



**Brosis International**

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GST No. : 03AKGPM8732K1ZY



**ANTI TERRORIST | DEFENCE | COMMERCIAL | RESIDENTIAL**





## OUR LOGO

SHIELD with SWORD signifies form of safety & defense, the very nature of a shield is to protect from something from attacking you enclose or reduce impact of threat and to provide safeguard & security.

## WE BROSIS

Brosis International are manufactures /exporters/suppliers & installers for **AUTOMATED ACCESS CONTROL TECHNOLOGIES** in India since 2005, we manufacture high security products in strict compliance as per International Crash test Standards.

We have developed infrastructure , which sprawls over area of 32000 square feet, and segregated into various departments like research & development, quality control, manufacturing, sales & marketing and administrative.

We believe in innovation & research of new products to cater security risks demand for high secure locations like **EMBASSIES, GOVERNMENT BUILDINGS, COURTS, BANKS, POWER STATIONS, MILITARY SITES, CRITICAL SITES AND AIRPORTS** etc. thus our strength is in its wide range of products to meet high security demands.

## OUR PRODUCTS

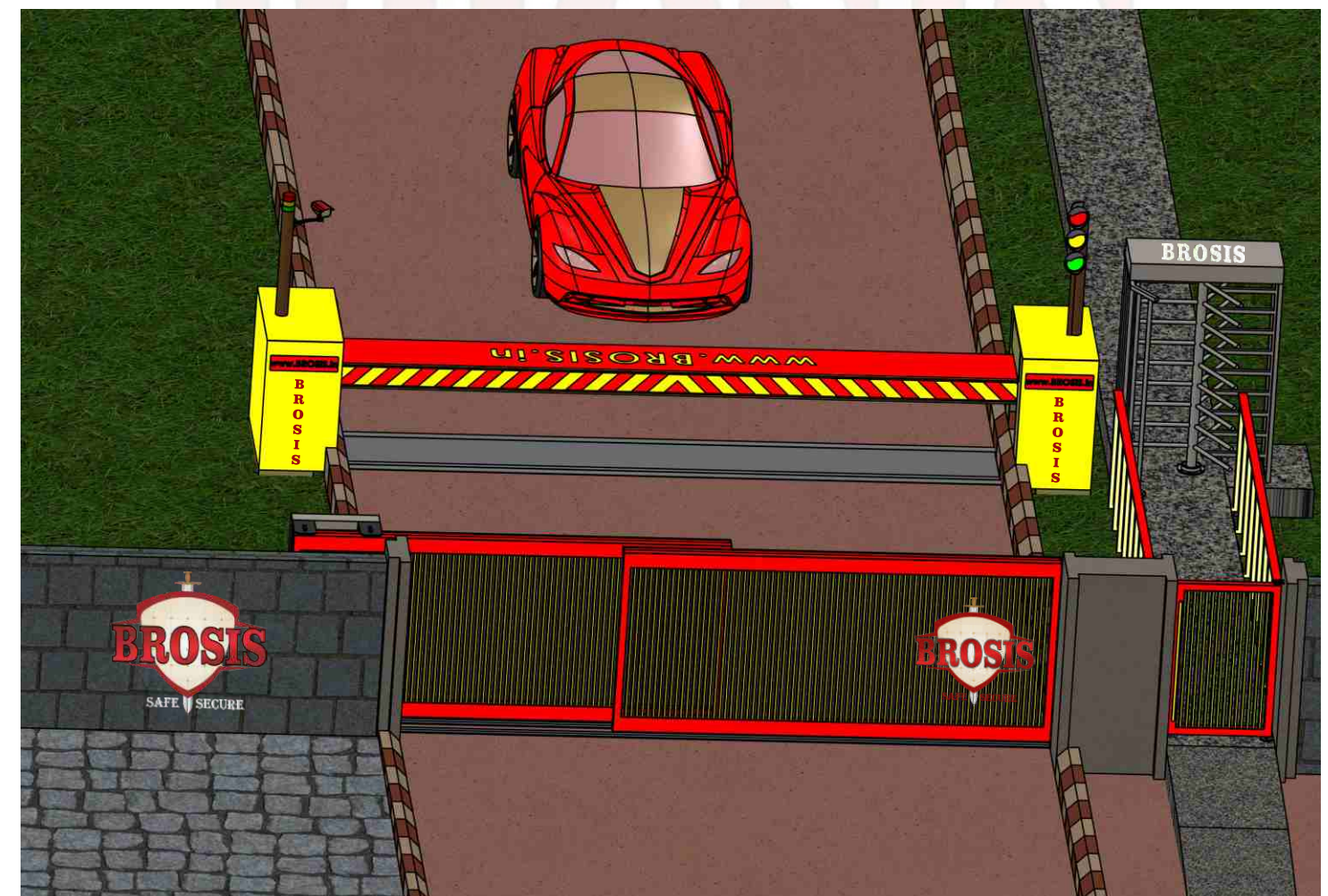
### Anti-Terrorist / Defence

- ◆ Anti-Ram Road Blockers
- ◆ Shallow Mounted Road Blockers
- ◆ Anti-Ram Bollards
- ◆ Shallow Mounted Bollards
- ◆ Anti-Ram Fixed Bollards
- ◆ One Way Barrier
- ◆ Anti-Ram Barrier/Drop Arm Barrier
- ◆ Anti-Ram Sliding Gate
- ◆ Axle Breaker
- ◆ Tyre Killer / Spike Barrier
- ◆ UVSS Area (Under Vehicle Surveillance System)

### Commercial / Residential

- ◆ Boom Barriers
- ◆ Flap Barriers
- ◆ Turnstiles
- ◆ Cantilever Sliding Gates
- ◆ Telescopic Sliding Gates
- ◆ Automatic Sliding Gates
- ◆ Automatic Swing Gates
- ◆ Swing & Sliding Gates Motors
- ◆ Automatic Overhead Garage Doors
- ◆ Column of Control and Management
- ◆ Truck Wheel Stopper/Vehicle Restraint

Registered with:







Brosis SHIELD B12 hydraulic road blockers are rated as most secure solution to minimize the destruction of the suicide truck bombings. It offers maximum security for highly sensitive entry points against unauthorized vehicles of all sizes and weights.

It is able to stop vehicle of 7.2 ton travelling at the speed of 50mph (80km/hr) and met requirements for M50: P1 rating as per ASTM F2656 (2018) standard equivalent to D/6800/88/90/2032 of BSI PAS 68 (2013) and D/6800/[N2B]/88/90:0.00 of ISO IWA 14-2 (2013).

Drainage system is provided so that accumulated dirt and water can be drained out and hence does not affect the mechanism of road blocker and its working efficiency for years.

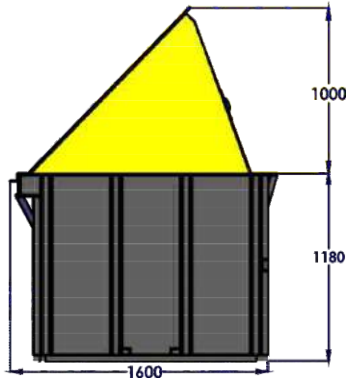
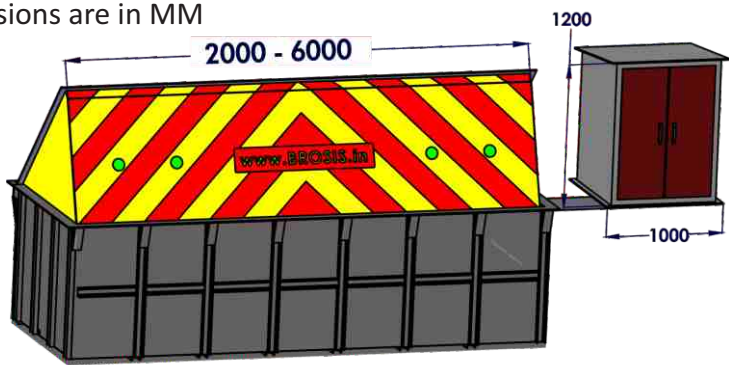


Technical Specification

MODEL	SHIELD B12
Anti-Ram class / Crash rating	Designed to stop 7.2 ton loaded vehicle @80km/hr known as K12 (M50-P1)
Drive unit	B12-H (Hydraulic - external)
Rising height	1000 mm
Width of blocked driveway	2000 mm - 6000 mm
Material	High tensile structural steel
Axle Load	50 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Top plate	Anti-slip
Hinges	Heavy duty high tensile steel
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Raise /lower time	3 - 6 sec, in emergency 1.5 sec
Oil tank	100 lt. - 350 lt.
Protection class	IP 67
Coating	Signal yellow-black/yellow-red or customize color options available
Blocking in raised position	Hydraulic lock
Duty Cycle	100%
Breakout resistance	16,80,000 J
Operating temperatures	-20°C to + 60°C
MTBF	70,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	4 nos. of LED lights on front face & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of power failure in emergency

Dimensions For Reference

All dimensions are in MM





Anti-Ram Road Blockers

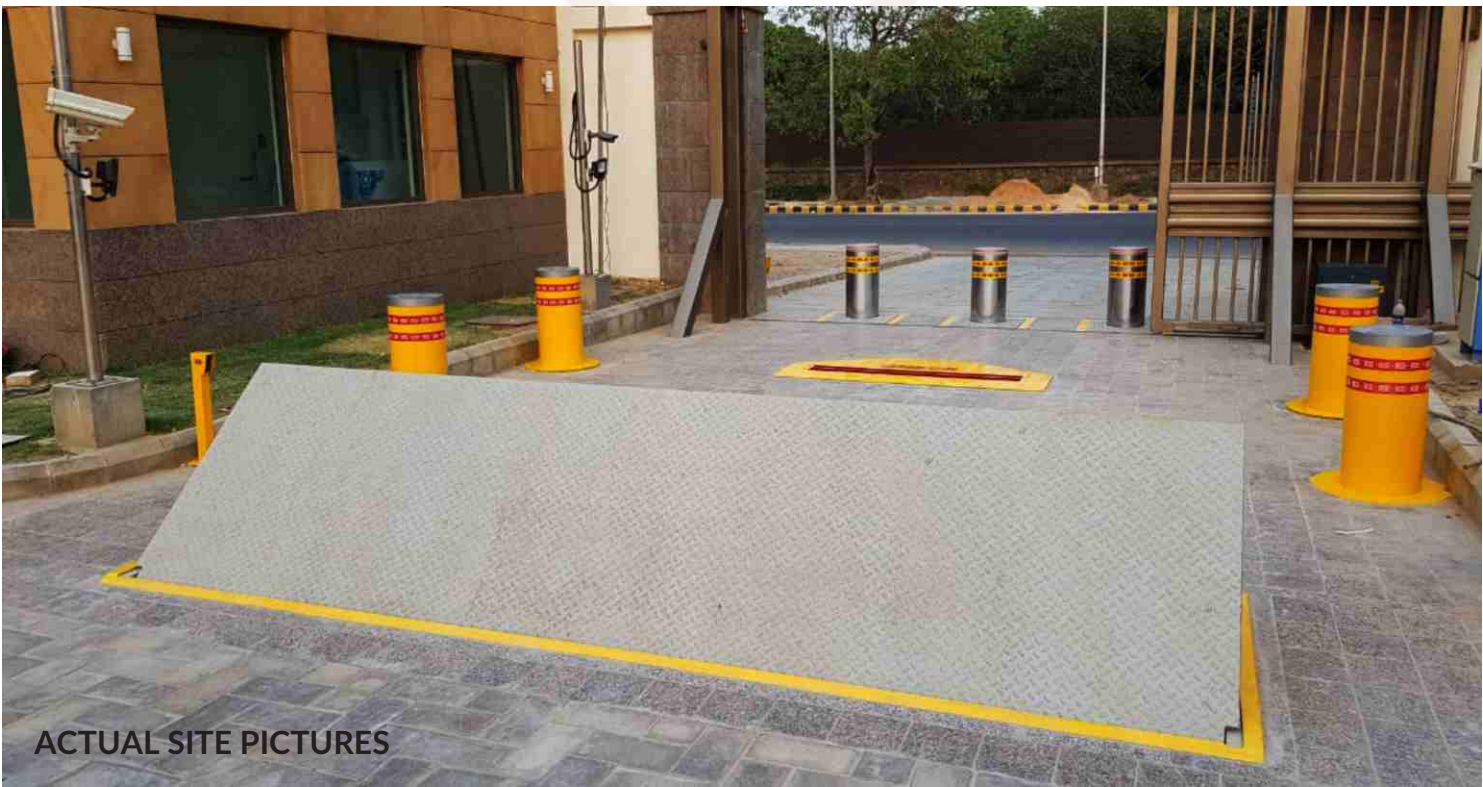
SHIELD B4



Brosis SHIELD B4 hydraulic road blockers are rated as most secure solution to minimize the destruction of the suicide truck bombings.

It offers maximum security for highly sensitive entry points against unauthorized vehicles of all sizes and weights.

Drainage system is provided so that accumulated dirt and water can be drained out and hence does not affect the mechanism of road blocker and its working efficiency.



ACTUAL SITE PICTURES



Anti-Ram Road Blockers

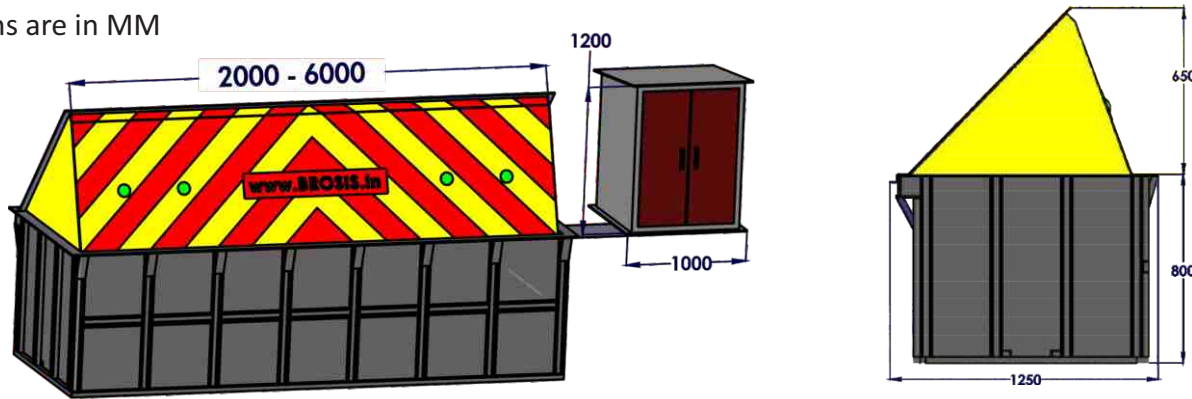
SHIELD B4

Technical Specification

MODEL	SHIELD B4
Anti-Ram class / Crash rating	Designed to stop 7.2 ton loaded vehicle @48km/hr known as K4 (M30-P1)
Drive unit	B4-H (Hydraulic - external)
Rising height	650 mm
Width of blocked driveway	2000 mm - 6000 mm
Material	Heavy duty structural steel
Axle Load	40 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Top plate	Anti-slip
Hinges	Heavy duty hardened steel
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Raise /lower time	3 - 5 sec, in emergency 1.5 sec
Oil tank	100 lt. - 300 lt. ( )
Protection class	IP 67
Coating	Signal yellow-black/yellow-red or customize color options available
Blocking in raised position	Hydraulic lock
Duty Cycle	100%
Breakout resistance	7,20,000 J
Operating temperatures	-20°C to + 60°C
MTBF	70,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	4 nos. of LED lights on front face & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of power failure in emergency

