SECTION 10 45 00

PHOTOLUMINESCENT EXIT SIGNS

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

*Copyright 2025 - 2025 ARCAT, Inc. - All rights reserved*

\*\* NOTE TO SPECIFIER \*\* American PERMALIGHT Inc.; Photoluminescent Safety Products.  
This section is based on the products of American PERMALIGHT Inc., which is located at:  
2570 W. 237th St., Suite C  
Torrance, CA 90505-5276  
Toll Free Tel: 888-737-6254  
Tel: 310 935 3192  
Fax: 310-891-0996  
Email: [request info (info@americanpermalight.com)](https://arcat.com/rfi?action=email&company=American%252BPERMALIGHT%252BInc.&message=RE%253A%2520Spec%2520Question%2520(10440apt)%253A%2520&coid=47261&spec=10440apt&rep=&fax=310-891-0996)  
Web: <https://americanpermalight.com>   
 [ [Click Here](https://arcat.com/company/american-permalight-inc-47261) ] for additional information.  
At American PERMALIGHT, our motto is simple: Guide & Protect. Since 1988 our mission has been to illuminate the path to safety in even the darkest environments. Here's what sets us apart:  
Industry Leadership: With over three decades of experience, we're a trusted name in the field, setting the standard for photoluminescent safety products.  
Comprehensive Solutions: From photoluminescent signs to luminous egress path markings, we offer a complete range of products designed to guide people to safety in buildings, vehicle tunnels, trains, ships,  
mines, and more.  
High-Performance Design: Our products are engineered for reliability, ensuring they glow brightly and consistently when it matters most. They're built to withstand the toughest conditions, providing peace of mind in emergencies.  
Emergency Readiness: Whether it's a power failure, building fire with smoke, natural disaster, or other emergency, our glow-in-the-dark safety products empower building and vehicular occupants to find their way to safety with confidence.  
Customer Satisfaction: We're dedicated to delivering quality, innovation, and customer satisfaction. Countless satisfied customers rely on American PERMALIGHT for unmatched performance and peace of mind in the darkest of times.  
Join us in our mission to make the world a safer place. Choose American PERMALIGHT for safety solutions you can trust.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Photoluminescent exit signs.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 10 14 00 - Signage.
    2. Section 10 14 43 - Egress Path Markings.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM International (ASTM):
       1. ASTM E2072 - Standard Specification for Photoluminescent Safety Markings.
    2. California Department of Forestry and Fire Protection (CAL FIRE).
    3. General Services Administration (GSA):
       1. P100 Facilities Standard.
    4. International Building Code (IBC).
    5. International Fire Code (IFC).
    6. Leadership in Energy and Environmental Design (LEED).
    7. National Fire Protection Association (NFPA):
       1. NFPA 101 - Life Safely Code.
       2. NFPA 5000 - Building Construction and Safety Code.
    8. New York City Local Law 141.
    9. Occupational Safety and Health Administration (OSHA):
       1. OSHA 29 CRF 1910.37 - Maintenance, Safeguards, and Operational Features for Exit Routes.
    10. The Joint Commission (TJC).
    11. Underwriters Laboratories (UL):
        1. UL 1994 - Standard for Luminous Egress Path Marking Systems.
    12. United States Department of Justice, American with Disabilities Act Standards for Accessible Design (USDOJ, ADA).
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00.
     2. Product Data:
        1. Manufacturer's data sheets with product descriptions, materials, finishes and performance characteristics on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
    2. Shop Drawings: Indicate locations, content, mounting heights, and attachments. Include details of materials, construction, and finish. Include relationship with adjacent construction.
    3. Certificates of Compliance: Demonstrate product compliance with reference standards.
    4. Maintenance Data: Include recommendations for cleaning and routine maintenance.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum of five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.
     4. Exit specialties must comply with requirements of authorities having jurisdiction.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. The intent of a mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If the mock-up is not acceptable, rebuild the mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. COORDINATION
     1. Coordinate layout of photoluminescent exit specialties with approved Shop Drawings.
  3. DELIVERY, STORAGE, AND HANDLING
     1. Store in a cool, dry place in original packaging and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, moisture, dust, excessive temperature, and construction operations.
  4. PROJECT CONDITIONS
     1. Maintain environmental temperature, humidity and ventilation conditions within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  5. WARRANTY
     1. Manufacturer's standard limited warranty unless indicated otherwise.
     2. Manufacturer's Warranty: Against loss of photoluminescence for the following periods:
        1. Exit Signs: Five years.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: American PERMALIGHT Inc., which is located at:  
         2570 W. 237th St., Suite C  
         Torrance, CA 90505-5276  
         Toll Free Tel: 888-737-6254  
         Tel: 310 935 3192  
         Fax: 310-891-0996  
         Email: [request info (info@americanpermalight.com)](https://arcat.com/rfi?action=email&company=American%252BPERMALIGHT%252BInc.&message=RE%253A%2520Spec%2520Question%2520(10440apt)%253A%2520&coid=47261&spec=10440apt&rep=&fax=310-891-0996);Web: <https://americanpermalight.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with the provisions of Section 01 60 00.

