

www.electromark.com



# The ELECTROMARK EDGE

Underground Power Marking Solutions

#### **EXPERTISE**

Our expertise comes from our experience. Over 45 years in outdoor identification has given us a deep understanding on the importance of proper identification. We are confident in our ability to customize, innovate and standardize solutions that fit your needs. With years of research, thorough testing and proven results, we know Electromark can deliver a reliable solution to you.

#### TRUSTWORTHY SERVICE

When we say that we are "Your Outdoor Identification Experts", we mean every word. Our job is to help you find a solution that alerts, protects and informs the community, contractors and employees. We don't push product, we provide solutions that will improve safety and the reliability of your services.

#### **QUALITY MATERIALS**

Durability is the most important trait to look for in a material. The use of poorly suited or inadequate material can result in inefficiency, injuries or death. For this reason, we have scoured and continue to search the marketplace for the best utility-centric products and materials that will stand up to the demands of any job as well as industry compliance requirements, such as OSHA, ANSI, NEMA, UL, ISO, ASTM and CSA. We have led the marketplace in innovation and continue to showcase superior products, like Metalphoto.





# UNDERGROUND POWER

#### **Buried Line Markers**



Excavators look for buried line markers before digging to identify cable locations. Alert excavators to your cables. (Pg. 3)

## **UGD Buried Tape**



Prevent damage and service interruptions by alerting excavators to the type and presence of utility cables. (Pg. 3)

#### Cable Markers



Use cable markers to comply with NESC 230 A2d by marking temporarily exposed cables on grade. (Pg. 5-6)

#### Phase & Cable Markers



Transformers have a fair amount of wires that, if not marked, can make it harder for a contractor or employee to distinguish the cables. Identify the phases on a three-phase transformer or label primary and secondary cables. (Pg. 5-6)

#### **Transformer Info Labels**



Make it easier for people to maintain or dispose of the transformer with KVA, PCB and Fault Indicator labels. (Pg. 9-10)

#### **Hazard Labels**

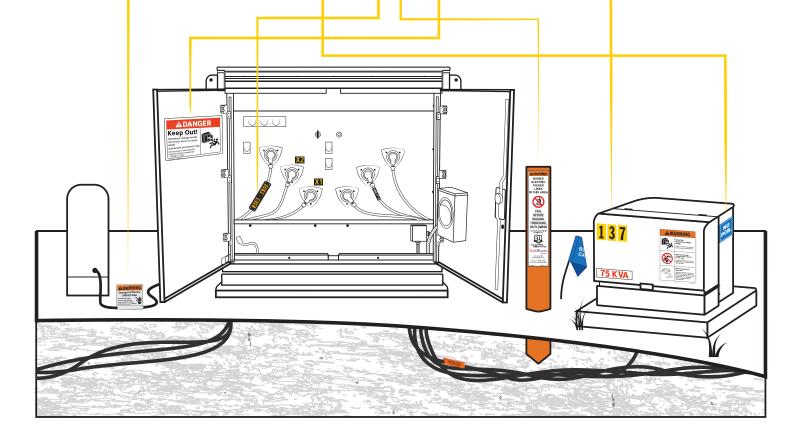


Alert people to the dangers of tampering with transformers with hazard labels. Make sure your message is clear, concise and placed on reliable, long-lasting material. (Pg. 7-8)

#### Asset Identification 7



Keep track of specific transformers through asset identification. Use reflective digits or Metalphoto for barcoding capabilities. (Pg. 10)



# **BURIED CABLE MARKERS**

**Underground Power Marking Solutions** 

#### **BURIED-LINE MARKERS**

Excavators look for buried line markers before digging to identify cable locations. We've designed an extensive selection of buried line options that will help you pinpoint the locations of your facilities. From vehicle impact resistant posts to 360 degree markers, we can provide a solution that works. Select from our four primary posts; Plasti-Curve, FiberCurve, TriView and Dome Posts. Or call us for something more specific to fit your need.

Combine one of our buried line posts designs with laminated polyester or Duracryl labels for the most effective marking.