Dimensions For Reference

All dimensions are in MM





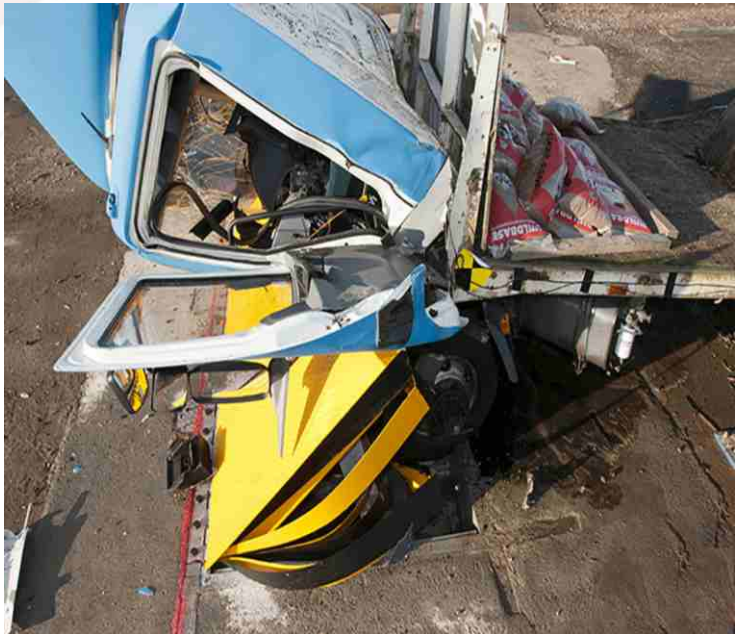
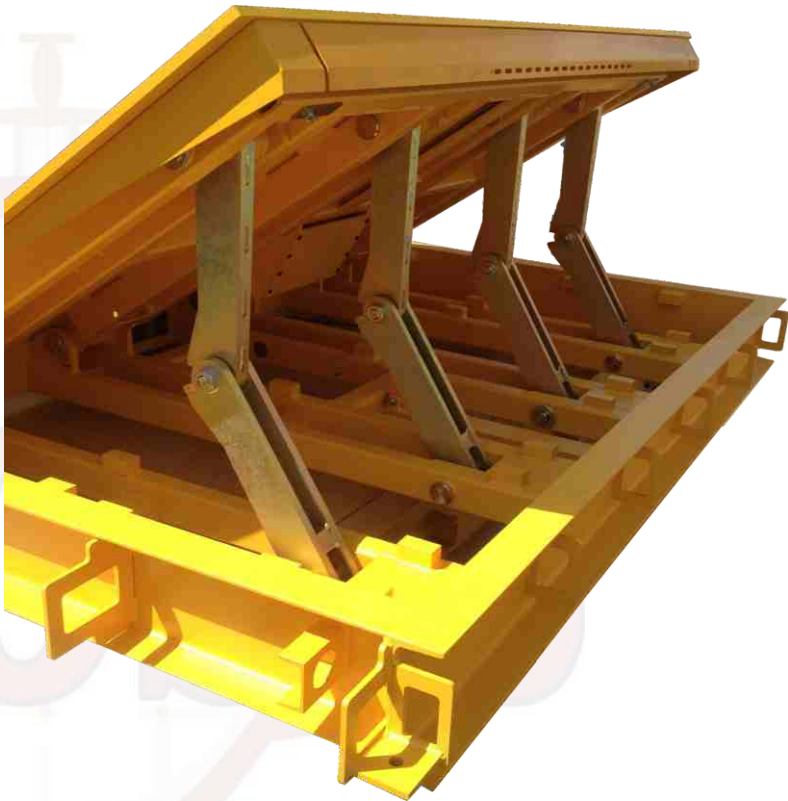


Brosis Shield B12 SM is a shallow Mount type hydraulically driven road blocker which requires maximum 400 mm excavation depth for shallow Mount installation. SHIELD B12 SM uses clever linkage to open and close, not only does this provide much smoother, quieter operation than chain driven blockers. It also protects the potentially vulnerable hydraulic ram during impact.

Drainage system is provided so that accumulated dirt and water can be drained out and hence does not affect the mechanism of road blocker and its working efficiency.

Features

- Substantially reduces installation time, cost and disruption.
- Can be installed where foundation depths cause problems.
- Made from finest material and built to highest standards.
- Due to its folding design, these can be installed with very little civil work.
- Easily serviceable.
- Housing and body is galvanised followed by anti-UV raise epoxy paint which makes it corrosion resistant.
- Manufactured and designed for intensive use.
- Will serve many years of trouble free service when used in accordance with manufacturer's instructions.

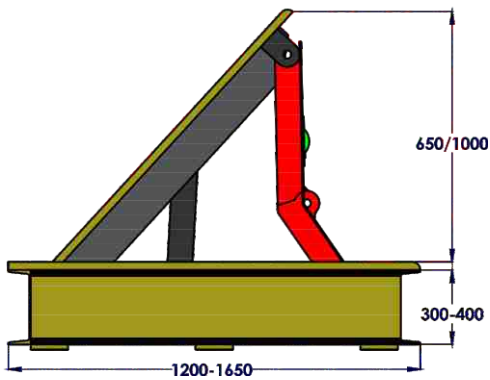
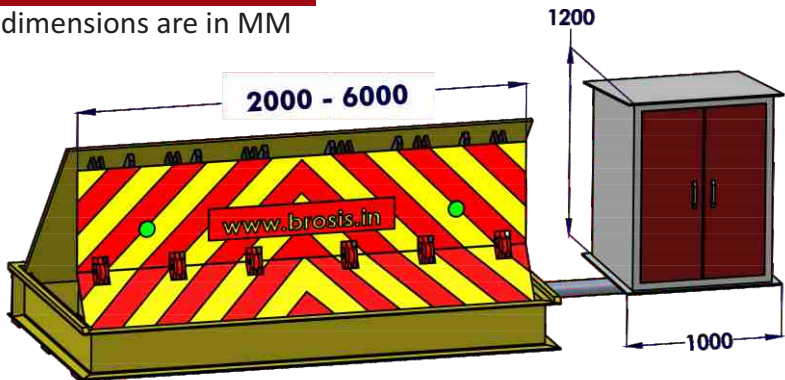


Technical Specification

MODEL	SHIELD B12 SM
Anti-Ram class / Crash rating	Designed to stop 7.2 ton loaded vehicle @80km/hr known as K12 (M50-P1)
Drive unit	B12-H (Hydraulic - external)
Rising height	650 - 1000 mm
Width of blocked driveway	2000 - 6000 mm
Depth of unit	300 - 400 mm
Material	High tensile structural steel
Axle Load	30 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Top plate	Anti-slip
Hinges	Heavy duty hardened steel
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Raise /lower time	3 - 6 sec, in emergency 1.5 sec
Oil tank	100 lt. - 350 lt.
Protection class	IP 67
Coating	Signal yellow-black/yellow-red or customize color options available
Blocking in raised position	Hydraulic lock
Duty Cycle	100%
Breakout resistance	16,80,000 J
Operating temperatures	-20°C to + 60°C
MTBF	50,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	4 nos. of LED lights on front face & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of power failure in emergency

Dimensions For Reference

All dimensions are in MM





Anti-Ram Bollards

FORCE B12



Special Features

- ◆ Reliable and durable.
- ◆ Hot dip galvanized body followed by anti - UV epoxy powder coating for corrosion free surface.
- ◆ Low operating & maintenance cost.
- ◆ Embedded LED lighting.
- ◆ Composite die casting anti-slip Aluminum moving cylinder top & load bearing plate.
- ◆ Operating in harsh environments.
- ◆ Readily available configuration in control unit for integration with all access control system.
- ◆ Manual operation in case of power breakdown.
- ◆ Use environmentally friendly hydraulic oil.



Actual Site Picture



Anti-Ram Bollards

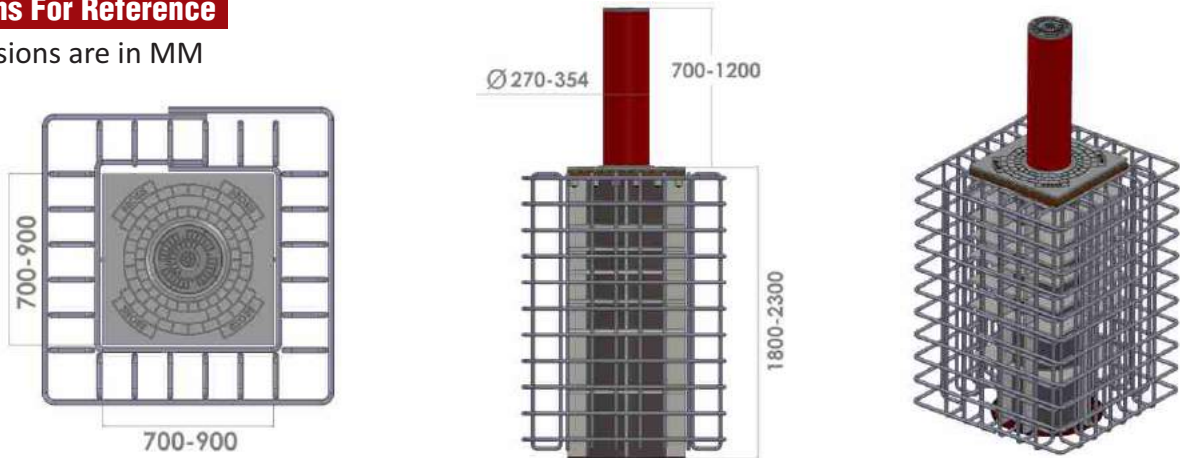
FORCE B12

Technical Specification

MODEL	FORCE B12
Anti-Ram class / Crash rating	Designed to stop 7.5 ton loaded truck @ 80 Km/h known as K12 (M50 - P1)
Drive unit (External)	B12 - H (Hydraulic) , B12 - P (Pneumatic)
Rising height	700 - 1200 mm
Diameter of bollard	270 - 354 mm
Material	Superior quality high tensile structural steel
Cylinder thickness	25 mm
Cylinder top plate	Anti-slip die cast aluminum
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Rising time	4-6 sec, emergency 1.5 sec
Lowering time	3-4 sec, emergency 1 sec
Oil tank	100 lt. - 350 lt. (depend on number of bollards to operate at a time)
Protection class	IP 67
Finish	Anti-UV epoxy powder coating or SS chrome finish
Blocking in raised position	Hydraulic lock/Pneumatic lock
Breakout resistance	16,80,000 J
Duty cycle	100%
Operating temperatures	-20°C to +60°C
MTBF	70,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	Embedded LED lights on the top of aluminum head & buzzer for operational alert with Red/Yellow radium reflective strips
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device/Pressure relief valve
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

All dimensions are in MM





Anti-Ram Bollards

FORCE B8



Brosis FORCE B8 retractable hydraulic bollard have been manufactured & designed to protect anti-terrorist areas with an unobtrusive barrier capable of defending against a vehicle attack / forceful entry. Our single FORCE B8 is able to stop vehicle of 7.2 ton travelling at the speed of 40mph (64km/h) and met requirements for M40 : P1 rating as per ASTM F2656 (2018) known as K8 crash rating.



Actual Site Pictures



Anti-Ram Bollards

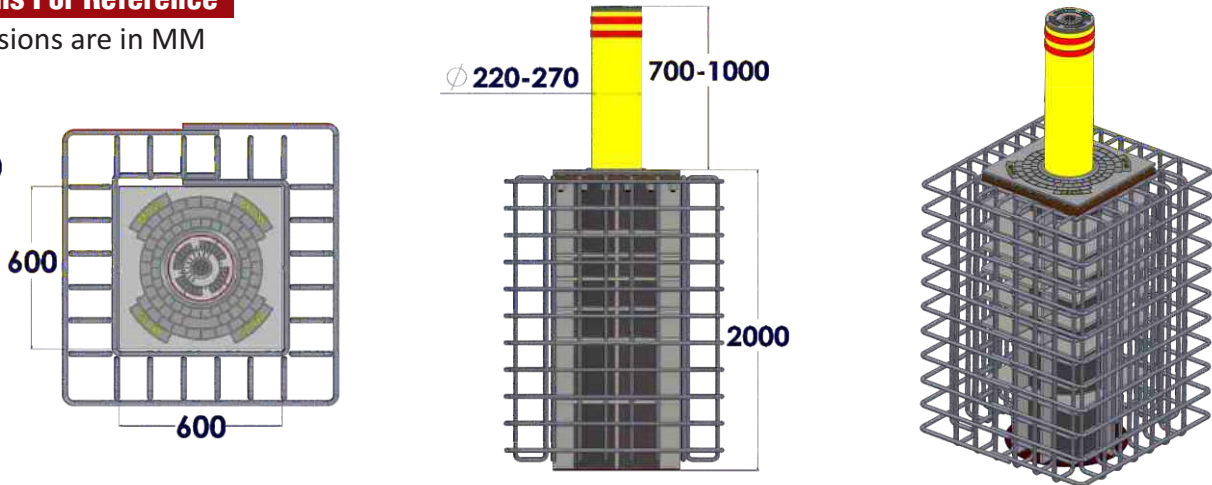
FORCE B8

TECHNICAL SPECIFICATION

MODEL	FORCE B8
Anti-Ram class / Crash rating	Designed to stop 7.2 ton loaded vehicle @ 64 Km/h known as K8 (M40 - P1)
Drive unit (External)	B8 - H (Hydraulic), B8 - P (Pneumatic)
Rising height	700 - 1000 MM
Diameter of bollard	220 - 270 MM
Material	High tensile structural heavy duty steel
Cylinder top plate	Anti-slip die cast aluminum
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Rising time	3-5 sec, emergency 1.5 sec
Lowering time	3-4 sec, emergency 1 sec
Oil tank	100 lt. - 250 lt. (depend on number of bollards to operate at a time)
Oil level sensor	Standard
Protection class	IP 67
Finish	Anti-UV epoxy powder coating or SS chrome finish
Blocking in raised position	Hydraulic lock/Pneumatic lock
Breakout resistance	15,00,000 J
Operating temperatures	-20°C to +60°C
MTBF	70,00,000
Duty Cycle	100%
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit for integration with all access control devices
Visual & Sound	Embedded LED lights on the top of aluminum head & buzzer for operational alert with Red/Yellow radium reflective strips
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

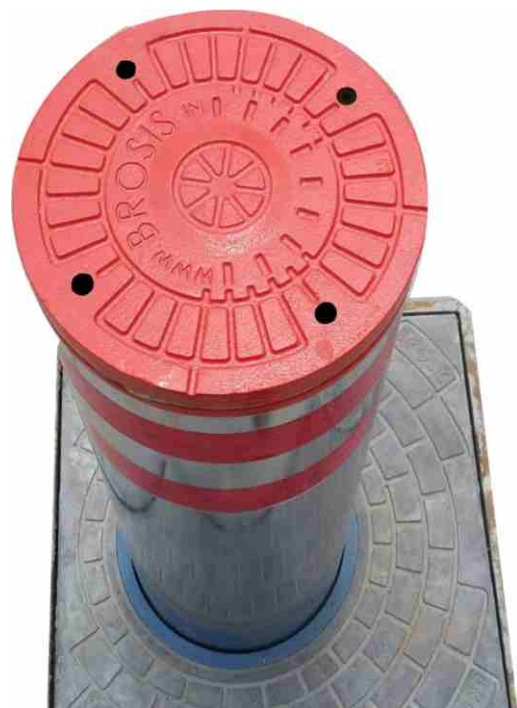
All dimensions are in MM





Anti-Ram Bollards

FORCE B4



Brosis FORCE B4 retractable hydraulic bollard is able to stop vehicle of 7.2 ton travelling at the speed of 30mph (48km/h) and met requirements for M30 : P1 rating as per ASTM F2656 (2018) known as K4 crash rating.