\*\* NOTE TO SPECIFIER \*\* Delete photoluminescent exit signs not required, Applicable standards, performance and design requirements for each group of products are located at the end of each list of basis of design products.

* 1. PHOTOLUMINESCENT EXIT SIGNS
     1. Basis of Design: Red LED Activation Exit Sign, 100 Ft. Viewing Distance: SKU: 600LED-RED, as manufactured and supplied by American Permalight, Inc.
     2. Basis of Design: Red LED Activation Exit Sign, 100 Ft. Viewing Distance, Double Sided: SKU: 600LED-RED-DB, as manufactured and supplied by American Permalight, Inc.
     3. Basis of Design: Green LED Activation Exit Sign, 100 Ft. Viewing Distance: SKU: 600LED-GREEN, as manufactured and supplied by American Permalight, Inc.
     4. Basis of Design: Green LED Activation Exit Sign, 100 Ft. Viewing Distance, Double Sided: SKU: 600LED-GREEN-DB, as manufactured and supplied by American Permalight, Inc.
        1. 8-5/8 x 15-1/2 inch (222.25 x 393.7 mm) x 3/4 inch (19.05 mm) thick sign with plastic body with photoluminescent Exit lettering and two customizable directional arrows. Surface, flag, or ceiling mounted. Mounting hardware included.
        2. Performance and Design Requirements:
           1. Standards Compliance:

GSA P100 Facilities Standard.

IBC. 1025

IFC. 1013.5.1 / 1104

LEED v4 and v4.1.

NFPA 101.

NFPA 5000.

OSHA 1910.37.b.6.

UL 924.

* + - * 1. Performance Requirements:

LED activation.

Non-electrical.

Non-radioactive, non-toxic.

Explosion proof.

Impact resistant.

Maintenance free.

* + - * 1. Design Requirements:

Requires minimum 5 fc (54 lux) LED, fluorescent, mercury vapor or metal halide light on sign face at all times of building occupancy.

* + 1. Basis of Design: Red ABS Plastic Exit Sign, 100 Ft. Viewing Distance, Photoluminescent Lettering, Snap-In Directional Chevrons: SKU: 600100R, as manufactured and supplied by American Permalight, Inc.
    2. Basis of Design: Red ABS Plastic Exit Sign, 100 Ft. Viewing Distance, Photoluminescent Lettering, Snap-In Directional Chevrons, Double Sided: SKU: 600100R-DB, as manufactured and supplied by American Permalight, Inc.
    3. Basis of Design: Green ABS Plastic Exit Sign, 100 Ft. Viewing Distance, Photoluminescent Lettering, Snap-In Directional Chevrons: SKU: 600100G, as manufactured and supplied by American Permalight, Inc.
    4. Basis of Design: Green ABS Plastic Exit Sign, 100 Ft. Viewing Distance, Photoluminescent Lettering, Snap-In Directional Chevrons, Double Sided: SKU: 600100G-DB, as manufactured and supplied by American Permalight, Inc.
    5. Basis of Design: Black ABS Plastic Exit Sign, 100 Ft. Viewing Distance, Photoluminescent Lettering, Snap-In Directional Chevrons: SKU: 600100B, as manufactured and supplied by American Permalight, inc.
    6. Basis of Design: Black ABS Plastic Exit Sign, 100 Ft. Viewing Distance, Photoluminescent Lettering, Snap-In Directional Chevrons, Double Sided: SKU: 600100B-DB, as manufactured and supplied by American Permalight, Inc.
       1. 8 5/8 x 15 7/8 inch (219.06 x 403.2 mm) x.1/8 inch (3.18 mm) thick sign with plastic body with photoluminescent Exit lettering and two field applied directional arrows. Surface, flag, ceiling or conduit mounted. Outdoor, for wet locations. Mounting bracket and hardware included.
       2. Performance and Design Requirements:
          1. Standards Compliance:

GSA P100 Facilities Standard.

