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Project: 2025003 Passage of Time - Ph. 2
Parcel ID 23-3S-18-16000-001-000
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Submittal #260553-1.0 - 260553 Identification for Electrical Systems
260553 - Identification for Electrical Systems

Revision	0	**Submittal Manager**	Cameron Moncrief (Cardella Construction Co, LLC)
Status	Open	**Date Created**	Jul 24, 2025
Issue Date	Dec 19, 2025	**Spec Section**	260553 - Identification for Electrical Systems
Responsible Contractor	Greg Hudson Electrical Contractors LLC	**Received From**	Greg Hudson (Greg Hudson Electrical Contractors LLC)
Received Date	Dec 19, 2025	**Submit By**	Oct 24, 2025
Final Due Date	Dec 29, 2025	**Lead Time**	30 day(s)
		Cost Code	
Location		**Type**	Product Data
Submittal Package			

Approvers Cameron Moncrief (Cardella Construction Co, LLC), Alex Dmitrashchuk (OLI Architecture, PLLC), Adi Klein (OLI Architecture, PLLC), Jenny Lin (OLI Architecture, PLLC)

Ball in Court Alex Dmitrashchuk (OLI Architecture, PLLC), Adi Klein (OLI Architecture, PLLC), Jenny Lin (OLI Architecture, PLLC)

Distribution Andrew O'Neill (Cardella Construction Co, LLC), Bear Green (Cardella Construction Co, LLC), David Reiter (CES - Consulting Engineering Services), Jeff Empson (Cardella Construction Co, LLC), Jeff Smith (Cardella Construction Co, LLC), Michael Raffo (CES - Consulting Engineering Services), OLI Team Email (OLI Architecture, PLLC), Tyler Moragas (CES - Consulting Engineering Services), Will Strange (Cardella Construction Co, LLC), Cameron Moncrief (Cardella Construction Co, LLC), Jaime Medina (Cardella Construction Co, LLC)

Description B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product.

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response
General Information Attachments				
Greg Hudson	Dec 19, 2025	Dec 19, 2025	Dec 19, 2025	Submitted
Cameron Moncrief	Dec 19, 2025	Dec 19, 2025	Dec 19, 2025	Submitted for Review
Comment	Please see attached specification section 260553.			
Alex Dmitrashchuk	Dec 19, 2025	Dec 29, 2025		Pending
Adi Klein	Dec 19, 2025	Dec 29, 2025		Pending
Jenny Lin	Dec 19, 2025	Dec 29, 2025		Pending

☐ Reviewed/No Exceptions Taken
☐ Rejected
☑ Furnish as Corrected
☐ Submit Specific Item
☐ Revise and Resubmit

This review is only for general conformance with the design concept of the project and general Compliance with the information given in the Contract Documents. Corrections or comments Made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include Approval of an assembly of which the item is a component. Contractor is responsible for: Dimensions to be confirmed correlated at the Jobsite; information that pertains solely to the Fabrication processes or to the means, methods, techniques, sequences and procedures of Construction; coordination of his or her Work With that of all other trades; and for performing all work in a safe and satisfactory manner.