Actual Site Pictures



Anti-Ram Bollards

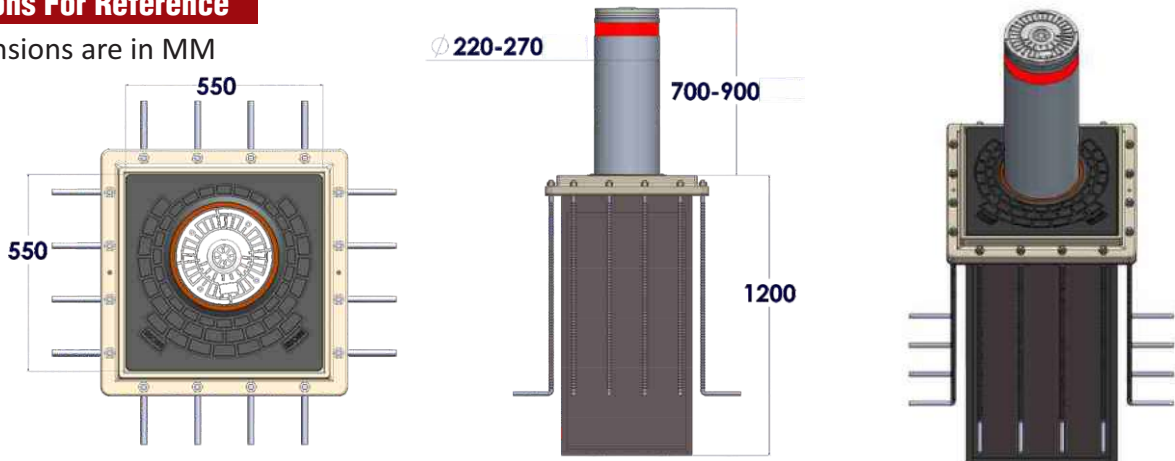
FORCE B4

Technical Specification

MODEL	FORCE B4
Anti-Ram class / Crash rating	Designed to stop 7.2 ton loaded vehicle @ 48 Km/h known as K4 (M30 - P1)
Drive unit (External / Internal)	B12 - H (Hydraulic), B12 - P (Pneumatic) / In built hydraulic power unit optional
Rising height	700 - 900 MM
Diameter of bollard	220 - 270 mm
Material	High tensile structural steel
Cylinder thickness	10 mm
Cylinder top plate	Anti-slip die cast aluminum
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, single phase
Rising time	4-5 sec, emergency 1.5 sec
Lowering time	3-4 sec, emergency 1 sec
Oil tank	100 lt. - 250 lt. (depend on number of bollards to operate at a time)
Oil level sensor	Standard
Protection class	IP 67
Finish	Anti-UV epoxy powder coating or SS chrome finish
Blocking in raised position	Hydraulic lock / Pneumatic lock
Breakout resistance	7,20,000 J
Operating temperatures	-20°C to +60°C
MTBF	70,00,000
Duty Cycle	100%
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit for integration with all access control devices
Visual & Sound	Embedded LED lights on the top of aluminum head & buzzer for operational alert with Red/Yellow radium reflective strips
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

All dimensions are in MM





Shallow Mounted Bollard

# FORCE BSM



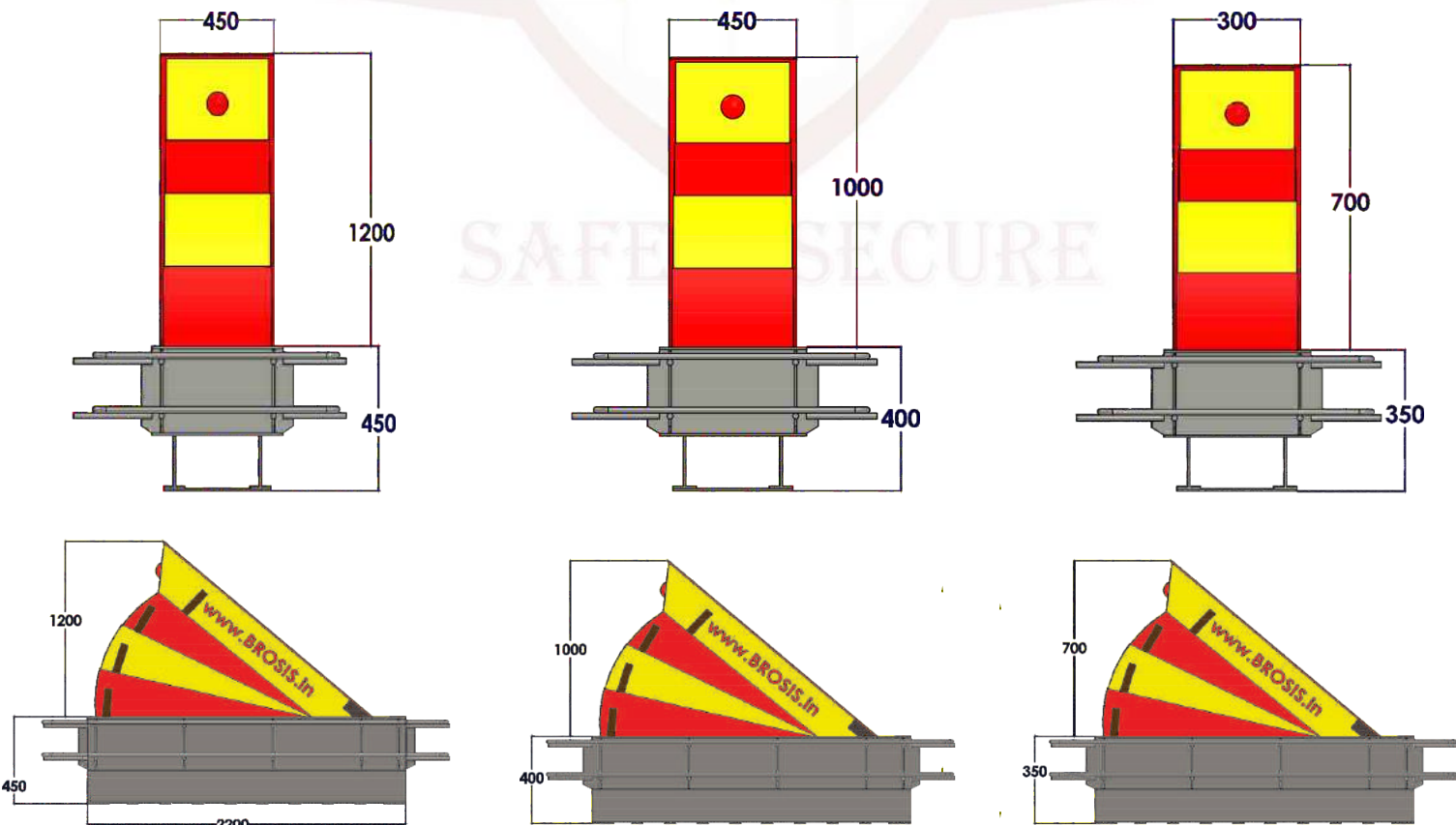
Shallow Mounted Bollard

# FORCE BSM

Brosis FORCE BSM is a hydraulically operated shallow mounted bollard, which is used to prevent the entry of vehicles where high security is required, ideally where automatic retractable bollards are not possible to install due to depth constraints.

Special Features

- ◆ Best option for protecting sites where there is problem of installing automatic retractable bollards due to their depth availability (pit size).
- ◆ Force SM requires maximum of 400mm depth.
- ◆ Due to its folding design, these can be installed with very little civil work.
- ◆ Less installation time as compared to automatic retractable bollards.
- ◆ Easily serviceable hence low maintenance cost.
- ◆ Finishing is done after hot dip galvanizing followed by anti-UV epoxy powder coating for corrosion free surface.
- ◆ LED lights and radium reflective strips for high visibility / alert.
- ◆ Can be installed in combination with other products like boom barriers, UVSS, spike barriers / tyre killers etc.
- ◆ Can be controlled with:
  - ◆ From wire or wireless remote control.
  - ◆ Automatically via access control system.
  - ◆ Manually (manual sinking in case of power failure).
  - ◆ Manually up and down using hand pump in case of any breakdown / emergency.



Technical Specification

MODEL	FORCE B12SM	FORCE B8SM	FORCE B4SM
Type of bollard	Shallow mounted		
Anti-Ram Class/rating	Designed to stop 7.2 ton loaded truck travelling @ 80 Km/h known as K12 (M50 – P1)	Designed to stop 7.2 ton loaded truck travelling @ 64 Km/h known as K8 (M40 – P1)	Designed to stop 7.2 ton loaded truck travelling @ 48 Km/h known as K4 (M30 – P1)
Drive Unit	Hydraulic (External)		
Rising height	1200 MM	1000 MM	700 MM
Blocking width	450 MM	350 MM	350 MM
Rising time	5-6 sec	4-5 sec	3-4 sec
Down time	3-4 sec	3-4 sec	2-3 sec
Material	Heavy duty high tensile steel	Heavy duty structural steel	
Axle Load capacity	25 Ton		
Structure & finish	Hot dip galvanized against resist to corrosion followed by epoxy powder paint.		
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase		
Protection class	IP 67		
Blocking in raised position	Hydraulic lock		
Breakout resistance	16,80,000 J	11,80,000 J	7,20,000 J
Duty cycle	100%		
Operating temperature	- 20° C to + 60° C		
Control Unit	PLC/microprocessor based control panel with readily available option for integration with any access control system		
MTBF	50,00,000		
SAFETY			
Reflective radium strips	Yes		
Visual & Sound	Yes, built in LED lights & buzzer for operational alert		
Safety for humans	IR photo cells (sensors)		
Safety for vehicles	Loop detector		
Driver alert	Traffic light (RED/GREEN) - Optional		
OPERATIONS			
Power Failure	Manual down with release valve		
Manual	Hand pump for operating manually up & down in case of prolonged power failure / breakdown / emergency		
Accumulator (Optional)	Accumulator for 04 cycles up/down operations if the one does not want to operate manually		
Smart Access	Can be integrated with TOTAL BA		



Anti-Ram Fixed Bollards

FORCE B12FB



Brosis FORCE B12FB is a fixed bollard and have been designed and manufactured bearing a resemblance similar to automatic retractable bollards and therefore allows the combined use of both type.

Special Features

- ◆ Doesn't need any power supply.
- ◆ Cylinder is hot dip galvanized followed by anti-UV epoxy powder coating for corrosion free surface or SS chrome finish (customised).
- ◆ Composite die casting anti-slip Aluminum cylinder top.
- ◆ Service & Maintenance free.
- ◆ Bearing similar resemblance to automatic retractable bollards with same sizes.
- ◆ Can be used in conjunction with automatic retractable bollards to successfully secure a perimeter and block passage permanently.

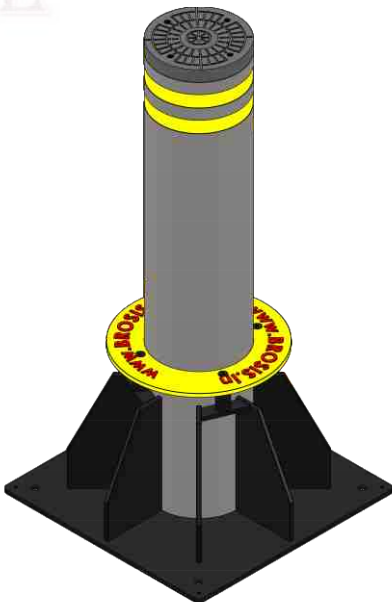
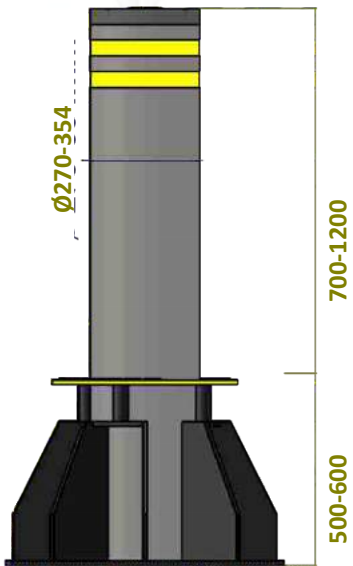
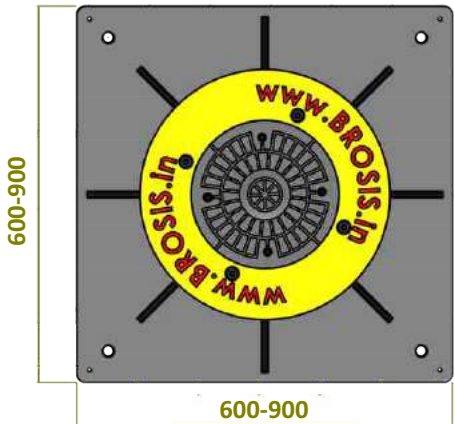


Technical Specification

MODEL	FORCE B12FB
Type of bollard	Fixed
Anti-Ram Class/rating	Designed to stop 7.2 ton loaded truck @ 80 Km/h known as K12 (M50 – P1)
Diameter of cylinder	270 – 354 MM
Height of cylinder	700 – 1200 MM
Thickness of cylinder	25 MM
Material	Heavy duty structural steel
Structure & finish	Hot dip galvanized against resist to corrosion followed by epoxy powder paint or SS chrome finish.
Power requirement	No power required
SAFETY	
Reflective radium strips	Yes – 2 nos, on the top of cylinder of 55 cm each

Dimensions For Reference

All dimensions are in MM



One Way Barrier

NAKH B80

Brosis NAKH B80 one way barrier is a mechanical operated device and an effective way to control speed of vehicle in addition to control traffic and regulate it in one direction.

Special Features

- ◆ Doesn't need any power supply.
- ◆ It act as speed bump / breaker and hence control the speed of vehicle.
- ◆ Quick and easy to install onto concrete and most asphalt road surfaces with no excavation required.
- ◆ Available in 1 m lengths – single units can be joined together to form the road width coverage that is needed.
- ◆ Each spike works individually and lowers to the ground as the vehicle passes over with the vehicle's weight.
- ◆ Designed to withstand 50 tons of axle Load.
- ◆ Tyres of the unauthorized vehicles will be destroyed immediately if it try to pass from the opposite direction.
- ◆ All the components are hot dip galvanized and with a superficial treatment of epoxy powder yellow color paint, in order to allow a major visibility (customize color options available).
- ◆ Surface of barrier is covered with anti-slip sheet.
- ◆ Can be used in all commercial and residential applications.
- ◆ Double the protection for your exit gates. Stop vehicles entering through exit gates.

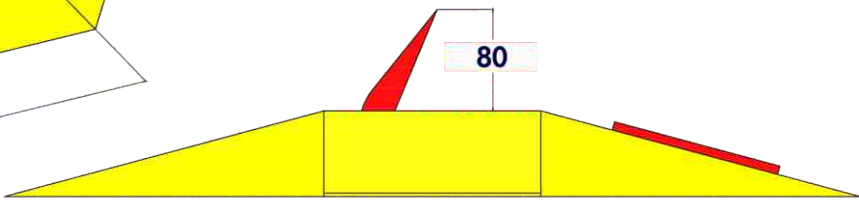
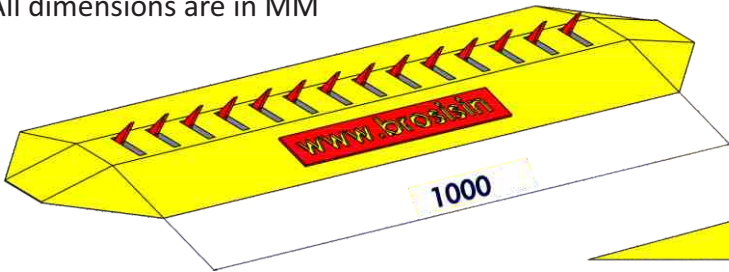


Technical Specification

MODEL	NAKH B80
Drive unit	Mechanically operated
Height of spike above ground	80 MM
Thickness of spike	10 MM
Spikes material	Tempered steel
Material	Heavy duty structural steel
Axle Load	50 Tons
Structure & finish	Hot dip galvanized against resist to corrosion followed by epoxy powder paint
Adjacent spike distance	100– 125 MM
Power requirement	No power required
Movement	Counterweight to allow only the exit transit
Blocking angle	60°
Coating	Spikes in Reflective Red color Housing in Yellow color (customized options available)

Dimensions For Reference

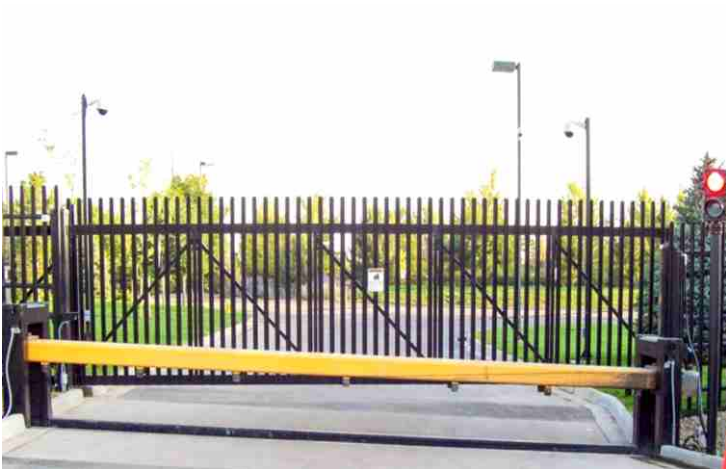
All dimensions are in MM





Anti-Ram Barrier / Drop Arm Barrier

VAJRA B12



Brosis VAJRA B12 anti-ram barrier is ideal for high to medium security access control scenarios with low to medium vehicle traffic. It is perfect for cities and sites that require minimal excavation. It is seamlessly installs on entrances up to 23 feet (7 m) of clear opening, making it a much more cost effective solution compared to multiple bollards or wedges. It also overcomes harsh terrain issues, snowplows, and other roadway obstacles.



