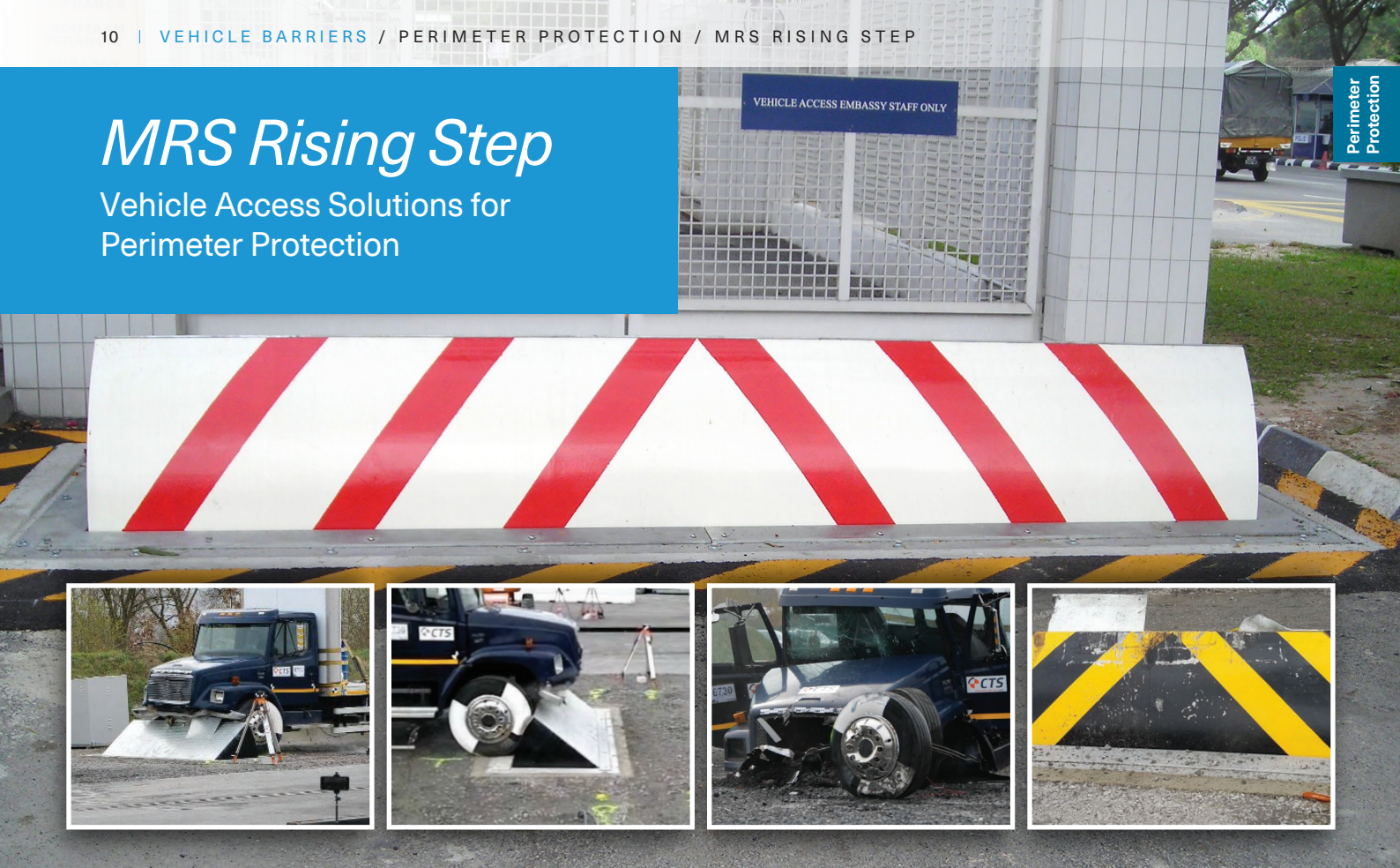


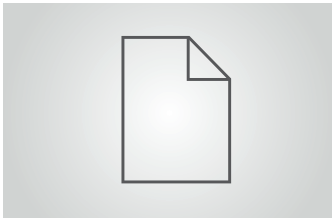
# MRS Rising Step

## Vehicle Access Solutions for Perimeter Protection



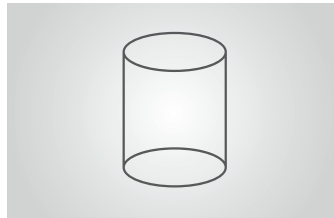
\*For illustration purpose only. Actual product may vary due to product enhancement / customization.

- » The MRS series of Rising Step Barriers are designed to prevent unauthorised vehicles from crashing through controlled entry and exit points.
- » Built for fast reliable and efficient operation, these barriers are capable of withstanding high impact loads and are ideally suited for installation where site security is paramount.
- » Typically installed in high security environments such as correctional facilities and government / military / law enforcement buildings.



### Description

The MRS series of Rising Step Barriers are a high security vehicle barrier that was designed by Magnetic Control Systems is to prevent unauthorized vehicles from crashing through controlled entry and exit points. Built for fast reliable and efficient operation, these barriers are capable of withstanding high impact loads and is ideally suited for installation at military facilities, airports, prisons, police department, bank & warehouse where property protection from unauthorized vehicle entry is necessary. Visual surveillance is recommended during the operation of the barrier.