CES ENGINEERING, LLC

Date 01/14/2026 By M. Selim

OLI Comments:
- Refer to CES comments.
- Per Specification 260553-1.5, provide all required product data, identification schedules, and manufacturer installation instructions for all identification products.
- Please provide identification products that comply with Section 260553, including wire and cable markers, voltage markers, underground warning tape, warning signs, and all other required identification components per the specifications.
- The submitted wire marker booklet consists of flat self-adhesive markers. Specification 260553-2.3.B permits wrap-around self-adhesive vinyl cloth or wrap-around self-adhesive vinyl self-laminating markers, and does not permit flat self-adhesive marker types. Provide compliant wire and cable markers.
- Per Section 260553-2.3.C, conductor and cable bundle identification requires plastic marker tags secured by nylon cable ties. The submitted product data does not include a product addressing this requirement; please confirm compliance.
- Specification 260553-2.3.D requires wire marker legends to indicate the power source and circuit number or other designation as indicated. The submitted numeric-only markers do not demonstrate compliance with project-specific identification requirements.
- The submitted underground warning tape does not demonstrate compliance with Specification 260553-2.5, which requires foil-backed detectable tape with a minimum 5-mil thickness and, per Section 260553-2.5.D.1, black text on a red background. Please provide compliant detectable tape and confirm legend color.
- Voltage markers must indicate the highest voltage present per Specification 260553-2.4.E. Please confirm that voltage markers are provided and coordinated for all systems, raceways, and equipment in accordance with the specifications.
- Per Section 260553-2.4.F, voltage markers are required to have black text on an orange background. Please confirm compliance.
- Per Sections 260553-2.1.B.14 and 2.6, warning signs must comply with ANSI Z535 and include the required legend (“DANGER; Electrical Hazard; Authorized Personnel Only”). The submitted product does not demonstrate compliance with the required legend, size, or ANSI standard.

OLI Architecture PLLC

SHOP DRWAING / SUBMITTAL REVIEW

- ☐ 1. NO EXCEPTIONS TAKEN
- ☐ 2. MAKE CORRECTIONS NOTED
- ☒ 3. REVISE AND RESUBMIT
- ☐ 4. RESUBMISSION NOT REQUIRED
- ☐ 5. REJECTED
- ☐ 6. NOT REVIEWED

By: ADI KLEIN Date: 01/21/2026

Review is for general compliance with the design concept and contract documents. Markings or comments or the lack thereof shall not be construed as relieving the Contractor from compliance with the project plans and specifications. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of construction, for performing his work in a safe manner, and for coordinating his work with that of other trades.

SECTION 260553

IDENTIFICATION FOR ELECTRICAL SYSTEMS

Project Name
Passage of Time

CARDELLA CONSTRUCTION CO

☑ SUBMITTED FOR REVIEW ☐ APPROVED
☐ APPROVED AS NOTED ☐ REVISE AND RESUBMIT

BY CameronMoncrief DATE 12/19/2025
SUBMITTAL# 1 SPEC 260553

This review is only for general conformance of the project and general compliance. Corrections or comments made on these drawings during this review do not relieve Subcontractor from compliance with the requirements of the plans and specifications. Subcontractor is responsible for all dimensions and fabrication to be confirmed and correlated at the job site

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Electrical identification requirements. APPLICABLE

B. Identification nameplates and labels. APPLICABLE

C. Wire and cable markers. APPLICABLE

D. Voltage markers. APPLICABLE

E. Underground warning tape. APPLICABLE

F. Floor marking tape. APPLICABLE

G. Warning signs and labels. APPLICABLE

1.2 RELATED REQUIREMENTS (follow the most currently adopted amended version)

A. See Division 01 – General Requirements

B. Division 09 - Finishes.

C. Section 260400 – General Conditions for Electrical Trades.

D. All of Divisions 26, 27 & 28.

1.3 REFERENCE STANDARDS (follow the most currently adopted amended version)

A. ANSI Z535.2 - American National Standard for Environmental and Facility Safety Signs.

B. ANSI Z535.4 - American National Standard for Product Safety Signs and Labels.

C. NFPA 70 - National Electrical Code.

D. NFPA 70E - Standard for Electrical Safety in the Workplace

E. UL 969 - Marking and Labeling Systems.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
1. Verify final designations for equipment, systems, and components to be identified prior to fabrication of identification products.

B. Sequencing:
   1. Do not conceal items to be identified, in locations such as above suspended ceilings, until identification products have been installed.
   2. Do not install identification products until final surface finishes and painting are complete.

1.5 SUBMITTALS

A. See Division 01- General Requirements

B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product.

C. Shop Drawings: Provide schedule of items to be identified indicating proposed designations, materials, legends, and formats.

D. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation and installation of product.

