

Delta Scientific Corporation Anti-ram Vehicle Barricades— Second Strike Capability



Stop and Destroy a 65,000lb (29,484 kg) vehicle traveling at 50mph (80kph)



These certified barricades, bollards, gates and beam barricades stop vehicles dead in their tracks. In fact, like the units originally certified at K12 and now tested at K54 (5.4 million foot-pounds),

many will stop much heavier vehicles going faster than the K12 certification standard. This is a quick overview of Our crash-certified systems — more information by contacting us directly.



High-Speed, High-Security Barricade with Minimal Foundation

This high speed, high security, shallow foundation barricade is Our fastest, smallest and shallowest foundation barricade, created especially for high-speed actuation and ease of installation. It is set in a foundation only 10-11 inches (25-28 cm) deep. K12 crash-certified by the U.S. Dept. of State (SD-SDT-02.01 Revision A dated March 2003) with no penetration, it stops a 15,000 pound (69,480 kg) vehicle traveling 50 mph (80 kph) dead in its tracks. And it still continues to operate after a 1.2 million foot pound impact. When an attack is imminent, the barricade rises in less than one-half second (0.500 seconds)!

LEGEND: CERTIFYING AGENCY

ASTM Unified National Barrier Testing Specification	DOS 2 U.S. Department of State [SD-STD-02.01 (APRIL 1985)]	NUREG Nuclear Regulatory Agency
CLASSIFIED (Need to know)	DSC Scientific Corporation—Determined by Dynamic Interactive Analysis/proprietary Finite Element Analysis (Note: DSC ratings are "stop and survive" unless an L value is given)	TSWG Technical Support Working Group
MIL U.S. Department of Defense		USACE U.S. Army Corps of Engineers
DOS 1 U.S. Department of State [SD-STD-02.01 REV A (MARCH 2003)]		USDOE U.S. Department of Energy
		USN U.S. Navy

Phalanx

BARRIER DESIGNATION	DESCRIPTION	ENERGY LEVEL/ PENETRATION RATING	CERTIFYING/ TESTING AGENCY
DSC501-K54 DSC501-RL-K54	Phalanx Barrier— Shallow Frame	K54 K12 K12/L3	TSWG DOS 2 DOS 1 • MIL
DSC2000 DSC2000M DSC2000RL DSC2000M-RL	Phalanx Barrier— Modular Shallow Frame 11.0 in (279mm) Powered or Manual	K12	DOS 1 • MIL
TT207S	Phalanx Barrier— Heavy Duty	K12/L3	DOS 2 • MIL
TT207S/FM	Phalanx—Heavy Duty Surface Mounted Barrier	K12/L3	DOS 2 • MIL
DSC2000-1 DSC2000M-1 DSC2000M-RL-1 DSC2000-RL-1	Phalanx Barrier— Shallow Frame Single Module	K10 K16 K10 K16	DSC • ASTM DSC • ASTM
DSC1100	Portable Phalanx Barrier— Surface Mounted Plate	K8/L1 K4/L2	DOS 2 MIL
DSC900	Portable Phalanx Barrier— Surface Mounted Plate	K8 RD8	USACE DSC
TT201	13" H Phalanx Barrier— Heavy Duty	K8 RD8	DSC
TT207	Phalanx Barrier— Heavy Duty	K8	US DOE (SANDIA)
TW2015	22" H Phalanx Barrier— Surface Mounted Plate	K8	USACE
TW4030	22" H Phalanx Barrier— Surface Mounted Plate	K8	USACE
MP5000	Trailer-Mounted Phalanx Barrier—Surface Mounted	K4/L1	DOS 2 MIL
TT205	Phalanx Barrier— Heavy Duty	D12	DSC
TT224	24" H Phalanx Barrier— Single Lane Modular	D8	USDOE
HTTC45	17" H Spiked Phalanx Barrier	N/D	DSC
TW107	14" Phalanx Barrier— Commercial	N/D	DSC
TW108	24" H Phalanx Barrier— Commercial	N/A	DSC

Gates

SYSTEM/ BARRIER DESIGNATION	DESCRIPTION	ENERGY LEVEL/ PENETRATION RATING	CERTIFYING/ TESTING AGENCY
TT280	Rolling Gate System, EM or Hyd Drive	K12/L3	DOS 2 • DOS 1 MIL
TT281	Rolling Beam Gate, EM or Hyd Drive	K12/L3	USDOE • DOS 1 MIL
TT282	Swing Gate System, EM or Manual	K12/L3	USN MIL
SC3000S	Cable Reinforced Cantilever Gate	NUREG D8.5	USDOE DSC
TT300S	Rolling Gate System, EM or Hyd Drive	NUREG D8.5	USDOE DSC
DSC750SG	Swing Gate System	K12	DOS 1

