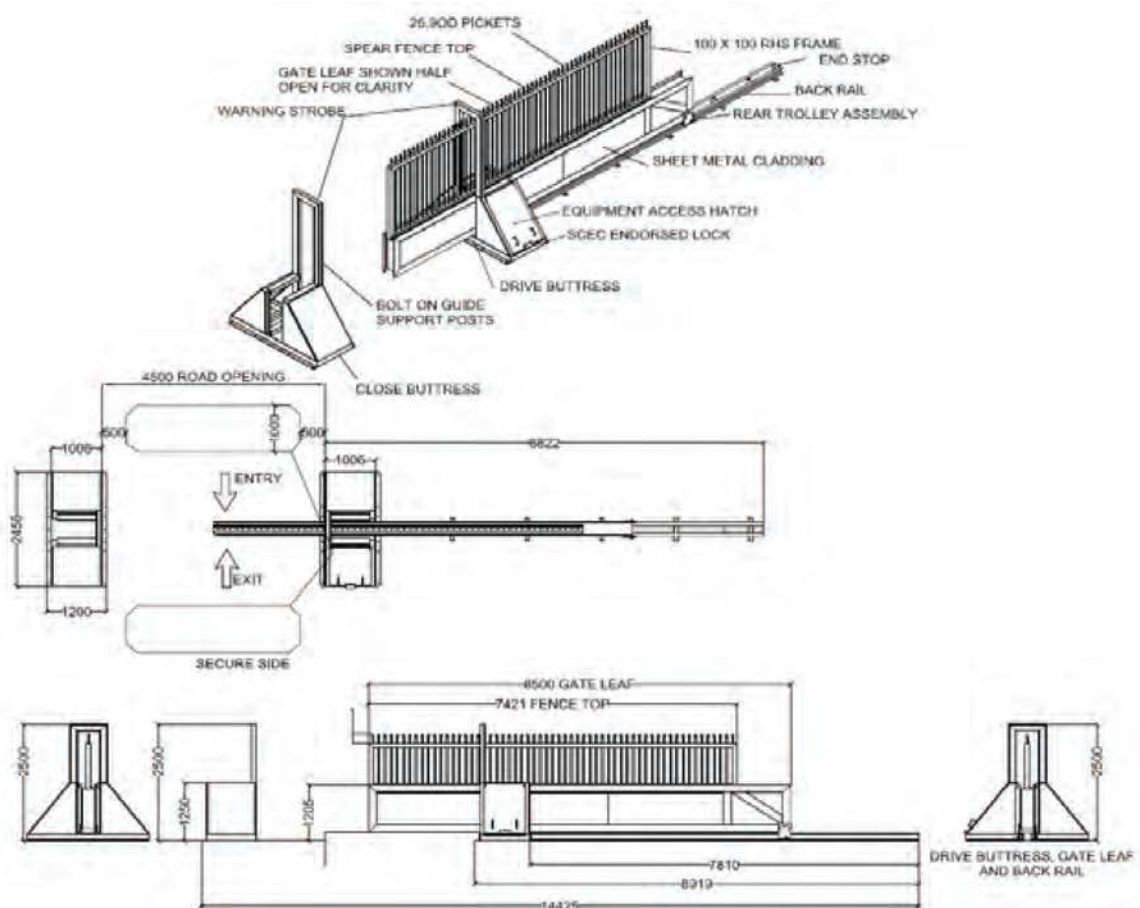
 **ASIAL**
MEMBER
AUSTRALIAN SECURITY INDUSTRIES ASSOCIATION

EZI TRUCKSTOPPER (BSI PAS68) V/7500/80/90:5.3/2.0

A TOTAL SOLUTION TO ALL PORTAL SECURITY RISKS



STANDARD TECHNICAL DRAWING



Ezi Security Systems
SERIOUS SECURITY IS EZI

PSSA
Partner Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRY ASSOCIATION

HEAVY INDUSTRIAL SLIDING GATE

RELIABLE AND TROUBLE-FREE PERFORMANCE



The Ezi Heavy Industrial Sliding Gate System is based on the principles of counter balancing. These systems are designed and engineered to Ezi's exacting calculations and standards with a strong emphasis on safety. Each Heavy Industrial Sliding Gate System comprises the following important mechanical modules. The modules consist of the gate main support tower, the gate leaf, the gate back rail and the end post. When bolted together, the main tower and back rail form the main support and rolling platform for the gate leaf. The gate leaf is then attached to this platform with two back-check plate roller sets. The roller sets, when bolted on, lock the sliding gate leaf within the confines of the gate back rail.

The gate system is then bolted to a concrete footing that has been engineered to provide adequate weight to counter-balance the gate system. The combination of gate design and concrete footing allows the gate to roll out over the relevant road opening, without tipping or sagging, basically traveling in free air.

Up to 10 metre road widths (for a single gate) are standard within our product range. The Heavy Industrial Sliding Gate System needs no road rails, tracks or overhead supports. Each Ezi Slide Gate is designed with automation features as standard. An industrial three-phase drive motor, PLC control logic, frequency inverter and proximity sensors are some of the highly advanced products used in Ezi's product range. Each Ezi PLC system allows for special features and auxiliary equipment to be added without major parts redundancy. e.g. traffic light controls, card access readers. Our main support and rolling platform is well balanced and provides smooth and efficient operations. Our standard cantilevered designs operate at variable speeds. These are adjustable to a maximum of 800mm per second of gate travel.

The Heavy Industrial Sliding Gate System is not affected by road crowns, kerbs or falls for drainage in roads. All associated works to install a Heavy Industrial Sliding Gate System are performed off to the side of the relevant road, thereby avoiding closures, which can be inconvenient and costly to your business. The Ezi Heavy Industrial Sliding Gate System has no equal in the industrial market place. Each system will perform reliably all day, every day.

*"AT EZI, WE BELIEVE SAFETY SHOULD NOT BE AN OPTION.
THAT IS WHY OUR SYSTEMS HAVE BEEN FULLY RISK
ASSESSED TO BEST STANDARDS"*

Our systems have been fully risk assessed to contemporary OH&S standards by an independent authority. Ezi Heavy Industrial Sliding Gate System has an extensive array of safety devices and features which form part of our standard product offering. Our wealth of knowledge and experience gained over the years has enabled Ezi to evolve and develop this premium product to suit a variety of ever-changing environments. The Ezi Heavy Industrial Sliding Gate Systems, as developed by Ezi, are purpose-built for the industrial market place. The key consideration is safety of operation without compromise to security. High levels of performance, aesthetically pleasing design and unrivalled reliability are also a feature.

The high performance and advanced technology built into the Ezi Slide Gate will ensure reliable operation for many years to come. Ezi boasts a large end-user customer base and continues to provide product and service to Australia's leading corporations.



HEAVY INDUSTRIAL SLIDING GATE

RELIABLE AND TROUBLE-FREE PERFORMANCE



STANDARD TECHNICAL SPECIFICATIONS

Gate width	3 metres to 12 metres (custom available)	Gearbox	Worm drive (ratio's variable)
Gate height	2200mm standard	Drive cog	Industrial grade nylon or brass
Gate clearance	150mm nominal	Drive rack	25mm sq zinc plated mild steel
Gate erected height	2350mm nominal	Control logic	True PLC, 24v DC
Gate frame	100mm sq RHS (minimum)	Drive logic	VSD 240v single phase to 240v three phase
Gate end post	100mm sq RHS	Power supply	Regulated 240v to 24v DC
Gate tower	100mm sq RHS	Control enclosure	IP56, mild steel, painted, 600 x 400 x 200
Gate tower height	2500mm nominal	Position sensing	Proximity sensors, NPN 24v DC
Gate tower cladding	Galvanised sheet metal (1.6mm)	Safety (pedestrian)	Photo electric cells, 24v DC, fail safe
Gate back rail	102mm I beam	Safety (vehicle)	Inductive loops & detectors, 24v DC, fail safe
Gate finish	Hot dip galvanised (optional 2 pack paint)	Gate duty cycle	True 100% cycling as per Ezi's standard
Gate bearings	Fully sealed	Power Requirement	240v, 15 amp supply
Guide rollers	Black PVC nylon	Current draw	4 amp running, 8 amp start up
Main rollers	Zinc plated, mild steel (40 ton rated)	Strobe light	Orange, 24v DC
Motor release	Throw over quick release	Piezo	24v DC (pulsing)
Motor	0.75kw three phase brake motor	Polycarbonate	High impact safety screen