1.6 DELIVERY, STORAGE, AND HANDLING

A. See Division 01 – General Requirements

B. Accept identification products on site in original containers. Inspect for damage.

C. Accept materials on site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.

D. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

1.7 QUALITY ASSURANCE

A. Conform to requirements of NFPA 70.

1.8 FIELD CONDITIONS

A. Do not install adhesive products when ambient temperature and humidity is lower than recommended by manufacturer.

PART 2 PRODUCTS

2.1 IDENTIFICATION REQUIREMENTS

A. Existing Work: Unless specifically excluded, identify existing elements to remain that are not already identified in accordance with specified requirements.

B. Identification for Equipment:
   1. Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.

a. Switchgear:
   1) Identify switchgear name.
   2) Identify ampere rating.
   3) Identify voltage and phase.
   4) Identify power source and circuit number. Include location when not within sight of equipment.
   5) Use identification nameplate to identify main and tie devices.
   6) Use identification nameplate to identify load(s) served for each branch device, including spares and prepared spaces.

NOTE TO DESIGNER: DELETE PARAGRAPH BELOW IF MIMIC BUS NOT SPECIFIED.

b. Panelboards:
   1) Identify panel name.
   2) Identify ampere rating.
   3) Identify voltage and phase.
   4) Identify power source and circuit number. Include location when not within sight of equipment.
   5) Identify main overcurrent protective device. Use identification label for panelboards with a door. For power distribution panelboards without a door, use identification nameplate.
   6) Use typewritten circuit directory to identify load(s) served for panelboards with a door, including spares and spaces
c. Transformers:
   1) Identify kVA rating.
   2) Identify voltage and phase for primary and secondary.
   3) Identify power source and circuit number. Include location when not within sight of equipment.
   4) Identify load(s) served. Include location when not within sight of equipment.
d. Enclosed switches, circuit breakers, and motor controllers:
   1) Identify voltage and phase.
   2) Identify power source and circuit number. Include location when not within sight of equipment.
   3) Identify load(s) served. Include location when not within sight of equipment.
e. Busway:
   1) Identify ampere rating.
   2) Identify voltage and phase.
   3) Identify power source and circuit number. Include location when not within sight of equipment.
   4) Provide identification at maximum intervals of 20 feet for horizontal runs; 10 feet for vertical runs; minimum of 1 identification label per run.
   5) Use identification nameplate to identify load(s) served for each plug-in unit. Include location when not within sight of equipment.
f. Enclosed Contactors:
   1) Identify ampere rating.
   2) Identify voltage and phase.

3) Identify configuration, e.g., E.O.E.H. (electrically operated, electrically held) or E.O.M.H. (electrically operated, mechanically held).
4) Identify coil voltage.
5) Identify load(s) and associated circuits controlled. Include location.

g. Transfer Switches:
1) Identify voltage and phase.
2) Identify power source and circuit number for both normal power source and standby power source. Include location when not within sight of equipment.
3) Identify load(s) served. Include location when not within sight of equipment.
4) Identify short circuit current rating based on the specific overcurrent protective device type and settings protecting the transfer switch.

h. Electricity Meters:
1) Identify load(s) metered.

2. Service Equipment:
a. Use identification nameplate to identify each service disconnecting means.
b. For buildings or structures supplied by more than one service, or any combination of branch circuits, feeders, and services, use identification nameplate or means of identification acceptable to authority having jurisdiction at each service disconnecting means to identify all other services, feeders, and branch circuits supplying that building or structure. Verify format and descriptions with authority having jurisdiction.

3. Emergency System Equipment:
a. Use identification nameplate or voltage marker to identify emergency system equipment in accordance with NFPA 70.
b. Use identification nameplate at each piece of service equipment to identify type and location of on-site emergency power sources.
c. Use identification nameplate to identify emergency operating instructions for emergency system equipment.

4. Use voltage marker to identify highest voltage present for each piece of electrical equipment.

5. Use identification nameplate to identify equipment utilizing series ratings, where permitted, in accordance with NFPA 70.

6. Use identification nameplate to identify switchboards and panelboards utilizing a high leg delta system in accordance with NFPA 70.

