

COPPERHEAD'S

Complete Utility Locating System[®]

Protecting Underground Utility Assets



Potable
WATER

Sanitary & Storm
SEWER

Reclaimed
WATER





THE COMPLETE UTILITY LOCATING SYSTEM®

For Underground Utility Damage Prevention

Copperhead Industries believes that utilities and contractors should have complete confidence in the products they use to protect underground infrastructures.

We understand underground utility construction and the concerns around accurate utility detection long after pipes and cables are buried. We also understand accurate, efficient locating and the importance of establishing strong grounds in order to complete the electrical circuit required for detection. We know that without a reliable tracer wire system, underground utility assets are jeopardized.

THE COMPLETE UTILITY LOCATING SYSTEM® combines 100+ years of cladding experience, American innovation and ingenuity, knowledge of underground utility construction, and in-depth utility locating expertise to

provide the strongest, most reliable tracer wire system on the market. The system includes Copperhead® copper-clad steel tracer wire designed specifically for open cut, directional drilling, and pipe bursting applications, corrosion-proof locking connectors, drive-in magnesium ground rods, access points, locating equipment, and marker posts to provide the most reliable end-to-end signal for utility locating.

WHY

To safeguard what matters most. Protect your investment. Protect your infrastructure. Specify Copperhead's Complete Utility Locating System for your next underground utility construction project.

**COPPERHEAD SET
THE STANDARD FOR
TRACER WIRE SYSTEMS**

COPPERHEADWIRE.COM





5

KEY STEPS

Pinpoint the exact location of underground utilities with Copperhead's Complete Utility Locating System®

1 CONDUCT

The right tracer wire matters. Choose 100% American-made Copperhead® copper-clad steel wire designed for open cut, directional drill, and pipe bursting, with a protective high density polyethylene (HDPE) insulation.



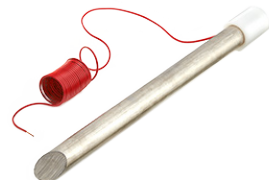
2 CONNECT

Solid connections are critical to allowing the locate signal to continue throughout the tracer wire system. Make sure connectors are corrosion-proof with non-hardening dielectric silicone sealant.



3 GROUND

Properly grounding the tracer wire system is the difference between being able to locate your utility, or not. Use a Copperhead® drive-in magnesium ground rod at all dead ends to pull the signal to the target.



4 ACCESS

Directly connect to your tracer wire system, protect tracer wire termination points, and turn ground on/off to isolate different sections of the tracer wire system with Copperhead access points.



5 LOCATE

Locate tracer wire and other buried objects as needed and at the time of rough grade and before final acceptance of the project with multi-function Copperhead® locating equipment.





THE COMPLETE UTILITY LOCATING SYSTEM[®]

Superior protection of buried utility systems such as potable water, reclaimed water, sanitary and storm sewer, telecommunications, natural gas, and others.

