

**For new (permanent) installations**

[QPL Product Information](#)

**Crash Cushion Attenuating Terminal (CAT-350)**

**Purpose:** The CAT-350 is an end treatment for W-beam guardrail. It can also be used for concrete barrier if a transition is provided.

**Description:** The system consists of slotted W-beam guardrail mounted on both sides of breakaway timber posts. Steel sleeves with soil plates hold the timber posts in place.

**Functionality:** When hit head-on, the slotted guardrail is forced over a pin that shears the steel between the slots. This shearing dissipates the energy of the impact.

**Foundation:** Concrete footings or foundations are not required.

**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.](#)

## Brakemaster 350

### [QPL Product Information](#)

**Purpose:** The Brakemaster 350 system is an end treatment for W-beam guardrail. It can also be used for concrete barrier if a transition is provided.

**Description:** The system contains an embedded anchor assembly, W-beam fender panels, transition strap, and diaphragm.

**Functionality:** The system uses a brake and cable device for head-on impacts and for redirection. The cable is embedded in a concrete anchor at the end of the system.

**Foundation:** A concrete foundation is not required for this system but a paved surface is recommended.

**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](#)

## QuadTrend 350

### [QPL Product Information](#)

**Purpose:** The QuadTrend 350 is an end treatment for 2 feet-8 inch high concrete barriers. The system's short length allows it to be used at the ends of bridges where the installation of a beam guardrail transition and terminal is not feasible.

**Description:** This system consists of telescoping quadruple corrugated fender panels mounted on steel breakaway posts.

**Functionality:** Sand-filled boxes attached to the posts dissipate a portion of the energy of an impact. An anchored cable installed behind the fender panels directs the vehicle away from the barrier end.

**Foundation:** The system is installed on a concrete foundation to support the steel posts.

**Slope:** A 6H:1V or flatter slope is required behind the barrier to allow for vehicle recovery.

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

## Universal TAU II

### [QPL Product Information](#)

**Purpose:** The Universal TAU II crash cushion system is an end treatment for concrete barrier, beam guardrail, and fixed objects up to 8 feet wide.

**Description:** The system is made up of independent collapsible bays containing energy absorbing cartridges that are guided and supported during a head-on hit by high strength galvanized steel cables and three beam rail panels. Each bay is composed of overlapping three beam panels on the sides and structural support diaphragms on the ends. Structural support diaphragms are attached to two cables running longitudinally through the system and attached to foundations at each end of the system.

**Functionality:** Overlapping panels, structural support diaphragms, cable supports, cables, and foundation anchors allow the system to resist angled impacts and mitigate head-on impacts.

**Foundation:** The system is installed on 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:** [Barrier Systems Inc.](#) [System Configuration Chart](#)