7. Use identification nameplate to identify disconnect location for equipment with remote disconnecting means.

8. Use identification label or handwritten text using indelible marker on inside of door at each fused switch to identify required NEMA fuse class and size.

9. Use identification label or handwritten text using indelible marker on inside of door at each motor controller to identify nameplate horsepower, full load amperes, code letter, service factor, voltage, and phase of motor(s) controlled.

10. Use identification label to identify overcurrent protective devices for branch circuits serving fire alarm circuits. Identify with text "FIRE ALARM CIRCUIT".

11. Use field-painted floor markings, floor marking tape, or warning labels to identify required equipment working clearances where indicated or where required by the authority having jurisdiction.
    a. Field-Painted Floor Markings: Alternating black and white stripes, 3 inches wide, painted in accordance with Division 09.
12. Available Fault Current Documentation: Use identification label to identify the available fault current and date calculations were performed at locations requiring documentation by NFPA 70, including but not limited to the following.
    a. Service equipment.
    b. Industrial control panels.
    c. Motor control centers.
    d. Elevator control panels.
    e. Industrial machinery.
13. Arc Flash Hazard Warning Labels: Use warning labels to identify arc flash hazards for electrical equipment, such as switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers that are likely to require examination, adjustment, servicing, or maintenance while energized.
    a. Minimum Size: 3.5 by 5 inches.
    b. Legend: Include orange header that reads "WARNING", followed by the word message "Arc Flash and Shock Hazard; Appropriate PPE Required; Do not operate controls or open covers without appropriate personal protection equipment; Failure to comply may result in injury or death; Refer to NFPA 70E for minimum PPE requirements" or approved equivalent.
    c. Service Equipment: Include the following information in accordance with NFPA 70.
        1) Nominal system voltage.
        2) Available fault current.
        3) Clearing time of service overcurrent protective device(s).
        4) Date label applied.
14. Use warning signs to identify electrical hazards for entrances to all rooms and other guarded locations that contain exposed live parts operating at 600 V nominal or less with the word message "DANGER; Electrical hazard; Authorized personnel only" or approved equivalent.
15. Use warning signs to identify electrical hazards for entrances to all buildings, vaults, rooms, or enclosures containing exposed live parts or exposed conductors operating at over 600 V nominal with the word message "DANGER; HIGH VOLTAGE; KEEP OUT".
16. Use warning labels to identify electrical hazards for equipment, compartments, and enclosures containing exposed live parts or exposed conductors operating at over 600 V nominal with the word message "DANGER; HIGH VOLTAGE; KEEP OUT".
17. Use warning labels, identification nameplates, or identification labels to identify electrical hazards for equipment where multiple power sources are present with the word message "DANGER; Hazardous voltage; Multiple power sources may be present; Disconnect all electric power including remote disconnects before servicing" or approved equivalent.

C. Identification for Conductors and Cables:
    1. Color Coding for Power Conductors 600 V and Less: Comply with Section 260519.

2. Identification for Communications Conductors and Cables: Comply with Section 270553.
3. Use identification nameplate or identification label to identify color code for ungrounded and grounded power conductors inside door or enclosure at each piece of feeder or branch-circuit distribution equipment when premises has feeders or branch circuits served by more than one nominal voltage system.
4. Use wire and cable markers to identify circuit number or other designation indicated for power, control, and instrumentation conductors and cables at the following locations:
   a. At each source and load connection.
   b. Within boxes when more than one circuit is present.
   c. Within equipment enclosures when conductors and cables enter or leave the enclosure.
   d. In cable tray, at maximum intervals of 20 feet.
5. Use wire and cable markers to identify connected grounding electrode system components for grounding electrode conductors.
6. Use underground warning tape to identify direct buried cables.