SnakePit[®] Access Point with
Two-terminal Switchable Lid

SnakePit[®] Access Point with
Two-terminal Switchable Lid

Ground
Rod

Ground
Rod

Mainline-to-Service
Connector

BoaBox[™] Water
Access Point

Curb Box

Mainline-to-Service
Connector

SnakeBite[™]
Locking Connector

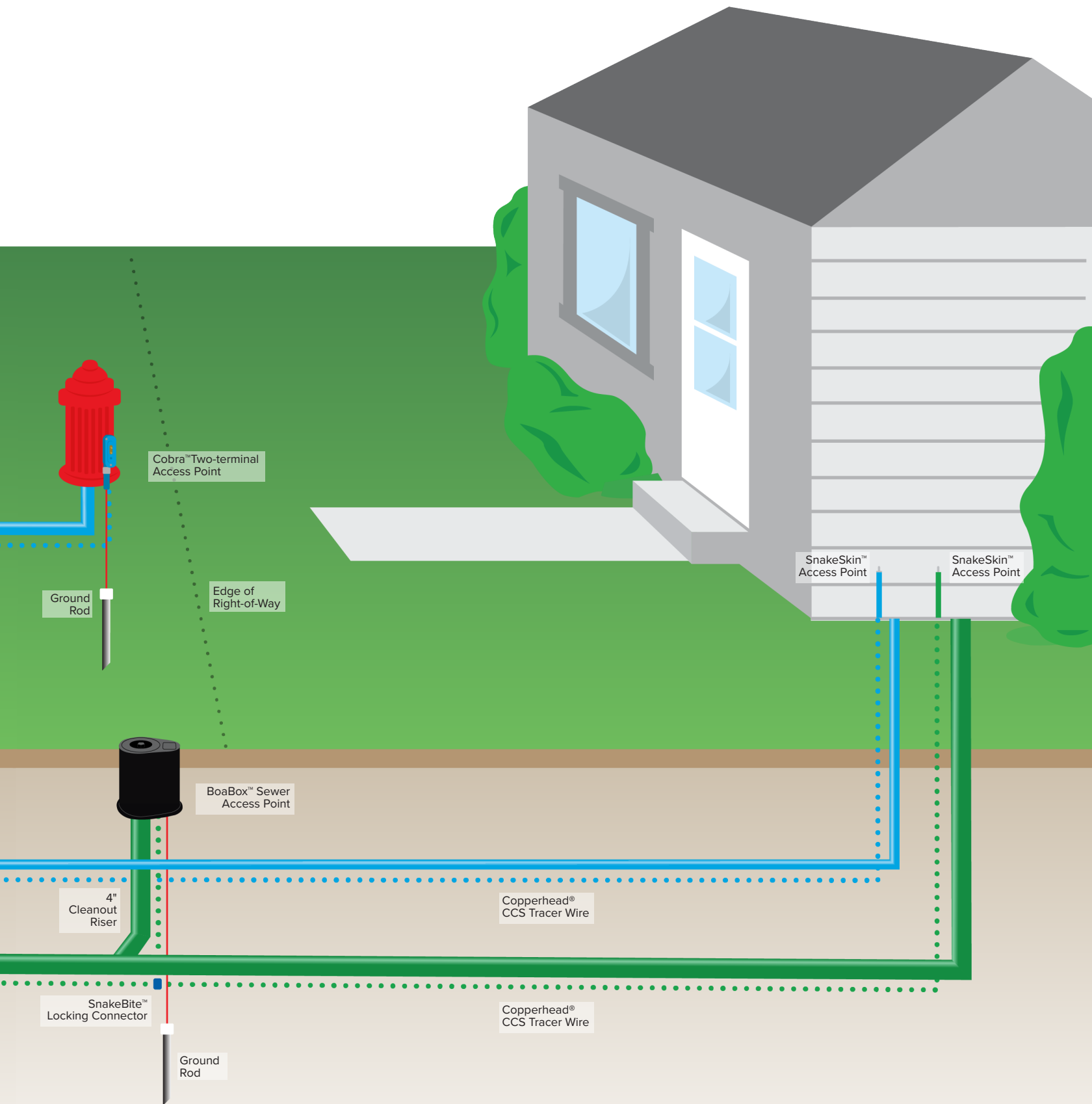
Ground
Rod

Sewer
Main

Mainline-to-Service
Connector

Water
Main

Note: This graphic is for demonstration purposes only. Not to scale.

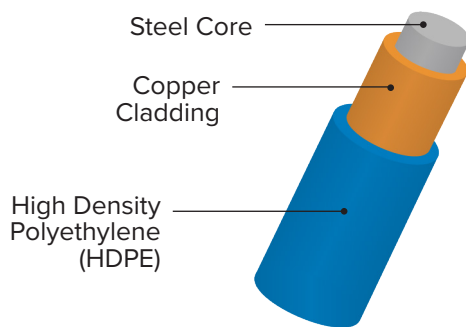




1 CONDUCT

COPPERHEAD® COPPER-CLAD STEEL (CCS) TRACER WIRE

Not all CCS is created equal. Pioneered by Copperhead Industries, CCS tracer wire is simply the best choice for accurate and efficient underground utility detection. Strong and highly conductive. Corrosion resistant. And withstands the rigors of underground construction. CCS combines the strength of fully annealed high-carbon steel with the conductivity of copper, all in one high-performance wire. Meets ASTM B1010 – the highest quality standard for tracer wire.



