

# HOSTILE VEHICLE SOLUTIONS

Your customers need the correct protective barriers in place to secure their high value locations.

CPSG has the Hostile Vehicle Mitigation/ Anti-Ram products and expertise to assist through the system design, quote and purchase process.

CPSG is more than the nation's largest wholesale distributor, we provide complete solutions. Contact our barrier experts for a free design consultation.

Call or visit our website and sign up for upcoming HVM/Anti-Ram webinars.























# **Types of Crash-Rated Barriers**

## HYDRAULIC & ELECTROMECHANICAL



POP UP WEDGE



- Easy Operation
- · In-ground solution
- · Above ground buttress
- Rapid deployment rate
- Fast Installation
- Flush with roadway when retracted
- · Hydraulic and Electromechanical
- · Sometimes paired with a non-rated barrier arm



**BARRIER ARMS** 



- · Sealed self-contained above ground solution
- · Manual or Automated
- Visual deterrent
- · Fast throughput
- Barrier arm fortified with Kevlar, steel cable, or a steel beam
- · No below ground maintenance required



**ACTIVE/PASSIVE BOLLARDS** 



- Bellow ground foundation
- Above ground barrier
- · Shallow and deep mount options
- May have high installation/labor costs
- Aesthetically pleasing
- · Tested as single, two and three bollard arrays
- Pedestrian friendly
- Fixed and retractable bollards used in conjunction



RISING BARRIERS



- Ideal for large clear openings
- · Flush with grade when retracted
- Steel beam / Steel cabling



**SLIDE & SWING GATES** 



- Above ground solution
- Sliding cantilevered/ V-track or overhead track options
- Decorative infill can be used for aesthetics
- Manual or automated



MODULAR/TEMPORARY



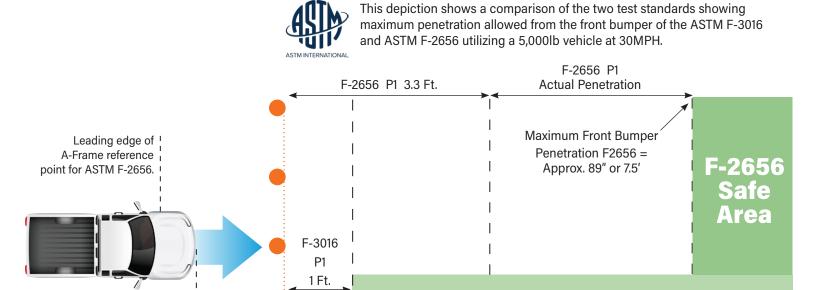
- Fast deployment
- Temporary barrier
- Can be towed into place with a truck
- · Above ground solution
- No excavation required
- · Adjustable clear opening widths

# **Crash Testing Standards**

### ASTM F-2656 and F-3016 Ratings

5,070lb vehicle at 30MPH

Front Bumper is the reference point for ASTM F-3016.



F-3016 Safe Area

Leading edge of vehicle bed reference point for Rating is based on a combination of the speed of the vehicle and how ASTM F-2656. far the leading edge of the vehicle bed penetrated beyond the barrier. M30 (K4) 15,000lb vehicle at 30MPH Penetration up to 98.4' M40 (K8) Penetration up to 23' 15,000lb vehicle at 40MPH **P2** EXAMPLE: M50 P2 Barrier will stop a 15,000lb vehicle traveling 50MPH within 3' - 23' **M50** (K12) 15,000lb vehicle at 50MPH Barrier

Reference point is back side of bollard

### Your ONE Source for Expert Crash Solutions

**Crash is no longer just for government facilities.** The demand for crash, anti-ram, and hostile vehicle mitigation (HVM) products is rapidly multiplying across many more common applications including public spaces, auto dealerships, coffee shops, daycare centers and farmers' markets.

Your customers need the right protective barriers installed to secure their high value locations. CPSG has the Crash/Anti-Ram/HVM products and expertise to guide you through the system design, quote and purchase process. One size does not fit all, and we can evaluate your site specific concerns, and provide solutions tailored to your needs. We can offer cost effective solutions - crash mitigation does not have to break the bank. We understand the products and have the ability to find solutions that work within your budget.