D. Identification for Raceways: NSI
1. Use voltage markers to identify highest voltage present for accessible conduits at maximum intervals of 20 feet.
2. Use voltage markers or color-coded bands to identify systems other than normal power system for accessible conduits at maximum intervals of 20 feet.
   a. Color-Coded Bands: Use field-painting or vinyl color coding electrical tape to mark bands 3 inches wide.
      1) Color Code:
         a) Emergency Power System: Red.
            (1) Life Safety Branch: YELLOW.
            (2) Critical Branch: RED.
            (3) Equipment Branch: GREEN.
         b) Fire Alarm System: Red.
      2) Field-Painting: Comply with Division 09.
      3) Vinyl Color Coding Electrical Tape: Comply with Section 260519.
3. Use identification labels, handwritten text using indelible marker, or plastic marker tags to identify circuits enclosed for accessible conduits at wall penetrations, at floor penetrations, at roof penetrations, and at equipment terminations when source is not within sight.
4. Use identification labels, handwritten text using indelible marker, or plastic marker tags to identify spare conduits at each end. Identify purpose and termination location.
5. Use underground warning tape to identify underground raceways.
6. Use voltage markers to identify highest voltage present for wireways at maximum intervals of 20 feet.

E. Identification for Cable Tray: Comply with Section 260536.

F. Identification for Boxes:
1. Use voltage markers to identify highest voltage present.
2. Use voltage markers or color coded boxes to identify systems other than normal power system.

a. Color-Coded Boxes: Field-painted in accordance with Division 09 per the same color code used for raceways.
1) Emergency Power System: Red.
(1) Life Safety Branch: YELLOW.
(2) Critical Branch: RED.
(3) Equipment Branch: GREEN.
2) Fire Alarm System: Red.
b. For exposed boxes in public areas, do not color code.

3. Use identification labels or handwritten text using indelible marker to identify circuits enclosed.
a. For exposed boxes in public areas, use only identification labels.

4. Use warning labels to identify electrical hazards for boxes containing exposed live parts or exposed conductors operating at over 600 V nominal with the word message "DANGER; HIGH VOLTAGE; KEEP OUT".

G. Identification for Devices: BRADY
1. Identification for Communications Devices: Comply with Section 270553.
2. Wiring Device and Wallplate Finishes: Comply with Section 262726.
3. Factory Pre-Marked Wallplates: Comply with Section 262726.
4. Use identification label to identify fire alarm system devices.
a. For devices concealed above suspended ceilings, provide additional identification on ceiling tile below device location.

5. Use identification label or engraved wallplate to identify serving branch circuit for all receptacles.
a. For receptacles in public areas or in areas as directed by Architect, provide identification on inside surface of wallplate.

6. Use identification label or engraved wallplate to identify load controlled for wall-mounted control devices controlling loads that are not visible from the control location and for multiple wall-mounted control devices installed at one location.
7. Use identification label to identify receptacles protected by upstream GFI protection, where permitted.

H. Identification for Luminaires:
1. Use permanent red dot on luminaire frame to identify luminaires connected to emergency power system.

2.2 IDENTIFICATION NAMEPLATES AND LABELS

A. Identification Nameplates: LOCAL NAME ENGRAVER
1. Manufacturers:
a. Brimar Industries, Inc.
b. Kolbi Pipe Marker Co.
c. Seton Identification Products
d. Substitutions: Division 01 - General Requirements.

2. Materials:
a. Indoor Clean, Dry Locations: Use plastic nameplates.
b. Outdoor Locations: Use plastic, stainless steel, or aluminum nameplates suitable for exterior use.

3. Plastic Nameplates: Two-layer or three-layer laminated acrylic or electrically non-conductive phenolic with beveled edges; minimum thickness of 1/16 inch; engraved text.

a. Exception: Provide minimum thickness of 1/8 inch when any dimension is greater than 4 inches.

4. Stainless Steel Nameplates: Minimum thickness of 1/32 inch; engraved or laser-etched text.
5. Aluminum Nameplates: Anodized; minimum thickness of 1/32 inch; engraved or laser-etched text.
6. Mounting Holes for Mechanical Fasteners: Two, centered on sides for sizes up to 1 inch high; Four, located at corners for larger sizes.