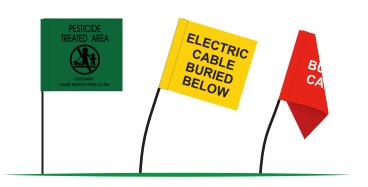


#### UNDERGROUND LOCATOR

Prevent damage and service interruptions by alerting excavators of buried lines and affected utility. Cut locating time by specifying metal-detectable tapes for use with non-ferric metal detectors. Our metal-detectable tapes are 5 mil polyethylene with an aluminum core and embedded graphics for maximum durability against acids, alkalies and water. Non-detectable and detectable tapes are available in 3" or 6" widths x 1000' rolls. Standard legend options and custom legends are available.

## **WARNING FLAGS**

Temporary flags alert the public about buried cables or boundaries. Both plastic and wire shafts are available. Shaft lengths are 21", 30" and 36" for plastic and 18", 24" and 27" for wire. Custom legends with company information are encouraged.



# **REFLECTIVE DIGITS**

**Underground Power Marking Solutions** 

#### **ADHESIVE DIGITS**

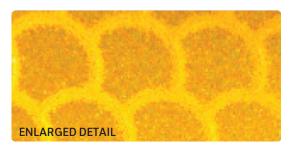
Use with PocketPanels, mounting panels or alone on pad-mount transformers. Choose the degree of reflectivity (Engineer Grade, High Intense or SunBright) that bests meets your needs. Digits come in a variety of colors and sizes.





#### **ENGINEER GRADE REFLECTIVE**

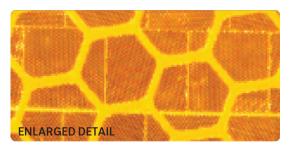
Most traditional reflective solution with a 10-year warranted life. Engineer Grade is a tamper-resistant material that shreds with attempted removal. Available in individual or notebook sheet packaging.





#### HIGH INTENSITY REFLECTIVE

Higher reflectivity than Engineer Grade with twice-asstrong acrylic adhesive that adheres to more surfaces, including low temperatures and select surface-energy plastics. Available in individual or notebook sheet packaging.





#### **SUNBRIGHT REFLECTIVE**

Need a high degree of reflectivity? Improve marking with the high visibility microprisms of SunBright. Three times Engineer Grade's reflectivity, SunBright out-performs at greater distances, wider angles and with lower light sources. Special thick acrylic adhesive holds quickly and firmly to smooth, clean surfaces. Available in individual or notebook sheet packaging.

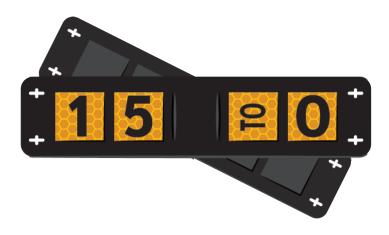
# MARKING YOUR CABLES

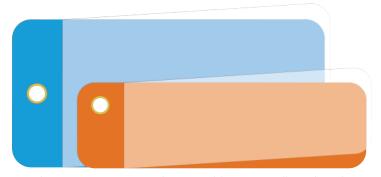
**Underground Power Marking Solutions** 

#### **URD POCKET PANELS**

Pocket Panels are easier to use than traditional cable markers. Easily correct mis-labeled panels by applying the correct label over the incorrect letter or digit. Pair panels with reflective numbers and digits for additional visibility. For smaller, temporary cables or secondary cables, use smaller panels that accommodate 3/8" characters. Primary cables use larger pocket panels to accommodate 1"characters. Panels can be used in either vertical or horizontal orientation.

**Suggested Applications:** Primary Cables, Secondary Cables, Cable Marking, Elbows, Feeders and Risers





Need a custom tag to mark URD cables? We will work with you to design a tag that fits your specific application.

#### **BLANK URD CABLE TAGS**

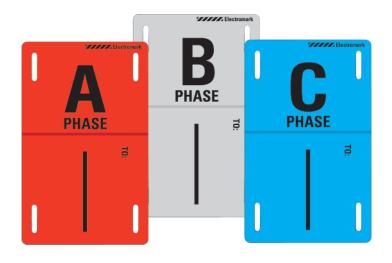
Customize your URD cable on the spot. Tags are available in polyester, polyethylene and polystyrene and will conform to cables of any size. Customize your tag, then seal in your writing with a laminate flap over a polyester tag. For a more robust tag try polyethylene or polystyrene.

