As an industry leader in the guardrail and end treatment business, Trinity Highway Products makes certain that several important steps in manufacturing outstanding highway products are taken.

**DEVELOPMENT**
Utilizing a diverse group of outside investors and transportation research institutions and the latest available technology, Trinity Highway Products is able to offer exciting new products, to include energy absorbing devices that are accepted for use worldwide.

**ACCEPTANCE**
By working closely with each state’s Department of Transportation and toll road authority, Trinity Highway Products’ sales and marketing teams are available to aid in the product approval and specification process. Once approved, specified and let, we begin the manufacturing process in one of our several highway safety manufacturing facilities.

**EVALUATION**
Trinity Highway Products uses several independent test facilities to conduct the crash tests for product approval required by the Federal Highway Administration. Each product must meet the requirements of NCHRP-350. Test results are then presented to the Federal Highway Administration for review and acceptance to use on the National Highway System.

**Highway safety concerns are increasing around the world. Every year, more countries make a commitment to improve conditions for their driving public.**

Trinity Highway Products, LLC, headquartered in Dallas, Texas, is a leading manufacturer of highway guardrail, highway guardrail end treatments, temporary and permanent crash cushions, truck-mounted attenuators and cable barrier systems. Offering a full line of standard and proprietary products, Trinity Highway Products is a recognized innovator of highway safety products. Trinity Highway Products manufactures products that have been tested, approved, and accepted as meeting established federal and state safety guidelines.

In fact, all products offered by Trinity Highway Products have been accepted and approved by the Federal Highway Administration as being National Cooperative Highway Research Program Report 350 (NCHRP Report 350) compliant. With all federally funded highway projects, state departments of transportation are required to specify guardrail end treatments, crash cushions and barriers that meet state and federal requirements. Trinity Highway Products innovations that satisfy such requirements include the ET-Plus™ Guardrail End Treatment, Trinity Attenuating Crash Cushion™ Family (TRACC™ Family), Heart Energy Absorbing Reusable Terminal (HEART™) and Cable Safety System (CASS™).
The Trinity Attenuating Crash Cushions™ Family (TRACC™ Family) feature a complete line of re-directive, non-gating crash cushions that are available in a variety of lengths for a variety of highway speeds. The 14'-3" (4.3 m) SHORTRACC™, the 21'-3" (6.5 m) TRACC™, the 26' (7.9 m) FASTRACC™ and the variable width/length WIDETRACC™ come fully assembled for fast and cost-effective installation.

Trinity Highway Products manufactures the TRACC™ Family with galvanized, all-steel construction that reduce concern of product deterioration from the sun’s ultra-violet rays and extends service life with minimal maintenance by end users. Interchangeable components facilitate swift and inexpensive repairs for state and federal departments of transportation.

The TRACC™ Family of crash cushions includes TRACC™, a narrow Test Level 3 cushion; SHORTRACC™, a narrow Test Level 2 cushion; FASTRACC™, a narrow Test Level 3 crash cushion with additional capacity for head-on impacts up to 70 mph (113 kph). The WIDETRACC™ is available in varying lengths, widths and test levels (per design speed). It can be configured for any appropriate wide application.

**Features**
- Galvanized all-steel construction for longer life and durability.
- No cartridges or black boxes.
- Only visual maintenance required unless impacted.
- A variety of backup width options with WIDETRACC™.
- “Wing Extensions”.
- Multiple speed options.
- Fewer anchor bolts than other products.
- NCHRP Report 350 Test Level 2 and Test Level 3 compliant.