B. Identification Labels: LOCAL NAME ENGRAVER

1. Manufacturers:
   a. Brady Corporation
   b. Brother International Corporation
   c. Panduit Corp.
   d. Substitutions: Division 01 - General Requirements.
2. Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant.
   a. Use only for indoor locations.
3. Text: Use factory pre-printed or machine-printed text. Do not use handwritten text unless otherwise indicated.

C. Format for Equipment Identification:

1. Minimum Size: 1 inch by 2.5 inches.
2. Legend:
   a. System designation where applicable:
      1) Emergency Power System: Identify with text "EMERGENCY".
      2) Life Safety Branch: Identify with text "LIFE SAFETY"
      3) Critical Branch: Identify with text "CRITICAL"
      4) Equipment Branch: Identify with text "EQUIPMENT"
      5) Fire Alarm System: Identify with text "FIRE ALARM".
   b. Equipment designation or other approved description.
   c. Other information as indicated.
3. Text: All capitalized unless otherwise indicated.
4. Minimum Text Height:
   a. System Designation: 1 inch.
   b. Equipment Designation: 1/2 inch.
   c. Other Information: 1/4 inch.
   d. Exception: Provide minimum text height of 1 inch for equipment located more than 10 feet above floor or working platform.
5. Color:
   a. Normal Power System: White text on black background.
   b. Fire Alarm System: White text on red background.

D. Format for General Information and Operating Instructions:

1. Minimum Size: 1 inch by 2.5 inches.
2. Legend: Include information or instructions indicated or as required for proper and safe operation and maintenance.
3. Text: All capitalized unless otherwise indicated.
4. Minimum Text Height: 1/4 inch.
5. Color: Black text on white background unless otherwise indicated.
   a. Exceptions:

1) Provide white text on red background for general information or operational instructions for emergency systems.
2) Provide white text on red background for general information or operational instructions for fire alarm systems.

E. Format for Caution and Warning Messages:
1. Minimum Size: 2 inches by 4 inches.
2. Legend: Include information or instructions indicated or as required for proper and safe operation and maintenance.
3. Text: All capitalized unless otherwise indicated.
4. Minimum Text Height: 1/2 inch.
5. Color: Black text on yellow background unless otherwise indicated.

F. Format for Receptacle Identification:
1. Minimum Size: 3/8 inch by 1.5 inches.
2. Legend: Power source and circuit number or other designation indicated.
a. Include voltage and phase for other than 120 V, single phase circuits.
3. Text: All capitalized unless otherwise indicated.
4. Minimum Text Height: 3/16 inch.
5. Color: Black text on clear background.

G. Format for Control Device Identification:
1. Minimum Size: 3/8 inch by 1.5 inches.
2. Legend: Load controlled or other designation indicated.
3. Text: All capitalized unless otherwise indicated.
4. Minimum Text Height: 3/16 inch.
5. Color: Black text on clear background.

H. Format for Fire Alarm Device Identification:
1. Minimum Size: 3/8 inch by 1.5 inches.
2. Legend: Designation indicated and device zone or address.
3. Text: All capitalized unless otherwise indicated.
4. Minimum Text Height: 3/16 inch.
5. Color: Red text on white background.

2.3 WIRE AND CABLE MARKERS

A. Manufacturers:
1. Brady Corporation
2. HellermannTyton
3. Panduit Corp.
4. Substitutions: Division 01 - General Requirements. NSI

B. Markers for Conductors and Cables: Use wrap-around self-adhesive vinyl cloth, wrap-around self-adhesive vinyl self-laminating, heat-shrink sleeve, plastic sleeve, plastic clip-on, or vinyl split sleeve type markers suitable for the conductor or cable to be identified.
1. Do not use self-adhesive type markers.

C. Markers for Conductor and Cable Bundles: Use plastic marker tags secured by nylon cable ties.

D. Legend: Power source and circuit number or other designation indicated.

E. Text: Use factory pre-printed or machine-printed text, all capitalized unless otherwise indicated.
   1. Do not use handwritten text.