Actual Site Pictures



Anti-Ram Barrier / Drop Arm Barrier

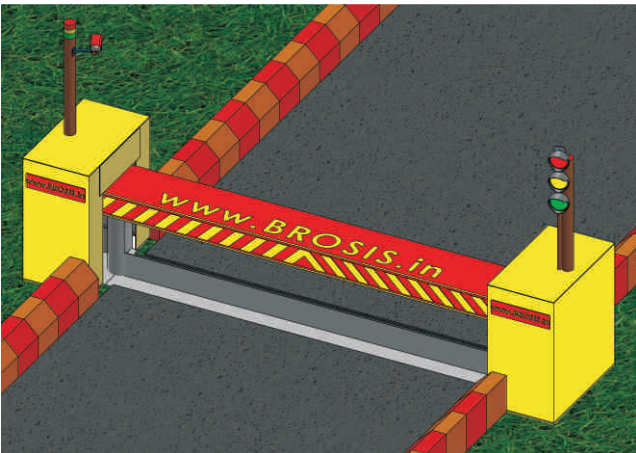
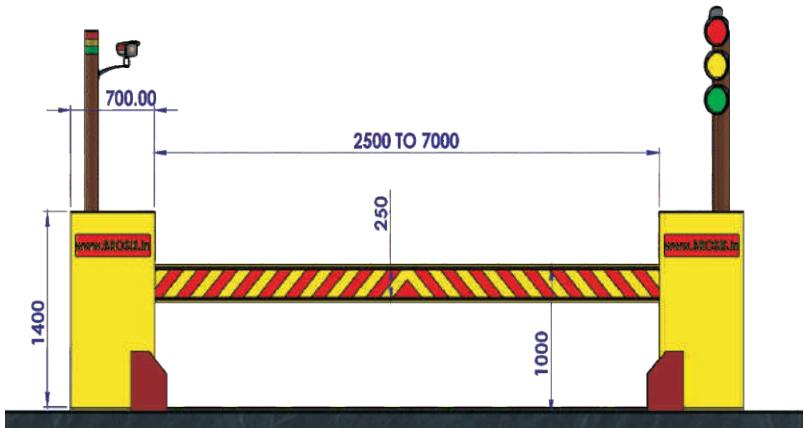
VAJRA B12

Technical Specification

MODEL	VAJRA B12
Mechanism	Electro-hydraulic
Anti-Ram Class / Rating	Designed to stop 7.2 ton loaded vehicle @80km/hr known as K12 (M50-P1)
Arm length	2500 - 7000 MM
Height of Arm from ground	1000 MM
Power supply	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Material	Arm Holder frames fabricated from heavy steel sections, designed to support boom in the lowered position and to take full impact load
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Raise & Lower time	6-10 seconds, raising & lowering time can be adjusted by controlling the rate of flow into or out of the cylinder.
Protection class	IP 67
Operations	Push button / remote control or with any third access control system like biometric, RFID, proximate readers etc.
Duty Cycle	100%
Breakout resistance	16,80,000 J
MTBF	50,00,000
SAFETY	
Safety for vehicles	Loop detector
Safety for humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual and Sound	Radium reflective strips on the arm of VAJRA B12 & buzzer
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

All dimensions are in MM





Anti-ram Sliding Gate  
KAVACH B12



Anti-ram Sliding Gate  
KAVACH B12



Actual Site Picture



Brosis KAVACH B12 crash sliding gate is designed & engineered to provide high level of security against unauthorized vehicle access. The product is able to accept any architectural enhancement over and above its standard construction; therefore it lends itself to the continuation of any high security fencing specification, powered fence or security toppings across the normally vulnerable entrance to a site.

The gate is available in variable heights, clear opening/ widths, infill types as per requirement.

Construction

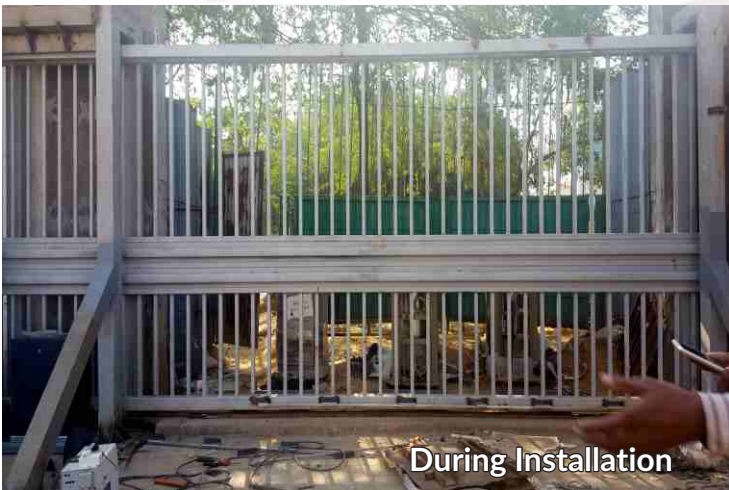
- ◆ The main frame of the gate consists of high tensile structural steel sections.
- ◆ Middle side of the gate where there will be maximum impact load during vehicle attack is strengthened with a steel bar which is located horizontally supported by the buttresses which are also manufactured from special heavy duty material beams. Buttresses are fixed to the ground by steel anchors and basement plate.
- ◆ Polyamide nylon rollers hold the gate vertically and support movement of gate to run in line and reduce noise and vibration during operation.
- ◆ Bottom wheels of gate and bottom rail are made of special EN series high quality alloy steel of high tensile strength with good ductility and shock resistance.

Features & Benefits

- ◆ Two drive options are available - standard sliding gate rack drive system with integral logic control panel, or a heavy duty drive unit including a programmable logic controller
- ◆ Gates can be controlled manually or automatically by a variety of interfaces
- ◆ Available with a wide variety of welded mesh or vertical bar infills
- ◆ Safe operation
- ◆ Reliable and dependable
- ◆ Strength and durability
- ◆ Typically used in locations where a high security profile is of utmost priority such as defense sites, government offices, Embassies, utilities, police stations, research and development centers, other critical sites.

Technical Specification

Infill	Your choice of mesh, solid sheet or vertical bars
Operating Speeds	Typical speeds of 20 m/min (depending on configuration). Extra fast Option also available
Gate Height	Typically 1800mm to 3000mm (Other heights available on request)
Gate Width	Up to a maximum of 7000mm
Gate Type	Tracked Sliding Gate
Civil Requirements	Foundation depth from 500mm (depending on configuration)
Power supply	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
In case of power failure	Manual operation
Operating temperature	-20°C to + 60°C
Duty Cycles	100%
Safety for humans and Vehicles	Photo sensors
Control unit	PLC/micro controller based control unit with readily available integration with all Access control devices
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA



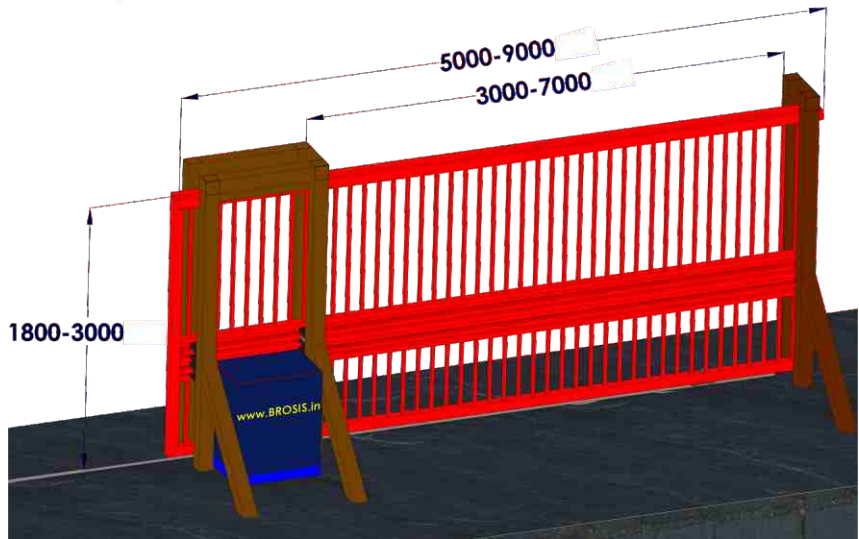
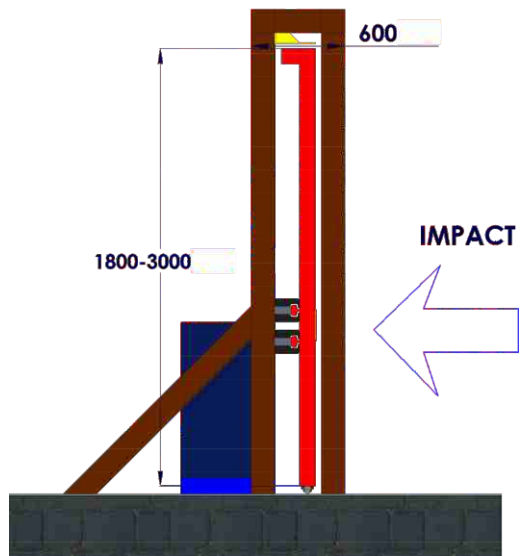
During Installation



After Installation

Dimensions For Reference

All dimensions are in MM



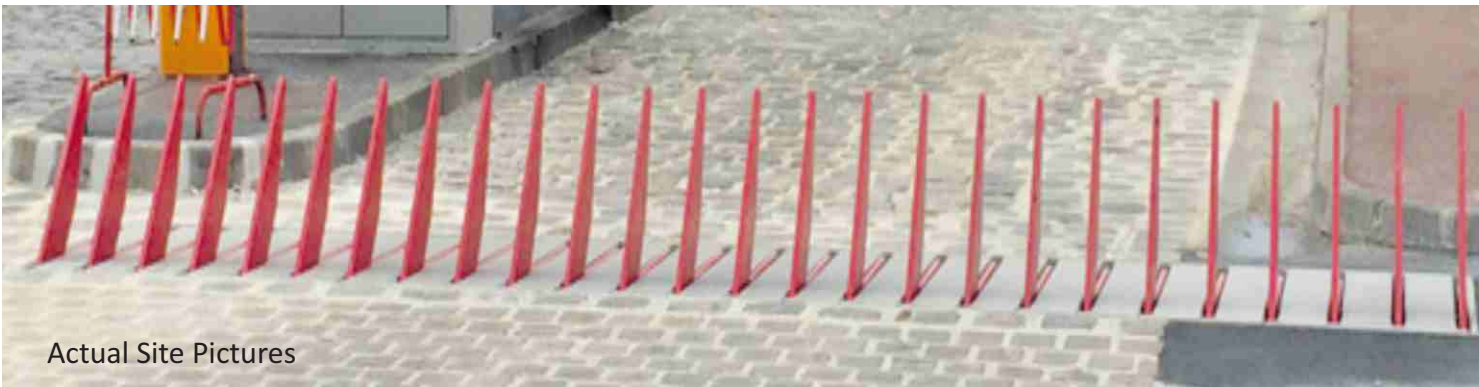
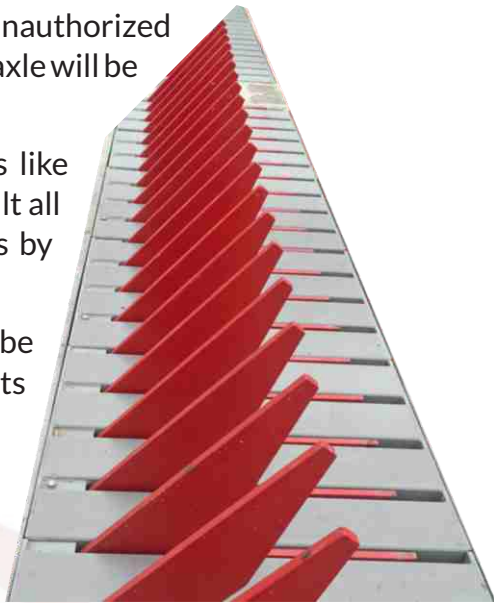




Brosis ASTRA B475H Axle breaker tyre killers are designed to prevent unauthorized entry or exit of vehicles. If a vehicle attempts to enter forcibly, its tyre and axle will be destroyed.

These can be used individually or in combination with other products like bollards, uvss, boom barriers etc. It is one of the best secure system to halt all type of vehicles moving at high speed having upto 40 ton of axle loads by damaging axle and tyres of vehicles.

Drainage system is provided so that accumulated dirt and water can be drained out and hence does not affect the mechanism of road blocker and its working efficiency.



Actual Site Pictures

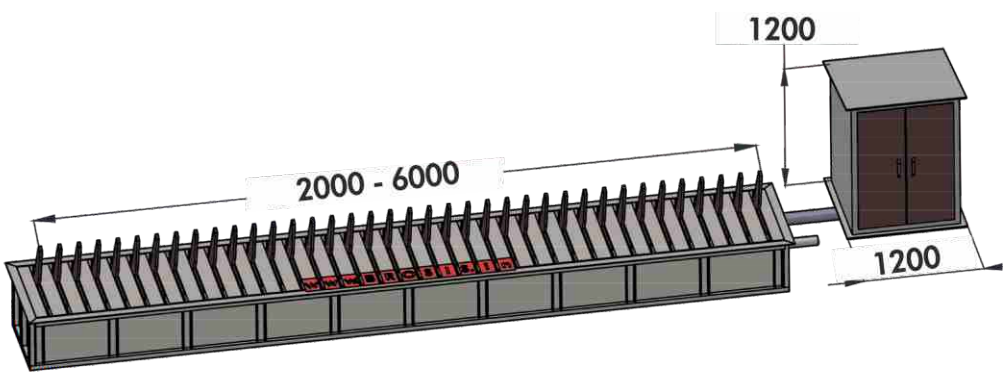
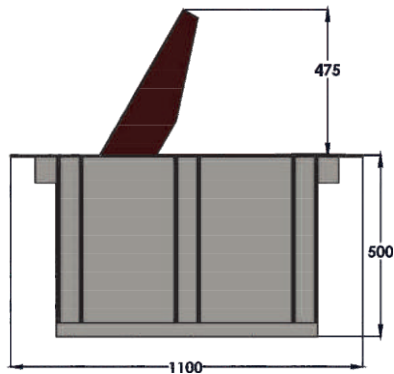


Technical Specification

MODEL	ASTRA B475H
Drive unit	B475 - H (Hydraulic)
Height in raised position	475 mm
Thickness of spike	25 mm
Spikes material	Tempered steel
Width of blocked driveway	2000 mm - 6000 mm
Material	Heavy duty structural steel
Axle Load	40 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Adjacent spike distance	200 mm
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Rise time	3-5 sec
Down time	3 sec
Blocking angle	60°
Protection class	IP 67
Duty cycle	100%
Coating	Spikes in Reflective Red, Housing in Siemens Grey (customized options)
Blocking in raised position	Hydraulic lock
Operating temperatures	-20°C to +60°C
MTBF	50,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	Radium reflective strips on spikes & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

All dimensions are in MM





Tyre Killer

# SPIKE B150H



Brosis Tyre Killer SPIKE B150H are designed keeping in mind for the security of those places where there is severe threat of vehicle attack. It is one of the best secure system to stop vehicles moving at high speed having upto 50 ton of axle loads by damaging rim and tyre of vehicle.

It is specially designed to penetrate tyres with minimum 3" thickness with penetration upto 4" and hence enable vehicle to halt within distance of 2-3 meters.



Tyre Killer

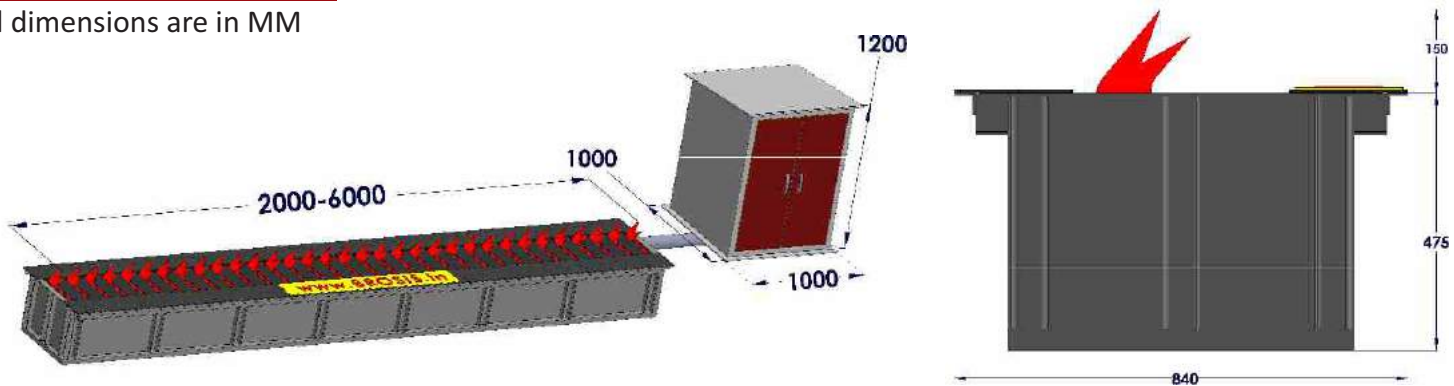
# SPIKE B150H

Technical Specification

MODEL	Spike B150H
Installation type	Flat type
Drive unit	B150 - H (Hydraulic), B150 - P (Pneumatic)
Height of spike above ground	150 MM
Thickness of spike	25 MM
Spikes material	Heavy duty hardened steel
Width of blocked driveway	2000 mm - 6000 mm
Housing Material	heavy duty structural steel
Axle Load	50 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Adjacent spike distance	200 MM
Input Voltage	440 VAC ± 10%, 50/60 Hz, 3 phase or 220 VAC ± 10%, 50/60 Hz, 1 phase
Rise time	2 sec
Down time	1 sec
Blocking angle	60°
Protection class	IP 67
Duty cycle	100%
Coating	Spikes in Reflective Red, Housing in Siemens Grey (customized options)
Blocking in raised position	Hydraulic lock/Pneumatic lock
Operating temperatures	-20°C to +60°C
MTBF	50,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	Radium reflective strips on spikes & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

All dimensions are in MM





Tyre Killer

# SPIKE B150C



Brosis SPIKE B150C Tyre Killer are designed keeping in mind for the security of those places where there is severe threat of vehicle attack. It is one of the best secure system to stop vehicles moving at high speed having upto 50 ton of axle loads by damaging rim and tyre of vehicle.