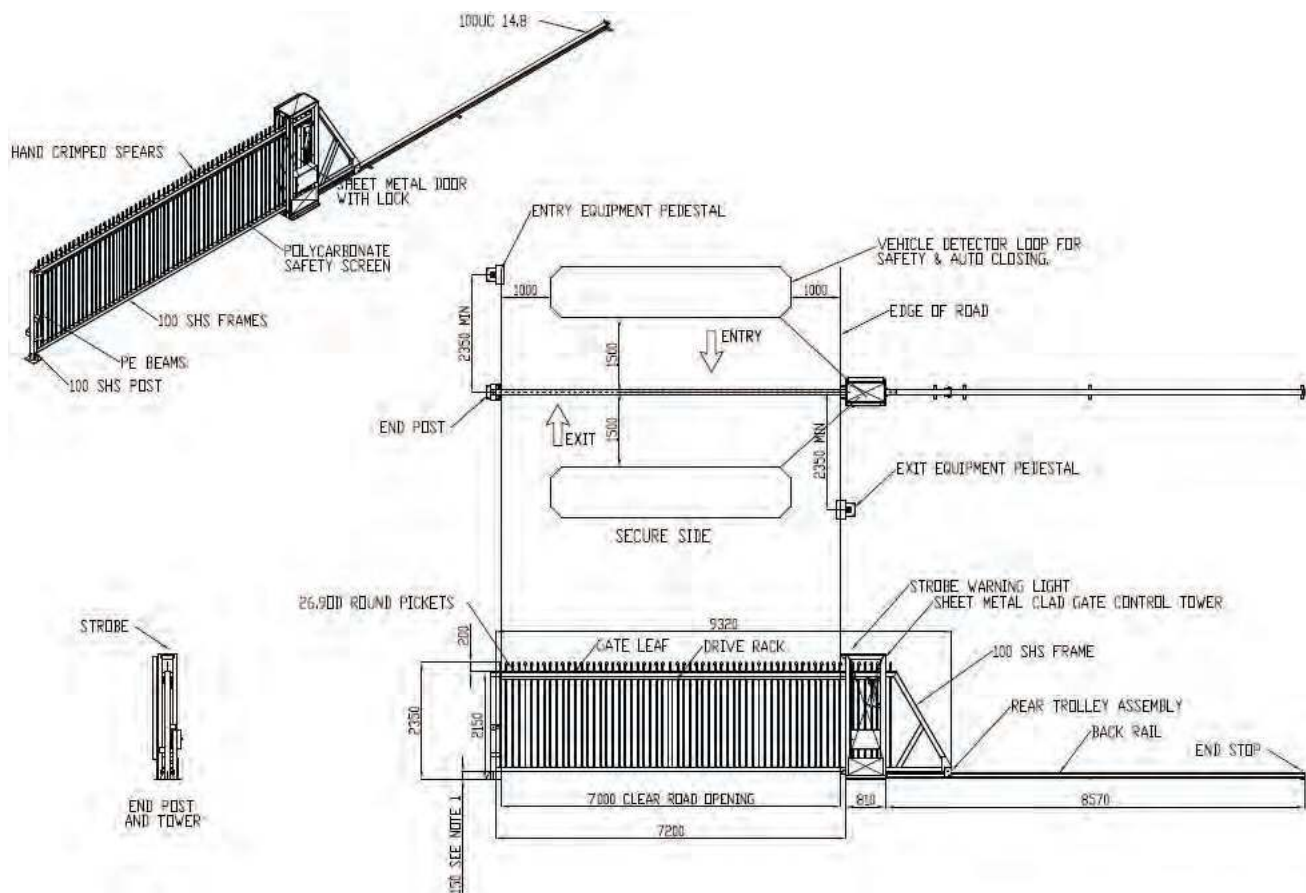


HEAVY INDUSTRIAL SLIDING GATE

RELIABLE AND TROUBLE-FREE PERFORMANCE



STANDARD TECHNICAL DRAWING



Ezi Security Systems
SERIOUS SECURITY IS EZI

PSSA
Partner Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRIES ASSOCIATION

CANTILEVER SLIDING GATE INTERROGATOR

(BSI PAS68:2013) V/7500[N2]/64/90:5.6/10.1
(BSI PAS68:2013) V/7500[N2]/80/90:1.6/5.4

THE WORLDS WIDEST CANTILEVER GATE TESTED AT 8M CLEAR OPENING



The INTERREGATOR is the worlds widest cantilever gate tested at 8m clear opening and 50mph. Eagle continue to lead the field with their innovative arrestor system. The gate produced outstanding results when tested on the N3 vehicle with only 1.6m of dynamic penetration.

Eagle Automation offers two cantilever sliding gates both successfully tested at 40mph and 50mph with a N2 and N3 vehicle respectively (7500kg). The patent applied for arrestor system produced the lowest penetration classification in its class. With shallow foundation and extremely low penetration both products provide a superb engineered solution for protection against hostile vehicle mitigation.

KEY FEATURES

- ▶ Eagle Fibre Technology
- ▶ The worlds widest Cantilever Gate tested at 8m clear opening and
- ▶ 50mph
- ▶ Smooth and quiet
- ▶ Smooth and quiet
- ▶ Standard operating speed 250mm per second
- ▶ Heavy duty cantilever rolling gear
- ▶ High quality bearings and rollers

FEATURES & DETAILS

- ▶ The gate is powered by an electric motor with a hydraulic locking pin. Typical operating times are 35 sec seconds for an 8m opening (250mm/sec).
- ▶ The gate is supplied from the factory as a complete assembled tested unit. Both the 40mph and 50mph products have the same foundations with a depth of only 380mm. Drawings are available on request.
- ▶ Steel construction, galvanised and powder coated to a standard RAL colour. Vertical bar infill with options of different mesh and security topping available.

SLIDING GATE INTERROGATOR VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N2	64	90	10.1
V/7500KG	N2	80	90	5.4



CANTILEVER SLIDING GATE INTERROGATOR

(BSI PAS68:2013) V/7500[N2]/64/90:5.6/10.1
(BSI PAS68:2013) V/7500[N2]/80/90:1.6/5.4

THE WORLDS WIDEST CANTILEVER GATE TESTED AT 8M CLEAR OPENING



The gate is either electrically or hydraulically driven dependant on client specification. The gate has a locking pin ensuring that it is secure before impact. The gate is very smooth and quiet with exceptional control in both directions. It has a powerful PLC with built in diagnostics and programmable inputs and outputs that can provide numerous options depending on client requirements. In the event of a power failure the gate has a full manual override system. The option of a powerful hydraulic motor is also available.

The gate requires a single phase 240volt 50Hz 16amp supply.

Compliant with EN 12453:2001 that recommends a minimum level of safeguarding for automatic gates. The gate comes as standard with CAT3 safety edges and light curtain that protects the threshold. Additional options include laser safety devices to protect zones. The control panel also has a dual channel loop card compatible with safety induction loops if required. Gate servicing recommended twice per annum.



Ezi Security Systems
SERIOUS SECURITY IS EZI

Eagle Automation Systems Ltd
Focused on Protection and Security

PSSA
Partnership Security Solutions Association

ASIAL
AUSTRALIAN SECURITY ASSOCIATION

CARSTOPPER 30 (PAS68:2010) V/1500 [M1]/48/90/1.76/0.00

LOW COST SHALLOW MOUNT SINGLE FIXED/REMOVABLE BOLLARD



Carstopper 30 is a shallow mount single removable bollard. This patent pending design is a technology break-through in shallow mount single removal bollards and can be fitted as a single or in long runs. It is the only 200 deep single removable car park bollard in the market to date. It is an ideal solution to protect retail shops, banks, sports stadiums, ATMs and all accidental impacts as well as being an ideal anti-ram bollard solution.

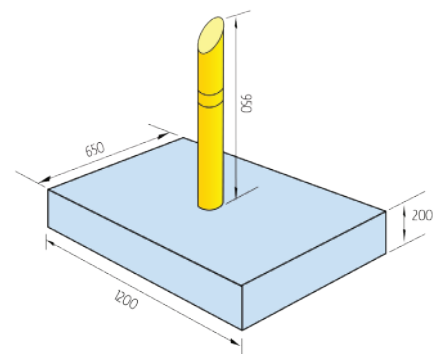
It is performance tested for Anti-Terrorist protection so provides assured high performance Hostile Vehicle Mitigation. On low impacts the spring bollard will not need replacing as it will return to its original position, undamaged. The shallow foundation will reduce the need to re-divert utilities. The system is small and easy to install keeping installation cost low. Once fitted and covered with a stainless steel shroud it is aesthetically pleasing and will need no maintenance, for anecdotal access to the area or maintenance the bollard can be removed easily.

PRODUCT SPECIFICATION

- ▶ Height above ground: 950mm
- ▶ Footing Depth: only 200mm
- ▶ Options: Stainless steel & mild steel shroud available

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres



SWING GATE LOCKDOWN

(BSI IWA 14-1:2013) V/7500[N2A]/64/90:0.9

CRASH-RATED WITH IWA-14 AND ABLE TO SWING IN BOTH DIRECTIONS



The Eagle Lockdown gate is the latest addition to the Eagle portfolio of crash tested products. The Lockdown has undergone rigorous testing to meet not only specific CPNI requirements but is also tested to documented crash performance accreditation under IWA-14. Fully removable posts mean it can be permanently or temporarily deployed. If required, just the closing post or indeed the hanging post could be removed.

