

Work Zone (Temporary) installations

[QPL Product Information](#)

ABSORB 350

Purpose: The ABSORB 350 is an end treatment limited to temporary installations for both concrete barrier and the Quickchange Moveable Barrier (QMB).

Description: The system contains water filled Energy Absorbing Elements. Each element is 2 feet wide, 2 feet-8 inches high, and 3 feet-3 ½ inches long.

Functionality: The low speed (below 45 mph) system uses 5 Energy Absorbing Elements and the high-speed (45 mph and above) system uses 8. The energy of an impact is dissipated as the elements are crushed.

Foundation: The system does not require a paved foundation.

Slope: 10H:1V or flatter slope between the edge of the traveled way and the near face of the unit.

Manufacturer/Supplier: [Barrier Systems Inc.](#)

Advanced Dynamic Impact Extension Module 350 (ADIEM 350)

[QPL Product Information](#)

Purpose: The ADIEM 350 is an end treatment for concrete barrier. At this time, it is limited to temporary installations. Existing permanent installations are experimental and are being used to evaluate long-term durability. Existing permanent units may be reset.

Description: The system is 30 feet long and consists of 10 lightweight concrete modules on an inclined base.

Functionality: An inclined base provides a track for placement of the modules and provides redirection for side impacts for roughly half the length. The energy of an impact is dissipated as the concrete modules are crushed.

Foundation: The system does not require a paved foundation.

Slope: If the site has excessive grade or cross slope, additional site preparation or modification to the units in accordance with the manufacturer's literature is required. Excessive is defined as steeper than 8% for the ADIEM 350.

Manufacturer/Supplier: [Trinity Industries, Inc.](#)

QuadGuard CZ

[QPL Product Information](#)

Purpose: This system is like the permanent QuadGuard listed for permanent systems above except that it can be installed on a 6 inch minimum depth asphalt concrete surface that has a 6 inch minimum depth compacted base.

Manufacturer/Supplier: [Energy Absorption Systems](#)

Reusable Energy Absorbing Crash Terminal (REACT 350)

[QPL Product Information](#)

Purpose: The REACT 350 is an end treatment for concrete barriers and is also used for fixed objects up to 9 feet wide.

Description: The system consists of polyethylene cylinders with varying wall thickness, redirecting cables, a steel frame base, and a backup structure.

Functionality: The redirecting cables are anchored in the concrete foundation at the front of the system and in the backup structure at the rear of the system. When hit head-on, the cylinders compress and absorb the impact energy, but the system returns to approximately 80% of its original length immediately. For side impacts, the cables restrain the system enough to prevent penetration and redirect the vehicle. It is anticipated that this system will require very few replacement parts or extensive repair.

Foundation: The system is installed on a concrete foundation.

Slope: If the site has excessive grade or cross slope, additional site preparation or modification to the units in accordance with the manufacturer's literature is required. Excessive is defined as steeper than 8% for the REACT 350.

Manufacturer/Supplier: Energy Absorption Systems: [REACT 350 \(Work Zone\)](#)

Non-Redirecting Energy Absorbing Terminal (N-E-A-T)

[QPL Product Information](#)

Purpose: The N-E-A-T system is an end treatment for temporary concrete barrier where vehicle speeds are 45 mph or less.

Description: The N-E-A-T System's cartridge weighs about 300 pounds and is 9 feet-8 inches long. The system consists of aluminum cells encased in an aluminum shell with steel backup, attachment hardware, and transition panels. It can be attached to the ends of New Jersey shaped portable concrete barrier and the moveable QuickChange Barrier.

Functionality: The energy of an impact is dissipated as the aluminum cells are crushed.

Foundation: The system does not require a paved foundation.

Slope: 10H:1V or flatter slope between the edge of the traveled way and the near face of the unit.

Manufacturer/Supplier: [Energy Absorption Systems](#)



Trinity Attenuating Crash Cushion (TRACC)

[QPL Product Information](#)

Purpose: The TRACC is an end treatment for concrete barriers. It is limited to use in construction or other work zones on a temporary basis.

Description: The 21 foot long TRACC includes four major components: a pair of guidance tracks, an impact sled, intermediate steel frames, and 10 gauge W-beam fender panels.

Functionality: The sled (impact face) is positioned over the upstream end of the guidance tracks and contains a hardened steel blade that cuts the metal plates on the sides of the guidance tracks as it is forced backwards when hit head-on.

Foundation: The system requires a concrete foundation.

Slope: 10H:1V or flatter slope between the edge of the traveled way and the near face of the unit.

Manufacturer/Supplier: [Trinity Industries, Inc](#)

Truck Mounted Attenuators (TMA's)

[QPL Product Information](#)

Purpose: A truck mounted attenuator is a portable impact attenuator attached to the rear of a large truck. The TMA is used as a shield to prevent errant vehicles from entering the work zone. They are most frequently used in short-term or mobile work zones.

Manufacturer/Supplier: Trinity Industries, Inc.: [MPS-350](#)

Manufacturer/Supplier: Energy Absorption Systems: [Alpha 70K](#), [Alpha 60 MD](#), [Alpha 2001 MD](#), [Safe-Stop TMA](#), [Safe-Stop 180](#)

Manufacturer/Supplier: Traffix Devices, Inc.: [The Scorpion](#)

Manufacturer/Supplier: Traffic Maintenance Attenuators, Inc.: [U-MAD 70k](#), [U-MAD 100k](#)

Manufacturer/Supplier: Renco Highway Control Products, Inc.: [Renco Ren-Gard 815](#), [Renco RAM 100K](#)

Triton CET

[QPL Product Information](#)

Purpose: The Triton CET is an end treatment limited to temporary concrete barrier installations.

Description: The system contains water filled Energy Absorbing Elements.

Functionality: The system uses 6 Energy Absorbing Elements. The energy of an impact is dissipated as the elements are crushed.

Foundation: The system does not require a paved foundation.

Slope: 10H:1V or flatter slope between the edge of the traveled way and the near face of the unit.

Manufacturer/Supplier: [Energy Absorption Systems](#)

QUEST

[QPL Product Information](#)

Purpose: The QUEST is an end treatment limited to temporary applications. This system is designed to shield hazards 2 feet or less in width.

Description: The system consists of two front anchor assemblies; a nose assembly containing an integrated trigger assembly; two shaper rail assemblies; a support rail assembly with two energy absorbing tube shapers; a diaphragm assembly; a bridge assembly; two rear rails; a freestanding backup assembly; and W-beam fender panels. Transition panels are required when traffic approaches from the rear of the unit.

Function: During head-on impacts, the Quest system telescopes rearward and energy is absorbed through momentum transfer, friction, and deformation. When impacted from the side, the QUEST System restrains lateral movement by dynamic tension developed between the end restraints.

Foundation: The system is installed on a concrete or asphalt foundation. (See manufacturer's installation requirements for details.) The unit is attached to the road surface with 30 to 34 anchors.

Slope: 12H:1V (8%) or flatter slope between the edge of the traveled way and the near face of the unit is required. In addition, if the slope varies (twists) more than 2% over the length of the system, a concrete leveling pad may be required.

Manufacturer/Supplier: [Energy Absorption Systems](#)