Actual Site Pictures



Tyre Killer

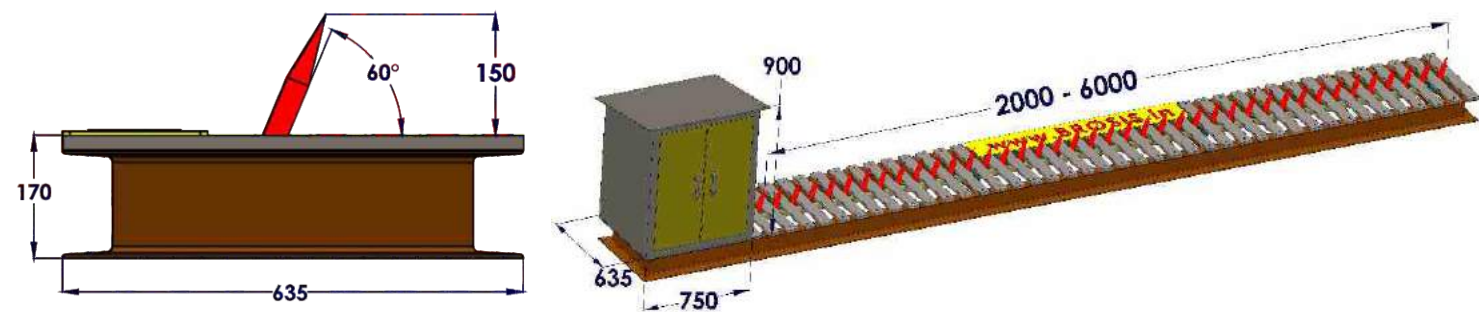
# SPIKE B150C

### Technical Specification

MODEL	SPIKE B150C
Installation type	Flat Type / Hump Type
Drive unit	B150 - H (Hydraulic), B150 - P (Pneumatic), B150-E (Electro mechanical)
Height of spike above ground	150 MM
Thickness of spike	Ø 32 MM
Spikes material	Heavy duty hardened steel
Width of blocked driveway	2000 mm - 6000 mm
Housing Material	Heavy duty structural steel
Axle Load	50 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Adjacent spike distance	100 - 110 MM
Input Voltage	220 VAC ± 10%, 50/60 Hz, 1 phase or 440 VAC ± 10%, 50/60 Hz, 3 phase
Rise time	2-4 sec
Down time	2 sec
Blocking angle	60° or 90°, as per customer requirement
Protection class	IP 67
Duty cycle	100%
Coating	Spikes in Reflective red, Housing in Siemens Grey/Yellow or (customized)
Blocking in raised position	Hydraulic lock/Pneumatic lock/Electric lock
Operating temperatures	-20° C to +60° C
MTBF	50,00,000
<b>SAFETY</b>	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	Radium reflective strips on spikes & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
<b>POWER FAILURE</b>	
Power failure	Manual hand pump
Manual	Mechanical manual release device/pressure relief valve

### Dimensions For Reference

All dimensions are in MM





Tyre Killer

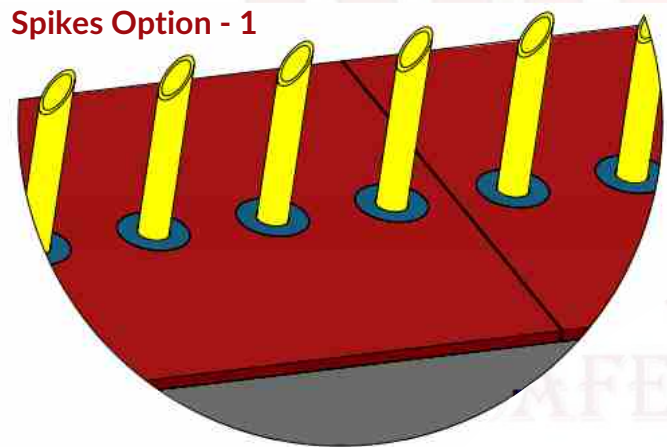
# SPIKE B150T

Brosis SPIKE B150T is two way tyre killer / spike barrier which is specially designed to secure entry where vehicles used to pass from entry/exit. Spike B150T comprise of set of hollow spikes which act as fail-safe puncture tool capable of bringing a vehicle to complete halt without harming passengers.

The Hollow spikes have been engineered to ensure that a vehicle will be disabled irrespective of its moving direction. It can puncture tyres of vehicles of all types & sizes.

Drainage system is provided so that accumulated dirt and water can be drained out and hence does not affect the mechanism of tyre killer and its working efficiency.

Spikes Option - 1



Spikes Option - 2



Actual Site Pictures



Tyre Killer

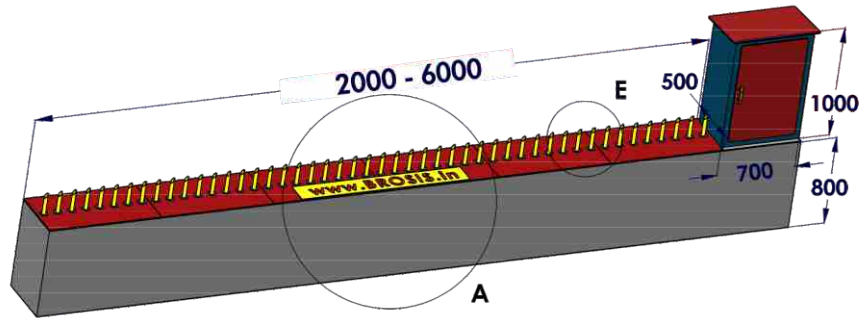
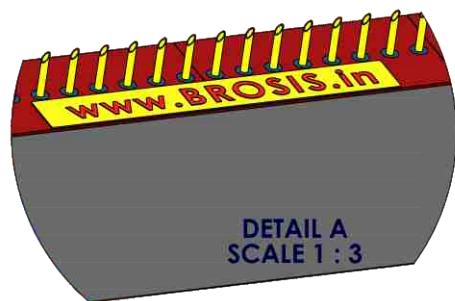
# SPIKE B150T

Technical Specification

MODEL	Spike B150T
Installation type	Flat Type (active 2-way spikes with dual hollow air vent)
Drive unit	B150 - H (Hydraulic), B150 - P (Pneumatic)
Height of spike above ground	90 - 150 MM
Spikes material	Tempered steel
Width of blocked driveway	2000 MM - 6000 MM
Housing Material	Structural steel
Axle Load / vehicle load	50 Tons
Structure & finish	Galvanized against resist to corrosion followed by epoxy paint
Centre to centre spike distance	100 - 125 MM
Input Voltage	220 VAC, 50/60 Hz, single phase ; 3 phase (optional)
Rise time	3 sec
Down time	2 sec
Blocking angle	90°
Protection class	IP 67
Duty cycle	100%
Coating	Spikes in Reflective Red, Housing in Siemens Grey/Yellow (customized)
Blocking in raised position	Hydraulic lock/Pneumatic lock
Operating temperatures	-20°C to +60°C
MTBF	50,00,000
SAFETY	
Safety against vehicles	Loop detector
Safety against humans	Photo sensors
Control unit	PLC/microprocessor based control unit with readily available integration with all access control devices
Visual & Sound	Radium reflective strips on spikes & buzzer for operational alert
Driver alert	Traffic light (Red/Green) - optional
Smart integration	Can be integrated with TOTAL BA
POWER FAILURE	
Power failure	Manual hand pump
Manual	Mechanical manual release device
Accumulator (optional)	Accumulator for 04 cycles up/down operations in case of emergency

Dimensions For Reference

All dimensions are in MM







Brosis BI-3rd EYE is the bi-directional, embedded solution that introduces in response to the growing need for Under Vehicle Surveillance Systems. The system's main aim is to provide private or government institutions with a powerful inspection tool that allows visual detection of potential threats to the security of its facilities.

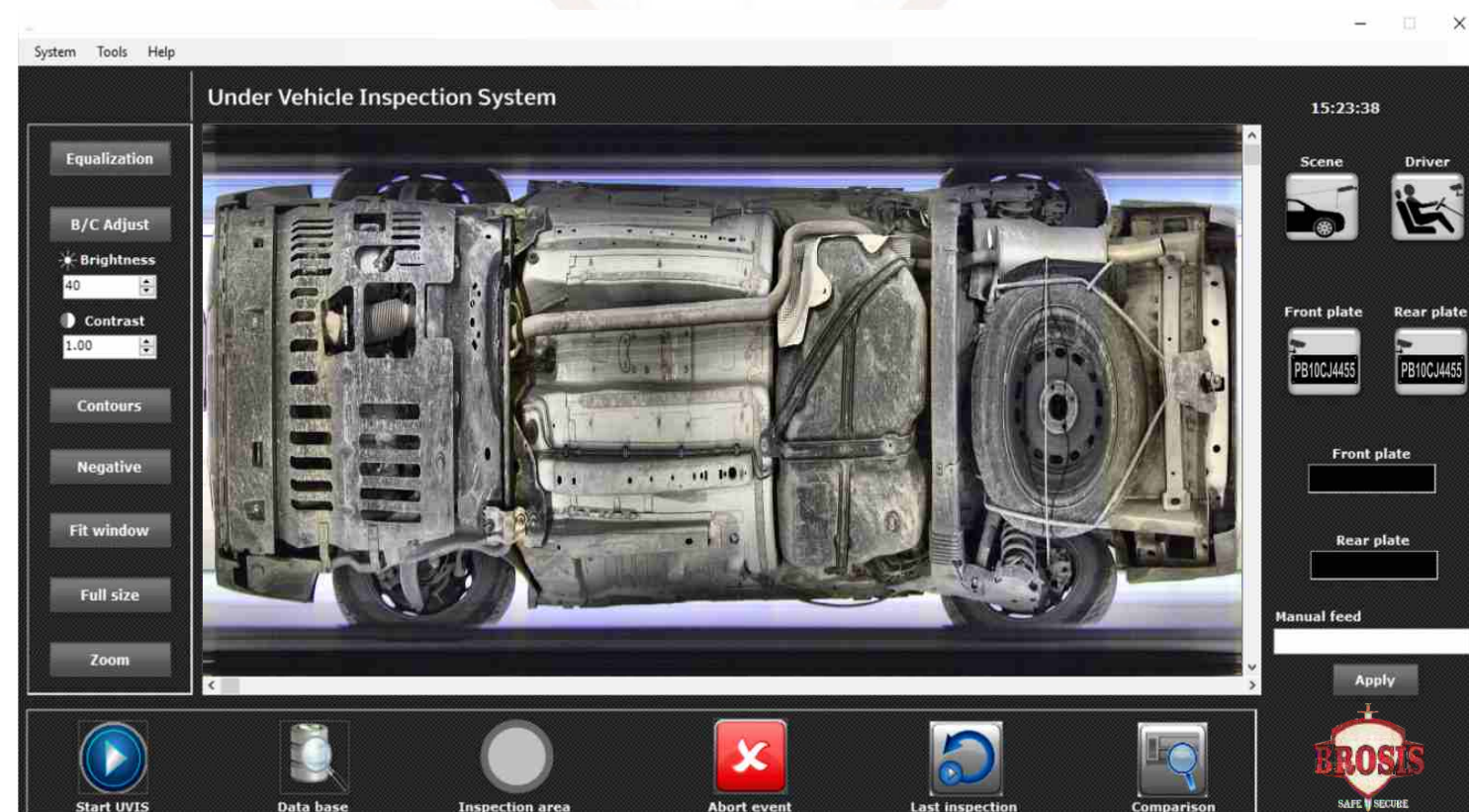
These threats range from weapons, packages of drugs and explosives, to any other foreign object different to the mechanical structure of the vehicle's underbody.

The general operation process of BROSIS UVSS is carried out in a following stages:

- Snapshots of both scene and driver of the vehicle
- License plate recognition using an LPR camera.
- Vehicle's underbody scanning up to maximum speed of 40 Km/Hr.
- 2-3 seconds to automatically compare the subject vehicle's undercarriage to a safe vehicle (stored in the database) and display both on the screen.
- Immediately identifies any foreign object or modifications to the undercarriage by circling them with a red ring and at the same time activates an audio and/or visual alarm.
- Automatically distinguishes between vehicle types (bus, truck, SUV, car etc.) without operator assistance and produces composite stitched images of identical high quality without the need to adjust scanner settings or lighting.
- Get panoramic image and visual inspection of this by the operator.
- Driver identification through biometrics or proximity card (optional).
- Auto throw air pump inbuilt to clean camera enclosure.

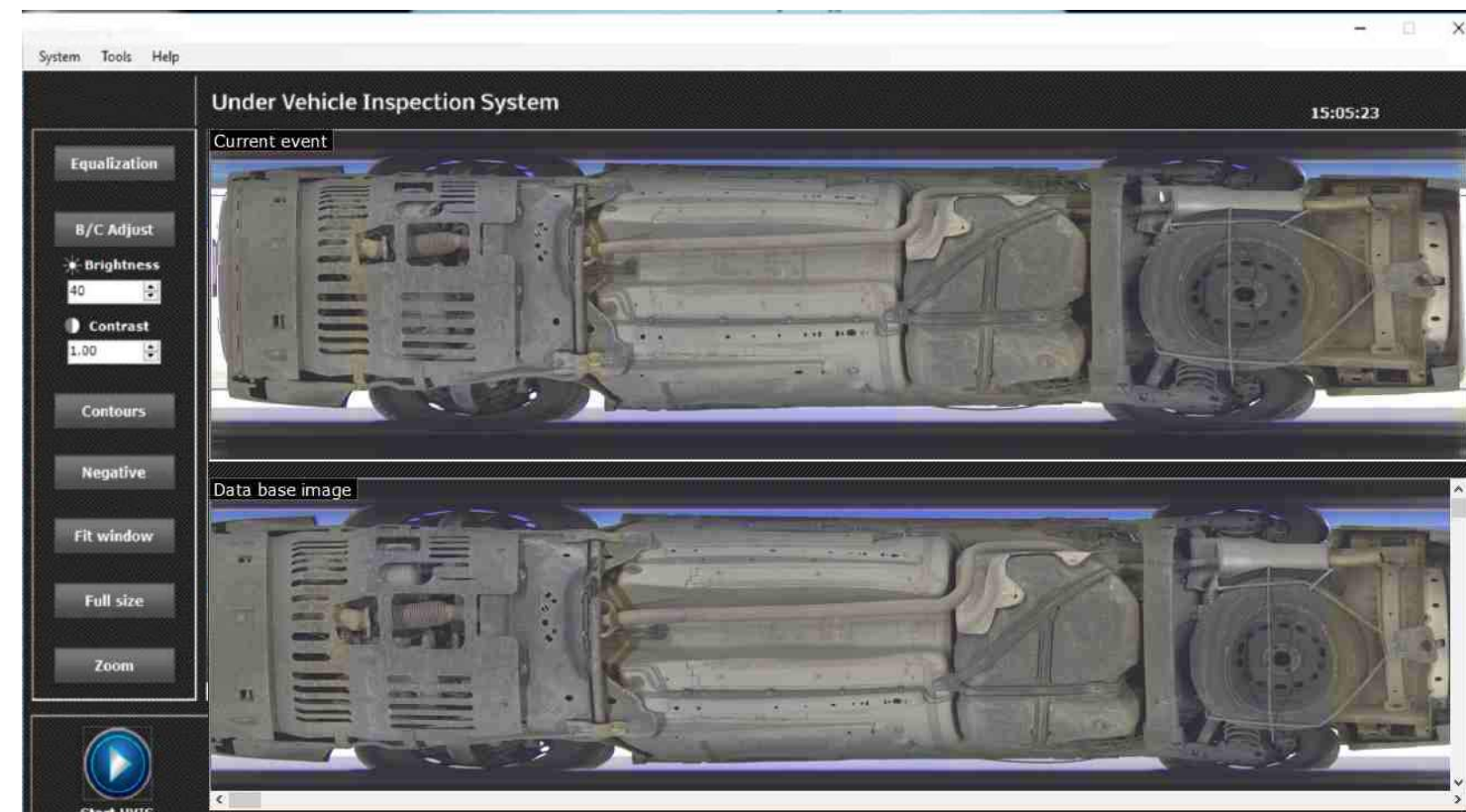
### Graphic user interface option

1. **EQUALIZATION:** This **ALGORITHM** produces a color image that homogenizes the brightness automatically to highlight those areas of the image that may appear a little dark.



