

QuadGuard™ CZ



Built-in lifting brackets allow the system to be moved as a complete unit.

NCHRP 350, TL-3 Performance In A Portable Crash Cushion For Work Zones

The QuadGuard CZ is an innovative, new crash cushion for work zones. It consists of crushable, energy-absorbing cartridges surrounded by a framework of Energy's exclusive steel Quad-Beam™ panels. The QuadGuard CZ meets all of today's strict crash cushion performance requirements as mandated by NCHRP 350, Test Level 3, and provides the same lifesaving efficiency and features of the permanent QuadGuard System, in a compact, portable unit.

- Redirective and non-gating
- Compact, modular design (3 to 9 bays) accommodates speeds from 70 km/h (45 mph) to 115 km/h (71 mph).
- Quad-Beam panels provide 30% higher beam strength than thrie beam.
- "Staged" cartridge design safely decelerates both light cars and heavier, high center-of-gravity vehicles.
- Monorail base eliminates the need for anchoring chains and tension cable meaning easy installation.
- Self-supporting nose – no legs.
- High 80% reusability after most design impacts.
- Lifting brackets allow easy repositioning as a complete unit.

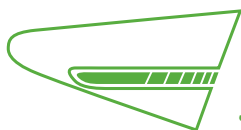


The QuadGuard CZ System has successfully passed the complete test matrix for NCHRP 350, Test Level 3.

Meets NCHRP 350, Test Level 3

The QuadGuard CZ System has successfully passed the complete NCHRP 350, Test Level 3 test matrix for redirective, non-gating attenuators with both the light car and high center-of-gravity pickup truck at speeds up to 100 km/h (62 mph) at angles up to 20P. For higher speed units, contact Energy Absorption Systems.

During head-on impacts, the QuadGuard CZ System telescopes rearward and crushes to absorb the energy of impact. When impacted from the side, the system safely redirects the errant vehicle back toward its original travel path, with no gating.

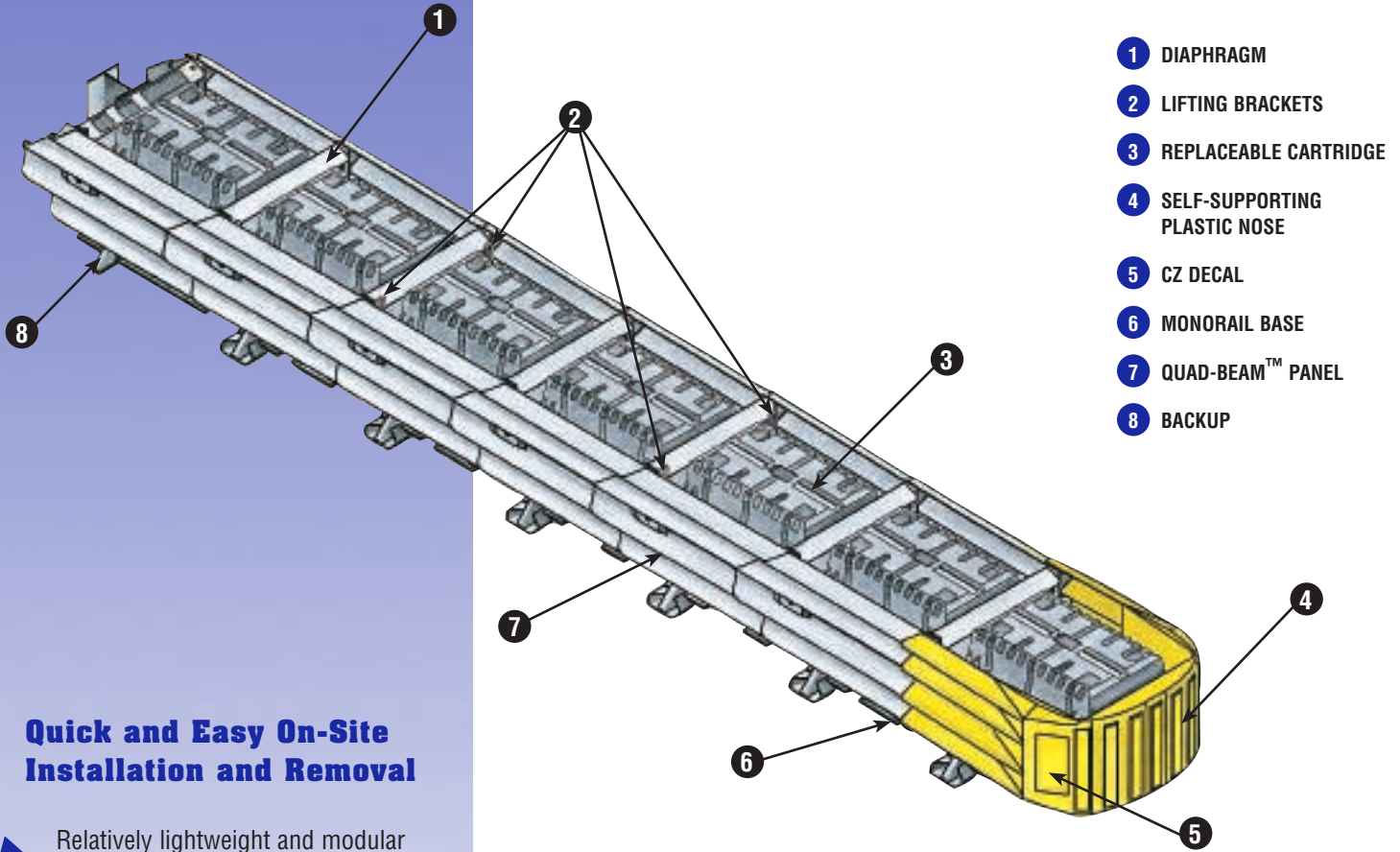


**ENERGY ABSORPTION
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System Diagram



- 1 DIAPHRAGM
- 2 LIFTING BRACKETS
- 3 REPLACEABLE CARTRIDGE
- 4 SELF-SUPPORTING PLASTIC NOSE
- 5 CZ DECAL
- 6 MONORAIL BASE
- 7 QUAD-BEAM™ PANEL
- 8 BACKUP

Quick and Easy On-Site Installation and Removal

- ▶ Relatively lightweight and modular construction.
- ▶ Entire system can be moved as a single unit using lifting brackets on diaphragms.



General Specifications

The following are general specifications for the QuadGuard CZ System. Additional information is available in the Design, Installation and Maintenance Manuals for this system. Contact Energy Absorption Systems, Inc., for details.

Minimum Width at Backup:	610 mm (2 ft)
Maximum Width at Backup:	910 mm (3 ft)
Weight (typical 6-bay unit):	1020 kg (2255 lb)
Length (typical 6-bay unit):	6.4 m (21 ft)



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