Bollards

SYSTEM/ BARRIER DESIGNATION	DESCRIPTION	ENERGY LEVEL/ PENETRATION RATING	CERTIFYING/ TESTING AGENCY
DSC720	12.75" Dia. x 35" H Hyd/Pneu Bollard System	KD54 K12/L2	DSC DOS 2 • MIL
DSC720M	12.75" Dia. x 35" H Manual Bollard	KD54 K12/L2	DSC DOS 2 • MIL
DSC720FP	12.75" Dia. x 35" H Fixed Post Bollard	KD54 K12/L2	DSC DOS 2 • MIL
DSC701	12.75" Dia. x 35" H Hyd/Pneu Bollard System	KD54 K8/L2	DSC DOS 2 • MIL
DSC701M	12.75" Dia. x 35" H Manual Bollard	KD54 K8/L2	DSC DOS 2 • MIL
DSC701FP	12.75" Dia. x 35" H Fixed Post Bollard	KD54 K8/L2	DSC DOS 2 • MIL
DSC800	6.6" Dia. x 30" H Hyd/Pneu Bollard System	KD18 K4/L2	DSC DOS 2 • MIL
DSC800M	6.6" Dia. x 30" H Manual Bollard	KD18 K4/L2	DSC DOS 2 • MIL
DSC800FP	6.6" Dia. x 30" H Fixed Post Bollard	KD18 K4/L2	DSC DOS 2 • MIL
TT210	10" Dia. x 30" H Bollard System (Hyd/Pneu)	KD18 K4/L2	DSC DOS 2 • MIL
TT210M	10" Dia. x 30" H Manual Bollard System	KD18 K4/L2	DOS 2 MIL
TT203	8.6" Dia. x 24" H Hyd/Pneu Bollard System	KD18 K8	DSC USACE • NUREG
TT203M	8.6" Dia. x 24" H Manual Bollard System	KD18 K8	DSC USACE • NUREG
DS-22	DOS Fixed Bollard	K12/L3	DOS 2 • MIL

Beam Barricades

SYSTEM/ BARRIER DESIGNATION	DESCRIPTION	ENERGY LEVEL/ PENETRATION RATING	CERTIFYING/ TESTING AGENCY
DSC 7000	High Security (rush drop) (powered or manual)	K12	DOS 2 MIL
DSC 7500	High Security Crash Horizontal Swing (Hydraulic/Manual/ Elect. Mech)	K12	DOS 2 MIL
IP500H	Portable Crash (Hydraulic)	K4/L2	DOS 2 MIL
IP500M	Portable Crash (Manual)	K4/L2	DOS 2 MIL
TT212EC(H)	High Security Crash (Hydraulic)	K4/L2	DOS 2 MIL
TT212EC(M)	High Security Crash (Manual)	K4/L2	DOS 2 MIL
TT218EC	High Security (Horizontal Swing)	K1 /L2	DOS 2 MIL
TT212	Cable Crash (Manual)	K1/L3	USN
TT212H	Cable Crash (Hydraulic)	K1/L3	USN
TT218	Cable Crash (Horizontal Swing)	K1/L3	USN
BB10MS	Hydraulic Cable	K1/L3	USN
TT212EH	High Security Cable Crash (Hydraulic)	NUREG	USACE
TT212EM	High Security Cable Crash (Manual)	NUREG	USACE
TT218E	High Security Cable Crash (Horizontal Swing)	NUREG	USACE



Very High Security Barricade System

Set in a foundation only 18 inches (46cm), the barrier survives and operates after a K54 impact. With its shallow foundation and aesthetic design, it is a major breakthrough in high duty, anti-terrorist barricades, eliminating the concerns of interference with buried pipes, power lines and fiber optic communication lines.

This is our next generation barricade, being selected for embassies, nuclear power plants, MIL, museums and other critical threat locations.

FM Hydraulic Barricade System

The barrier is a 108 inch (2,743mm) moving wedge that is 38 inches (965mm) high. Widths are available up to 240 inches. It is crash rated K12/L3. It lowers to allow the passage of authorized vehicles. These barricades are employed at nuclear facilities, power plants, corporate headquarters and embassies.

The barricade is used for the highest security applications and installs at difficult locations such as parking structure ramps or areas with sub-surface drainage problems. Both shallow foundation or bolt-to-surface versions are available. The barrier is a moving ramp barricade and available in widths up to 240 inches (6,096mm) and 39 inches (991mm) high.



High Security Bollard System

This is the highest crash rated bollard system we sell. Applications include Federal and MIL facilities, embassies and high profile, high-risk clients. Its height is 39 inches and its diameter is 12.75 to 13.25 inches. Speed of operation can be adjusted from 3 to 6 seconds (emergency fast operation of only 2 seconds).

Bollard arrays of 1 to 6 or more can be packaged. The unit can be a hydraulic, pneumatic, manual operation or fixed post bollard and be used with or without a decorative sleeve.



Linear Crash Gate/Swing Crash Gate

This crash gate also withstands the impact of a 15,000 lb. vehicle striking the gate at 50 MPH, suffering no significant damage. It was created for the highest security applications such as embassies, government facilities and corporate headquarters. The gate can be tailored to match the surrounding decor in a wide variety of architectural treatments. This barrier is the swing version of our other crash gate.



For more information on this and other vehicle control systems, contact our sales team.

Complete design, installation & consulting services are available worldwide.