



Automatic Rising/Drop Arm Barriers

PAS 68 & Security Ranges



Product Brochures



FP2
Security Sliding Gates

Also available:

[Corporate Brochure](#)

[Your Guide to PAS 68](#)



FP2.1
Barricade Beams



FP3
Hinged/Swing Security Gates



FP4
Automatic Drop/Rising Arm Barriers



FP5
Road Blockers & Rising Kerbs



FP5.1
Rising & Static Bollards



FP6
Manual Perimeter Security



FP7
Pedestrian Gates & Turnstiles

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Also known as the Terra Manual Barrier
PAS 68 - 7500kg @ 30mph

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For other manual rising/drop arm barriers please see the Manual Perimeter Security Product Guide

Why Use Frontier Pitts?



From our UK HQ
in Crawley, West Sussex



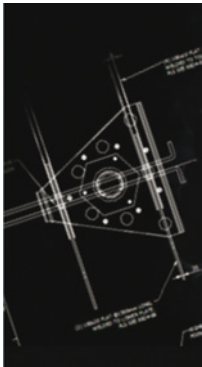
Frontier Pitts is more than just a Manufacturer:

90 years experience & accredited to BSi ISO 9001

National & International. Installations in over 90 countries

95 directly employed personnel, including multi-lingual staff & personnel that have been Frontier Pitts for 30+ years

Technical Consultants based at regional offices will visit any site within the British Isles, without charge or obligation, offering technical advice on the most appropriate & effective perimeter security solutions. Including BSi PAS 68 & CEN CWA 16221 standards.



Directly employed sales & support staff

Large product portfolio to suit all budgets & requirements

Standard product specifications are complimented by our bespoke design service. Previous accomplishments include a sliding gate system which secures a 70 metre aperture

Full 3D CAD Design. Site specific drawings issued to clients

British Engineering - Designed & built to last

Mechanical & Electrical Engineering Research & Development Programs

Comprehensive Training Program; ensures the client always receives the very best of our technical expertise

Dedicated Project Manager for each project. All work is executed under the strict control of our specially trained PMs

Fleet of vehicles including HGV's to ensure the equipment is safely delivered to site, with full ID tracking for security





Accreditations



Secured by Design



Official Police Security Initiative



Chas Accredited



FRONTIER PITTS LTD
Product Registration No: 00004
Terra V Gate (ATL)



Highly skilled, dedicated Mechanical & Electrical Field Engineers

Installation, Commissioning, Service & Maintenance

24hr / 7days a week manned UK Call Centre &
Nationwide Breakdown Service

A range of Maintenance Contracts available to suit individual
site requirements

Maintenance Contracts with response times in as little as 4 hours
Comprehensive Customer Service

Highly skilled, directly employed engineers located nationally.
Frontier Pitts do not use Sub Contractors

Full Installation & Commissioning Service

Civil, Electrical & Ground Works Team

BSi ISO 9001 Accredited and LPCB approved to LPS 1175

Verified and Founder member of the PSSA - Perimeter Security
Suppliers Association - with the aim to raise the standards of the
industry.

In house resources & skills - IT, Engineering, Fabricating,
Maintenance & Installation - to overcome any possible obstacle

Spares Department, holding on average £200K of stock

Frontier Pitts is highly recommended by our existing & previous
customers

Extra Fast Repair & Refurbishment for existing customers.

Total customer care for your peace of mind

In house secure IT servers, latest software and hardware

Experience of 'List X' regulations and data security.

Automatic Barriers play an essential role in regulating and restricting the vehicle access and egress so their reliability is key. Barriers are often the visitors first contact with a company so appearance is also important. Whether the requirement is for a simple, low cost barrier for relatively low volume usage or a heavy-duty barrier for frequent operation, Frontier Pitts will supply a system designed to meet the sites exact needs. All barriers operate through a 90 degree movement. There are various options to consider when specifying your automatic barrier:-

1. Which product range? PAS 68 Impact Tested HVM Anti Terra range or Security Range
2. Means of Operation - automatic or manual
3. Width of road that requires barrier
4. Skirt & other accessory requirements
5. Conditions on site (weather; usage, etc)

Frontier Pitts manufacture a wide range of automatic rising arm barriers to suit individual site requirements.

Our Security range FBX and FB models operate using torque motors.

The benefits of torque motor barriers are:

Instantly reversible

Motor constantly energised: for security locking & provides protection against low temperatures & damp conditions.