The Lockdown gate is specifically designed as a manual gate for openings up to 6m. The gate can be constructed in sections, allowing the system to be easily shipped and built on site. Our in house design team with CAD technology can develop a system bespoke to your requirements.

KEY FEATURES

- ▶ The latest addition to the Eagle portfolio of crash tested products.
- ▶ Undergone rigorous testing to meet IWA-14
- ▶ Fully removable posts mean it can be permanently or temporarily deployed
- ▶ Can be removed and reinstated in fifteen minutes

SWING GATE LOCKDOWN VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7200KG	N2A	64	90	0.9
V/1500KG	M1	80	90	0.9



SWING GATE LOCKDOWN

(BSI IWA 14-1:2013) V/7500[N2A]/64/90:0.9

CRASH-RATED WITH IWA-14 AND ABLE TO SWING IN BOTH DIRECTIONS



KEY FEATURES

- ▶ Eagle Fibre technology
- ▶ Tested on a 7.5T truck (N2A) at 64kph (40mph)
- ▶ Tested on a 1.5T car (M1) at 80kph (50mph)
- ▶ Very low penetration
- ▶ Shallow foundation
- ▶ Tested at 6m clear opening
- ▶ Robust and rigid



- ▶ Can swing in both directions
- ▶ Various designs available
- ▶ The gate has some unique qualities that make it stand out in today's competitive market. Fully removable posts mean it can be permanently or temporarily deployed. If required, just the closing post or indeed the hanging post could be removed from its socket.

Ezi Security Systems
SERIOUS SECURITY IS EZI

Eagle Automation Systems Ltd
Focused on Protection and Security

PSSA
Partner Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION
ESTABLISHED 1974

SWING GATE LOCKDOWN

(BSI IWA 14-1:2013) V/7500[N2A]/64/90:0.9

CRASH-RATED WITH IWA-14 AND ABLE TO SWING IN BOTH DIRECTIONS



The Eagle Lockdown gate is the latest addition to the Eagle portfolio of crash tested products. Fully removable posts mean it can be permanently or temporarily deployed. If required, just the closing post or indeed the hanging post could be removed.

The Lockdown gate is specifically designed as a manual gate for openings up to 8m. The gate can be constructed in sections, allowing the system to be easily shipped and built on site. Our in house design team with CAD technology can develop a system bespoke to your requirements.

SPECIAL FEATURES

- ▶ Eagle Fibre technology
- ▶ Very low penetration
- ▶ Shallow foundation
- ▶ Tested at 8m clear opening
- ▶ Robust and rigid
- ▶ Can swing in both directions
- ▶ Various designs available

KEY FEATURES

- ▶ The Eagle Lockdown gate is the latest addition to the Eagle portfolio of crash tested products.
- ▶ Can be removed and reinstated in fifteen minutes with the correct lifting equipment
- ▶ Fully removable posts mean it can be permanently or temporarily deployed. If required, just the closing post or indeed the hanging post could be removed from its socket.

SWING GATE LOCKDOWN VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N2A	64	90	0.9
V/1500KG	M1	80	90	0.9

Ezi Security Systems
SERIOUS SECURITY IS EZI

Eagle Automation Systems Ltd
Focused on Protection and Security

PSSA
Partner Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION
ESTABLISHED 1971

IN GROUND PLANTER

(BSI PAS68:2010) V/7500[N2]/64/90:2.8/7.2

PLANTER 40 MITIGATES 7.5 TONNE TRUCK AT 64KPH



The Safetyflex universal slimline planter is the worlds smallest crash rated security planter and is the only slimline planter in the marketplace that is universally designed to be made to any sized required. The planter is designed as surface mounted with a shallow foundation. This system is so shallow it reduces the need to re-divert utilities.

This slimline security designed planter can easily fit onto narrow walkways outside banks, train stations, sports stadiums and will not take up large amounts of floor space and is very aesthetically pleasing. One great advantage with this system is the planter is only 100kg in weight so you need no heavy plant to off load or move it into place. The minimum length is 1500mm long, 460mm width and 930mm height.

The planter has been crash tested to BSI PAS68:2010 to mitigate a 7.5 tonne truck travelling at 40mph or 64km/h at 90 degrees from breaking through the security line.

KEY FEATURES

- ▶ Shallow Mount Foundation
- ▶ Only 100kg in weight
- ▶ Guaranteed re-usable after impact
- ▶ Once hit, planter can be removed
- ▶ Low cost installation
- ▶ Bespoke size options available

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference centres



PLANTER PAS68 VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	25KG+ DISPERSION
V/7500KG	N2	64	90	2.8	7.2



APT30SM BOLLARDS

(BSI PAS 68: V/7500 (N2)/48/90:5.5/0.0

THE WORLD'S FIRST SURFACE MOUNT BOLLARD

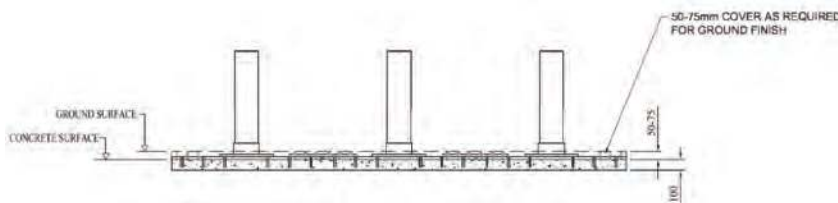


Eagle Automation have a full and wide range of PAS68 tested bollards. Our static bollard range includes the world's first surface mount bollard - 30SM, an ultra-shallow foundation bollard - 40SH, a shallow foundation single unit bollard - 30SH and mid depth foundation bollards - 30/40/S0ST.

We also offer a range of different diameters with many of our bollards having removable options. Automated products include full depth & shallow foundation rising bollards with Zero penetration at 30mph - 30A, 30AT, and a full depth 50mph bollard - 50A.

KEY ELEMENTS

- ▶ Bollard tested with N2 7.5ton vehicle at 30mph / 48kmh
- ▶ Diameter: 219mm
- ▶ Height: min 800mm above FFL
- ▶ Finish: Painted / Optional Stainless Steel Sleeve
- ▶ Foundation: Surface fixed to existing slab (>100mm), 70mm anchor depth
- ▶ Static fixed bollard
- ▶ Removable option requires additional depth for socket



APT30SM STATIC BOLLARD VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N2	48	90	5.5



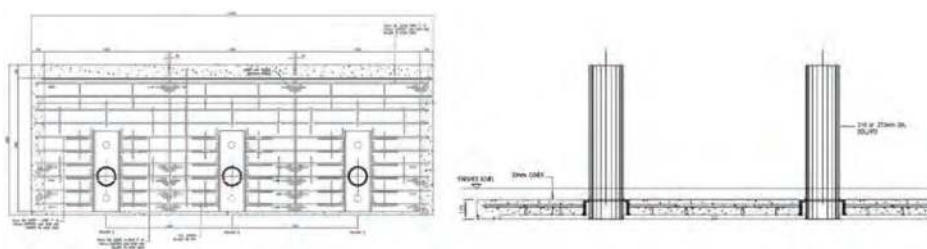


APT40SH BOLLARDS (BSI PAS68: V/7500 (N2)/64/90:4.7/9.2)

ULTRA-SHALLOW FOUNDATION BOLLARD

Eagle Automation have a full and wide range of PAS68 tested bollards. Our static bollard range includes the world's first surface mount bollard - 30SM, an ultra-shallow foundation bollard - 40SH, a shallow foundation single unit bollard - 30SH and mid depth foundation bollards - 30/40/50ST.

We also offer a range of different diameters with many of our bollards having removable options. Automated products include full depth & shallow foundation rising bollards with Zero penetration at 30mph - 30A, 30AT, and a full depth 50mph bollard - 50A.



KEY ELEMENTS

- ▶ Bollard tested with N2 7.5ton vehicle at 40mph / 64kmh
- ▶ Diameter: 272mm (tested) also available in 219mm
- ▶ Height: 1000mm above FFL
- ▶ Finish: Painted / Optional Stainless Steel Sleeve
- ▶ Supplied pre-fabricated with base plate, additional re-bar required.
- ▶ Foundation: 125mm, plus allowance for 75mm topping
- ▶ Static fixed and removable options

APT40SH BOLLARDS VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N2	64	90	4.7



RAPIDE BI-FOLDING SPEED GATE

(BSI PAS68:2010) V/7500[N2]/64/90:0.8/0.0
(BSI PAS68:2010) V/7500[N3]/80/90:0.7/0.0

THE LOWEST PENETRATION CLASSIFICATION IN ITS CLASS



Eagle Automation offers two PAS68 Bi-Folding gates both successfully tested at 40mph and 50mph with a N2 and N3 vehicle respectively (7500kg). The Eagle arrestor system produced the lowest penetration classification in its class. With shallow foundation and extremely low penetration both products provide a superb engineered solution for protection against hostile vehicle mitigation.