Suggested Applications: Primary Cables, Secondary Cables, Cable ID, Inspection Reporting, Damage Reporting, Address ID, Various and Reel ID

#### **PHASE ID**

Identify the phase cable(s) in a single phase or three-phase transformer. A, B and C phase labels are available in a number of materials including, polyethylene, adhesive vinyl, rigid vinyl and polycarbonate or polycarbonate with reflective.

**Suggested Applications:** Phase Direction, Risers, Phase Rotation



# MARKING YOUR CABLES

**Underground Power Marking Solutions** 



#### SNAP-ON TEMPORARY CABLE FLAGS

Emergency supply lines need to stand out, especially in tall grass areas. Most cable markers lie flat and aren't noticeable until closer inspection. Our coiled vinyl marker with an extended "flag" was designed to be a better, more visible option for temporary cable marking. Snap-on cable flag orders are all custom. For additional visibility, request 2-sided printing or one of our reflective options.

Suggested Applications: Emergency Supply Cables, Temporary Service Jumpers, Temporarily Exposed Cables

#### **SNAP-ON MARKERS**

Cables do not need to be cleaned before installing Snap-on markers. Adhesive markers require the surface to be cleaned before application. Snap-on markers coil around the cable completely and adhere to the cable marker material instead of the actual cable. Available in vinyl, polyester, reflective and UV resistant. Preprinted and on-site writable options are available.

Suggested Applications: Cable ID, Joint Use, URD Cables, Cable Direction, Cable Splice ID, Temporary Grounds, Address ID, Backfeed Hazard



# CAUTION CAUTION CAUTION MCI FIBER OPTIC CABLE DO NOT DISTURBO ALLI 1-800-MOLINORK Loc 28 Cable 5/9/2 Count: 2

#### SELF-LAMINATING CABLE LABELS

Add information specific to the cable run on the spot. Write and seal with a self-laminating flap to protect your writing from long-term UV exposure and chemicals. We customize the labels to fit your size requirements, color and legend specifications. Our standard is polyester markers with a polyester self-laminating flap.

Suggested Applications: Fiber Optic Cables, URD Cables, Cable Routing, Rod Readings, Ownership/Joint Use, Cable Size and Length, Circuit ID, CATV

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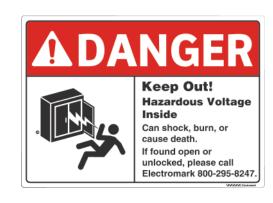
#### **ELECTROMARK Preferred Label Materials for Transformers**

SUGGESTED APPLICATION	MATERIAL	REASON
Transformer Exterior	Duracryl	<ul> <li>Vandal-resistant: with attempted removal the label will come off in tiny fragments, making removal a difficult, tedious process</li> <li>UV resistance extends the life of the label against the sun</li> </ul>
Transformer Interior	Polyester	Chemical, heat, and dirt resistant     Withstands internal transformer temperature conditions
Asset ID	Metalphoto	<ul> <li>Durable, long-lasting material with an adhesive option</li> <li>The anodic layer makes the image resistant to abrasion, extreme temperatures, UV, chemicals and solvents</li> <li>Clear, sealed images deliver readable barcodes for 30 years outdoors</li> </ul>
Asset ID or Safety Label	Retro-reflectivity	<ul> <li>Day and nighttime visibility</li> <li>Tamper-resistant</li> <li>Comes in three different grades of reflectivity: Engineer Grade, High Intensity, and SunBright</li> </ul>

#### TRANSFORMER HAZARD LABELS

Constant exposure to fluctuating temperatures and weather conditions is harsh on transformer labels. We have chosen and tested materials that will fit your transformer labeling requirement.

The NESC (National Electric Safety Code) specifies standards that follow ANSI Z535 for sign design and layout. Our knowledgeable sales and support team will ensure your signs meet these regulations.





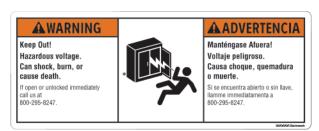
#### SHRUB MANAGEMENT LABELS

Residential customers are often tempted to dress up highly visible transformers with shrubs. While disguising transformers with shrubs is more aesthetically pleasing for the customer, it creates access issues for maintenance and delays immediate response to an outage. Educate customers about transformer entry and work space needs with shrub maintenance labels.

