

"Curbed" Fixed Vehicle Surface Barrier F10™



Description

The "Curbed" Fixed Vehicle Surface Barrier (VSB) F10™ is a hydraulically-operated, compact, low-profile, high-energy absorbing vehicle security barrier. The physical "footprint" is relatively small and, when installed in high traffic locations, the low profile provides a solid, unobtrusive driving surface. No vehicle barrier on the market today provides more stopping power than the "Curbed" VSB F10™.

- All steel construction, welded and inspected to AWS D1.1
- 2-inch thick, one-piece steel plate wedge
- Wedge height is 39-inches - higher than others for added vehicle capture
- Twenty-seven 4-inch wide solid steel load bearing hinges
- 2-inch diameter load-bearing hinge pin fabricated from high strength steel
- Seven 2-inch thick solid steel load-bearing struts arranged in a progressive energy absorbing system
- Forty 1½-inch diameter high-strength anchor bolts
- 144-inch wide x 96-inch long footprint
- Weight - approximately 12,500 pounds
- Minimum excavation
- Hydraulic cylinder in steel curb above ground
- Hydraulic and electrical systems are highest quality and reliability

Certification

- 15,000-lb. vehicle @ 50 mph (by DOS crash test) - vehicle stopped and destroyed - impact absorbed by primary struts only, secondary struts not engaged - no structural damage - barrier fully operational after impact - received highest DOS crash rating K12/L3.
- 60,000-lb. vehicle @ 50 mph (by analysis) - vehicle would be stopped and destroyed - impact absorbed by primary struts - no significant structural damage - possibly replace primary struts and return to service.
- 80,000-lb. vehicle @ 50 mph (by analysis) - vehicle would be stopped and destroyed - impact absorbed by primary and secondary struts - minor structural damage to replaceable primary struts.

Applications

The "Curbed" VSB F10™ is especially suited for high security locations where below ground, low profile barriers can be installed. Because only minimal excavation is required for installation, high water table, bedrock, or underground cables and pipes generally are not a problem. The "Curbed" VSB F10™ will support normal traffic loadings up to 50,000 lbs. axle weight.

Installation

Because of its unique design, the "Curbed" VSB F10™ can be quickly and easily installed or moved to a new location if a secured roadway is abandoned or redesigned. Installation of the "Curbed" VSB F10™ requires only minor excavation. Because the hydraulic and electrical components are self-contained, it can be installed on practically any surface and does not require expensive site preparation.



Operation

Accepts all optional vehicle detection and warning equipment. Basic or enhanced control system. Normal up in 8 seconds and emergency up in 2 seconds or less. Improved performance is available where required with normal up in 5 seconds or less and emergency up in 1 second or less.

Environmental Considerations

The "Curbed" VSB F10's™ unique self-contained hydraulic system traps fluid to prevent seepage in the event of a system leak. The result is a roadway barrier suitable for use in sensitive environments such as high-water table or porous soil. Biodegradable hydraulic fluids are available.

Maintenance

- Maintenance and repair costs are reduced through the use of highest quality parts and construction
- Available painted or powder coated in over 300 colors, or galvanized

Product Documentation

- Detailed installation, electrical and hydraulic drawings and instructions specific to each customer product
- Crash certification, warranty, and technical specification
- O&M manual
- Spare parts list
- Most parts are off-the-shelf

Ongoing Product Support

- Timely response to customer inquiries
- On-site installation oversight
- On-site maintenance and troubleshooting assistance
- Highly qualified support personnel who hold government security clearances
- Training of customer security and maintenance personnel
- Extended warranties

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