F. Minimum Text Height: 1/8 inch.

G. Color: Black text on white background unless otherwise indicated.

2.4 VOLTAGE MARKERS

A. Manufacturers:
   1. Brady Corporation
   2. Brimar Industries, Inc.
   3. Seton Identification Products
   4. Substitutions: Division 01 - General Requirements. NSI

B. Markers for Conduits: Use factory pre-printed self-adhesive vinyl, self-adhesive vinyl cloth, or vinyl snap-around type markers.

C. Markers for Boxes and Equipment Enclosures: Use factory pre-printed self-adhesive vinyl or self-adhesive vinyl cloth type markers.

D. Minimum Size:
   1. Markers for Equipment: 1 1/8 by 4 1/2 inches.
   2. Markers for Conduits: As recommended by manufacturer for conduit size to be identified.
   3. Markers for Pull Boxes: 1 1/8 by 4 1/2 inches.
   4. Markers for Junction Boxes: 1/2 by 2 1/4 inches.

E. Legend:
   1. Markers for Voltage Identification: Highest voltage present.
   2. Markers for System Identification:
      a. Emergency Power System: Text "EMERGENCY".
      b. Other Systems: Type of service.

F. Color: Black text on orange background unless otherwise indicated.

2.5 UNDERGROUND WARNING TAPE

A. Manufacturers:
   1. Brady Corporation
   2. Brimar Industries, Inc.
   3. Seton Identification Products
   4. Substitutions: Division 01 - General Requirements. NSI

B. Foil-backed Detectable Type Tape: 3 inches wide, with minimum thickness of 5 mil (0.1 mm), unless otherwise required for proper detection.

C. Legend: Type of service, continuously repeated over full length of tape.

D. Color:
1. Tape for Buried Power Lines: Black text on red background.
2. Tape for Buried Communication, Alarm, and Signal Lines: Black text on orange background.

2.6 WARNING SIGNS AND LABELS

A. Manufacturers:
1. Brimar Industries, Inc.
2. Clarion Safety Systems, LLC.
3. Seton Identification Products
4. Substitutions: Division 01 - General Requirements. NSI

B. Comply with ANSI Z535.2 or ANSI Z535.4 as applicable.

C. Warning Signs:
1. Materials:
a. Indoor Dry, Clean Locations: Use factory pre-printed rigid plastic or self-adhesive vinyl signs.
b. Outdoor Locations: Use factory pre-printed rigid aluminum signs.
2. Rigid Signs: Provide four mounting holes at corners for mechanical fasteners.
3. Minimum Size: 7 by 10 inches unless otherwise indicated.

D. Warning Labels:
1. Materials: Use factory pre-printed or machine-printed self-adhesive polyester or self-adhesive vinyl labels; UV, chemical, water, heat, and abrasion resistant; produced using materials recognized to UL 969.
a. Do not use labels designed to be completed using handwritten text.
b. Provide polyester overlaminate to protect handwritten text.
2. Machine-Printed Labels: Use thermal transfer process printing machines and accessories recommended by label manufacturer.
3. Minimum Size: 2 by 4 inches unless otherwise indicated.

PART 3 EXECUTION

3.1 PREPARATION

A. Clean surfaces to receive adhesive products according to manufacturer's instructions.

3.2 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Install identification products to be plainly visible for examination, adjustment, servicing, and maintenance. Unless otherwise indicated, locate products as follows:
1. Surface-Mounted Equipment: Enclosure front.
2. Flush-Mounted Equipment: Inside of equipment door.
3. Free-Standing Equipment: Enclosure front; also enclosure rear for equipment with rear access.
4. Elevated Equipment: Legible from the floor or working platform.

5. Branch Devices: Adjacent to device.
6. Interior Components: Legible from the point of access.
7. Conduits: Legible from the floor.
8. Boxes: Outside face of cover.
9. Conductors and Cables: Legible from the point of access.
10. Devices: Outside face of cover.

C. Install identification products centered, level, and parallel with lines of item being identified.

D. Secure nameplates to exterior surfaces of enclosures using stainless steel screws and to interior surfaces using self-adhesive backing or epoxy cement.
1. Do not use adhesives on exterior surfaces except where substrate cannot be penetrated.

