

39% of facility damages occured to telecommunication utilities

-DIRT Report

EXPERTISE · INNOVATIONS · SOLUTIONS



FIBER OPTIC PROTECTION Product Catalog





Permanent Marking



Before we answer the question "How should we mark our cables?," we like to point out why we are marking cables in the first place.

Cable markers are installed to warn potential excavators of the presence and approximate location of buried fiber lines. They are a reminder to the excavator at the point of contact that he/she must submit a locate ticket for the required amount of time before digging.



25%

of hits and near misses are caused by failure to request a locate

By contacting 811, excavators have less than a 1% likelihood of being involved in a damage event

A fiber optic cable that served the data center for a major airline was severed in Tempe, AZ resulting in hundreds of grounded flights, thousands of passengers stranded and millions of dollars in lost revenue



TriView® Post



Durable ©

- RhinoPoly construction allows the post to bend and rebound when struck from any direction at speeds up to 55 MPH
- Remains flexible in temperatures ranging from -40° to 150°F
- UV stable



Visible

• Patented triangular design allows for three readable warning messages per post, providing 360° visibility without added cost



Unique Design/

- TriView posts can be used as a standalone marker or to permanently remark or retrofit old/outdated posts
- Flat surfaces allow for easy sign attachment, providing a truly flexible marker even during high winds
- Color-coded sleeves and caps available upon request





Optional Add-Ons Reflective bands

- Custom decals (see page 12)
- RhinoPoly® Signs (see page 13)



Visible

With a larger profile than the TriView, the TriView 400 provides a more visible warning message on each surface



- Retrofit faded fiberglass or old metal posts
- Provide a more visible warning message

Installation 🛎

- Bury It Patented TriGrip™ Anchor System locks the post into the ground in multiple soil conditions
- 1. Simply pull out the TriGrip Anchor
- 2. Bury the Tri View 18" deep and backfill
- Slide It Designed to easily slide over metal, u-channel or faded fiberglass posts
 - Place the TriView 400 over old or faded fiberglass or metal posts
 - Secure at base with a screw or fastener if installing over u-channel post *Screw / fastener not included



TriView PLUS™

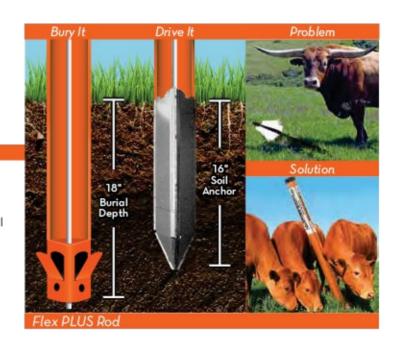




- The addition of the Flex PLUS™
 Rod helps the TriView rebound to
 standing when cattle or other wildlife
 use the marker as a scratching post
- · Will snap back when laid or stepped on
- Easily withstands direct impacts from off-road vehicles that may be using the ROW

Installation 🛎

- · Bury I
- 1. Pull out the TriGrip Anchor
- 2. Insert the Flex PLUS Rod inside
- 3. Bury the TriView 18" deep and backfill
- Drive It
- Drive TriView Soil Anchor into the ground using the anchor driver
- Insert the Flex PLUS Rod inside the TriView
- Slide TriView with rod into the anchor to lock in place



Hybrid 3-Rail™



Durable 🖑



· Withstands direct tire impacts that would leave traditional fiberglass posts cracked or broken UV stable

Visible

• Accommodates all standard decals Call for standard and custom post color offerings



- · Composed of a special blend of thermoplastics, quaranteeing the post will never suffer from fiberbloom
- The slightly curved 4" wide design allows the post to be driven into the ground in hard or rocky soil without the tip rounding off









• Recommended in areas where vehicle impacts are an issue



• Drive post to a minimum depth of 18" using the Hybrid Driver (pg. 20)

Fiberglass Posts



Durable

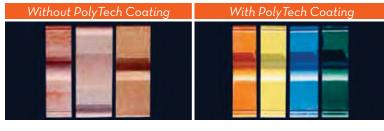
- Can withstand extreme temperatures
- UV stable
- Comes standard with SunCoat™ UV inhibitors