The gate is powered by a hydraulic power pack that also controls the locking pin. Typical operating times are 8-9 seconds after allowing the pin to raise and lower. The gate is very smooth and quiet with exceptional control in both directions. In the event of a power failure the gate has a full manual override system.

KEY FEATURES

- ▶ Eagle Fibre Technology
- ▶ Trackless
- ▶ Smooth and quiet
- ▶ Opening and closing in approximately 8-9 seconds. Add an additional 3 seconds for locking pin function.

RAPIDE BI-FOLD GATE VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7500KG	N2	64	90	0.8
V/7500KG	N3	80	90	0.7



Ezi Security Systems
SERIOUS SECURITY IS EZI

Eagle Automation Systems Ltd
Focused on Protection and Security

PSSA
Partner Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION
ESTABLISHED 1977

RAPIDE BI-FOLDING SPEED GATE

(BSI PAS68:2010) V/7500(N21)/64/90:0.8/0.0
(BSI PAS68:2010) V/7500(N31)/80/90:0.7/0.0

THE LOWEST PENETRATION CLASSIFICATION IN ITS CLASS



CONSTRUCTION & MAINTENANCE

Steel construction, galvanised and powder coated to a standard RAL colour. Vertical bar infill with options of different mesh and security topping available.

Gate servicing recommended twice per annum.

DIMENSIONS

The gate is tested for a clear opening of 4.2m and can be manufactured for heights up to 5m. Outside dimensions over the posts are 4.8m and allowing for control cabinets is 5.4m. Overall height for the gate at 2.4m is approximately 2.8m allowing for the base frame.

SAFETY

The gate comes as standard with CAT3 safety edges and light curtain that protects the threshold. Additional options include laser safety devices to protect zones. This device can also be used to produce an alarm output should someone be in the vicinity of the gate when it is closed. The control panel also has a dual channel loop card compatible with safety induction loops if required.

DRIVE, CONTROLS, ELECTRICAL

The gate is hydraulically driven with a bespoke power pack and cylinder producing a smooth quiet operation with few moving parts. The gate has a powerful PLC with built in diagnostics and programmable inputs and outputs that can provide numerous options depending on client requirements.

The gate requires a single phase 240volt 50Hz 16amp supply.



Eagle Automation Systems Ltd
Focused on Protection and Security



RISING ARM BARRIER ARRESTOR

(BSI IWA 14-1:2013) V/7200[N2A]/64/90:3.0

CRASH-RATED WITH IWA-14 AND AVAILABLE AS AUTOMATIC OR MANUAL



The Eagle Rising Arm Barrier is the latest addition to the Eagle's portfolio of crash tested products. Tested at a clear opening of 7.1m it meets our secure before impact (SBI) criteria utilising an au-tomatic or manual locking pin on the closing portal.

IWA-14 RISING ARM BARRIER ARRESTOR

- Model: EAG10040
- Product Name: Arrestor
- Product Category: Rising Arm Barrier
- IWA14-1 Rating: Tested to 7.2T (N2A) @ 40 mph (64kph)
- Foundation depth: 400mm (comprising 20mm blinding, 330mm concrete, 50mm surface finish)
- Span: Tested at 7100mm clear opening

Operation options:

Automatic, PLC control and Hydraulic system. Manual, counterweight attached to beam. Manual, hand pump/drill drive HPU.



APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Data Centers
- ▶ Train Stations
- ▶ Conference Centres

Key Feature

'Secure Before Impact' – the product does not rely upon an impact for beam to catch into a locking system – these have proven unreliable and easily overcome and so CPNI have expressed significant preference toward products which are secured before impact.

RISING ARM BARRIER ARRESTOR VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION
V/7200KG	N2A	64	90	3.0



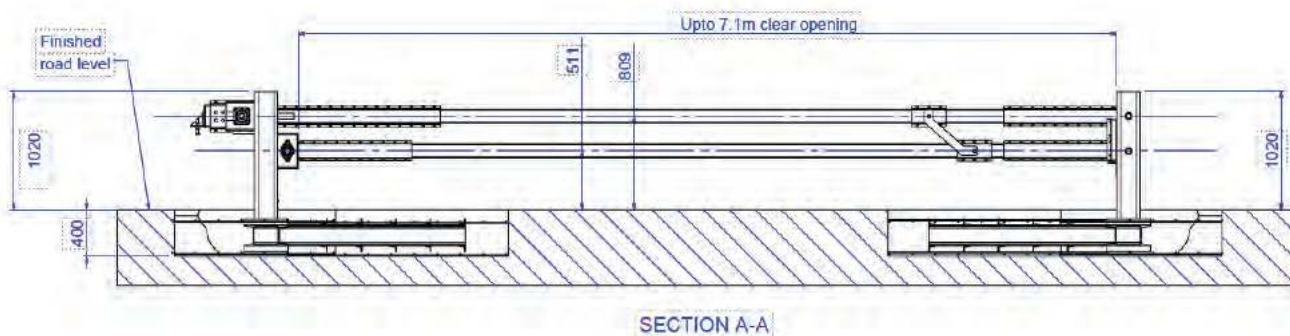
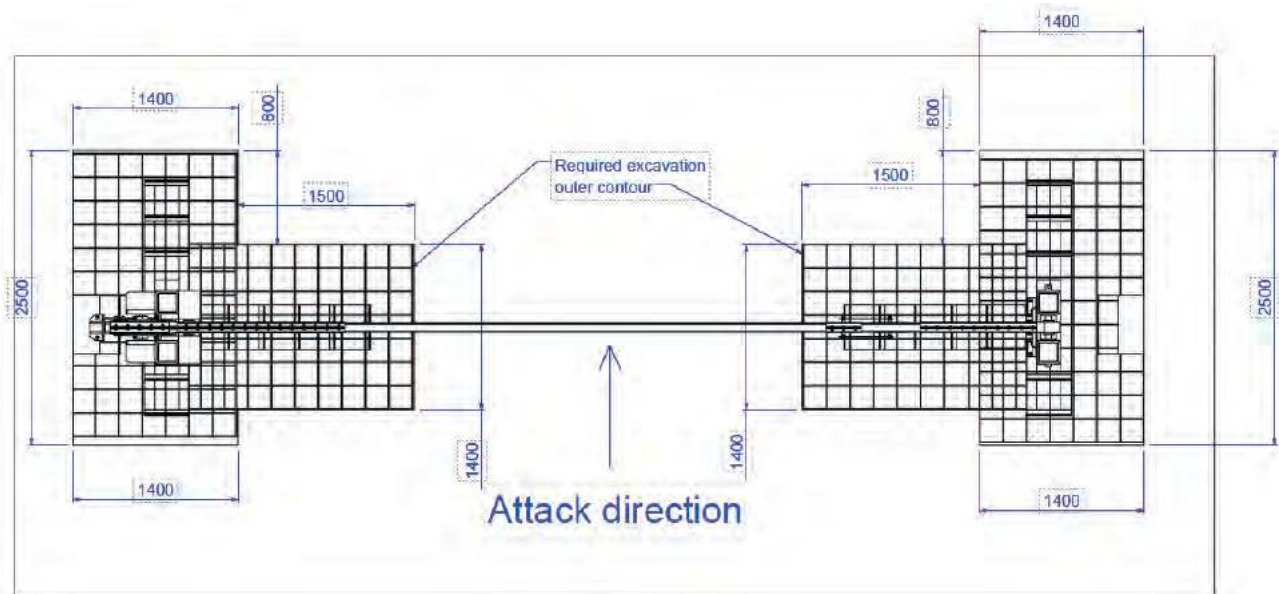
RISING ARM BARRIER ARRESTOR

(BSI IWA 14-1:2013) V/7200[N2A]/64/90:3.0

CRASH-RATED WITH IWA-14 AND AVAILABLE AS AUTOMATIC OR MANUAL



IWA-14 VERTICAL LIFT LOCKDOWN



Ezi Security Systems
SERIOUS SECURITY IS EZI

Eagle Automation Systems Ltd
Focused on Protection and Security

PSSA
Professional Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION

RB001-30 BOLLARD

(PAS68:2010) V/7500[N2]/48/90:3.2/0.0
(PAS68:2010) V/7500[N2]/48/45:2.6/2.2

MITIGATES A 7.5 TONNE TRUCK AT 48KPH - NO MAIN POWER NEEDED



The new technology breakthrough in SHALLOW MOUNT RISING BOLLARD systems, it will keep bollard system and ground work costs to a fraction of the old large systems.

This new patent granted bollard rising system is designed by our new Micro Engineering Divisions to cope with today's demand for shallow mount systems in both manual and hydraulic systems. It requires no mains power as it is powered by cordless drill. This shallow rising bollard has capacity to mitigate a 7.5 ton truck at 30mph or 48kph at 90 degrees and 45 degrees from breaking through the security lines.