**Back-Up Structure Attachments**
- Concrete barrier
- Bridge parapet
- Bridge piers
- Square blocks
- W-Beam
- Thrie-Beam

**Installation and Repair Advantages**
- Can be installed on new or existing concrete or asphalt pad.
- Open design facilitates easy installation, inspection, and repair.
- Units ship fully assembled.
- (can be shipped unassembled upon request)

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>TRACC™</th>
<th>SHORTRACC™</th>
<th>FASTRACC™</th>
<th>WIDETRACC™</th>
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</thead>
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<tr>
<td>21'-3&quot; (6.5 m)</td>
<td>14'-3&quot; (4.3 m)</td>
<td>26' (7.9 m)</td>
<td>21' Long (6.4 m)</td>
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<tr>
<td>24&quot; Wide (610 mm)</td>
<td>24&quot; Wide (610 mm)</td>
<td>24&quot; Wide (610 mm)</td>
<td>50&quot; Wide Standard (1.47 m)</td>
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<td>2200 Lbs. (998 kg)</td>
<td>4000 Lbs. (1814 kg)</td>
<td>3825 Lbs. (1735 kg)</td>
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*Can be customized to protect any width.*
CRASH CUSHIONS

In addition to the TRACC™ Family of crash cushions, Trinity Highway Products offers the ADIEM™, CAT-350™ and HEART™. Each are designed to absorb energy during impact.

SPECIFICATIONS

ADIEM™
- System Length: 30'-0" (9.2m) Base
- System Width: 32" (11.3mm) at Widest Point
- System Height: 28" (712mm) at Nose, 48" (1.2m) at Hazard
- Base Weight: 11,500 lbs. (5216 kilos)

CAT-350™
- System Length: 31'-3" (9.52m)
- System Width: 24" (610mm) Inside
- System Width: 30" (762mm) Outside
- System Height: 27.75" (705mm) Top of Rails
- Total Number of Posts: 6
- Redirective Capability (LCN), Begins at Post 4 from Nose

HEART™
- 26' Long
- 32' High
- 25' - 27' Wide at the diaphragms with a maximum width of 36' between diaphragms 3 and 4.
- 2700 Lbs

CAT-350™ USAGE
- HIGHWAY
- PERMANENT
- UNIDIRECTIONAL TRAFFIC
- BI-DIRECTIONAL TRAFFIC
- BRIDGES/TUNNELS

ADIEM™ USAGE
- HIGHWAY
- WORKZONE
- TEMPORARY
- PERMANENT
- UNIDIRECTIONAL TRAFFIC
- BI-DIRECTIONAL TRAFFIC
- BRIDGES/TUNNELS
- MUNICIPAL/CITY

HEART™ USAGE
- HIGHWAY
- WORKZONE
- TEMPORARY
- PERMANENT
- UNIDIRECTIONAL TRAFFIC
- BI-DIRECTIONAL TRAFFIC
- BRIDGES/TUNNELS

ADIEM™
The Advanced Dynamic Impact Extension Module (ADIEM™) is a cost effective energy-absorbing system that utilizes lightweight, crushable concrete modules. Enhanced coatings and optional covers provide additional protection from the elements.

Features
- No site-specific foundation pad needed. Can be placed on existing surfaces such as concrete, asphalt or compacted soil/base material.
- Composed of three component groups: reinforced concrete base, engineered lightweight concrete modules, and anchor brackets.
- Redirective capability [Beginning Length of Need at 15’ (4.6 m) from nose].
- NCHRP Report 350 Test Level 3 compliant.

Installation and Repair Advantages
- Pinned anchorage allows unit to be moved and relocated quickly.
- All ten lightweight modules are identical in design and composition, requiring no sequence priority when attaching or replacing damaged modules.
- Impact damage to the product is typically confined to the modules making repair a simple process.
- Contains no torque-sensitive bolts.
- No concrete to pour.

HEART™
The HEART™ is a reusable, restorable and non-gating re-directive crash cushion manufactured by Trinity Highway Products, LLC. The HEART™ is compliant with the NCHRP Report 350 TL-3.

The HEART™ uses High Molecular Weight/High Density Polyethylene (HMW/HDPE) side panels and a rounded frontal nose piece, which are connected to steel diaphragms mounted on tubular steel tracks. The HEART’s HMW/HDPE panels and nose reduce lifecycle costs and minimize maintenance.

Features
- Reusable High Molecular/High Density Polyethylene (HMW/HDPE) side panels and a rounded frontal nose piece, which are connected to steel diaphragms mounted on tubular steel tracks. The HEART’s HMW/HDPE panels and nose reduce lifecycle costs and minimize maintenance.