100% duty continuous rating

Automatic Barriers up to 6 metres will generally operate an unlimited number of cycles per hour. Automatic Barriers over 5 metres will give up to 120 operations per hour or unlimited operations with special controls. Single phase power supply required.

Our Heavy Duty HB Barrier is hydraulically operated and features an exceptionally heavy-duty boom. Recommended for sites requiring a greater level of security. It is particularly suitable for unlimited duty cycles, closing off large entrances, especially on exposed sites where high wind conditions are experienced. Three phase power supply required. Option of single phase available.



FBX Barrier, torque motor
Boom up to 6.5m



FB Barrier, torque motor
Boom up to 9m


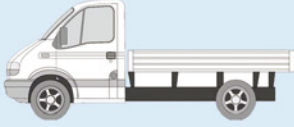
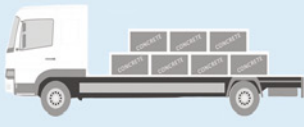



HB Barrier, hydraulic motor
Boom up to 10m

Terra Ultimate Barrier, Compact Terra Barrier & the Terra Manual Barrier

The Anti Terra range includes equipment successfully impact tested to the BSi PAS 68 specification. The different category ratings are all designed to illustrate how the perimeter security equipment will arrest an energy created by various masses and speeds, as illustrated below:

Vehicle & Vehicle Mass

M1	N1	N2	N3
			
1500kg	3500kg	7500kg laden	7500kg empty 18000kg

Speeds	30mph / 48kph	40mph / 64kph	50mph / 80kph
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When specifying your PAS 68 equipment, first establish what speed the different types of vehicles could reach on site before approaching the barrier & therefore how much energy the barrier may need to stop.

For further information please see Frontier Pitts "Your Guide to PAS 68" or contact the PAS 68 Specialist Technical Consultant on 01293 422800

Vehicle Test Weight (kg)	Vehicle Class	Vehicle Speed (kph)	Vehicle Angle	Vehicle Penetration	Dispersion
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Terra Barriers



Terra Ultimate Barrier



Compact Terra Barrier



Terra Manual Barrier

7500kg	N3	80	90	5.3	2.0
3500kg	N1	48	90	1.5	0.0
7500kg	N2	48	90	0.0	0.0



FBX Barrier

Up to 6.5 metres
with lower folding skirts up to 5m



FBX Barrier with STOP sign



Entry & Exit FBX Barriers



FBX Barrier with lower folding skirt



Bi-parting pair of FBX Barriers raising

A rapid-action torque motor barrier:

100% duty rating - designed for continuous and frequent use.

Typical operating speeds of 3.5 to 7 seconds depending on configuration.*

Power is supplied from a single phase supply.

For added security, lower folding skirts are available with boom lengths up to 5m.

Accessories: Signage, boom lights, magnetic locks, a range of end rests, special colours and articulated booms (please see page 20)

Access controls: A wide range of access control systems are available.

Safety control systems: Vehicle detector loops, safety photocells and ultra-sonic sensors are available.

The Benefits of a Torque Motor Barriers:

- Instantly reversible
- Motor constantly energised: for security locking and provides protection against low temperatures & damp conditions.
- 100% duty rating - Continuous.

**This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453*

Applications: Traffic control automatic barriers for car parks



Features

- Instantly Reversible
- 100% Rated Motor
- Single phase
- Override switch
- Security lock on door
- Switched fuse supply double pole isolator
- Earth bonded door
- Easy accessible fuse unit
- Boom safety shear plate
- Motor protection

Specially built FBX Barriers with boom 2 metres high from ground. This system provides an access control system to HGV's whilst allowing access to cars & smaller vehicles.



Standard Automatic Barrier base

Barrier Cabinet size
L:380mm x W:350mm x H:1210mm

CIVIL REQUIREMENTS

Barrier Base Foundation
600mm SQ. x 450mm deep
(Note: Power and control wiring ducts to be incorporated into foundations)



Automatic Barrier base with special rubber kerbing

End Rest Foundation
400mm SQ. x 300mm deep

ELECTRICAL REQUIREMENTS

6 amp, 3 wire, 230v, 50hz, single phase



FB Barrier

Up to 9 metres
Lower folding skirts up to 7.5m
Full height swivel skirt up to 5.5m



FB Barrier with STOP sign



FB Barrier with lower folding skirt & cabinet in clients choice of colour



FB Barrier with full height swivel skirt & cabinet in clients choice of colour

A rapid-action torque motor barrier which can support longer boom lengths.