After impact the bollard still worked. This system is the most economical on the market for both bollards systems and installation. It is also very low maintenance, once fitted as a stand-alone single unit, it can follow the contours of the ground. After impact if the bollard or any parts in the system are damaged all the parts can be removed from the outer case that is concreted into the foundation and replaced. When fitted with a stainless steel bollard cover it is very aesthetically pleasing. These bollards are manually operated and require no mains power.

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres

**TESTED TO STOP A
7.5 TONNE TRUCK
TRAVELLING AT 48KPH
AT 45 & 90 DEGREES**



RB001-30 BOLLARD

(PAS68:2010) V/7500[N2]/48/90:3.2/0.0
(PAS68:2010) V/7500[N2]/48/45:2.6/2.2

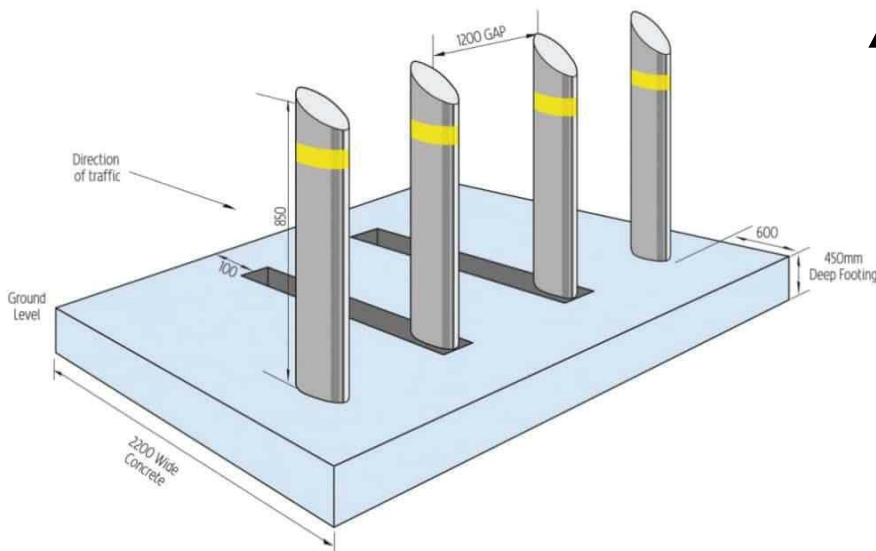
MITIGATES A 7.5 TONNE TRUCK AT 48KPH - NO MAIN POWER NEEDED



SPECIFICATION

- Height above ground:
850mm
- Footing Depth:
Only 400mm
- Options:
Stainless steel & mild steel
shroud available

AUSTRALIA'S PRODUCT
OF THE YEAR 2019
(PHYSICAL SECURITY)



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
BARRIERS & CRASH FENCES

PSSA
Physical Security Suppliers Association
MEMBER

ASIAL
AUSTRALIAN SECURITY INDUSTRIES ASSOCIATION
MEMBER

RB002-40 BOLLARD

(BSI IWA-1: 2013) V/7200[N2A]/64/90:1.0

SUPER SHALLOW MOUNT RETRACTABLE BOLLARD



The new technology breakthrough in SHALLOW MOUNT RISING BOLLARD systems, it will keep bollard system and ground work costs to a fraction of the old large systems.

This new patent granted bollard rising system is designed by our new Micro Engineering Divisions to cope with today's demand for shallow mount systems in both manual and hydraulic systems. It requires no mains power as it is powered by cordless drill. A new shallow rising bollard, it will mitigate a 7.2 tonne truck travelling at 40mph or 64 km at 90 degrees from breaking through the security line.

After impact the bollard still worked. This system is the most economical on the market for both bollards systems and installation. It is also very low maintenance, once fitted as a stand-alone single unit, it can follow the contours of the ground. After impact if the bollard or any parts in the system are damaged all the parts can be removed from the outer case that is concreted into the foundation and replaced. When fitted with a stainless steel bollard cover it is very aesthetically pleasing. These bollards are manually operated and require no mains power.

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres

TESTED TO STOP A
7.2 TONNE TRUCK
TRAVELLING AT 64KPH
AT 90 DEGREES



RB002-40 BOLLARD

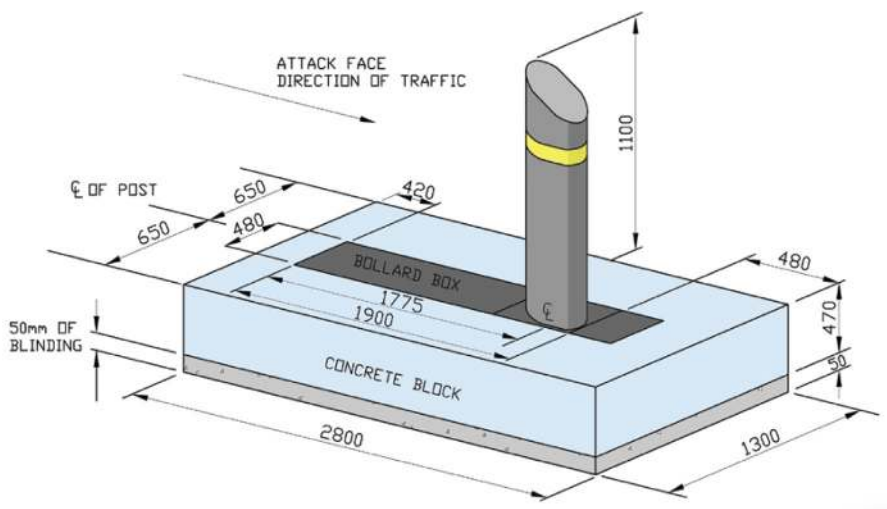
(BSI IWA-1: 2013) V/7200[N2A]/64/90:1.0

SUPER SHALLOW MOUNT RETRACTABLE BOLLARD



SPECIFICATION

- Specification Single bollard installation with footprint 3000 mm x 1400 mm
- Dimensions: 970 x W200
Breadth: 280
- Foundation: C - Depth >0.5m below ground level



AUSTRALIA'S PRODUCT
OF THE YEAR 2019
(PHYSICAL SECURITY)



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
RADIUM & CRASH FENCE

PSSA
Perimeter Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRY ASSOCIATION

RB003-50 BOLLARD

(IWA-1: 2013) V/7200IN2A1/80/90:3.1

SUPER SHALLOW MOUNT RETRACTABLE BOLLARD



The new technology breakthrough in SHALLOW MOUNT RISING BOLLARD systems - it will keep bollard systems and groundwork costs to a fraction of the old, large systems.

This new patent granted bollard rising system is designed by our new Micro Engineering Division to cope with today's demand for shallow mount systems in both manual and hydraulic systems. It requires no mains power as it is powered by a cordless drill. A new shallow rising bollard, it will mitigate a 7.5 ton truck travelling at 50 mph or 80 km at 90 degrees from breaking through the security line.

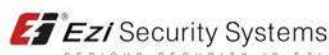
After impact the bollard still worked. This system will also reduce the need to re-divert utilities. The system is the most economical on the market for both bollard systems and installation. It is also very low maintenance, once fitted as a stand-alone single unit and can also be installed on a gradient. After impact if the bollard or any parts in the system are damaged all the parts can be removed from the outer case that is concreted into the foundation and replaced. When fitted with a stainless steel bollard cover it is very aesthetically pleasing.

Tested as a single bollard.

APPLICATION

- ▶ Airports
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres

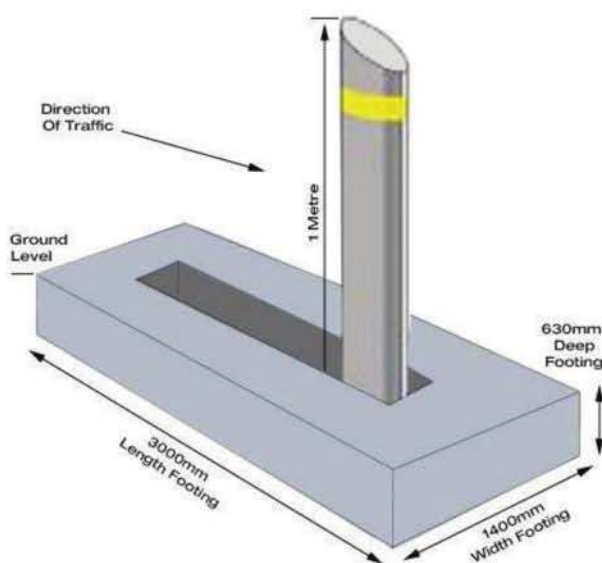
ALL CARBON NEUTRAL PRODUCT



RB003-50 BOLLARD

(IWA14:2013) V/7200(IN2A1/80/90:3.1

SUPER SHALLOW MOUNT RETRACTABLE BOLLARD



PATENT GRANTED

SPECIFICATION

- Height above ground: 950mm
- Footing Depth: Only 630mm
- Options: Stainless steel & mild steel shroud available

**ALSO AVAILABLE IN
48KM/H & 64 KM/H
OPTIONS**



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
BARRIERS & FRASH FENCE

PSSA
Professional Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRY ASSOCIATION (ASIA)

SPRINGLINE 30

(BSI PAS68:2010) V/7500[N3C]/48/90:3.4/6.4/400

ONLY 400MM FOUNDATION - FITTED AND TEST IN SOFT GROUND



- ▶ No need for deep foundations.
- ▶ Fitted and tested in soft ground (type 1 stone).
- ▶ No heavy transport needed to move it to and from sites.
- ▶ No heavy plant needed to install it.
- ▶ The fence system is delivered in breakdown kits with ready-made cages.