Back-Up Structure Attachments
- Concrete barrier
- Bridge piers
- Bridge parapet
- Square blocks

Installation and Repair Advantages
- Units arrive fully assembled.
- Installs on new or existing concrete pad.
- Open design facilitates easy installation, inspection, and repair.

CAT-350™
The Crash Cushion Attenuating Terminal (CAT™) is an energy-absorbing attenuator available for use where blunt ends of rigid barriers and fixed objects are in the median or on the shoulder.

Features
- CAT™ can be used as a longitudinal barrier end treatment and as a crash cushion either in the median or on the shoulder.
- Various post and post/sleeve options are available.
- Available in weathering steel.
- NCHRP Report 350 Test Level 3 compliant.

Installation and Repair Advantages
- No torque requirements on bolts.
- Requires no concrete pad (can be installed in soil). Foundations and deadmen anchors are not required.
- Material below ground is typically found undamaged after impact, allowing for simple repair and replacement of damaged parts.
INNOVATIVE TRUCK PROTECTION

MPS-350™

The MPS-350™ (Mobile Protection System 350) is available for use on stationary or moving shadow or support vehicles and is the first truck-mounted attenuator to pass NCHRP Report 350 Test Level 3. It has an open design and all-steel construction of functional components. The MPS-350™ design is a new concept that eliminates bulky, crushable cartridges.

Inventive Truck Protection

MPS-350™

Trinity Highway Products

MPS-350™ Truck-Mounted Attenuator offers unique form and function for shadow or support vehicle protection.

USAGE

HIGHWAY • WORKZONE • TEMPORARY • PERMANENT • UNIDIRECTIONAL TRAFFIC • BI-DIRECTIONAL TRAFFIC • BRIDGES/TUNNELS • MUNICIPAL/CITY

SPECIFICATIONS

MPS-350™

• 14’ L (4.30 m) in down position
• 12’ H (3.68 m) when raised
• 6’ (1.83 m) without plastic side panels
• 72” (1.83 m) with plastic side panels
• 1800 lbs. weight (816 kg)

Features

• Open design for easy inspection.
• All-steel construction reduces moisture absorption concern.
• Electric hoist raises frame to traveling position.
• Limit switch for automatic shut-off.
• Adjustable support chains eliminate sagging when unit is in down/horizontal position.
• Automatic safety latch locks frame in traveling position.
• Customized lighting packages available.
• NCHRP Report 350 Test Level 3 compliant, passing both mandatory and optional tests.

Installation and Repair Advantages

• Swivel jacks at side and rear for easy installation and removal.
• Open design facilitates easy repair, keeping all parts within view and reach.
• Operating components are at side and out of the way of the frame.

Usage

Highway • Workzone • Temporary • Permanent • Unidirectional Traffic • Bi-Directional Traffic • Bridges/Tunnels • Municipal/City

Trinity Highway Products

MPS-350™ Truck-Mounted Attenuator offers unique form and function for shadow or support vehicle protection.

SPECIFICATIONS

MPS-350™

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• Operating components are at side and out of the way of the frame.
Trinity Highway Products manufactures a wide variety of end terminals.

**END TERMINALS**

Trinity Highway Products guardrail terminal product line includes a wide variety of end treatments, including the ET-Plus™, Euro-ET™, SRT-350™ family and the WY-BET™ Box Beam End Treatment.

**ET-PLUS™**
The ET-Plus™ is a federally approved, competitively priced, energy-absorbing end treatment. It can be used at the termination of flexible barriers on the shoulder of a roadway or in the median. The ET-Plus™ is a cable-anchored system utilizing standard guardrail components.

**EURO-ET™**
The EURO-ET™ offers specifiers and installers the latest innovation of the world’s leading guardrail end treatment. The European version of the ET-Plus™ meets or exceeds EN 1317-4 P4 criteria. It is uniquely configured to meet European highway safety specifications.