2. Brightness and contrast adjustment of **AUTO-COMPARISON** of current and data base image: Brightness and contrast controls of the image according to the following thresholds:

$0\% \leq \text{Brightness} \leq 100\%$ , by intervals of 1% ;  $0.00 \leq \text{Contrast} \leq 3.00$ , by intervals of 0.1%



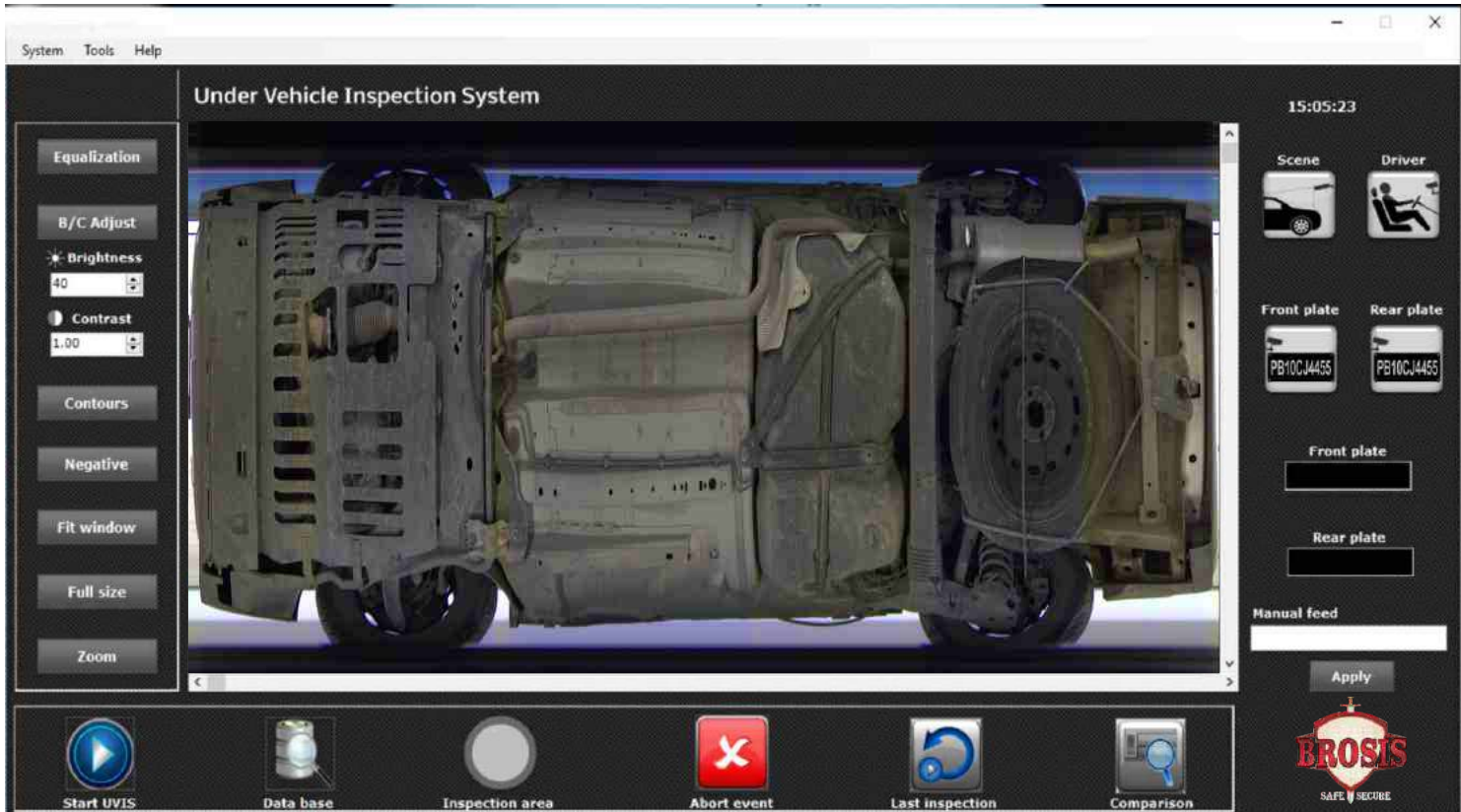
3. **CONTOURS EXTRACTION:** This algorithm produces a binary image representing the closed contours of the visually perceptible parts of the vehicle. These silhouettes offer another alternative for finding foreign objects on it.



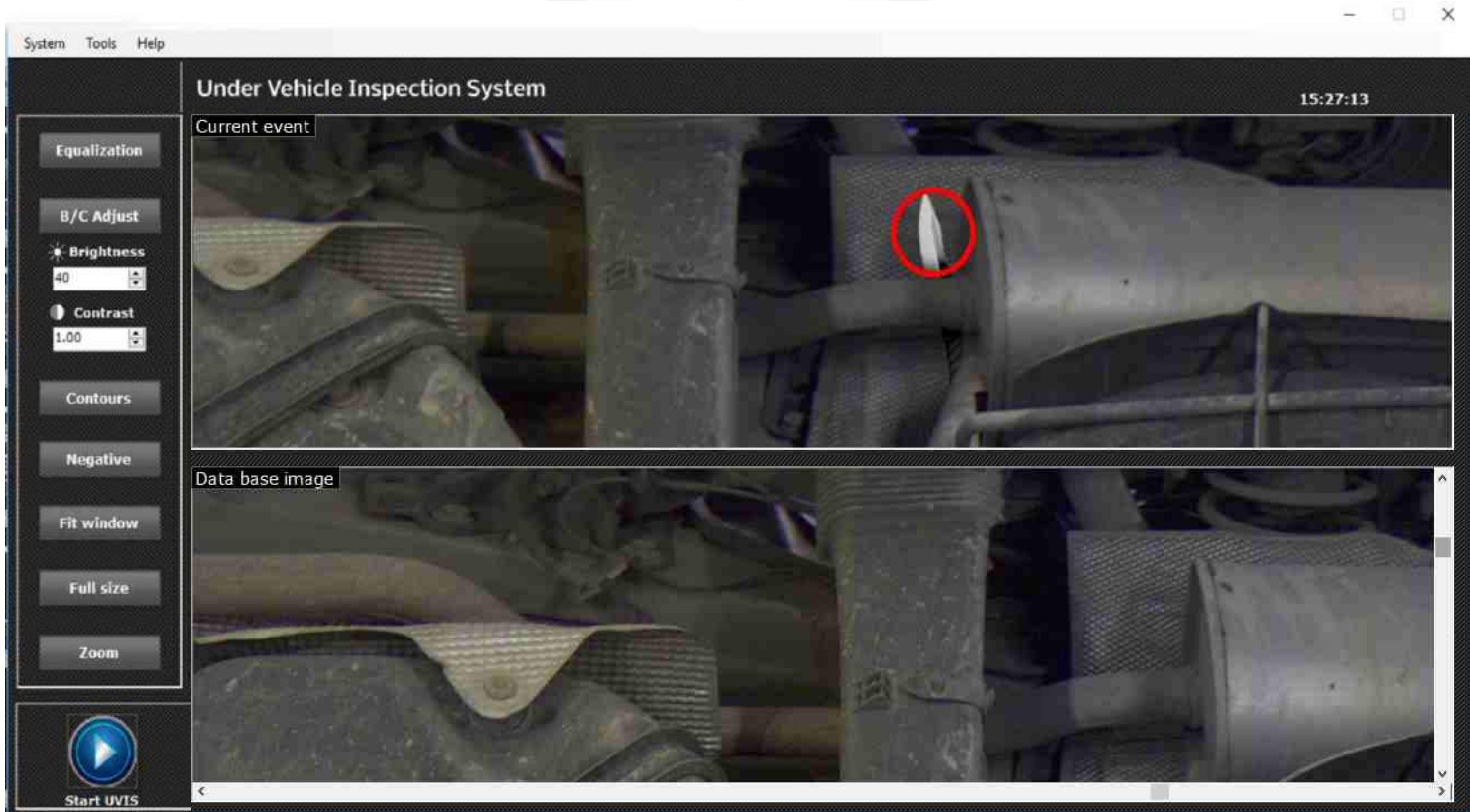




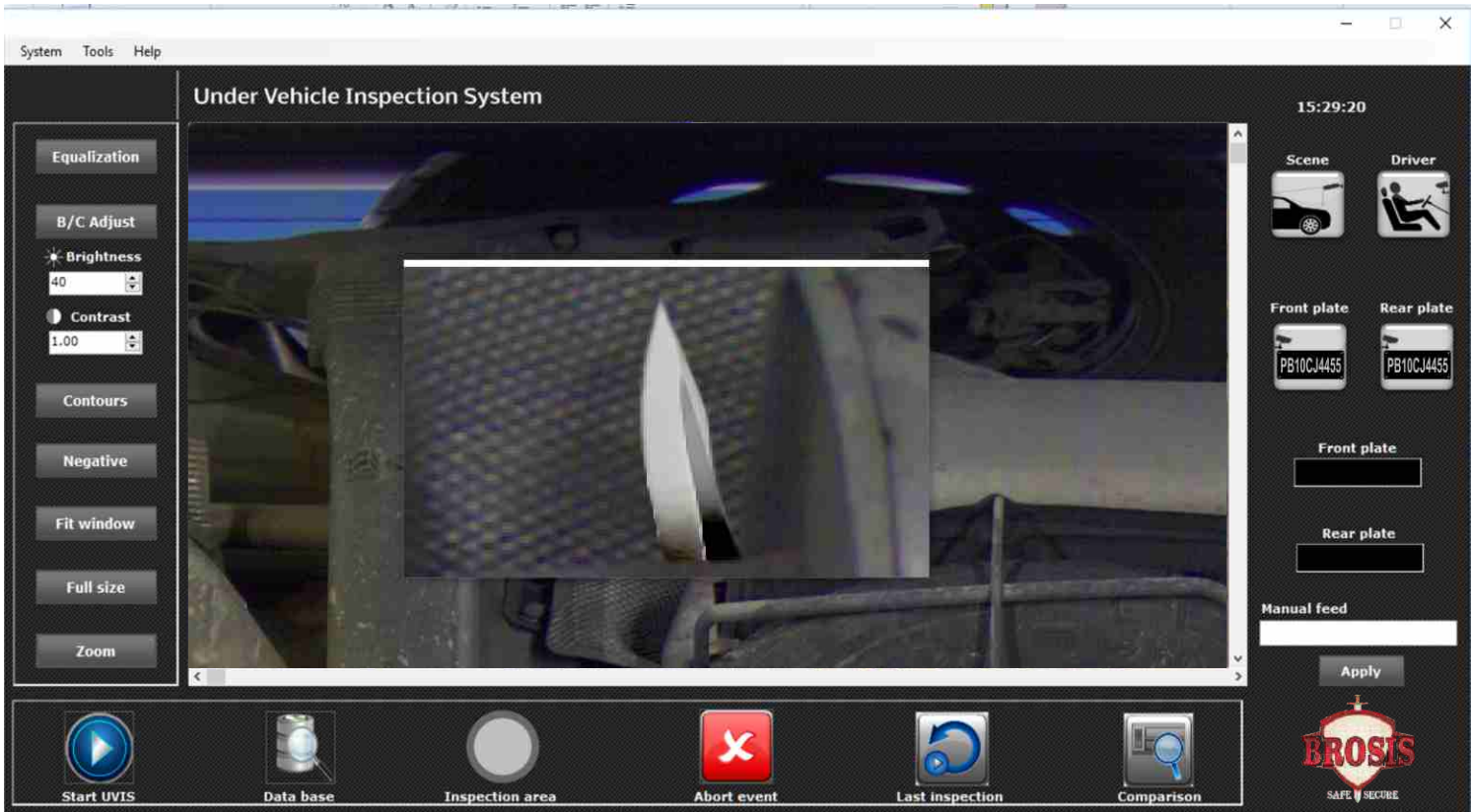
4. Adjust the picture to screen size: The button "ADJUST WINDOW" adjusts the vehicle image to the size of the main display window. In this way, the user can inspect the entire image of the car at once.



5. AUTO COMPARISON OF ZOOMED IMAGE: It compares current generated image with database image.



6. ZOOM: The zoom function is designed to carry out a further inspection of the smallest parts of the vehicle structure. This tool allows the user to increase up to **16 TIMES THE IMAGE VIEW** in two different operating modes: decoupled window and detail view window.



7. Vehicle's license plate image (Front / Rear plate): This image is acquired by the license plate recognition (LPR) camera that integrates the BROSIS UVSS system. The image provided is, among other things, very useful to visually confirm that the plate's number corresponds to the number (text string) the LPR camera







### Hardware Specifications

#### Embedded Frame

Unit mounts flush with the road surface and extends 35.5cm below grade. The embedded unit includes drainage and conduit exit point. Our UVSS is tested and certified for IP68 and IP44 for water proof and dust proof respectively from NABL (Govt. of India).

### Scanner Specifications

- Length: 910mm x Width 610mm x depth 21mm
- Power Supply: 230 VAC
- Frequency: 50/60 Hz
- Consumption: 500 W
- Camera resolution: 1600 x 1200
- Image resolution: 4 MP
- Sensor: Progressive Scan CCD/CMOS
- Video Format: GIGE
- Environmental: Sealed unit to protect against heat, dust, water and vibration.
- Temperature range: -20°C to + 60°C
- Operating Humidity : 100%
- Illumination system: white super bright LED
- Number of LEDs: 18
- Expected life time: 7 years
- Operating system: Windows 7 or better
- RAM: 16 GB
- Hard disk: 1TB
- CPU: Intel core i7 3.6 Ghz
- Impact Proof: Yes
- Shock Proof: Yes
- Zoom capability: 16X
- Image width: 6000 pixels

### Anpr Camera Specifications

- Camera resolution - 3 MP
- Image Resolution- 2048(H) x 1536(V)
- Scanning System- Progressive CCD/CMOS
- Range - 40m
- Lens Type - 11x, automatic, motorized lens
- Focus Distance Range - 10 - 40m
- Day/night mode: Light sensor configurable auto- switching day/night mode, automatic brightness control
- Communication protocols: ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP
- Wavelength: 850nm (Infrared)
- Illumination modes: Synchronized flash or continuous
- Power requirement: 24 Vdc
- Connectivity Binder M12 circular: Ethernet (8 pin), Power (4 pin), User (8 pin), User (12 pin)
- IP & IK rating :IP67 & Ik10

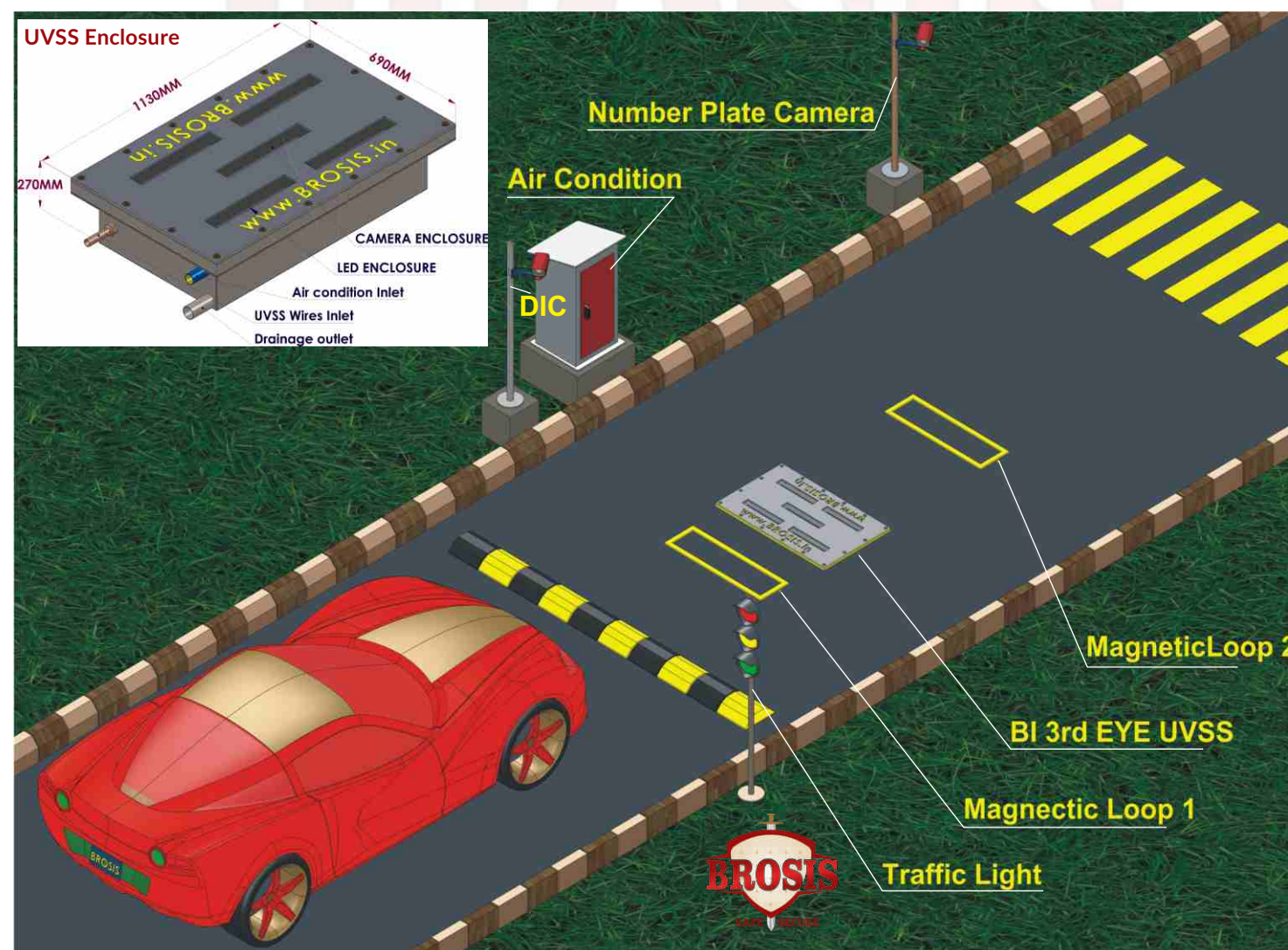
### Driver Image Camera Specifications

- Imaging Device: 1/2.9" 2.19MCMOS
- Effective Pixels: 1,984(H) x 1,105(V)
- Scanning System: Progressive
- Min. Illumination: Color :0.095Lux(30IRE), B/W:0Lux
- IR Viewable Length: 50m (98.43ft)
- Day & Night: True Day & Night
- White Balance: ATW/AWC/Manual/Indoor/ Outdoor
- Backlight Compensation: Off / BLC / WDR
- Wide Dynamic Range: 120dB
- Digital Noise Reduction: SSNR (Off / On)
- Electronic Shutter Speed Minimum / Maximum / Anti flicker
- Flip / Mirror: Flip / Mirror / Hallway view
- Intelligent Video Analytics: Motion detection with metadata, Tampering, Defocus detection
- Alarm I/O: Input 1 / Output 1
- Alarm Triggers: Motion, Tampering, SD card error, NAS error, Alarm input, Defocus detection.