CCS offers several advantages over solid copper:

- More durable
- Longer lasting
- Stronger - up to six times the break load
- Reduced material cost
- More stable, longer-term pricing
- Reduced threat of theft due to lack of after-market value
- Lower shipping and handling cost due to lighter weight
- HDPE insulation rating for direct bury

CCS is a bimetallic product manufactured by metallurgically bonding two metals with heat and pressure making them inseparable. Only our cladding process ensures that the wire is free of gaps in the metals, resulting in a consistent signal and strength over the entire length of the wire. Copperhead CCS tracer wire is insulated with protective high-density polyethylene (HDPE) designed for direct bury.

THE RIGHT WIRE FOR THE JOB

Tough jobs require tough wire, but not all jobs need the same tracer wire. That's why Copperhead tracer wire comes in multiple strengths and lengths and is color coded to meet American Public Works Association (APWA) standards. From open cut, to directional drilling, to pipe bursting — whatever the application, Copperhead has the right wire for your project.

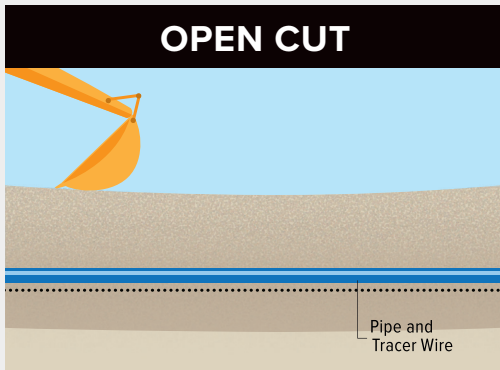
AMERICAN PUBLIC WORKS ASSOCIATION (APWA) UNIFORM COLOR CODE



For tracer wire use only



Copperhead CCS tracer wire is the best at protecting your underground utility assets from future damage.



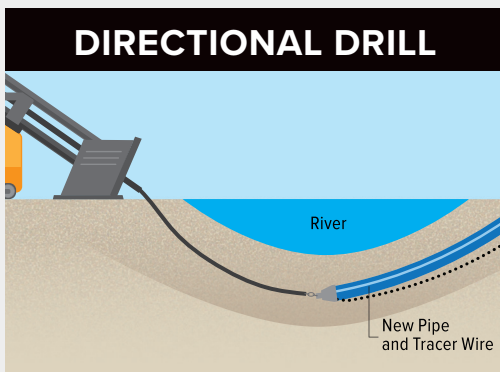
Open cut trenching is the traditional method for excavation used to expose existing or install new utilities where there are no buildings or other obstructions. The trench is then backfilled.

High Strength

- Most specified tracer wire for open cut applications
- 2 times the break load of solid copper
- Heavy-duty applications
- Industry exclusive in strength and reliability

SuperFlex™

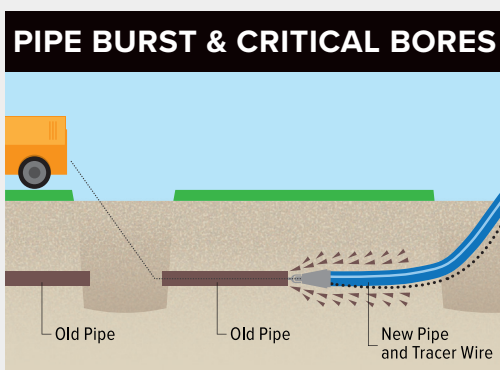
- As flexible as solid copper
- Light-duty applications
- Economical



Directional drilling is a trenchless method of installing underground utilities that involves drilling along a chosen bore path to install utilities that need to go under roads, sidewalks, or other obstructions.

SoloShot™ Extra-High Strength

- Engineered to handle the rigors of directional drilling
- 6 times the break load of solid copper
- Pulls through the first time
- No need to pull multiple wires



Pipe bursting and critical boring are trenchless installation methods that demand the highest strength of tracer wire.