**SRT-350™**
The Slotted Rail Terminal (SRT-350™) is a gating, flared end terminal and is available in a 6-Post and 8-Post System. The SRT/HBA 6-Post System, has 2 steel breakaway posts, 4 wood CRT posts, and is installed in a straight-line flare. The straight-line flare offers a simple layout on new installations. The 6-Post System also has steel breakaway posts that are typically reusable after NCHRP Report 350 criteria impacts. The SRT 8-Post System has 2 tube sleeves/wood posts, 6 wood CRT posts, and installs on a parabolic flare. The parabolic flare has a “footprint” similar to the previously used BCTs and MELTs, making replacement easier. Strategically located slots in the w-beam rail enhance SRT-350™ performance.

**WY-BET™**
The Wyoming Box-beam End Terminal (WY-BET™) uses an oversized outer tube that telescopes over the standard box-beam rail element. When impacted, within NCHRP Report 350 criteria, on the traffic face within the length of need, the terminal functions like the box beam guardrail to contain and redirect the impacting vehicle.

**USAGE**

**HIGHWAY • PERMANENT • UNIDIRECTIONAL TRAFFIC • BI-DIRECTIONAL TRAFFIC • BRIDGES/TUNNELS • MUNICIPAL/CITY**

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**SPECIFICATIONS**

**ET-PLUS™**
- Offset: 0 to 2’ (0-610 mm)
- Length: 25” (642 mm), 37 6” (11.45 m) or 50” (15.24 m)
- Post Spacing: 6’-3” (1905 mm)
- Length of need: 12’6” (3.81 m)

**SRT-350™**
- Offset: 3’0” to 4’0” (915-1220 mm)
- Length: 37’6” (11.43 m)
- Length of need: 12’6” (3.81 m) from the end of the terminal (at the 3rd post)
- Parabolic or straight flare options

**WY-BET™**
- Length: 50’ 0” (15.24 m)
- Post Spacing: 6’ (1.83 m)
- Shoulder and median options

---

**FEATURES**

**ET-PLUS™**
- Tall and narrow extruder head.
- Softer ride down for smaller vehicles.
- Lighter weight head facilitates installation.
- NCHRP Report 350 Test Level 2 and Test Level 3 compliant.
- ET-Plus™ head is sometimes reusable after a NCHRP Report 350 criteria impact.

**EURO-ET™**
- All-steel construction.
- Easy installation.
- ET-Plus™ head is frequently reusable after a design impact.
- EN 1317-4 P4 compliant.
- 12 meter pay length.

**SRT-350™**
- Offset: 3’0” to 4’0” (915-1220 mm)
- Length: 37’6” (11.43 m)
- Length of need: 12’6” (3.81 m)
- Parabolic or straight flare options

**WY-BET™**
- The first tested and approved NCHRP Report 350 end terminal configured for box beam guardrail.
- May be used in both shoulder and median applications.
- NCHRP Report 350 Test Level 3 compliant.

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**INSTALLATION AND REPAIR ADVANTAGES**

**ET-PLUS™**
- 3’0”-4’0” (915 mm-1220 mm) offset results in reduced installation costs.
- Two steel breakaway posts are typically reusable after an impact within NCHRP Report 350 criteria.
- Improved angle struts allow for easier installation.
- Fewer posts and a straight layout provide cost savings in construction, making replacement easier.

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**END TERMINALS**

Trinity Highway Products guardrail terminal product line includes a wide variety of end treatments, including the ET-Plus™, Euro-ET™, SRT-350™ family and the WY-BET™ Box Beam End Treatment.
High Performance, Low Maintenance

Steel Yielding Terminal Post™ (SYTP)

The Steel Yielding Terminal Post™ (SYTP) is an innovative steel post configuration that can be utilized in the ET-Plus™ family of products. The ET-Plus™ with SYTP™ is available in a wide variety of configurations when specifying a 50’ 0” (15.24m) terminal system. The post is made of standard material with special shop-fabricated holes. Upon an impact within NCHRP Report 350 criteria, the post yields allowing the ET-Plus™ head to flatten the rails and absorb some of the energy of the impacting vehicle. SYTP™ is NCHRP Report 350 Test Level 3 compliant.