Typical operating speeds of 7 to 10 seconds depending on configuration.*

Power is supplied from a single phase supply.

For added security, lower folding skirts are available with boom lengths up to 7500mm. Full height swivel skirts are available on booms up to 5500mm

Accessories: Signage, boom lights, magnetic locks, a range of end rests, special colours and articulated booms (please see page 20).

Access controls: A wide range of access control systems are available.

Safety control systems: Vehicle detector loops, safety photocells and ultra-sonic sensors are available.

The Benefits of a Torque Motor Barriers:

- Instantly reversible
- Motor constantly energised: for security locking and provides protection against low temperatures & damp conditions.

**This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453*

Applications: Traffic control automatic barriers for car parks.
Available with larger boom lengths to secure wider road widths



Bi-parting pair of FB Barriers with full height swivel skirts in closed position (above) and raising (below)



FB Barrier installation with typical base foundation

Features

- Instantly Reversible
- Single phase
- Override switch
- Security lock on door
- Switched fuse supply double pole isolator
- Earth bonded door
- Easy accessible fuse unit
- Boom safety shear plate
- Motor protection

Barrier Cabinet size
L:460mm x W:405mm x H:1340mm

CIVIL REQUIREMENTS

Barrier Base Foundation
600mm SQ. x 450mm deep
(Note: Power and control wiring ducts to be incorporated into foundations)

End Rest Foundation
400mm SQ. x 300mm deep

ELECTRICAL REQUIREMENTS

6 amp, 3 wire, 230v, 50hz, single phase



HB Barrier

Up to 10 metres
 Lower folding skirts up to 9m
 Full height swivel skirts up to 7.5m



HB Barrier securing 10m aperture



HB Barrier with full height swivel skirt



HB Barrier with full height swivel skirt working in conjunction with a Road Blocker. Traffic light system recommended.

A heavy duty hydraulically operated motor barrier. Unlimited duty cycles.

Typical operating speeds of 10 to 15 seconds depending on configuration.*

Power is supplied from a three phase supply with option of a single phase supply.

For added security, lower folding skirts are available with boom lengths up to 9000mm. Full height swivel skirts are available on booms up to 7500mm

Accessories: Signage, boom lights, magnetic locks, a range of end rests, special colours and articulated booms (please see page 20).

Access controls: A wide range of access control systems are available.

Safety control systems: Vehicle detector loops, safety photocells, ultra-sonic sensors and safety edges are available.

The Benefits of Hydraulically operated Barriers:

- An exceptionally robust heavy-duty boom
- Recommended for sites requiring a greater level of security and/or exposed sites where there is high wind conditions.
- Unlimited duty cycles
- Secures large road widths

* This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453

Applications: For sites with large road widths to secure or sites exposed to high wind conditions.

Swivel Skirted Barriers offer the speed & flexibility of a drop arm barrier, with the deterrent of a gate.



HB Barrier in the raised position.

Features

- Heavy Duty Drive Unit
- Three Phase
- Switched fuse supply
- Earth bonded
- Security locks on door
- Override toggle switch
- Industrial vandal resistant unit
- Boom safety shear plate

Barrier Cabinet size
L:460mm x W:405mm x H:1340mm

CIVIL REQUIREMENTS

Barrier Base Foundation
800mm SQ. x 600mm deep
(Note: Power and control wiring ducts to be incorporated into foundations)

End Rest Foundation
400mm SQ. x 300mm deep

ELECTRICAL REQUIREMENTS

6 amp, 5 wire, three phase and neutral or
10 amp, 3 wire single phase

Looks can be deceiving!

The BSi PAS 68 impact tested Drop Arm Barrier that looks like a standard car park barrier, hydraulically powered for reliability & strength.



PAS 68 Compact Terra Barrier

V Drop Arm Gate 3500[NI]/48/90:1.5/0.0

Tested dimensions : width 4000mm,

Maximum width: 6000mm



Compact Terra Barrier post impact test

Successfully impact tested to the latest BSi PAS 68 specification stopping a 3500kg vehicle travelling at 30mph (48kph) which equates to 311 kJ

Maximum crash beam length 6000mm

Hydraulically driven barrier. Designed for ease of installation and maintenance.

The Compact Terra Barrier can be interfaced to any access control systems.