SoloShot™ Xtreme

- Strongest, most durable tracer wire
- Designed to withstand the volatile environment of pipe bursting and critical bores
- Highest break load
- Toughest protective insulation
- No need to run multiple wires





2 CONNECT

A tracer wire system is only as good as its weakest connection. Waterproof, corrosion-proof connectors protect vulnerable wire splices and keep the locate signal flowing across connections. All Copperhead connectors are designed for direct bury.



SnakeBite™ Locking Connector

- No wire stripping needed
- Exclusive 90-degree twist-lock design
- Connects up to 3 wires
- Simply insert wires, twist, and lock
- Snap-lock tabs prevent over-rotation
- Won't open during backfilling
- Waterproof, corrosion-proof
- Dielectric non-hardening silicone sealant



Mainline-to-Service



Insulation-Piercing
Mainline-to-Service

Mainline-to-Service Connector

- Connects service lateral tracer wire to mainline tracer wire
- No need to cut the mainline tracer wire
- 3-way connection
- Outer lid locks down in 3 places
- Waterproof, corrosion-proof
- Dielectric non-hardening silicone sealant



Regular
or Large

Twist-on Connectors

- Waterproof, corrosion-proof
- Dielectric non-hardening silicone sealant
- Regular size connects up to 4 wires
- Large size connects up to 6 wires



Three-way



In-Line
Splice



Pipe Burst
Mainline-to-Service
Connector

Pipe Burst Connectors

- Works with SoloShot™ Xtreme tracer wire
- Handles variety of wire size combinations
- Weather resistant
- No need to cut the mainline with the Pipe Burst Mainline-to-Service Connector





3 GROUND

Grounding all tracer wire dead ends is essential for completing the electrical circuit needed for line detection.



Ground Rod

- Pulls the electrical current emitted by the locate transmitter down the tracer wire for detection
- 1.5 lbs drive-in magnesium ground rod
- HDPE cap provides sturdy drive-in surface
- 20' copper-clad steel wire with 30 mil HDPE insulation





4 ACCESS

Access Points are used to provide a reliable direct connection point to tracer wire systems. The multi-terminal SnakePit, Cobra, and BoaBox Access Points also allow external connection and disconnection to the ground rod.



SnakePit® Access Points

- Ground-level access
- Two-terminal Switchable Lid allows locators to switch ground off and on from top of lid; no need to remove lid (Patent No.: US 11,165,173 B2)
- Encapsulated magnet provides easy detection by ferrous metal detector
- Anti-corrosion gel protects wires
- Lid color-coded to meet APWA standards for utility detection
- SnakePit Bracket secures SnakePit along side curb box



Cobra™ Access Points

- Above-ground access
- Brass hardware for maximum conductivity
- Multiple mounting options
- Can be used with rigid or flexible PVC conduit
- Color-coded to meet APWA standards for utility detection



SnakeSkin™ Access Point

- Above-ground access
- No ground connection
- Color-coded to meet APWA standards for utility detection



ACCESS



BoaBox™
Water



BoaBox™
Sewer

BoaBox™ Access Points

- Two access points in one - curb box/cleanout and tracer wire system
- Direct connection to tracer wire and ground rod from top
- Bottom flange adds strength and anchors into ground to accommodate soil shifting
- Encapsulated magnet in pentagon plug allows for detection by ferrous metal detector
- Industry's first ¼-turn pentagon style plug - no cross-threading
- Anti-corrosion gel protects wires
- Brass hardware means no rusting or seizing parts
- U.S. Patent No. 11,047,116





5

LOCATE & MARK

The ViperMag™ is a general-purpose locator designed to locate pipes and cables including Copperhead's Complete Utility Locating System®.