Features
- Yielding action minimizes roadside debris often found with conventional wood post options.
- Reduction in parts inventory.
- Galvanized steel reduces issues with wood posts caused by weather.
- Recycled steel offers environmentally sound options as compared to chemically treated wood posts.
- NCHRP Report 350 Test Level 3 compliant.

Installation and Repair Advantages
- Can be installed with a standard driving head.
- Fewer parts simplify buying and stocking for repairs.

Product Application
All-steel post option available for use in the ET-Plus™ family of guardrail end treatments.

O-POST™

The O-Post™ is a single ply post that is robust and corrosion resistant, yet incorporates features that facilitate handling and installation.

Features
- Easy to handle; roll-formed shape provides handle-like grip, with no sharp edges.
- 25% lighter in weight than a standard W6x8.5 lb (W150x13) steel post.
- Reinforced bolt hole edge.
- Specialized manufactured for roadway applications.
- Ribs and rolled edges add section strength and increase driveability.
- NCHRP Report 350 Test Level 3 compliant.

Installation and Repair Advantages
- Typically reusable after design impact within NCHRP Report 350 criteria.
- Drivable into most soils.
- Galvanized steel.
- NCHRP Report 350 Test Level 3 compliant.

Product Application
All-steel post option available for use in the ET-Plus™ family of guardrail end treatments.

HBA POST™

Trinity Highway Products’ Hinged Break-Away™ (HBA) post is a two-piece, reusable steel post manufactured to be used with the ET-Plus™ and SRT™ families of products. Upon impact within NCHRP Report 350 criteria, the HBA Post™’s 3/8” bolts shear, allowing the post to hinge and fold over at ground level.

Features
- Can be substituted for wood posts.
- Drivable into most soils.
- Galvanized steel.
- NCHRP Report 350 Test Level 3 compliant.

Installation and Repair Advantages
- Typically reusable after design impact within NCHRP Report 350 criteria.
- The post can be reassembled after design impact within NCHRP Report 350 criteria by pulling it back to the original upright position and replacing the shear bolts.
- HBA Post™ eliminates the need for soil plates and tube sleeves.

Product Application
All-steel post option available for use in the ET-Plus™ family of guardrail end treatments.

Specifications

SYTP™
- W6 x 8.5 lb (W150x13)
- A-36 steel post @ 6’0” (1.83m) in length
- Galvanized per ASTM A-123 with special shop-fabricated yielding holes to be used in any of the 50’ 0”(15.24m) versions of ET-Plus™

O-POST™
- 12 gauge (2.7mm) thickness
- 6’0” (1.83m) in length

HBA POST™
- W6 x 8.5 lb (W150x13)
- Galvanized per ASTM A-123 to be used with ET-Plus™ and SRT™ families of products

Trinity Highway Products manufactures a full range of highway posts, from the Steel Yielding Terminal Post™ to the O-Post™ and Hinged Break-Away Post™. Each model provides distinct advantages for highway use.
INNOVATIVE CABLE SAFETY SYSTEM

CASS™
CASS™ assists in re-directing errant vehicles that would otherwise traverse the median of a roadway. The unique post employs a proprietary wave-shaped slot, which works in tandem with strategically positioned cables to increase the system’s ability to restrain various types of vehicles that impact the system within the criteria of the NCHRP Report 350.

The proprietary shape of the post allows for lower deflections during crash tests by minimizing the length of unsupported cables. Additionally, the widened cable spread works to retain different types of vehicles.

Features
- Three-cable (pre-stretched or standard) high-tension system.
- Wave-shaped slot in post results in lower deflections.
- Pre-stretched (recommended) or standard cables.
- The system is compliant with NCHRP Report 350.
- Aesthetically pleasing design.
- Cables aligned within body of the post.