BENEFITS & FEATURES

- Looks like a standard car park barrier
- Hydraulically operated, single or three phase
- Aluminium boom with the latest PST (Perimeter Security Technology)
- 100% duty rating
- Instantly reversible
- Boom length up to 6 metres
- Impact tested to the latest BSi PAS 68 specification
- Lower folding skirt as standard
- A wide range of Accessories are available

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Applications: Sites that require a subtle security solution with the PAS 68 specification.

High Security Car Parks | Anti Terrorist | Government
Military | Airports | Industrial | Commercial



In event of Power Failure
Fail safe (remain in raised position)
Fail secure (remain in lowered position)

Option of a hand pump is available if the barrier is to be re-raised during power failure.

DUTY CYCLE – 100%



OPERATING SPEED
Typical operating speeds of 7.5-15 seconds, depending on boom length & configuration.*

OPTIONAL ACCESSORIES
100/200mm Traffic Lights
Manual Hand pump
High Security Cabinet

SAFETY - Option of vehicle detector loops and safety photocell beams.

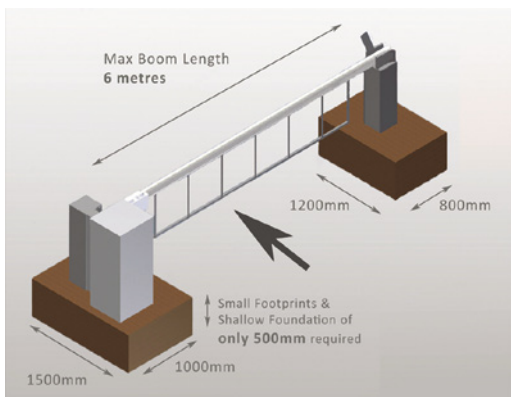
Barrier Cabinet size
L:522mm x W:472mm x H:1145mm

Compact Terra Barrier raising

CIVIL REQUIREMENTS
Barrier Base Foundation
L:1500mm x W:1000mm x D:500mm
(Note: Power and control wiring ducts to be incorporated into foundations)

End Rest Foundation
L:1200mm x W:800mm x D:500mm

ELECTRICAL REQUIREMENTS
6 amp, 5 wire, three phase and neutral or
10 amp, 3 wire single phase
*This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453



The ULTIMATE PAS 68 drop arm barrier from Frontier Pitts. Successfully impact tested against a range of different energies. The Ultimate Solution.



PAS 68 Terra Ultimate Barrier

V/7500[N3]/80/90:5.3/2.0

*Tested dimensions : width 4500mm,
crash beam height 1050mm*

Maximum width: 4500mm



Successfully impact tested to the latest BSi PAS 68 specification stopping a 7500kg vehicle travelling at 50mph (80kph) which equates to 1852kj.

Maximum aperture 4500mm

Hydraulically driven barrier. Designed for ease of installation and maintenance.

The Terra Ultimate Barrier can be interfaced to any access control systems.

BENEFITS & FEATURES

- Hydraulically operated, three phase supply
- 100% duty rating, reversible
- Impact tested to the latest BSi PAS 68:2010 specification
- The beam was retested for with underrun skirt to test arresting capability on other vehicles such as saloon car vehicles
- The Terra ULTIMATE Barrier will stop low & high energy vehicles from entering site
- A wide range of Accessories are available, including lower folding skirts and full height swivel skirt options.



Applications: Sites that require equipment that meets an even higher level of the PAS 68 specification.

High Security | Anti Terrorist | Government | Military | Airports | Industrial | Commercial



In event of Power Failure

Fail safe (remain in raised position)

Fail secure (remain in lowered position)

Option of a hand pump is available if the barrier is to be re-raised during power failure.

DUTY CYCLE – 100%

OPERATING SPEED

Typical operating speeds of 8-14 seconds to raise, depending on boom length & configuration.*



Terra Ultimate Barrier with underrun skirt was also successfully BSi PAS 68 impact tested with a 1500kg saloon car to test the barrier with different energies. Classification code: V/1500[M1]/80/90:11.3/15.0
Tested dimensions : width 4500mm, crash beam height 900mm



OPTIONAL ACCESSORIES

EFO (Extra Fast Operation)

100/200mm Traffic Lights

Manual Hand pump

High Security Cabinet

Remote Hydraulic Power Unit



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SAFETY - Option of vehicle detector loops and safety photocell beams.