This newly designed fencing system can be fitted in soft waterlogged ground or hard ground with only a foundation of 400mm deep. The foundation post blocks are not linked underground so you do not have to run the fence in a straight line. The posts slings have also been designed so they are independently linked to each post so that the system can go up and down slopes and around corners, by just moving the slings.

No special parts are needed to do this as the cable slings are designed to be short so they are easy to handle and follow the contour of the ground by moving the slings on the posts. Once the slings are tightened you will have no rope drop in the line. The sling ground height can be set exactly to the drawing. A great advantage with this system is if you need an access along the fence line you can remove just part of the fence very quickly.

APPLICATION

- ▶ Nuclear Sites
- ▶ Sports Arenas
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Conference Centres

The Springline fence had capacity to be installed in short and long runs and can stop a to 7500kg truck.

Ezi also offers the Springline Fence 'Springline Fence 50'

SPRINGLINE 30 VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	FOOTING DEPTH
V/7500KG	N2	48	90	3.4	400mm

Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
BARRIERS & CRASH FENCES

PSSA
Partnership Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION
ESTABLISHED 1979

SPRINGLINE 50

(BSI IWA14:2013) V/7200[N3C]/80/90:8.5

SHALLOW MOUNT IWA 14 CRASH TESTED FENCE ONLY 400MM FOUNDATION

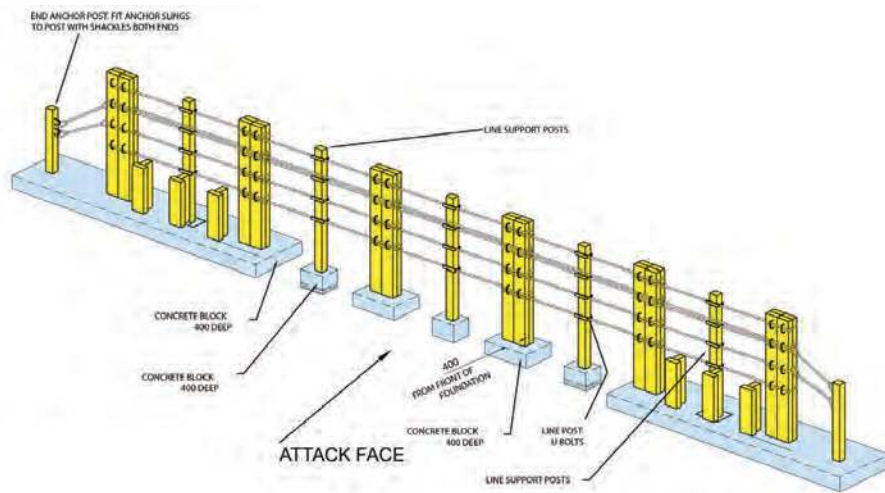


This new generation of crash fence has been designed to protect perimeters from any terrorist, criminal or accidental attacks. The IWA 14 Springline 50 crash fence has been designed for hostile vehicle mitigation. Safetyflex Barriers were commissioned to specially design a crash fence, with a very shallow foundation of only 400mm that could be installed into soft ground.

This IWA 14 Springline crash fence is designed to protect key sites like airports, MOD Bases, oil and gas infrastructure, or any other facility that requires hostile vehicle mitigation measures along the fence line, from any vehicle attack. The Springline 50 can be installed in short and long runs, and can stop a 7200kg truck at 80kph.

APPLICATION

- ▶ Airports
- ▶ MOD Bases
- ▶ Oil and Gas Infrastructure



SPRINGLINE 50 VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	FOOTING DEPTH
V/7200KG	N3C	80	90	8.5	400mm

Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
BARRIERS & CRASH FENCES

PSSA
Partner Security Suppliers Association

ASIAL
MEMBER
AUSTRALIAN SECURITY ASSOCIATION
ESTABLISHED 1979

WEDGE II

(BSI PAS68) V/7500[N3]/80/90:0.0/20.7
(BSI IWA 14-1) V/7200[N3C]/80/90:0.0

STATE OF THE ART FOUNDATION AND REINFORCEMENT

Elkosta Wedge II is designed to guarantee the full level of security. Typical areas of application are embassies, government seats, research and development centres, power stations, industrial plants, military sites, airports and other high security areas. It can be installed as a single unit or in combination with other products (e.g. barriers, gates, tyre killers or bollards) in order to realise a sluice arrangement forming a vehicle check point.

"THE WEDGE II IS ALSO SUITABLE FOR INSTALLATION IN CITY CENTRES DUE TO ITS SHALLOW FOUNDATION DEPTH OF ONLY 300MM"

The new elkosta Wedge II was successfully tested to PAS 68:2013 and IWA 14-1:2013 standard stopping a 7.5 t vehicle travelling at 80 km/h with ZERO penetration. With its decreased installation depth and foundation footprint combined with the lowest foundation thickness in the world, the new Wedge II reduces installation costs significantly and allows installation in areas where foundation depths are limited due to underground utilities. Compared to the previous model, the Wedge II features many technically innovative details, like state of art foundation and reinforcement. It offers high energy efficiency due to employment of pressure spring pistons. Starting power and lifting power for raising of blocking element due to energy stored in pressure springs have been optimised as well. Further improvements are the scale down versions of accumulator for EFO and RO3 function. The Wedge II effectively blocks the road within 3 sec., decreasing to 1 sec. (via optional accumulator). The WEDGE II working oil volume is reduced due to use of a single hydraulic cylinder. This means lower costs for higher security.

CONTROL OPTIONS

- ▶ Certified with a blocking width of 4m according to the following performance classifications:
- ▶ Extremely fast operation (approx 1 sec EFO option)
- ▶ State of art foundation and reinforcement
- ▶ Only 300mm installation depth (200mm foundation thickness + 100mm below road covering)
- ▶ With or without safety skirt - one version for all requirements
- ▶ Reduced working oil volume due to single hydraulic cylinder
- ▶ Scale-downed versions of accumulator for EFO and RO3 function
- ▶ Compact and easy to install assembly unit
- ▶ Easy assembly for effortless maintenance
- ▶ LEDs available as optional extra

WEDGE II VEHICLE PERFORMANCE CLASSIFICATION

VEHICLE TEST WEIGHT	VEHICLE CLASS	VEHICLE SPEED	VEHICLE ANGLE	VEHICLE PENETRATION	25KG+ DISPERSION
V/7500KG	N3	80	90	0.0	20.7
V/7200KG	N3C	80	90	0.0	