STANDARD EQUIPMENT



INCLUDES: receiver, transmitter, direct connection cables, ground rod, alkaline batteries, soft sides case, user guide

ViperMag™ Pipe and Cable Locator

- Active locating frequencies (512 Hz, 8.19 kHz, 83 kHz)
- Passive power locating (60 Hz)
- Conductive or inductive locating
- Ferrous metal detection - magnetic north/south indicator
- Optional fault find mode (8 kHzFF)

OPTIONAL EQUIPMENT



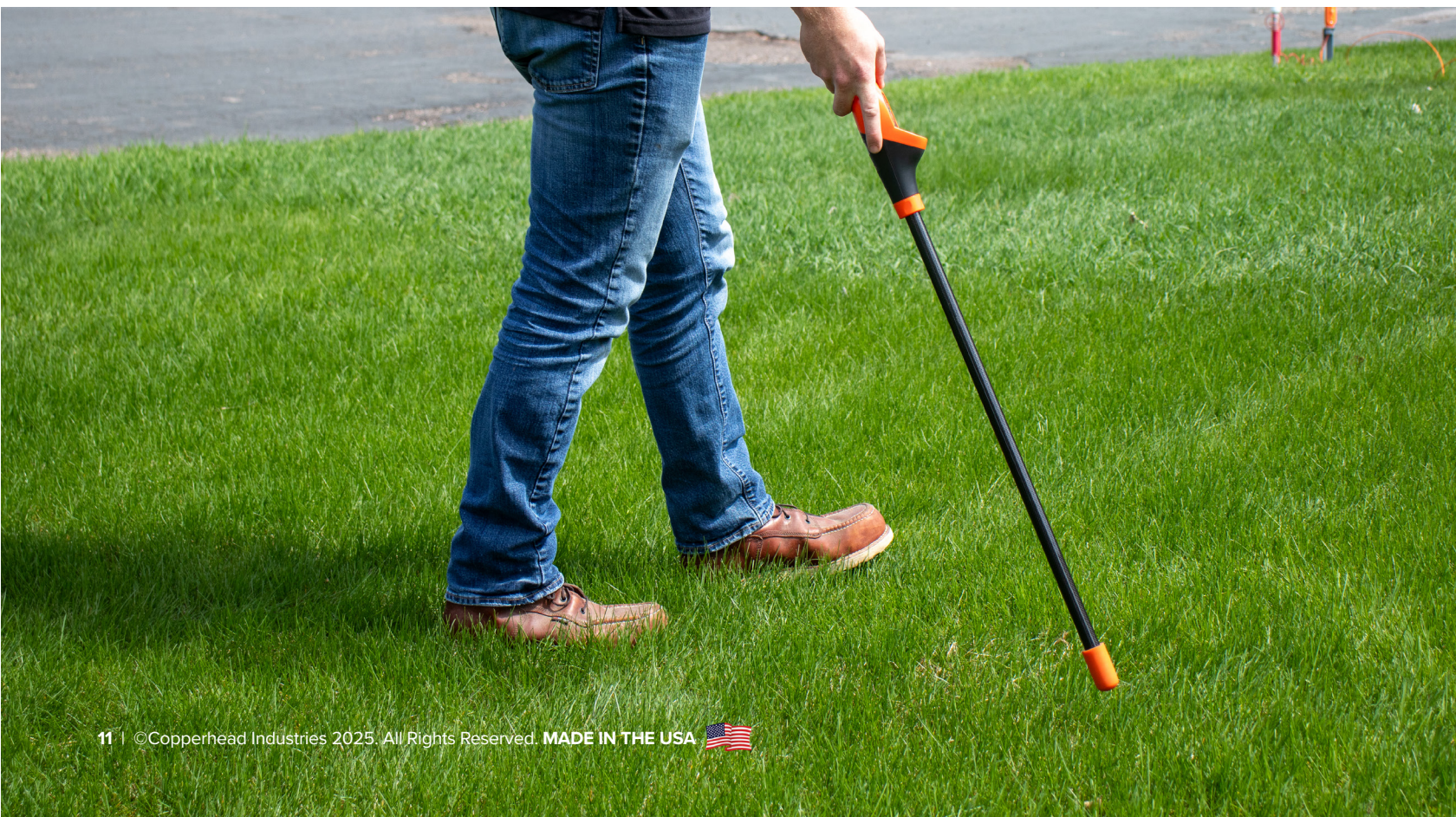
Induction
Clamp



A-Frame
Locator



ViperMag Hard Case





LOCATE & MARK

Copperhead Mamba™ Markers alert excavators to buried pipes and cables. Optional built-in tracer wire access point makes Mamba Markers multi-functional.