Barrier Cabinet size

L:980mm x W:1400mm x H:1055mm

CIVIL REQUIREMENTS

Barrier Base Foundation

L:2800mm x W:2040mm x D:400mm deep

(Note: Power and control wiring ducts to be incorporated into foundations)

End Rest Foundation

L:2800mm x W:1540mm x D:400mm

ELECTRICAL REQUIREMENTS

10 amp, 5 wire, 400V, 50Hz, Three phase and neutral supply

*This is subject to a risk assessment to ensure the automatic equipment complies to BS EN 12453

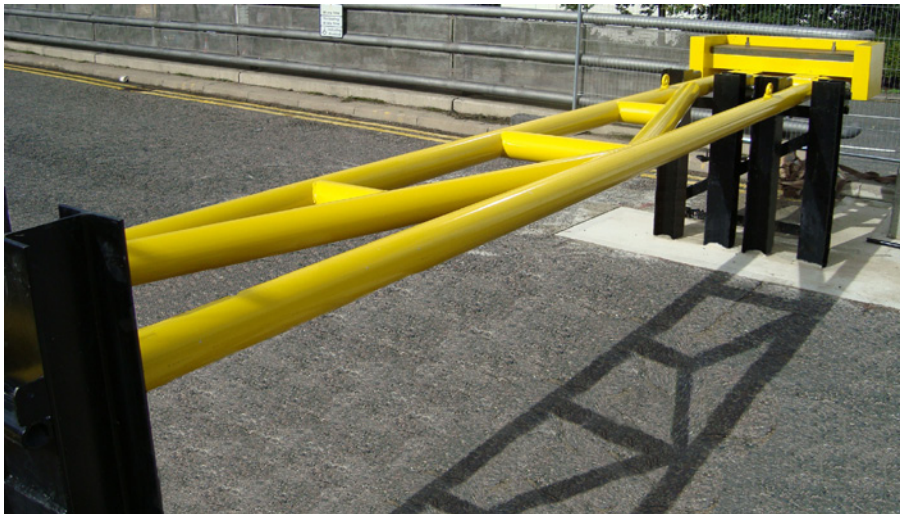
The PAS 68 Manual Drop Arm Barrier
British Government design & PAS 68 impact tested as the 'MRAG' - Manual Rising Arm Gate



PAS 68 Terra Manual Barrier

V Drop Arm Gate - 7500[N2]/48/90:0/0
3500[N1]/ 80/90:4.0/0
3500[N1]/80/90:2.23/0

Tested dimensions : width 3000mm & 4500mm,
crash beam height 900mm



Maximum crash beam length 4500mm

The Terra Manual Barrier is a PAS 68 counter balanced barrier ideal for remote locations where no power is available.

BENEFITS & FEATURES

- Design of her Majesty's Government manufactured by Frontier Pitts.
- Non powered rising/drop arm barrier
- Boom length up to 4500mm
- Impact tested to BSi PAS 68:2010





Signage: Boom height, HGV Height, Cabinet mounted warning signs



Fixed



Pogo-stick



Removable

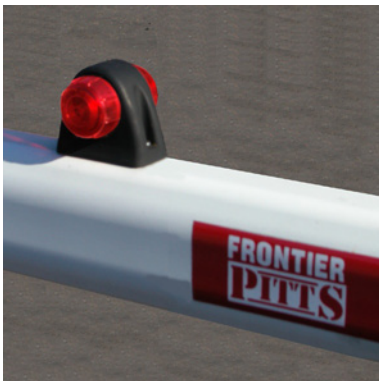


Maglock

End rests

All booms over 4m require an End Rest. Fixed, Pogo Stick and Removable models available. For added security on a Fixed end rest, a Magnetic Lock option is available.

Signage, End Rests, Finish, Skirts,
Lights & Articulated Booms



Boom Lights



Choice of colour



Stainless Steel Cabinet



Lower folding skirts



Full height swivel skirts



Articulated Booms; for sites with limited height clearance



Traffic Light Signals including Car Park "FULL" sign



Access Control Systems



Access Control Pedestal

Access Control Pedestal

Vehicle Detector Loop laid in the road surface

Frontier Pitts Automatic Barriers can be interfaced to a wide range of access control including Card Readers, Intercom Systems, Remote VHF Systems and Digital Keypads. The access control readers can be mounted on pedestals which are recommended to be installed a minimum of 3 metres from the barrier cabinet.