WEDGE II

(BSI PAS68) V/7500[N3]/80/90:0.0/20.7
(BSI IWA 14-1) V/7200[N3C]/80/90:0.0

STATE OF THE ART FOUNDATION AND REINFORCEMENT



STANDARD TECHNICAL SPECIFICATIONS

Design	Wedge with electro-hydraulic drive in separate drive cabinet. Optional: Wedge fitted with safety skirt	Control Box	Control unit configuration STANDARD: HxWxD = 400x400x-200mm, IP 66 Control unit configuration STANDARD: HxWxD = 400x400x-200mm, IP 66 Control unit configuration VARIO BASIC: HxWxD = 600x400x200mm, IP 66 Control unit configuration VARIO EFO: HxWxD = 600x400x-20mm, IP 66 Control unit configuration VARIO RO3: HxWxD = 800x400x300 mm, IP 66	
Impact Load	1852 kJ (7.5 t @ 80 km/h) Certified according to PAS68 V/7500[N3]/80/90:0.0/20.7 and IWA 14-1 V/7200[N3C]/80/90:0.0			
Blocking Width	2.0m, 2.5m, 3.0m, 3.5m and 4.0m			
Blocking Height	1000mm	Weight	Approx. 1500 – 2000 (wedge) Approx. 280 – 400kg (drive cabinet)	
Base frame	L x W x H: (blocking width + 200mm) x 1950mm x300 mm	Lighting (Optional)	LED-strip lighting and front cover fitted to impact beam	
Drive Cabinet	H x W x D: 1400mm x 1200mm x 400mm incl. 200mm high base	Colour (Standard)	Blocking element	RAL 7030 stone grey
Emergency	Via hand pump (standard)		Base frame	RAL 7030 stone grey
Operation	Accumulator incl. rechargeable batteries for 3 movements (RO3) (optional)		Cover plate	RAL 7030 stone grey
Operating Times	Raising: approx. 3.5 sec, lowering: approx. 3.5sec (standard) Emergency fast operation (EFO): approx. 1sec (with optional accumulator)		Scissor joints	RAL 3000 flame red
Wheel Load	100kN according to SLW60 – DIN 1072		Hydraulic cylinder	RAL 3000 flame red
Drive	4.0kW, 400V (three-phase), 50Hz		Drive cabinet	RAL 7035 light grey
Hydraulic Fluid	Mineral oil HLP 22 or biodegradable oil Plantohyd 22 S, non-hazardous to water	Colour (Optional)	Optional safety skirt	RAL 3000 flame red
Control unit	PLC in control box installed in drive cabinet (standard), PLC in separate control box for wall mounting inside a building (optional), control voltage 24V		Cover plate	V-striped RAL 1007 daffodil yellow / RAL 9005 jet black V-striped RAL 3000 flame red / RAL 9010 pure white cross striped RAL 1007 daffodil yellow / RAL 9005 jet black cross striped RAL 3000 flame red / RAL 9010 pure white or other RAL colours or DB colours
Supply voltage	400V (3Ph + N + PE), 50Hz		Optional safety skirt	cross striped RAL 1007 daffodil yellow / RAL 9005 jet black cross striped RAL 3000 flame red / RAL 9010 pure white or other RAL colours or DB colours Scissor joints, hydraulic cylinder, blocking element and base frame: other RAL colours

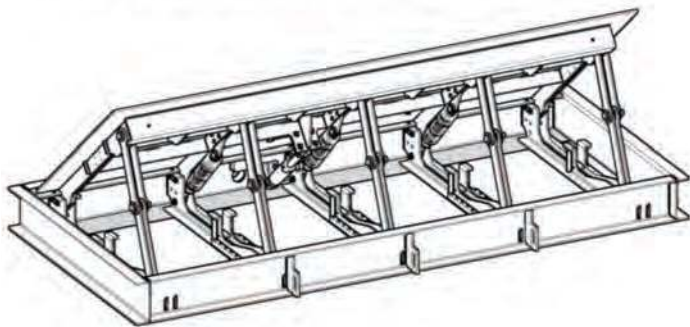
WEDGE II

(BSI PAS68) V/7500[N3]/80/90:0.0/20.7
(BSI IWA 14-1) V/7200[N3C]/80/90:0.0

STATE OF THE ART FOUNDATION AND REINFORCEMENT

STANDARD TECHNICAL DRAWING

Wedge II standard configuration



Wedge II with optional safety skirt and LED-strip lightening



BENDERS SUPERELLIPSE

FREESTANDING VEHICLE BARRIER



Superellipse is a freestanding vehicle barrier designed for active and densely populated urban environments.

The product has been crash-tested in accordance with ISO 22343-1:2023, which replaces IWA 14 and PAS 68. The crash test confirms that the impacting vehicle is brought to a complete stop and rendered inoperable upon collision.

A key advantage of Superellipse is its rapid and straightforward installation, as no ground anchoring or fixing is required. This makes it an ideal freestanding barrier solution for dynamic city environments where flexibility, speed of deployment, and minimal disruption are essential.

In traffic applications, Superellipse is intended to fully or partially block access to a roadway or to force vehicles to reduce speed.

The concrete construction gives the product smooth and visually refined surfaces, resulting in a durable vehicle barrier well suited to withstand harsh urban climate conditions.



Block Measurements	1875mm L x 1630mm W x 800mm
Block Spacing	3200mm Centre to Centre
Foundation Depth	N/A
Crash Test Rating	ISO 22343-1 : 2023 Wall V/7200[-N2A]/64/90:6.33/0.0
Minimum array	One



BENDERS SICURA

SURFACE MOUNTED PLANTER BOX



The planter box is both a vehicle barrier and a piece of urban furniture designed for planting trees or flowers.

The Bender SICURA Planter Box is manufactured in concrete with a 4 mm steel plate shell. The product is made in Sweden, and the concrete uses an alternative binder in the form of slag. This replaces 20% of the product's total cement requirement and significantly reduces the overall climate impact.

The furniture unit features a frame made from Swedish pine, surface-treated with a stain specially developed for tough climates. All steel components are corrosion-protected to C3 classification and powder-coated for a long service life. The powder coating colour and gloss level can be selected to suit each project. Reflective paint can also be used to improve visibility.

The SICURA 1350 x 1350 Planter Box has been crash-tested as a staged triple set in accordance with the new ISO 22343-1:2023 standard. The crash test demonstrates that a vehicle comes to a complete stop and becomes inoperable after collision with the SICURA Planter Box.

A major advantage of the product is its quick and easy installation, as no ground anchoring is required. This makes it a freestanding street furniture solution, ideal for active and densely populated urban environments.

In traffic applications, the planter box is intended to fully or partially block a roadway, or to force road users to reduce their speed. Vehicle barriers are often installed to improve traffic safety in cities and densely built-up areas.

The steel construction gives the product smooth visible surfaces, making it well suited to the harsh conditions of urban environments. The unit is also fitted with threaded inserts embedded in the concrete, allowing relocation with lifting anchors and easy movement by forklift truck.

The planter box can also be supplied with an irrigation system. It is now also available as a customisable product, consisting of a plastic planter box with a separate insert, making replanting easy and fast.

Performance classification:

ISO 22343-1 : 2023 Wall
V/7200[N2A]/48/90:5,1/12.9



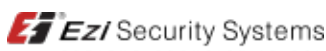
SICURA
2000mm L x 1000mm W x 900mm H
1580kg plus 1700kg planting weight



SICURA ROUND
1394mm x 900mm H
2340kg plus 550kg planting weight



SICURA
1350mm L x 1350mm W x 900mm H
2320kg plus 700kg planting weight



Low Cost Shallow Mount Single Fixed/Removable Bollard



The new technology TRUCKSTOPPER 6-30 has a small super light weight base plate - 46kg only. This patent pending design is a technology break through in a removable single shallow footing bollard systems of 200mm deep, that will mitigate a 7.5 ton truck at 48 km at 90 degrees from breaking through the security line. If access is needed the bollard can be removed in minutes.

The 200mm deep single shallow bollard will also reduce the need to re divert utilities. The system is the most economical on the market and very aesthetically pleasing. This bollard is small and easy to install. This system is designed to follow the contours of the ground and can go around corners. If the post gets damaged after an attack they can be removed from the slipper box and replaced with no need to remove or replace the concrete foundation.

Once fitted the only maintenance is to repaint when needed or the bollard can be covered with a mild or stainless steel shroud.

APPLICATION

- ▶ Airport
- ▶ Sports Arenas
- ▶ Retail Parks
- ▶ Police Stations
- ▶ Critical Infrastructure
- ▶ Government Buildings
- ▶ Concurrence Centers

*"New Technology
breakthrough - foundation
only 200mm deep"*

TRUCKSTOPPER 6-30

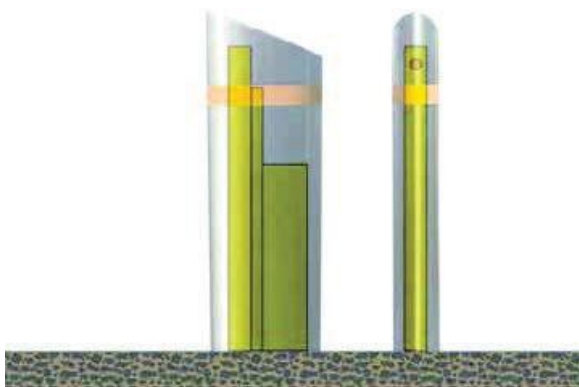
(BSI PAS68:2010) V/7500 (N2)/48/90:2.8/0.00
(BSI iwa14-1:2013) V/7200 (N2a)/48/90:3.0

Low Cost Shallow Mount Single Fixed/Removable Bollard



Spring Bollard Cover
Side View

Spring Bollard Cover
Front view



200mm
Depth Footing

Foundation only 200mm deep x 900mm wide x 1200mm long.
Tested and passed as a single removable bollard.

SPECIFICATION

- ▶ Height above ground:
900mm
- ▶ Footing Depth:
Only 200mm
- ▶ Options:
Stainless steel & mild steel
shroud available

*Safetyflex also offer a selection
of shrouds and street furniture.
Details available on request.*



Ezi Security Systems
SERIOUS SECURITY IS EZI

safetyflex
ANTI-TERRORIST BOLLARDS
RABBITDC & PDACH FEMPEC

PSSA
Partnership Security Suppliers Association
MEMBER

ASIAL
AUSTRALIAN SECURITY INDUSTRY ASSOCIATION
MEMBER

FIX BLOCK 30

SHALLOW MOUNT HVM PROTECTION



Designed for modern public spaces, this shallow-foundation hostile vehicle mitigation solution delivers proven protection without the cost, disruption, or visual impact of traditional barrier systems. It offers a smarter, more flexible approach to security for environments where safety must work seamlessly alongside everyday public life.