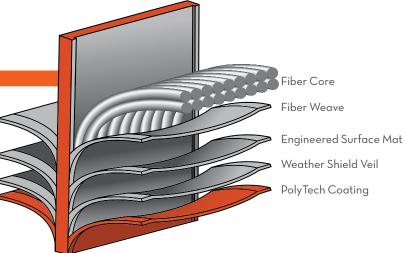
**Unique Design

· Rugged and lightweight, fiber reinforced composite posts will not rust, rot or corrode

Optional Add-Ons

- Patented PolyTech Coating greatly extends the life of the post and dramatically reduces fading while significantly blocking UV light from reaching the fiberglass core of the post for at least 10 years
- PolyTech Coating helps protect against fiberbloom that creates damaging glass slivers leaving posts faded and bristled





HideOut™





- · Made of RhinoPoly that can withstand temperatures from -40° to 150°F
- Helps eliminate interference with mowers
- · Impact resistant
- · UV stable / fade resistant

Unique Design)



- · Allows for easy access to wires when attached to the sliding terminal board
- Comes standard with 2 internal terminals, a lock and an integrated steel plate beneath the cap for locating ease
- · Comes punched with a TriGrip™ Anchor allowing it to lock into the ground in varying soil conditions
- · Comes with a standard warning legend (custom options available; call for details)

Visible 🕠

· 7" round cap provides a highly visible, low profile warning message

Optional Add-Ons 🕇

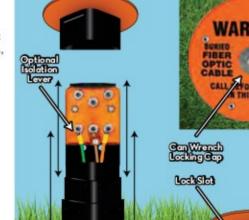
 Grounded LocatePlate™, Isolation Lever™ or additional terminals

See hardware options on pg. 19 for details

Installation

- · Pull out the TriGrip Anchor
- · Place the Hide Out 24" belowground while running tracer wire through the HideOut
- · Connect tracer wire to terminals, lock cap and backfill
- *Do not use solid 6-gauge wire







Installation Tools

EZ Auger

Design Design

 Designed to be a faster, more efficient way to create holes for both the TriView and dome-style posts



- TriView post installation
- Dome or bullet-style post installation
- HideOut[™] installation



• Twist the auger clockwise to create a 6" diameter hole

TriView® Anchor Driver



• Designed to install the TriView Soil



• When installing TriView posts into hard or rocky soil



- Place soil anchor in ground
- Remove transport pin on tool and position over anchor
- Drive anchor into ground by raising and dropping the slide hammer until anchor is flush with ground
- Insert TriView post into anchor and pull up to lock in place



Flat Post Driver



· Flat fiberglass post installation



- Place pointed end of post on ground and slide Flat Post Driver over post
- Slide driver up and down with foot braced against bottom of post to control buckling until burial depth is reached

Hybrid Driver



Hybrid post installation



- Place pointed end of post on ground and slide Hybrid Driver over post
- Slide driver up and down with foot braced against bottom of post to control buckling until burial depth is reached



Installation Tools

Pilot Hole Driver



· Designed to break up hard ground



- Flat post installation
- Hybrid post installation



- · Place driver spade on the ground
- · Raise and lower slide hammer to make a hole

U-Channel Post Driver



- U-Channel post installation
- Metal post installation

- Place driver over metal or u-channel post
- · Raise and lower until burial depth of post is reached

Only works for 1.12lb u-channel posts



Pedestals & **Vault Markers**

PolyTech™ 360° Pedestal Marker



• The fiberglass core provides strength and flexibility which allows the marker to withstand repeated bending and flexing



O Visible

• The 360° design increases pedestal visibility and ensures your warning message can be seen from any direction



Design

• The rod is made of a weather resistant round composite that allows for quick replacement and repair



🟲 Optional Add-Ons

· Shown with optional reflective bands

PolyTech™ 360° Vault Marker

Visible 📆

· Eases handhole and vault locating when tall, overgrown grass or snow can be a problem

Unique Design /

- Bracket is composed of powder coated black steel, including a hex
- The rod is made of a weather resistant round composite that allows for quick replacement and

Optional Add-Ons 🛨

• Reflective bands



- · Bolt bracket to handhole or vault
- · Slide PolyTech 360° Rod into bracket
- Twist screw into rod until tight





Bracket and rod can be purchased separately

Surface Markers

A-Tag™





Durable

- A-Tags are slightly recessed so even snowplows will not destroy them
- UV stable



Brightly colored

New Construction Tag

Unique Design

 Warning message molded right into the tag and cannot be removed (32 character max for outer ring)



charges)