Standard Car Height Pedestals. Installed with bollards for protection

HGV & Dual Height Pedestals for use by cars & HGVs the road

Automatic Barrier Safety:
For Pedestrian Safety - Safety Photocells
Lower the boom safely - Vehicle Detector Loops & Timer Systems



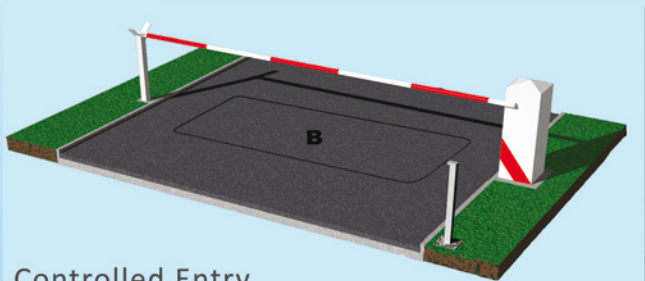
Safety Photocell - beams of light fitted across the road way to monitor vehicle & pedestrian movement

Safety Vehicle Detector Loops laid in the road surface

Signage, End Rests, Finish, Skirts,
Lights & Articulated Booms

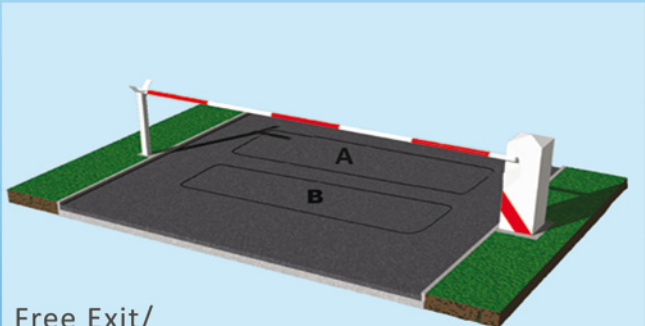


Controlled Entry



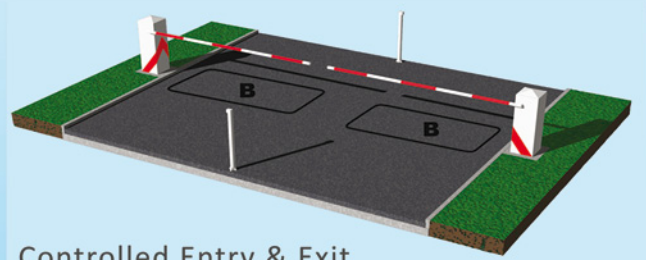
Controlled Entry
& Safety Autoclose Loop

Free Exit System



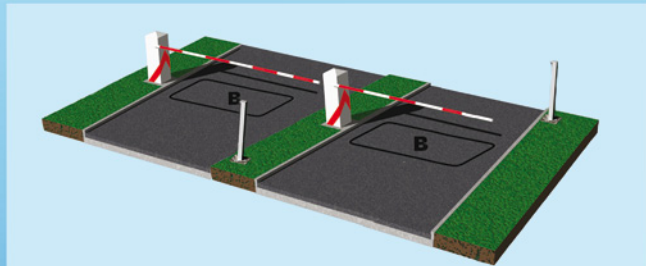
Free Exit/
Safety Autoclose Loop

Controlled Entry & Exit System



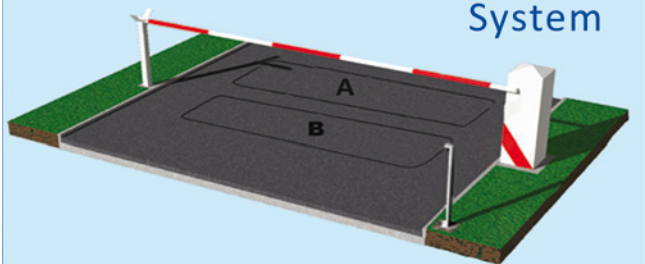
Controlled Entry & Exit
with Safety Autoclose Loop

Controlled Entry & Exit System with central island

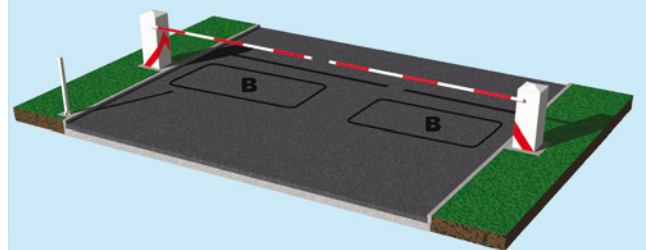


Controlled Entry
& Safety Autoclose Loop

Controlled Entry & Free Exit System



Bi-parting System



2 barriers operating
together for wide roads

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