### Structure

The frame and structure of the Rising Barrier is fabricated from heavy gauge steel fully welded prior to hot dip galvanizing which ensures maximum protection against corrosion. The barrier is hinged on its full length by a continuous stainless steel bar of 76mm diameter. The impact face of the barrier is reinforced with steel ribs and impact plates, which is 8mm thickness to transfer mechanical forces to the required and suitable reinforced concrete foundation. The top cover is made of galvanized steel checker plate which is 8mm thickness mounted on the main frame structure of thick section profiles capable of Axle loading of 15 Tons.



### Technology

The barrier is operated from 2 parallel high speed hydraulic cylinders. A power pack containing an electric-motor-pump assembly and an accumulator is installed adjacent to the barrier in a lockable enclosure. Limit switches provide feed back for the fully up or fully down position of the barrier. Hydraulic energy stored in the accumulator during the rest period powers the step up in the shortest possible time. A safety valve locks the barrier in the "up-(secure) position in case of hydraulic failure or sabotage. Manual hand pump is available.



### The Controller

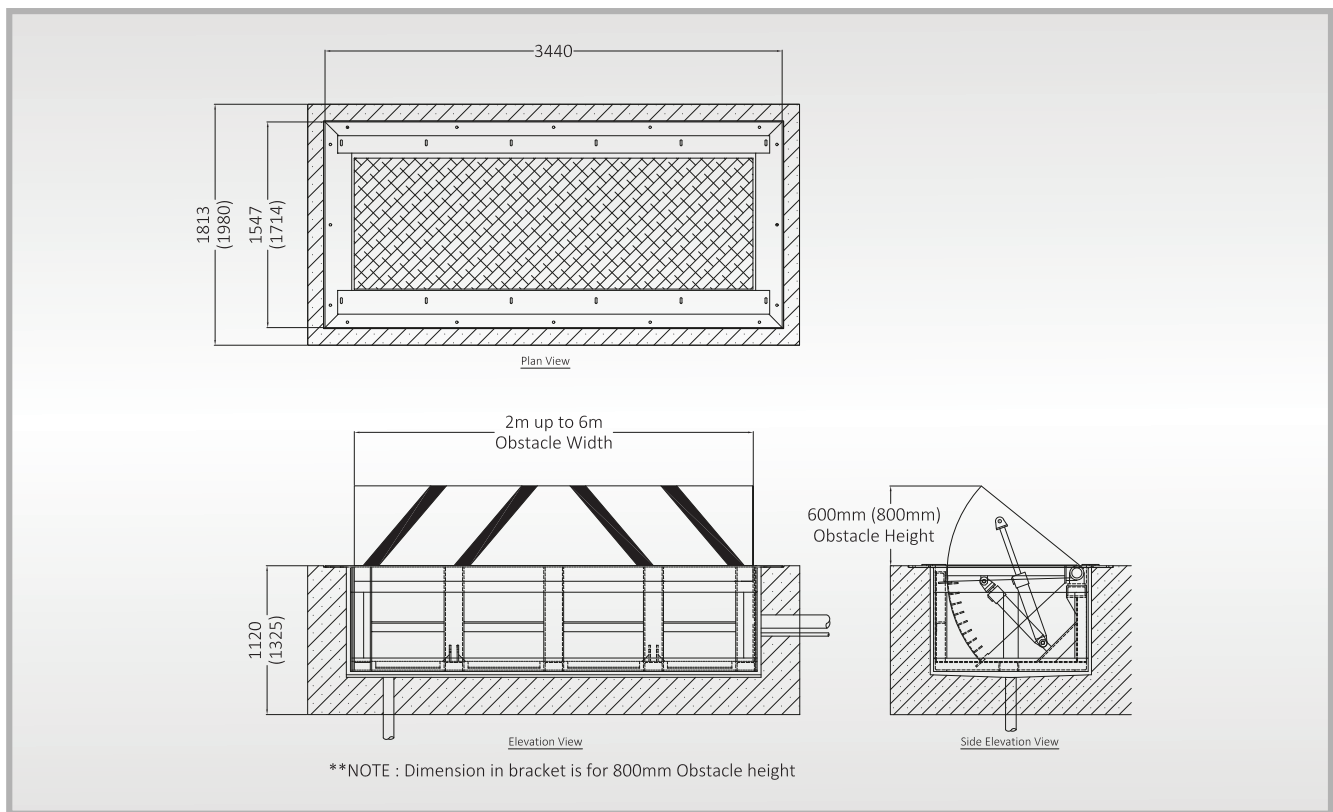
The Magnetic Rising Step is controlled by a controller panel, which consist of programmable logic controller (PLC) is provided with an EEPROM chip or programmer to enable software adaption and interfacing with a variety of remote control devices, security access systems and key card readers. It also integrates the inputs from proximity switch and safety control devices. Outputs are provided for motor drivers, status conditions and warning lights or Traffic Light. Control voltage is 24v DC and the controller is housed in a lockable steel enclosure which is located in the main housing.

Technical Data	Specifications
Open/Close Time	3.5 sec/3.0 sec
Operating Voltage	415 VAC @ 50/60Hz (3 Phase)
Power Pack	Hydraulic System
Controller	Programmable Logic Control
Starting Current	15-18
Operating Current	8-13A
Impact Strength*	6.8 Tons @ 40mph(64kph) only for 3m (L) x 600mm (H) obstacle length
Stopping Distance**	1.01 to 7m
Obstacle Width	2m to 6m
Height of Obstacle (+/-5mm)***	600mm
Structure housing weight****	2500KG @ 3.5mx 600mm
Axle Loading	15 Tons
Manual control in the event of power failure	Manual hand pump
Resistance to impact	ASTM F2656/F2626M-18a (M40)

\* and \*\* No certification

\*\*\*800mm obstacle height not available for 6m obstacle length

**Diagram provided for information purpose only**



**Example Installations**