Installation and Repair Advantages
- Posts can be driven or placed into steel sleeves (in soil, asphalt or concrete).
- Pre-stretched and tensioned cables require no maintenance by end-users.
- Cables provided in convenient pre-assembled 100’ lengths (305 meters).
- No interwoven cables.
- Minimal maintenance and quick repair after impact by end-users.

SPECIFICATIONS

CASS™ (C-Shaped Post)
- Pre-stretched (recommended) or standard cables: 3/4” (19mm)
- Post spacing: 6’6” (2m) to 16’5” (5m)
- C-Shaped post: 2”x4”x10GA
(50mm x 100mm x 4mm)
- NCHRP Report 350 TL-3 and EN-1317 N2 compliant

CASS TL-3™ (I-Beam Post)
- Pre-stretched (recommended) or standard cables: 3/4” (19mm)
- Steel Yielding Cable Post (SYCP): S4 x 7.7# (S100 x 11.5) I-Beam
- Cable heights: 20.9” (530mm), 25.2” (640mm), 29.5” (750mm)
- Post spacing: 6’6” (2m) to 20’ (6.1m)
- NCHRP Report 350 TL3 compliant

CASS TL-4™ (I-Beam Post)
- Pre-stretched (recommended) or standard cables: 3/4” (19mm)
- Steel Yielding Cable Post (SYCP): S4 x 7.7# (S100 x 11.5) I-Beam
- Cable heights: 20.9” (530mm), 29.5” (750mm), 38.1” (970mm)
- Post spacing: 6’6” (2m) to 20’ (6.1m)
- NCHRP Report 350 TL4 compliant

CASS™ is configured for use on medians, shoulders and slopes. CASS™ can also be custom-tailored by end-users for appropriate deflections via variable post spacing.
Trinity Highway Products’ proprietary T-31 Guardrail™ is a strong post w-beam system that has been successfully crash-tested and accepted by the Federal Highway Administration (FHWA) to both NCHRP Report 350 TL-3 and the FHWA proposed “350 update” criteria. In the 31” system height, the w-beam attaches directly to Steel Yielding Line Posts (SYLP) eliminating the need for offset blocks.

Features
- Strong posts with weakening holes at the ground line.
- No offset blocks required.
- Countersunk-Head Bolts and Flange Protectors.
- Mid-span splices between adjacent posts.
- NCHRP Report 350 TL3 compliant.
- Meets the proposed “350 update” criteria.
- Reduced site grading by eliminating spacer block.
- Single-face or Double-Face (median) application.

The T-31 Guardrail™ is a strong post w-beam system that has been successfully crash-tested with the heavier pickup truck detailed by the FHWA proposed NCHRP “350 update” criteria, as well as to NCHRP Report 350 TL4. In the 39” system height, the thrie-beam attaches directly to Steel Yielding Line Posts (SYLP) eliminating the need for offset blocks.

Features
- Strong posts with weakening holes at the ground line.
- No offset blocks required.
- Countersunk-Head Bolts and Flange Protectors.
- Mid-span splices between adjacent posts.
- NCHRP Report 350 TL3 compliant.
- Meets the proposed “350 update” criteria.
- Reduced site grading by eliminating spacer block.
- Single-face or Double-Face (median) application.

Once installed, these blocks maintain original size, vastly reducing the need for tightening guardrail bolts due to shrinkage often found with wood blocks.

KING BLOCK™

Features
- Self-hanging fingers.
- Self-aligning side rails.
- Light weight – only 8 lbs. (3.6 kg) for W-beam, 12 lbs. (5.5 kg) for Thrie-Beam.
- Bottom tab supports rail during installation.
- Block is considered a “green” product, environmentally safe and recyclable.
- Molded product reduces inconsistencies sometimes seen in wood blockouts
- NCHRP Report 350 Test Level 3 compliant.

Installation and Repair Advantages
- Self-hanging fingers minimize the need for assistance by end-users during installation.
- Self-aligning side rails help hold block in place and minimize spinning.
- Narrower width allows easier access to bolts at splices.

KING-SIZE KING BLOCK™

The King Block™ is used for W-Beam Installations, and the King-Size King Block™ is used for Thrie-Beam Installations.