- Alarm Events: File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
- Ethernet: RJ-45 (10/100BASE-T)
- Video Compression Format: H.265, H.264, MJPEG
- Resolution: 1920x 1080, 1280x 1024, 1280x 960, 1280x 720, 1024x 768, 800x 600, 720x 576, 720x 480, 640x 480, 320x 240
- Max. Framerate: H.265/H.264: Max. 30fps at 2M all resolutions, MJPEG: 15fps
- Smart Codec: Wise Stream
- Video Quality Adjustment: H.265/H.264: Target bitrate level control, MJPEG: Quality level control
- Bitrate Control Method: H.265/H.264: CBR or VBR, MJPEG: VBR
- Streaming Capability: Multiple streaming (Up to 3 profiles)
- Audio I/O: Line in
- Audio Compression Format: G.711 u-law / G.726 selectable, G.726 (ADPCM) 8KHz, G.711 8KHz, G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps
- Audio Communication: Uni-directional audio
- IP: IPv4, Ipv6
- Protocol: TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour

### UVSS Layout







2 – 8 m Boom length	0.9-6 sec Operating time	Versatile application
100 % Duty rating	>500 Vehicles per hour	Enhanced security

The Most Versatile & Secure Boom Gate

Brosis BAR SERIES boom barrier can be used to control entrances upto 8 meters. Barrier is designed & constructed entirely by Brosis in compliance with current safety standards, and with IP 54 protection rating. These barriers are cherished for their simple functionality, easy installation and cost effectiveness. Powerful drive unit performs flawlessly even in the most demanding operating and weather conditions.

Low Operating Costs

Thanks to their high energy efficiency, extremely long service lives, and simple maintenance, barriers from BROSIS are particularly cost-effective - an investment that will certainly pay off.

Significant Security Enhancement

BAR Series automatic barrier by BROSIS provides a significant enhancement to perimeter security, especially when combined with top & bottom skirt, electromagnetic lock, broken arm signalization and other security features.

High Speed

BROSIS BAR 3T is specially designed model with 0.9 sec opening / closing time and for very intensive use. It is designed for toll plazas where very fast opening and closing is required with reliable product.

Ultra Safe

All automatic barriers are designed with maximum safety in mind. Should you need auto reverse function, safety photocells kit, break-away arm mechanism, flashing light, and boom LED lights or even more, your wish is granted. Search no more.

High Capacity

BROSIS automatic barrier gate has a high throughput rate ranging from 300 to more than 500 vehicles per hour, depending on boom length.

Intelligent

Automatic barrier gates by BROSIS are not only efficient but also intelligent. With dual channel vehicle detector besides vehicle presence they are able to detect vehicle direction, which is extremely useful for vehicle counting upon integration with VMS software.



Technical Specification

MODEL	BAR 3T	BAR 6	BAR 8
Drive unit	Gear operated electromechanical		
Power supply	220 VAC ± 10%, 50/60 Hz, 1 phase		
Boom length	3m	6m	8m
Boom Type	Round	Octagonal	Round
Operating time	0.9 sec	4-6 sec	6 sec
Housing finish	Hot dip galvanizing followed by anti-UV rays epoxy powder coated		
Housing material	Galvanized plate or Cold roll plate, 2.0mm thickness sheet, 3 years without rust, shedding and fading		
Boom	Aluminum with red reflective strips		
Installation	Both left & right assembly		
Control Unit	Microprocessor		
Swing away flange	Available	—	—
Duty Cycle	100%		
Spring and bearing	Heat treatment: more durable		
Protection class	IP 54		
Operating temperatures	-30° C to +70° C		
MTBF	50,00,000		
Certification	ISO & CE certified		
Integration	NO/NC dry relay contact, RS485 and can be integrated with access control		
Color Options	Yellow/Red/Grey		
SAFETY			
Reverse Back Option	Available in case it meets any obstacle in its movement.		
Safety against humans	Photo sensors		
Driver Alert	Traffic lights (Red/Green) - optional		
Lock	Self Locked in any position to avoid unauthorized person to manually operate arm.		
POWER FAILURE			
Manual	Manual release keys		
Back up	Batteries - optional		



Actual Site Pictures





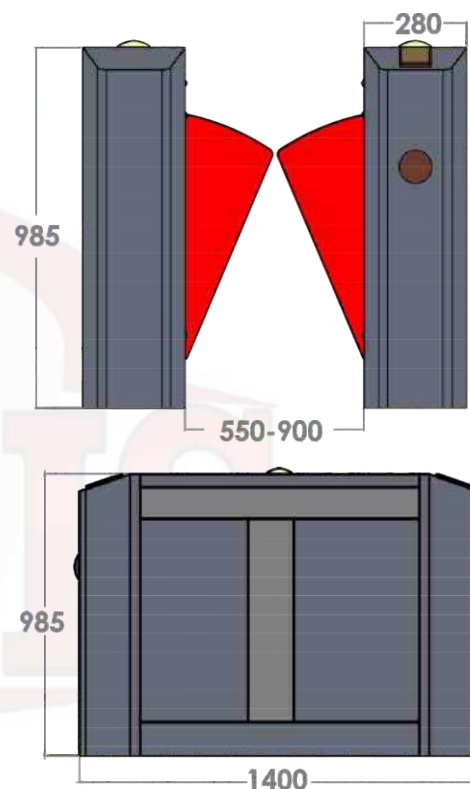


Brosis BFB 550/900 Flap Barrier is a waist-high pedestrian flap barrier system available as a single or multiple-lane set up designed for smooth and silent operation and draws very little power. It is made of AISI 304 stainless steel grade which makes BFB 550/900 highly durable and reliable. It is compatible with most access control systems, such as biometric, proximity readers, RF readers, to prevent unauthorized access pedestrian safety has also been taken into account.

BFB 550/900 is an ideal indoor solution for railway platform, passenger terminal, metro entrances and exits, airports, checkpoints, factories, stadium, Industrial or Government buildings. Flap barrier gives a more premium and organized entrance to your building.

## Special Features

- ◆ AISI 304 stainless steel housing ensure long lasting durability.
- ◆ Low power consumption, energy conservation and environment protection.
- ◆ Flap barrier provides wide opening and making it comfortable passage for pedestrian of any size as compare to turnstile.
- ◆ Users on wheel chair can also pass.
- ◆ Users can carry luggage or big parcel.
- ◆ Fast opening/closing time upto 0.8 sec thus allow fast passages and hence reduce long queue in front of entrance / exit during peak hours.
- ◆ 6 (six) IR sensors for safety of pedestrians / users.
- ◆ Flap wings will pause if any pedestrian / user is detected by IR sensors instead of getting reverse and will resume closing when passage is clear. This will effectively discourage tailgating.
- ◆ Flap wings will close only when passage is clear thus avoid crushing onto the users / pedestrians.
- ◆ Automatic opening of flaps to allow free passage in case of any emergency (power failure).
- ◆ Flaps will automatically reverse if something block the passage to avoid motor overload and damage itself.
- ◆ Flaps will automatically close if there is no pedestrian / user is passing through after the delay time elapsed.
- ◆ Built in high sensitive infrared photocell to detect unauthorized access. Alarm will sound and help guard for immediate response. It will sound if there is unauthorized user attempting to enter from opposite direction or when user is staying inside the passage for too long time.



## Technical Specification

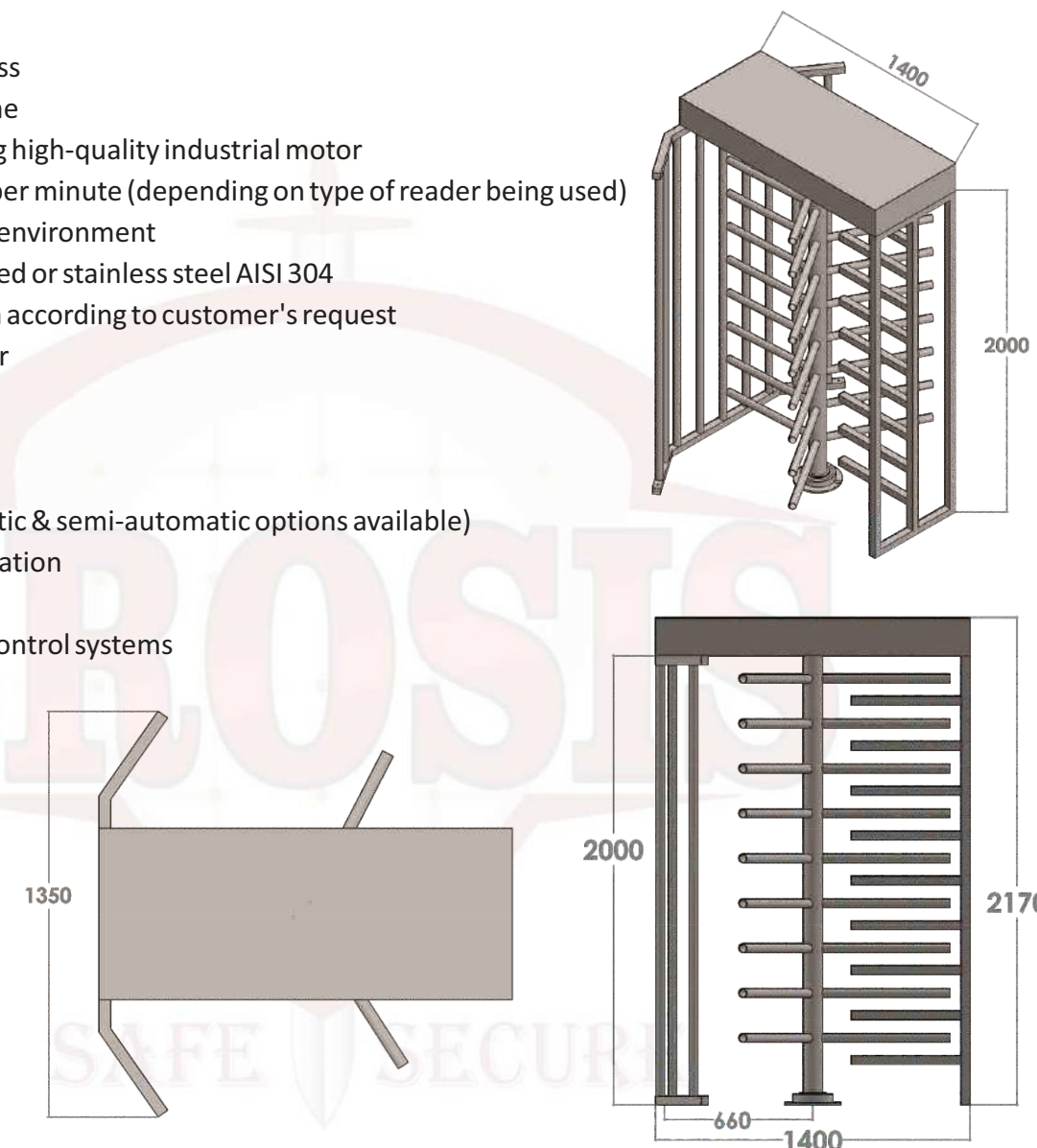
MODEL	BFB 550/900
Material	Housing made of AISI 304 stainless steel (Optional in M.S. powder coating)
Passage width	550 MM (standard), 900 MM available on request (for users on wheel chair)
Power supply	220 VAC $\pm$ 10%, 50/60 Hz
Maximum power consumption	60 W
Opening / closing time	0.8 sec
Maximum flow rate	30 - 40 persons per minute
LED indicator	Yes
Drive unit	Electro - magnetic DC
Dimensions	1400 MM x 280 MM x 985 MM
Duty cycle	100%
Protection rating	IP 44



Brosis BFT 590 is bi-directional full height turnstile designed for intensive pedestrian movement sites such as industrial parks, sports complexes, stadiums, schools & universities, exam halls, factories etc. It consists 3 or 4 arms that rotate to allow only one person to pass per rotation. It can be easily integrate with access control and computer, turnstiles can help to maintain attendance record, entry and exit timings of staff and visitors.

## Special Features

- ◆ Prevents unauthorized access
- ◆ Ensures one passage at a time
- ◆ Powerful drive unit featuring high-quality industrial motor
- ◆ Flow rate ~20–25 passages per minute (depending on type of reader being used)
- ◆ Designed for harsh outdoor environment
- ◆ Available in hot-dip galvanized or stainless steel AISI 304
- ◆ Complimentary color design according to customer's request
- ◆ Durable composite top cover
- ◆ Vandalism-proof design
- ◆ Long service life
- ◆ Smooth and quiet operation
- ◆ Bi-directional (both automatic & semi-automatic options available)
- ◆ Fail-lock or fail-safe configuration
- ◆ Self-centering mechanism
- ◆ Compatible with all access control systems
- ◆ Battery backup (optional)
- ◆ 24/7 continuous operation
- ◆ No staff necessary
- ◆ 100% factory tested



## Technical Specification

MODEL	BFT 590
Material	Housing made of AISI 304 stainless steel (Optional in M.S. powder coating)
Passage width	590 MM
Passage height	2000 MM
Passage lanes	Single or double lane (as per customer requirement)
Power supply	220 VAC $\pm$ 10%, 50/60 Hz
Maximum flow rate	20 - 25 persons per minute (depend on type of reader being used)
LED indicator	Yes
Duty cycle	100%
No. of arms	3 (120°) or 4 (90°)
Operating temperature	- 20°C to +60°C



## Cantilever Sliding Gate



Brosis cantilevered sliding gate system is based on the principles of counter balancing. The gate slides on carriages, which are fixed on a concrete block located on the push back side. According to the opening position of the gate, the carriages are in contact with either the upper or the lower part of the track to ensure a perfect balance.

### Features & Advantages

- ◆ No steel track on the ground.
- ◆ No concrete tie-beam is required to install or support the track.
- ◆ The only construction work consists in the concrete block located on the push back side.
- ◆ No risk of wear or deformation of the track due to the passage of lorries.
- ◆ No risk of ground deformation due to the weather changes.
- ◆ No obstruction of the track trough dust, gravel, stone chips.
- ◆ Polyamide nylon rollers hold the gate vertically and support movement of gate to run in line and reduce noise and vibration during operation.
- ◆ The gate can be installed on a non-stabilized ground (grass, gravel, mould...) and unsealed surfaces, and are extremely reliable.
- ◆ Compared to sliding gates, minimal disruption is caused to the site during installation.
- ◆ They are easier to safeguard when automating and can be set up to completely avoid closing on an obstruction
- ◆ They are aesthetically appealing; their efficient design will impress owners, visitors and customers visiting your property.
- ◆ The gate is available in variable heights, clear opening / widths, in fill types as per requirement.