Flat

Round

Round Locate
Security Sleeve

Round Locate
Twist Top

Triad

Mamba™ Marker Posts

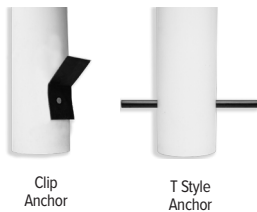
Post

- Durable
- Impact resistant
- Rust-proof
- Maximum visibility
- High-grade color pigments
- Color throughout marker – never needs painting
- Customize with your utility's colors, message, logo
- Multiple color options for cap, sleeve, post
- Anchor options available
- Multiple lengths
- Strong HDPE material
- UV stabilizing components to prevent fading
- Recyclable material
- Designed to easily attach to a U-Channel support post with a simple drive rivet

Decal

- Customizable
- WARNING message printed using outdoor durable inks for superior durability
- Extra-strong adhesive
- Protective overlay applied to marker before shipping
- Meets federal requirements

Mamba Round Anchor Options



Clip
Anchor

T Style
Anchor

Accessories



Flat Post
Driver



U-Channel Support Post





OTHER PRODUCTS



Service Ready Kit

- Contains all components necessary to install the Complete Utility Locating System® from the mainline to the edge of right-of-way to a building
- Kit contains: 100' CCS Tracer Wire, Mainline-to-Service Connector, SnakeSkin Access Point, 2 SnakeBite Locking Connectors, 2 Ground Rods, SnakePit Lite Duty Access Point with Two-Terminal Switchable Lid

The first step in protecting underground utility assets is installing a reliable locating system. Visit copperheadwire.com to view and download comprehensive specifications for your next project.



TRACER WIRE

Product Name	Part Number	Application	Wire Gauge	Spool Size	Break Load	Coating Thickness
SuperFlex	1830*-SF-**	Open Cut	18 awg	500, 1000, 2500	75 lb	30 mil
SuperFlex	1845*-SF-**	Open Cut	18 awg	500, 1000, 2500	75 lb	45 mil
SuperFlex	1630*-SF-**	Open Cut	16 awg	500, 1000, 2500	115 lb	30 mil
SuperFlex	1645*-SF-**	Open Cut	16 awg	500, 1000, 2500	115 lb	45 mil
SuperFlex	1430*-SF-**	Open Cut	14 awg	500, 1000, 2500	194 lb	30 mil
SuperFlex	1445*-SF-**	Open Cut	14 awg	500, 1000, 2500	194 lb	45 mil
SuperFlex	1230*-SF-**	Open Cut	12 awg	500, 1000, 2500	302 lb	30 mil
SuperFlex	1245*-SF-**	Open Cut	12 awg	500, 1000, 2500	302 lb	45 mil
SuperFlex	1030*-SF-**	Open Cut	10 awg	500, 1000, 2500	513 lb	30 mil
SuperFlex	1045*-SF-**	Open Cut	10 awg	500, 1000, 2500	513 lb	45 mil
High Strength	1830*-HS-**	Open Cut	18 awg	500, 1000, 2500	107 lb	30 mil
High Strength	1845*-HS-**	Open Cut	18 awg	500, 1000, 2500	107 lb	45 mil
High Strength	1630*-HS-**	Open Cut	16 awg	500, 1000, 2500	144 lb	30 mil
High Strength	1645*-HS-**	Open Cut	16 awg	500, 1000, 2500	144 lb	45 mil
High Strength	1430*-HS-**	Open Cut	14 awg	500, 1000, 2500	282 lb	30 mil
High Strength	1445*-HS-**	Open Cut	14 awg	500, 1000, 2500	282 lb	45 mil
High Strength	1230*-HS-**	Open Cut	12 awg	500, 1000, 2500	452 lb	30 mil
High Strength	1245*-HS-**	Open Cut	12 awg	500, 1000, 2500	452 lb	45 mil
High Strength	1030*-HS-**	Open Cut	10 awg	500, 1000, 2500	684 lb	30 mil
High Strength	1045*-HS-**	Open Cut	10 awg	500, 1000, 2500	684 lb	45 mil
High Strength	830*-HS-**	Open Cut	8 awg	500, 1000, 2500	830 lb	30 mil
High Strength	845*-HS-**	Open Cut	8 awg	500, 1000, 2500	830 lb	45 mil
SoloShot EHS	1445*-EHS-**	Directional Drill	14 awg	500, 1000, 2500	lb	45 mil
SoloShot EHS	1245*-EHS-**	Directional Drill	12 awg	500, 1000, 2500	1150 lb	45 mil
SoloShot EHS	1045*-EHS-**	Directional Drill	10 awg	500, 1000, 2500	2032 lb	45 mil
SoloShot EHS	845*-EHS-**	Directional Drill	8 awg	500, 1000, 2500	2785 lb	45 mil
SoloShot Xtreme	PBX-50*-**	Pipe Burst and Critical Bores	3/16" 7x7 stranded CCS	Custom min qty 500' qty discount at 5,000'+	4700 lb	50 mil
SoloShot Burst	3/16*-PB-**	Pipe Burst	3/16" 7x19 stranded stainless steel	Custom min qty 500'	3700 lb	45 mil