SPECIFICATIONS

KING BLOCK™

- King block™ – 4”W x 14”L x 7.5”D, 8 lbs. (100mm x 350mm x 190.5mm), 3.6 kg
- King-Sized King Block™ – 4”W x 22”L x 7.5”D, 12 lbs. (100mm x 560mm x 190.5mm), 5.5 kg

T-31 GUARDRAIL™

- Standard w-beam guardrail
- Steel Yielding Line Posts (SYLP): W6x8.5x6” (W150x12.6x1.83m)
- W-beam guardrail height: 31” (790mm)
- Post spacing: 6’3” (1.9m)
- 5/8”x1 3/4” (16mmx45mm)
- Countersunk Head Bolts
- W-beam Flange Protector at each post

T-39 GUARDRAIL™

- Standard thrie-beam guardrail
- Steel Yielding Line Posts (SYLP): W6x8.5x6” (W150x12.6x1.83m)
- Thrie-beam guardrail height: 39” (990mm)
- Post spacing: 6’3” (1.9m)
- 5/8”x1 3/4” (16mmx45mm)
- Countersunk Head Bolts
- W-beam Flange Protector at each post

The King Block™ is a composite, polyethylene/crumb rubber block made fully from recycled materials. It can be substituted for wood or steel blocks on steel posts by end-users.

SPECIFICATIONS

KING BLOCK™

- King block™ – 4”W x 14”L x 7.5”D, 8 lbs. (100mm x 350mm x 190.5mm), 3.6 kg
- King-Sized King Block™ – 4”W x 22”L x 7.5”D, 12 lbs. (100mm x 560mm x 190.5mm), 5.5 kg

The King Block™ is used for W-Beam Installations, and the King-Size King Block™ is used for Thrie-Beam Installations.

T-39 GUARDRAIL™

- Standard thrie-beam guardrail
- Steel Yielding Line Posts (SYLP): W6x8.5x6” (W150x12.6x1.83m)
- Thrie-beam guardrail height: 39” (990mm)
- Post spacing: 6’3” (1.9m)
- 5/8”x1 3/4” (16mmx45mm)
- Countersunk Head Bolts
- W-beam Flange Protector at each post
GUARDRAIL

W-BEAM RAIL

NOMINAL WEIGHT

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W-Beam & Thrie-Beam Rail End Sections

Components are available in 12 gauge or 10 gauge as required (except where noted).

Finish is available either hot dip galvanized or weathering steel.
GUARDRAIL

RADIUS RAIL INFORMATION

Rail sections specified to be installed on curves having a radius of 5 feet (1.5m) to 150 feet (45.7m) can be curved in our fabricating facilities prior to delivery.

Rail can be curved either convex or concave as required. Terms convex or concave refer to the direction curved, outward or inward, relative to the traffic face of the rail.

TO FIND THE RADIUS FOR A CURVED RAIL:

STEP 1: Starting at the last post in the straight run (point A), lay cloth tape along the path that the curved guard rail will follow.

STEP 2: Mark-off two points along the curved cloth tape: One at 6'3”, pull string directly from starting point (point A) to the second mark-off point (point B). Measure from the first mark-off point (point B) over to the second mark-off point (point C).

STEP 3: Pull string directly from starting point (point A) to the second mark-off point (point C).

STEP 4: Measure from the first mark-off point (point B) over to the mid-point of the taut string. This measurement (D) is the Rise.

STEP 5: Check the chart to find the Radius (R), given the Rise (D). Example: a Rise of 4 inches (102 mm) would result in a radius of 60 feet (18.3 m).

The diagrams & chart provide data for locating posts and curves. For assistance, please contact our Sales Offices.