• Patch identification including contractor ID and patch completion year

· Can be customized to include company name,

 One-time engraving charge applies for custom inserts (outer ring and center ring are separate and require separate engraving

Customizable ▼▲▼▲

phone number or unique message

• To identify buried valves, splices or repairs



Installation (

New Construction

Place A-Tag into fresh concrete or asphalt and push down so it is slightly recessed

· Retrofit

Drill a hole with a carbide tipped A-Tag drill bit and glue A-Tag in place

When either version is installed, locators will only need to use a small amount of paint to verify the location of the cable

das CurbMarkers®







Ourable)

- UV stable
- Used since 1983, an independent lab test proved the marker had little fading after the equivalent of 30 years outdoor use

Installation

- Standard das Adhesive™ requires no mixing
- Apply adhesive to back of marker and stick to the curb
- Once adhesive cures, it will take a hammer and chisel to remove

▼▲▼ Customizable

• Markers with different shapes and sizes are available; call for details



 Used as a permanent warning message on curbs, leaving a clean and professional message notifying homeowners, contractors and other excavators that there are cables in the area



Surface Markers

400 Series SoilMarker™

Marker installs in soil only. Cannot be used in asphalt or pavement.



Durable I

- · Composed of RhinoPoly preventing cracking, breaking or significant fading for at least 10 years
- · Marker can be mowed over
- UV stable



- This brightly colored, one-piece design has a 4" surface and an 8" stake
- The warning message is permanently molded into the marker



proposed digging areas

barbed stake

drops, etc.

unsightly signs

•Use a large screwdriver to create a pilot hole

• Temporary marking-available without a

• Permanent marking-identifying sewer

laterals, sprinkler lines, gas distribution

lines, stub ends, survey markers, service

not tolerate upright marker posts or

· White markers can be used to identify

· Lower profile marker used to identify buried facilities in areas where homeowners will

• Center the marker over the pilot hole and drive into the soil until flush



Available with or without barbed stake

Customizable ▼▲▼▲

· Custom warning legends available; call for details



IN THIS AREA

700 Series SoilMarker™

Marker installs in soil only. Cannot be used in asphalt or pavement.

Durable

- · Composed of RhinoPoly which prevents cracking, breaking or significant fading for at least 10 years
- Marker can be mowed over
- · Used for over 15 years in residential and commercial settings
- Tested by in-house and 3rd party labs
- UV stable

Unique Design

- This brightly colored, two-piece design has a 7" surface and a 13" stake
- The warning message is permanently hot stamped into the marker
- Rolled-edge design of the disk helps lock the marker in place

Customizable ▼▲▼▲

· Custom warning legends available; call for details



• Lower profile marker used to identify buried facilities in areas where homeowners will not tolerate upright marker posts or unsightly signs

Optional Add-Ons



- Add terminals to the SoilMarker for easy access to tracer wire
- · Add a metal disc to make the SoilMarker locatable

Installation

- •Use a large screwdriver to create a pilot hole
- Place the stake in the disk, center the marker over the pilot hole and drive into the soil until flush with top of ground

HIT Kit

Unique Design • 1 marker post with 2-7/8" x 14" bold "MARK" legend • 1 marker post with 2-7/8" x 14" bold "DAMAGE" legend · Ruler with documentation guidelines on the back • 2 marker post bases 4 spikes · Durable carrying bag





Optional Dry Erase Board Kit

Unique Design

- 3 marker posts with 2-7/8" x 14" bold "MARK" legend
- 1 marker post with 2-7/8" x 14" bold "DAMAGE" legend
- Ruler with documentation guidelines on

Uses 👸

- Helps record damage to buried utilities with a distance perspective that tells the whole story
- Provides the tools to photograph damages in a consistent, clear way which translates into reduced cost and litigation
- · When damages are documented, one of the key objectives is to show how far the damage is from the marks, but often times it is not easy to determine from photographs alone; that's where the HIT Kit comes in

Optional Add-Ons



- Dry Erase Board Kit: Capture all vital information in your photos using captions; all you have
- French or Spanish language postsMetric ruler, 1-meter4' hinged ruler

Special Add-On

HIT Kit or HIT Kit +2 and Damage **Investigation Training Video**

the HIT Kit how to take good photos, drawings and more



• Additional posts are important to clarify the location of the locate marks for a clearer depiction of the scene