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#### **BILINGUAL LABELS**

Labels should reach the widest audience possible. A sign is not affective if only half of the people can understand the message. In some geographical locations this means having bilingual labels. We offer stock products in English-Spanish and English-French. Send us your translated message and we'll put it in the proper ANSI format.





Can shock, burn or cause

#### **MULTI-HAZARD LABELS**

Too much clutter can distract from the important signs on the transformer. Reduce cabinet clutter and create clearer messaging by combining hazards onto one label. Electromark's interpretation of the ANSI Z535 standard is to use a single header to direct the person to the most immediate hazard first.

#### **CUSTOM LABFLS**

cause death.

If open or damaged, notify Electromark

Custom designs are preferred over stock layouts. A company logo and phone number on a label tells customers and passersby who they should contact if a transformer is damaged or shows evidence of tampering. Customers are often the first people to alert electric utilities of issues within their area. Equip them with the tools they need to alert the right people.



#### **Other Available Materials**

APPLICATION	GOOD	BETTER	BEST
Transformer Exterior	Calendered Vinyl	Polyester	Duracryl
Inside of Transformer	Calendered Vinyl	Acrylic	Polyester
Asset ID	Vinyl Label	Reflective Label	Metalphoto
Reflective Materials	N/A	Engineer Grade	SunBright / High Intensity

Obstructions may be

during service restoration or maintenance.

Use OSHA specified, ANSI Z535 layouts to improve label effectiveness. If your labels need to be changed to ANSI Z535-accepted formats, send in your label artwork as-is and we'll handle the rest.

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#### **FAULT INDICATOR LABELS**

Speed up responses to line faults by spotlighting fault indicators on the actual transformer for rapid maintenance-work assessment. Custom or standard options available.

#### REPLACEMENT BUSHING LABELS

Time and use erodes original equipment labeling. Bushing labels are a quicker, easier and sharper alternative to stenciling. Try Engineer Grade reflective or clear polyester.



A1 A2 X1 X4 B1 B2 X2 X0 C1 C2 X3





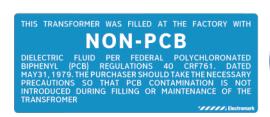
#### **KVA MARKERS**

KVA markers represent the maximum amount of power that can run through a transformer without it overheating. Distinguish KVA limits with our Engineer Grade or High Intensity KVA markers. Different colors and sizes are available.

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#### PCB / CLEAR

PCB levels within transformers affect how the transformer is disposed. Transformers with less than 50 part per million (ppm) of PCB are classified as non-PCB transformers. Declare your transformer liquids are PCB-free with Electromark labels.











#### **ASSET ID LABELS**

Asset ID labels can be printed in two ways, individual character labels or one-piece labels. If the number sequence has not been determined at the time of order, use individual character labels to arrange on site. If the sequence is known, reduce application time and mistakes in the field by providing the number pattern. We'll print a one-piece label and package them in sequential order. Individual character labels come in Engineer Grade and Sunbright. Our most durableone-piece labels are made with Metalphoto. Add barcoding capabilities to your asset ID labels with Metalphoto.

#### **SURFACE PREP 77**

When a label is applied to a dirty surface, the dirt creates a barrier between the adhesive and the application surface resulting in reduced label performance. For the best bond, the surface needs to be cleaned before the label is applied. Surface Prep 77 is a non-flammable, non-solvent based surface cleaner formulated to beat citrus cleaners in removing surface dirt, cutting oils and wax. Available in a 5 gallon pails or 32 oz spray bottles.



# **Your Underground Utility Marking Experts**

Over 45 years of utility industry knowledge enables us to deliver durable, reliable, standard and custom underground utility marking solutions. The Underground Power Marking Solutions booklet includes a variety of products that come custom or standard:

- Cable markers
- Underground markers
- Transformer labels

Need help making a decision? We'll evaluate your needs and guide you to a solution that will work for you.

Call us with any questions or orders, we're happy to help! For more underground power marking options visit us at www.electromark.com.

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