*Color: B=Blue, G=Green, P=Purple, N=Orange, R=Red, W=White, Y=Yellow, K=Black **Spool Length: 500', 1000', 2500'

CONNECTORS

Product Name	Part Number	Application	Package Quantity
SnakeBite Locking Connector	LSC1030C*	Main splice and/or service line, 10 awg	Jar qty of 10, 25 or bulk box of 100
SnakeBite Locking Connector	LSC1230C*	Main splice and/or service line, 12 awg	Jar qty of 10, 25 or bulk box of 100
SnakeBite Locking Connector	LSC1430C*	Main splice and/or service line, 14 awg	Jar qty of 10, 25 or bulk box of 100
Twist-on Connector - Regular	SCB-01*	Main splice or dead end	Pkg qty 20 or bulk box of 100
Twist-on Connector - Large	SCB-01-LG	Main splice or termination	Pkg qty 1
Mainline-to-Service Connector	3WB-01	Mainline to service line	Pkg qty 10
Insulation-Piercing Mainline-to-Service Connector	3WB-SS	Mainline to service line	Pkg qty 10
Pipe Burst In-line Splice	SC-PB-01	Main splice	Pkg qty 1
Pipe Burst Connector - Two-way	SC-2WPB-01	Two-way splice	Pkg qty 18
Pipe Burst Connector - Three-way	SC-3WPB	Three-way splice	Pkg qty 1

*BULK (box of 100), CTR25 (jar of 25), CTR10 (jar of 10)

GROUND RODS

Product Name	Part Number	Application	Wire Gauge
Ground Rod	ANO-12	Tracer wire grounding	12 awg
Ground Rod	ANO-14	Tracer wire grounding	14 awg

ACCESS POINTS

Product Name	Part Number	Application	Terminal	Dimension
SnakePit Lite Duty, Single-Terminal	LD14*TP	Ground level, non-roadway, lite duty	1	14.5" L
SnakePit Lite Duty, Two-Terminal Switchable	LD14*2T-SW	Ground level, non-roadway, lite duty	2, Switchable	14.5" L
SnakePit Lite Duty Adjustable, Single-Terminal	LD14*TP-ADJ	Ground level, non-roadway, fluctuations in grade	1	18.625" - 24" L
SnakePit Lite Duty Adjustable, Two-Terminal Switchable	LD14*2T-ADJ-SW	Ground level, non-roadway, fluctuations in grade	2, Switchable	18.625" - 24" L
SnakePit Lite Duty XL Adjustable, Single-Terminal	LDXL36*TP	Ground level, non-roadway, heavy soil shifting	1	36.25" - 41.625" L
SnakePit Lite Duty XL Adjustable, Two-Terminal Switchable	LDXL36*2T-SW	Ground level, non-roadway, heavy soil shifting	2, Switchable	36.25" - 41.625" L
SnakePit Concrete/Driveway, Single-Terminal	CD14*TP	Ground level, low traffic, driveway	1	14.5" L
SnakePit Concrete/Driveway, Two-Terminal Switchable	CD14*2T-SW	Ground level, low traffic, driveway	2, Switchable	14.5" L
SnakePit Roadway, Single-Terminal	RB14*TP	Ground level, roadway	1	17" L
SnakePit Roadway, Two-terminal Switchable	RB14*2T-SW	Ground level, roadway	2, Switchable	17" L
SnakePit Bracket	SP-BRACKET	Secures SnakePit to curb box	--	