Actual Site Pictures

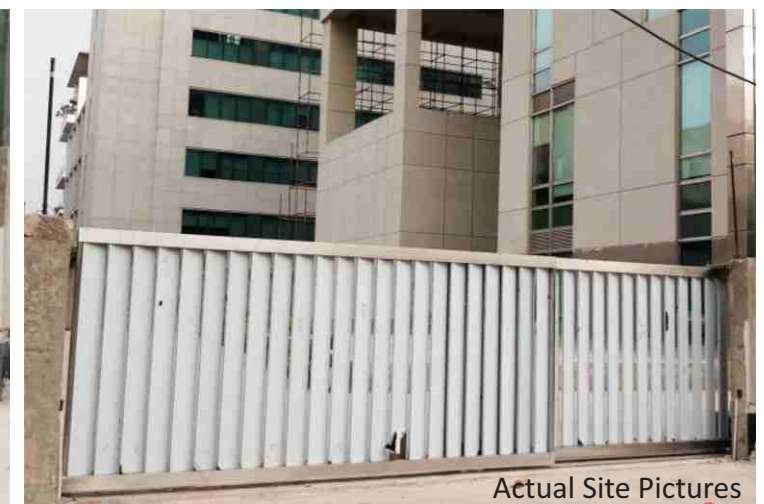
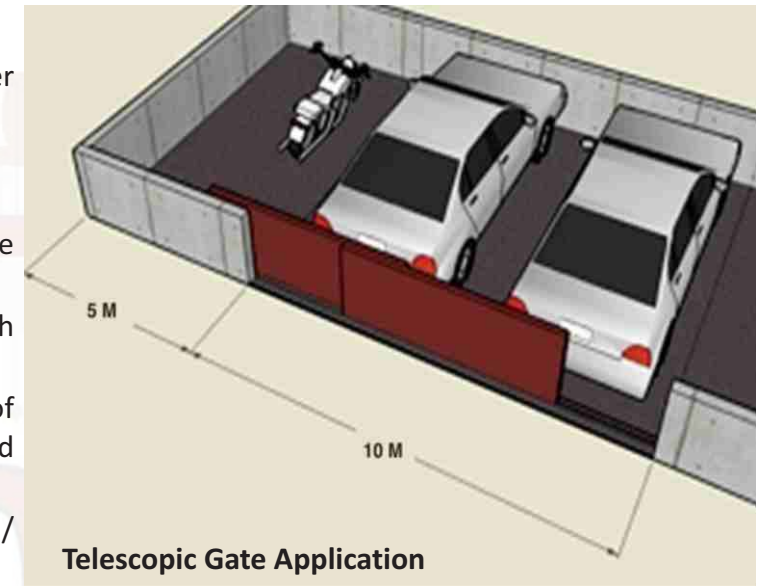


## Telescopic Sliding Gate

Brosis provide options where space is limited and a sliding gates is required .The gates are manufactured so that two or three leafs of sliding gates are installed onto the one side and slide in a staggered format towards the closing position. A telescopic sliding system is the perfect solution for gates where the run-back area is less to install a double swing gate or where the side space is less for a standard sliding gate. Our concept is the easiest and cheapest solution to build a reliable telescopic automatic sliding gate. Telescopic sliding gates use a block and rail guide system, required two tracks and one automatic operator.

### Features & Advantages

- ◆ High opening and closing speed as compared to other sliding gates.
- ◆ Long life with minimum maintenance.
- ◆ Suitable for very large openings.
- ◆ Perfect for the sites where there is little run back space available than opening of gate.
- ◆ Reliable and economical electrical drive units with almost silent operation.
- ◆ Bottom wheels of gate and bottom rail are made of special EN series high quality for good ductility and shock resistance.
- ◆ The gate is available in variable heights, clear opening / widths, infill types as per requirement.



Actual Site Pictures



Automatic Sliding Gate



- ◆ Sliding gate operate on bottom wheels that run on metal track which is concreted into a concrete footing.
- ◆ Wind pressure effect is minimum on these gates due to top and bottom support.
- ◆ Complete driveway space available as the gate slide along the wall.
- ◆ Galvanized heavy duty wheels used which does not require lubrication and nylon roller support kit provided for smooth and sound free operation.
- ◆ German or Italian make automation options available.
- ◆ Hot tempered rail track used for smooth running of wheels.
- ◆ All gates supplied with two coat grey epoxy primer.
- ◆ Available in mild steel, stainless steel and aluminum.
- ◆ A gate may slide to the left or right.
- ◆ Sliding gate operators are available from 600 Kg to 4000 Kg.



Actual Site Pictures

Automatic Swing Gate



- ◆ Swing gates are ideal where driveway access is critical. Swing gates open on their axes so that they swing towards or away from individuals. We manufacture automatic swing gates in architectural / customized designs and are easy to install.
- ◆ These can be manufactured in mild steel, stainless steel, hot dip galvanized steel or cast iron.
- ◆ These are provided with self-locking electromechanical operator or hydraulic operator depend on the weight and size of gate. Ideally our all automatic swing gates are set up on a structural metal frame, good quality pivots (hinges) or wheels.



Swing Gate Motors

Raider 2500

- ◆ Low-voltage, electromechanical operator for swing gates. Residential use.



Technical Specification

Power supply	230 V(AC); 50/60 Hz
Motor power supply	24 Vdc
Absorbed power	100 W
Absorbed current	5 A (max.)
Max. thrust force	2500 N
Piston stroke	400 mm
LINEAR SPEED	16 mm/sec.
Operating temperature	-20°C to +70°C
Max. leaf width without electric lock	1,8 m
Max. leaf width with electric lock	3,0 m
Max. LEAF weight	300 kg (for leaf 3 m), 500 kg (for leaf 2 m)
Anti-crush safety device	Electronic
EMERGENCY RELEASE	Manual
Protection class	IP44

AP350

- ◆ Operator for swing gates. Residential use for wings up to 3m 350Kg.



Technical Specification

Power supply	230 V (AC); 50/60 Hz
Power Input	280 W
Current consumption	1.8 A
Stroke rate	1.8 cm/sec
Maximum stroke length	400 mm
Maximum wing size	3m
Maximum wing weight	350 Kg
Protection rating	IP 44
Thermal protection	150 p
Operating cycles/hr	25
Operating temperature	-20°C to +70°C
Condenser capacity	8 uF
Clutch	Electronic clutch with easy and quick travel adjustment, With possibility to adjust the delay time of the second gate
Engine weight	6 Kg
Control Unit	Microprocessor
Receiver	Built - in 433 Mhz





EM 73N

- ◆ Underground electromechanical operator for swing gates. Residential use.



Main Power Supply	230 V (AC); 50/60 Hz
Motor Power Supply	24 Vdc
Wing Opening Angle	110°, 140°, 180°
Width / Weight	1,8 m / 400 kg, 3,5 m / 200 kg*
Protection Degree	IP67
Absorbed Power	200 W
Absorbed Current	10 A
Nominal Torque	280 Nm
Operating Temperature	-20°C to +70°C
110° Opening Time	20 s
Slowdown	Optional
Weight Operator	9kg

ZT 70

- ◆ Underground swing gate hydraulic operator. Residential and condominium use.



Hydraulic Control Unit ZT 70	B4
Single-phase Power Supply	230 V (AC); 50/60 Hz
Absorbed Power	250 W
Max. Wing Width (m)	2.0
Pump Capacity (Lt/min)	0.6
Protection Degree	IP54
Operating Temperature	-20°C to + 70°C
Max. Operating Pressure	40 Bar
Oil Quantity	1 Lt
Oil Type	Aprim Oil
Weight With Oil	5 kg
JACK	AT 175
Max. Useful Operating Angle	110° max.
Max. Wing Weight	800 kg
Protection Degree	IP67
Angular Pump Speed From 0.6 Lt/min.	6°/s
Angular Pump Speed From 0.75 Lt/min.	7°/s
Nominal Torque	410 Nm
Weight With Oil	12 kg
Oil Quantity	1 Lt
Oil Type	AprimOil



ONDA Series

Gear Motors in 24 V(DC) and 230 V (AC) to automate residential, commercial or industrial gates of all types i.e. conventional sliding gate, cantilever gate or telescopic gate from 400 Kg to 2000 Kg. These motors have built-in electromechanical lock and can be integrated with any access control system. These can be operated with remote control, push button, GSM receiver (for operation through mobile), key switch etc..

DESCRIPTION	ONDA 624	ONDA 800	ONDA 2000
Main Power Supply	230 V (AC); 50/60 Hz	230 V (AC); 50/60 Hz	230 V (AC); 50/60 Hz
Motor Power Supply	24 Vdc		
Max. Wing Weight	600 kg	800 kg (Z16)	2000 kg
Cycle Number	100 cycles/day	100 cycles/day	1000 cycles/day
Protection Degree	IP44	IP44	IP44
Max. Absorbed Power	80 W	260 W	700 W
Max. Thrust Force	650 N	1250 N (Z16)	2570 N (Z16)
Max. Linear Speed	10 m/min	9,5 m/min (Z16)	9,5 m/min
Operating Temperature	-20°C to + 55°C	-20°C to + 70°C	-20°C to + 70°C
Height Of Pinion From Ground	55 mm	70 mm	85MM
Weight Operator	7 Kg	11 Kg	18 Kg

AT Series

Gear Motors in 3 phase for industrial use if gate weight range from 2000 kg to 8000 kg. Intensive use.

DESCRIPTION	AT 88T	AT 90T
Main Power Supply	Three-phase 230/400 V - 50/60 Hz	Three-phase 230/400 V - 50 Hz
Max. Gate Weight	4000 Kg	8000 Kg
Protection Degree	IP44	IP44
Motor Power	0,96 kW	1,5 kW
Max Absorbed Current	2,6 A	3,5 A
No. Of Motor/Pinion Revs g/1'	1400/33	1400/23
Drive Speed m/1'	9	8
Pinion Module	4 mm	5 mm
Operating Temperature	-15°C to + 60°C	-15°C to + 60°C
Lubricant Brand	API DT SINT 320	DTSINT 320
Weight Operator	50 Kg	70 Kg







- ◆ Brosis Garage doors are developed to accommodate automobiles and other vehicles. Garage doors are made in a single panel that tilts up and back across the garage ceiling.
- ◆ The operating mechanism is spring-loaded or counterbalanced to offset the weight of the door and reduce human or motor effort required to operate the door
- ◆ Door with counterweight balancing system. During opening and closing the door can remain completely flush or partially protrude.
- ◆ Doors are manufactured in sectional steel frame clided with-HPL, Wood, ACP in customised designs.
- ◆ Hydraulic operator for up-and-over doors. Residential, condominium and intensive use.

**Maximum anti-crushing safety** thanks to the sensitive edges (optional) combined with maximum pressure relief valves that limit the maximum value of the hydraulic pressure in the presence of obstacles (adjustable during installation).

**Ideal for heavy workloads** in the presence of large-sized up-and-over doors.

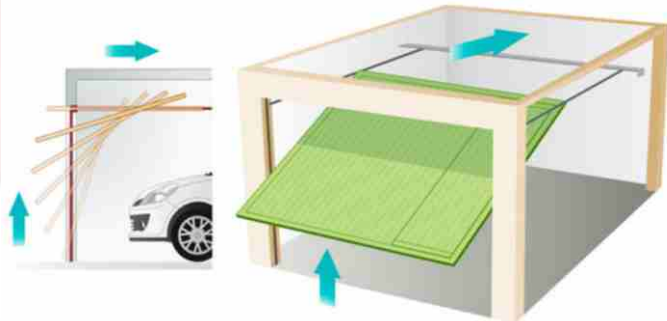
**Locks on opening and closing (double lock)** the door remains shut without installing further locks

**AT 50 can be easily installed** without modifying the up-and-over doors.

**Very high resistance to shocks and stress** during operation thanks to the ductile cast iron body.

**Great hydraulic sealing** thanks to internal scrapers.

**Silent and regular** performance guaranteed by polyurethane seals and P.T:E. guide rings.



Main Power Supply	230 V (AC); 50/60 Hz
Nominal Torque At 40 Bar	320Nm
Sheet Dimension	3,5 x 3 m single motor, 5 x 3 m double motor
Protection Degree	IP54
Absorbed Power	250 W
Nominal Torque at 40 Bar	320 Nm
Operating Temperature	-20°C to + 60°C
Opening Time	13 - 15 sec.
Max. Operating Pressure	40 bar
Pump Capacity	1 Lt/min
Oil Quantity	1,3 Lt
Weight With Oil	13 kg
Oil Type	AprimOil
Slowdown	With T3E unit
Weight Operator	10 Kg



Manage your access control with TOTAL BA

Brosis TOTAL BA is a technical access control tower designed & developed to host the various equipment, control and safety devices, necessary for the operation of retractable barriers.

It allows the integration of control for access management equipment (controller for tag reader, printer, HF receiver etc for barriers like road blockers, bollards and tyre killer, ANPR.

Special features

- ◆ AISI 304 stainless steel or M.S. galvanized epoxy powder coated body
- ◆ Ventilated heating to prevent condensation
- ◆ Removable top part for raising options
- ◆ Locking the door with an anti-vandal lock
- ◆ Protection Rating: IP 67
- ◆ Access control equipment: intercom, camera, badge reader, code keypad, remotes etc.
- ◆ Extension, single or double sided, fixed or adjustable, equipped with a red light or several traffic lights, buzzer, emergency alarm, walkie talkie, controllers, key switch.



Applications Possible with TOTAL BA





Truck Wheel Stopper / Vehicle Restraint

# HALT ST



BROSIS HALT ST represents a new system for safety of vehicles docked at loading bays during loading / unloading operations. Easy to use, BROSIS guarantees a safe and continuous function and is at the forefront when it comes to comply with standards in force. This system consists of a series pneumatically lifted wedges which are placed near the back wheels of the vehicle already in loading/unloading position. This prevents any accidental movement which would create danger for people handling the goods.

Avoid Risk

- ◆ Unexpected departure of the truck
- ◆ Progressive movement of the trailer
- ◆ Unexpected departure of the truck and falling over of the forklift driver. Cause to No communication between the bay operator and the truck driver
- ◆ Progressive movement of the lorry and fall over of the forklift driver

Main Advantages

- ◆ Immobilize all types of trailers
- ◆ Simple and reliable
- ◆ Make the operation automatic
- ◆ Can be installed in any conditions (new building, existing levelers and wheel guides, ...)
- ◆ Simple preventive and curative maintenance
- ◆ Enslavement with the loading bay door.
- ◆ Load capacity - 40 tons.

Operations

- ◆ Principle: loading bay door "open", chocks raised, loading bay door "closed", chocks in lowered position

The Usual Working Procedure

- 1-2. The lorry arrives and reverse over the lowered chocks.
3. The bay operator open the door/barrier lifting up automatically the chocks. The lorry is immobilized.
- 4-5. Once the chocks are raised, the forklift driver is allowed to position the dock leveler. The loading and unloading operations can proceed with minimal risk.
6. At the end of the loading / unloading operation, the dock leveler is retracted.
- 7-8-9. The bay operator close the door / barrier, that lowers the chocks automatically. The chocks, when fully lowered allow the lorry to leave.



RAJA Security Services Ltd. DOMESTIC PURCHASE ORDER

Vendor: M/S BROSIS INTERNATIONAL, 536/25 Block-29, Industrial Area-C, Ludhiana-141010

Buyer: M/S TETRA SCHOOL, 110/110/110, Chandigarh-160004

Item: 01 Electronic Barrier for Passages 1 Nos.

Amount: 11000.00

LETTER OF AWARD

Ref: MAFFFL/PUR/PRO/BOLLARD

M/s BROSIS INTERNATIONAL, 536/25 Block-29, Industrial Area-C, Ludhiana-141010

Supply of 01 Electronic Barrier for Passages

BY REGD POST

सर्वप्रथम सूचित कि माहसिल

1 TETRA SCHOOL, 110/110/110, Chandigarh-160004

PLACEMENT OF SUPPLY ORDER NO. 115/80/16-17 DATED 06 MAY 16

RAJA Security Services Ltd. DOMESTIC PURCHASE ORDER

Vendor: M/S BROSIS INTERNATIONAL, 536/25 Block-29, Industrial Area-C, Ludhiana-141010

Buyer: M/S TETRA SCHOOL, 110/110/110, Chandigarh-160004

Item: 01 Electronic Barrier for Passages 1 Nos.

Amount: 11000.00

LETTER OF AWARD

Ref: MAFFFL/PUR/PRO/BOLLARD

M/s BROSIS INTERNATIONAL, 536/25 Block-29, Industrial Area-C, Ludhiana-141010

Supply of 01 Electronic Barrier for Passages

BY REGD POST

सर्वप्रथम सूचित कि माहसिल

1 TETRA SCHOOL, 110/110/110, Chandigarh-160004

PLACEMENT OF SUPPLY ORDER NO. 115/80/16-17 DATED 06 MAY 16

Northern Railway

128/W/2600/02/17-18/Works

Sub: Providing and fixing Hydraulic Bollards size 226x700 (83 boards 1 set), (K4 Crash rated) under Sr.Den Works.

LETTER OF AWARD

Ref: MAFFFL/PUR/PRO/BOLLARD

M/s BROSIS INTERNATIONAL, 536/25 Block-29, Industrial Area-C, Ludhiana-141010

Supply of 01 Electronic Barrier for Passages

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