Rise (D) (inches) | Radius (R) (feet) | Rise (D) (m) | Radius (R) (m)
--- | --- | --- | ---
41 | 5 | 1041 | 1.5
36 | 6 | 914 | 1.8
28 | 8 | 711 | 2.4
26 | 9 | 660 | 2.7
22 | 10 | 559 | 3.1
20 | 12 | 500 | 3.7
18 | 13 | 457 | 4.0
16 | 15 | 406 | 4.6
14 | 16 | 356 | 4.9
11 1/2 | 20 | 295 | 6.1
9 1/2 | 25 | 221 | 7.6
7 1/2 | 30 | 197 | 9.1
6 1/2 | 35 | 171 | 10.7
6 | 40 | 152 | 12.2
5 1/4 | 45 | 133 | 13.7
4 1/4 | 50 | 117 | 15.2
4 | 55 | 108 | 16.8
3 3/4 | 60 | 102 | 18.3
3 1/2 | 65 | 92 | 19.8
3 1/4 | 70 | 86 | 21.3
3 | 75 | 83 | 22.9
2 3/4 | 80 | 76 | 24.4
2 1/2 | 85 | 70 | 25.9
2 1/4 | 90 | 67 | 27.4
2 | 95 | 64 | 29.0
1 3/4 | 100 | 60 | 30.5
1 1/2 | 105 | 56 | 32.1
1 1/4 | 110 | 51 | 33.6
1 | 115 | 46 | 35.1
1 1/8 | 120 | 41 | 36.6
1 1/16 | 125 | 36 | 38.1
1 1/8 | 130 | 31 | 40.6
1/4 | 140 | 24 | 42.7
1/4 | 150 | 36 | 45.7

W-BEAM POST SYSTEMS

King Block™ (one required)

Wood Block (one required)

Post Bolt (one required)

Post Bolt (one required)

Post Bolt (one required)

STRONG POST WITH KING BLOCK™

STRONG POST WITH WOOD BLOCK

WEAK POST

THRIE BEAM POST SYSTEMS

Post Bolt (two required)

Post Bolt (two required)

Post Bolt (one required)

Post Bolt (one required)

Post Bolt (one required)

Post Bolt (one required)

STEEL BLOCK (TEST LEVEL 4)

POSTS

Post W6 x 8.5 (W150 x 12.6)

Post W6 x 8.5 (W150 x 12.6)

Post W6 x 8.5 (W150 x 12.6)

Post W6 x 8.5 (W150 x 12.6)

Post W6 x 8.5 (W150 x 12.6)

Post W6 x 8.5 (W150 x 12.6)
SALES CONTACTS

Principal Place of Business
2525 N. Stemmons Freeway
Dallas, TX 75207
800-527-6050
Domestic 800-644-7976
International +1-214-589-8140

DALLAS, TX
2525 Stemmons Freeway
Dallas, TX 75207
800-527-6050
214-589-8423 (Fax)
Sales for Arizona, Arkansas,
Colorado, Iowa, Kansas, Louisiana,
Missouri, Nebraska, New Mexico,
Oklahoma, Texas, International-
Puerto Rico

ORANGEBURG, SC
600 Prosperity Road
Orangeburg, SC 29115
800-835-9307
801-292-2145 (Fax)
Sales for District of Columbia,
Maryland, New Jersey, New York,
North Carolina, Pennsylvania,
South Carolina, Virginia

GIRARD, OH
1150 N. State Street
Girard, OH 44420
800-321-2755
330-545-3718 (Fax)
Sales for Canada, Connecticut,
Delaware, Maine, Massachusetts,
Michigan, New Hampshire,
Ohio (North), Pennsylvania,
Rhode Island, Vermont

CENTERVILLE, UT
950 West 600 South
Centerville, UT 84014
800-772-7976
801-292-2145 (Fax)
Sales for Alaska, California, Hawaii,
Idaho, Montana, Nevada, North
Dakota, Oregon, South Dakota,
Utah, Washington, Wyoming

ELIZABETHTOWN, KY
655 East Dixie Avenue
Elizabethtown, KY 42701
800-282-7668
270-234-9433 (Fax)
Sales for Alabama, Florida,
Georgia, Illinois, Indiana, Kentucky,
Minnesota, Mississippi, Ohio (South),
Tennessee, West Virginia,
Wisconsin

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