*Color: B=Blue, G=Green, P=Purple, N=Orange, R=Red, Y=Yellow, K=Black



ACCESS POINTS – CONTINUED

Product Name	Part Number	Application	Terminals	Dimensions
Cobra	T1*	Above ground	1	Fits 1" conduit
Cobra	T2*	Above ground	2	Fits 1" conduit
Cobra Hydrant Flange	HYDFL	Mount Cobra to fire hydrant	--	Fits 3/4", 5/8" 1/2" bolts
Cobra Hydrant Flange Package	T1/2-*-FLPKG	Includes Cobra (1 or 2-terminal), flange, 1" NPT thread	1 or 2	Fits 3/4", 5/8" 1/2" bolts
Cobra Mounting Stake	T3-STAKE	Mount Cobra in any location	--	
SnakeSkin	SNSK-*-01 SNSK-*-BULK25 SNSK-*-BULK100	Above ground	1	Pkg qty 1 Pkg qty 25
BoaBox Water	BOABOX125	Ground level	2	Fits 1" and 1 1/4" iron standpipe (IPS)
BoaBox Water	BOABOX150	Ground level	2	Fits 1 1/2" iron standpipe (IPS)
BoaBox Sewer	BOABOX SWR	Ground level	2	Fits 4" PVC pipe (SDR25 & SDR26 HWS) & 4" SCH40 IPS PVC pipe

*Color: B=Blue, G=Green, P=Purple, N=Orange, R=Red, Y=Yellow, K=Black

LOCATOR

Product Name	Part Number	Application	Contents
ViperMag Pipe and Cable Locator	VIP-MAG	Location of buried pipe and cable	Receiver, transmitter, direct connect cables, ground rod, batteries, soft-side case, user guide
ViperMag Hard Case	VIP-CASE	Storage and protection of ViperMag Pipe and Cable locator and content	Case only with custom cut foam inserts
Induction Clamp	VIP-CL2/4/5	Apply locating signal to metal pipe when no tracer wire is present	2", 4", or 5" Induction Clamp
A-Frame Locator	CI-A-Frame	Fault finding	A-Frame, soft-side bag, USB cable, user guide

MARKER POSTS

Product Name	Part Number	Length	Options
Mamba Flat	MAMBA-FLT-M	60", 66", 72", 78", 96"	Decal 1-sided or 2-sided
Mamba Round	MAMBA-RND-M	48", 60", 72", 84", 96", 120"	Anchors: none, clip, t-style
Mamba Round Locate Security Sleeve	MAMBA-RND-L	48", 60", 72", 84", 96", 120"	Anchors: none, clip, t-style
Mamba Round Locate Twist Top	MAMBA-RND-L	48", 60", 72", 84", 96", 120"	Anchors: none, clip, t-style
Mamba Triad	MAMBA-TRI-M	60", 66", 72"	Standard anchor clip
Mamba Flat Post Driver	MAMBA-DRVR		
Mamba U-Channel Support Post	MAMBA-SP	5', 6', 7', 8', 10'	1.12, 2, 3 lbs per ft

OTHER PRODUCTS

Product Name	Part Number	Application
Service Ready Kit *Color: B=Blue, G=Green	SRK-*01	Install Copperhead's tracer wire system from a main line to the edge of the right-of-way and to the building.



COPPERHEAD'S CUSTOMER SERVICE

UNBEATABLE SERVICE AND RESOURCES

At Copperhead, your calls are answered by an actual person. No robots here! Our customer service team is standing by to answer all your questions.



877-726-5644



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763-271-4432



763-271-3694



copperheadwire.com

Visit our website to learn more about preventing underground utility damage with the Complete Utility Locating System®.



APP - Copperhead Industries

Download our app to access product information, marketing materials, and specs on the go.





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