E. Install self-adhesive labels and markers to achieve maximum adhesion, with no bubbles or wrinkles and edges properly sealed.

F. Install underground warning tape above buried lines with one tape per trench at 12 inches below finished grade.

G. Secure rigid signs using stainless steel screws.

H. Mark all handwritten text, where permitted, to be neat and legible.

3.3 FIELD QUALITY CONTROL

A. See Division 01 - General Requirements.

B. Replace self-adhesive labels and markers that exhibit bubbles, wrinkles, curling or other signs of improper adhesion.

END OF SECTION

13235 Reese Boulevard West
Huntersville, NC 28078
800.321.5847
techteam@nsiindustries.com

WIRE CONNECTORS

Wire Marker Book 1-45

#WMB-3

Pocket Pal Wire Marker Book with vinyl impregnated cloth nd strong adhesive for lasting labeling. Black legend on white background, 450 wire markers. Legend: 0-45

Download

Wire Marker Book 1-45

CES COMMENTS:
PROVIDE MARKERS FOR CONDUCTORS, CABLES, AND CONDUITS AS SPECIFIED IN SECTION 2.3 & 2.4.B OF ELECTRICAL BOOK SPECIFICATIONS.

Product Information

UNSPSC 39131506

13235 Reese Boulevard West
Huntersville, NC 28078
800.321.5847
techteam@nsiindustries.com

WIRE CONNECTORS

3" Red "Buried Electric Line Below"

#ULT-327

Caution Buried Electric Line Below - 3" x 1000 Red Used for the protection, location and identification of underground utility installations. Impervious to alkalines, acids and other soil components. Consists of a 4 mil overall thickness, inert 100 percent virgin low-density polyethylene plastic film formulated for underground use. Environmentally safe ink.

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3" Red "Buried Electric Line Below"

Product Information

UNSPSC 31201529

CES COMMENTS:
PROVIDE BLACK TEXT/RED BACKGROUND MARKING TAPE PER SECTION 2.1.(C) 2.5.(D)(1) & 3.2.(F) OF ELECTRICAL BOOK SPECIFICATIONS FOR BURIED UNDERGROUND POWER LINES

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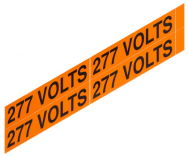
WIRE CONNECTORS

Voltage Markers (4) 277 Volts

#VM-B-9

Voltage Markers 277 Volts, 4ea. 4.5x1.125"



Download

Voltage Markers (4) 277 Volts

CES COMMENTS:
-GENERAL CONTRACTOR TO CONFIRM THAT 277V VOLTAGE MARKER IS PROVIDED FOR RACEWAYS WHERE 277V IS HIGHEST VOLTAGE.
-PLACEMENT OF 277V VOLTAGE MARKER FOR RACEWAYS WHERE 480V FEEDERS ARE PRESENT IS NOT PERMITTED.

Product Information

UNSPSC 39121910

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WIRE CONNECTORS

Safety Sign - Danger

#DSS-6

Safety Sign - Danger Self Stick

Download

Safety Sign - Danger

CES COMMENTS:
-GENERAL CONTRACTOR SHALL PROVIDE SAFETY SIGN IN COMPLIANCE WITH SECTION 2.1.(14)
-SAFETY SIGN MESSAGE TO READ "DANGER; ELECTRICAL HAZARD; AUTHORIZED PERSONNEL ONLY"

Product Information

UNSPSC 31201502

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WIRE CONNECTORS

Voltage Marker Card 277V- 480V

#VM-C-37

Voltage Marker Card 277V- 480V, 12ea. .5x2.25"

Download

Voltage Marker Card 277V- 480V

CES COMMENTS:
-GENERAL CONTRACTOR TO CONFIRM THAT 277V-408V VOLTAGE MARKERS ARE PROVIDED FOR SYSTEMS WHERE 277V/480V IS PRESENT.

Product Information

UNSPSC 39121910