Independently crash tested at MIRA to the new ISO 22343-1, the system has been proven to stop a 7.5 tonne vehicle, with impact loadings to 7.2 tonne, at 30mph, 48kph. It achieved a controlled penetration distance of just 2.1 metres and zero major debris travel. The shallow foundation design reduces installation time and groundworks, helping projects stay on programme and within budget.

With a choice of finishes and discreet cover options, including planter and street-furniture designs, the solution blends naturally into public realm, retail, leisure, and transport settings, while still providing robust protection for higher-risk sites such as airports, police stations, government buildings, data centres, and critical infrastructure.

Block Measurements	2000mm L x 800mm W x 600mm (from FFL)
Block Spacing	3200mm Centre to Centre
Foundation Depth	200mm
Crash Test Rating	ISO 22343-1:2023 Barrier V/7200[N2A]/48/90:2.1/0.0
Minimum array	One

FINISHES

- ▶ Standard concrete finish with option to clad in alternative finishes. Please contact us for more details

APPLICATIONS

- ▶ Public Realm
- Stadiums
- Retail parks
- Leisure attractions
- Critical infrastructure
- Police stations
- Government buildings
- Data Centres
- Shopping Centres
- Airports



FIX BLOCK 30

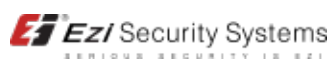
SHALLOW MOUNT HVM PROTECTION



OPTIONAL COVERING



ISO 22343-1:2023 Barrier V/7200[N2A]/48/90:2.1/0.0



SIDE SLIDER 30

MANUALLY OPERATED SLIDING BOLLARD



IMPACT TESTED SINGLE BOLLARD LESS THAN A METRE PENETRATION

The Side Slider Bollard is one of the shallowest impact-tested sliding bollard available on the market today, with a foundation depth of just 250mm, reducing the need to re-divert utilities. This allows for installation at a fraction of the cost of traditional bollards.

This manually operated sliding bollard is ideal for areas that require occasional authorised vehicle access while allowing pedestrians to pass freely.

The slimline, sleek design of the product allows it to blend seamlessly into the public realm without compromising on security. The Side Slide bollard is installed as one double unit, with single bollard testing. The system is operated by hand, requiring no mains power connections or manual lifting, allow for simple and cost-effective maintenance

Shroud measurements	153mm x 265mm x 1000mm from FFL as standard
Clear drive through width	2400mm (3800mm if installing 2 units)
Security rating	ISO 22343-1:2023 Bollard V/7200[-N2A]/48/90:0.9/13.3
Tested core dimensions	100mm W x 200mm L x 940mm H from FFL
Minimum array	One
Shroud material	316 satin polished stainless steel as standard
RAL options	Any standard RAL colour
Foundation depth	250mm with 50mm bedding

FINISHES

- ▶ Oval 316 stainless steel mitre top shroud with up to 2 his-vis bands as standard. Alternative finishes available

BANDING OPTIONS

- ▶ Black
- ▶ Yellow
- ▶ Red, Blue
- ▶ Orange
- ▶ White
- ▶ No banding

APPLICATIONS

- ▶ Public Realm
- ▶ Stadiums
- ▶ Retail parks
- ▶ Leisure attractions
- ▶ Critical infrastructure
- ▶ Police stations
- ▶ Government buildings



GroundLock™ Helical Bollard

G-1000 Series

- ASTM F3016-19 S20 P2 Certified
- Crash Tested and Certified

Features

- Helical Ground Anchor Technology
- Minimal Site Disruption (No Spoils)
- Rapid Installation
- Corrosion Resistant Construction
- Decorative Cover Options

Benefits

- Sustainable with reduced concrete requirements.
- Ideal for Retrofits in existing Sidewalks and Hardscapes
- Simplified Replacement/Maintenance.



GroundLock™ Helical Bollard

Ezi Security Systems
SERIOUS SECURITY IS EZI



AISC
CERTIFIED
FABRICATOR

S20 P2 Certified

The **GroundLock Helical Bollard** is crash test certified to ASTM F3016-19 S20 P2 with a maximum dynamic penetration of 1.5 ft (0.46m) to the front bumper with a 5,000 lbs vehicle traveling at 23mph.

HUSSON H STOP®

ISO 22343-1: SURFACE - PLACED BARRIER V/3500[N1]/48/90:12.9/19.0



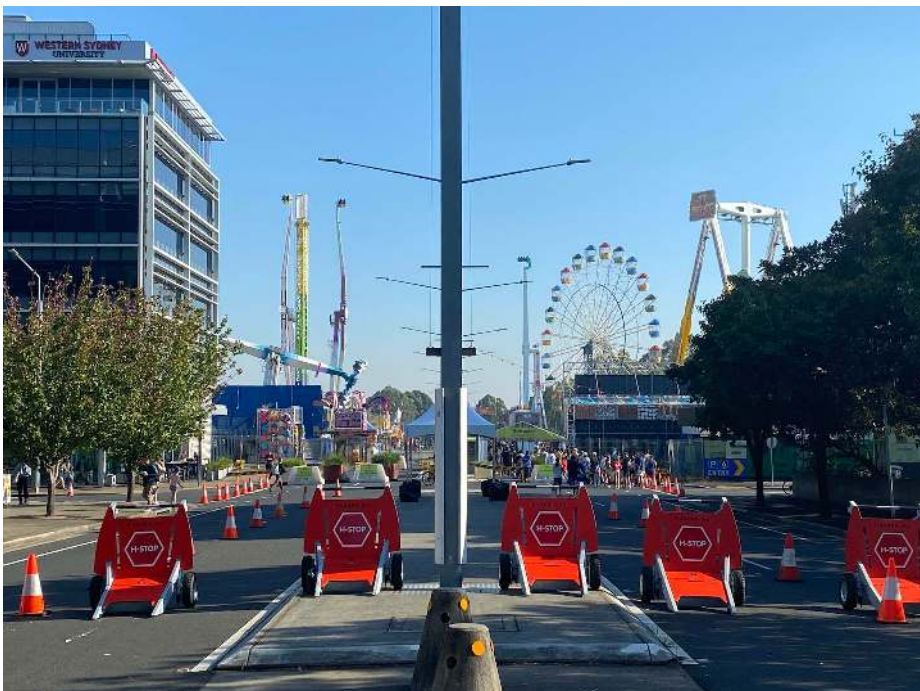
H Stop® provides temporary protection for sporting, cultural events and urban city environments.

H Stop® is formidably effective and can offer a very high level of security, proven by rigorous tests carried out according to the most stringent international standard: ISO 22343-1:2023

H Stop® has been designed to be urban furniture; it does not add to public anxiety.

PRODUCT BENEFITS

- ▶ High-security device to protect from vehicle ramming attacks
- ▶ Mobile equipment that is easy to handle
- ▶ An exclusive system (patented system, registered design) that can stop a 3.5 tonne truck launched at 48km/h
- ▶ Elegant design



Transpolis



1200 V 2024 / REF: MJU-0476-EQ-2024

Ezi Security Systems
SERIOUS SECURITY IS EZI

PSSA
Professional Security Systems Association

ASIAL
MEMBER
AUSTRALIAN SECURITY INDUSTRY ASSOCIATION LIMITED

hussou



* UNITS CAN BE EASILY STACKED FOR STORAGE



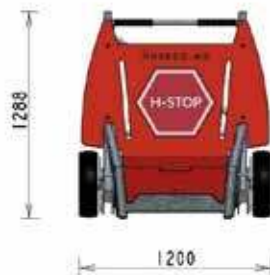
A VERY MANOEUVRABLE DEVICE:

Quick to install; in a few minutes by one worker

Easy to move in a few seconds to let through emergency vehicles

Once unlocked (using a special key), **H Stop®** can be handled like a cart that is perfectly balanced design with minimal force required.

Requires no anchoring to the ground or assembly



TECHNICAL DETAILS:

- ▶ **Structure:** Frame made with steel tubes, 150x100mm, anti-corrosion protection by hot dip galvanisation.
- ▶ For the safety of the public and those who put the equipment in place, all the parts of the **H Stop®** (anchors etc.) are rounded or protected by moulded pieces.
- ▶ 420mm diameter wheels, 115mm wide, with profiled pneumatic tyres **for rolling on any type of surface**, including climbing kerbs, rolling on uneven ground, etc
Wheel locking / unlocking system with key
- ▶ Red panels thickness 14mm
- ▶ **Dimension of 1 module:**
Width: 1200mm, Height 1288mm, Weight: 179kg
- ▶ **Possible customisations:** other colours of panels, lettering, logos etc