IBC.

IFC.

LEED v4, v4.1.

NFPA 101.

NFPA 5000.

OSHA 1910.37.b.6.

UL 924.

* + - * 1. Performance Requirements:

LED and fluorescent activation.

Non-electrical.

Non-radioactive, non-toxic.

Explosion proof.

Impact resistant.

Maintenance free.

* + - * 1. Design Requirements:

Requires minimum 5 fc (54 lux) LED, fluorescent, mercury vapor or metal halide light on sign face at all times of building occupancy.

* + 1. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Black Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Green Lettering, Self Adhesive Directional Chevrons: SKU: 600111, as manufactured and supplied by American Permalight, Inc.
    2. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Black Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Green Lettering, Self Adhesive Directional Chevrons, Double Sided: SKU: 600112, as manufactured and supplied by American Permalight, Inc.
    3. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Black Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Red Lettering, Self Adhesive Directional Chevrons: SKU: 600113, as manufactured and supplied by American Permalight, Inc.
    4. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Silver Brushed Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Green Lettering, Self Adhesive Directional Chevrons: SKU: 600126, as manufactured and supplied by American Permalight, Inc.
    5. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Silver Brushed Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Red Lettering, Self Adhesive Directional Chevrons: SKU: 600127, as manufactured and supplied by American Permalight, Inc.
    6. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Silver Brushed Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Green Lettering, Self Adhesive Directional Chevrons, Double Sided: SKU: 600128, as manufactured and supplied by American Permalight, Inc.
    7. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Silver Brushed Aluminum Frame. 50 Ft. Viewing Distance, 6 Inch Red Lettering, Self Adhesive Directional Chevrons, Double Sided: SKU: 600129, as manufactured and supplied by American Permalight, Inc.
       1. 9 1/8 x 14 5/8 inch (231.76 x 371.48 mm) x.5/8 inch (15.86 mm) thick photoluminescent PVC sign with Exit lettering, four pre-drilled holes, and field applied, self adhesive directional arrows. Ceiling, flag mount, 10 inch (254 mm) ceiling mount, and 19 1/2 inch (495.3 mm) ceiling mount accessories available. Flat mount accessories included.
       2. Performance and Design Requirements:
          1. Standards Compliance:

CAL FIRE.

GSA P100 Facilities Standard.

IBC.

IFC.

LEED v4, v4.1.

NFPA 101.

NFPA 5000.

OSHA 1910.37.b.6.

UL 924.

US State Building Codes.

US State Fire Codes.

* + - * 1. Performance Requirements:

Fluorescent activation.

Non-electrical.

Non-radioactive, non-toxic.

Explosion proof.

Impact resistant.

Maintenance free.

* + - * 1. Design Requirements:

Requires minimum 5 fc (54 lux) fluorescent, mercury vapor or metal halide light on sign face at all times of building occupancy.

* + 1. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Unframed. 50 Ft. Viewing Distance, 6 Inch Green Lettering, Self Adhesive Directional Chevrons: SKU: 600117, as manufactured and supplied by American Permalight.
    2. Basis of Design: Permalight Rigid PVC Plastic Exit Sign, Unframed. 50 Ft. Viewing Distance, 6 Inch Red Lettering, Self Adhesive Directional Chevrons: SKU: 600118, as manufactured and supplied by American Permalight.
       1. 7 7/8 x 13 inch (200.03 x 330.2 mm) x.1/32 inch (.79 mm) thick photoluminescent PVC sign with Exit lettering, four pre-drilled holes, and field applied, self adhesive directional arrows. Mounting accessories available for ceiling or flag mount.
       2. Performance and Design Requirements:
          1. Standards Compliance:

CAL FIRE.

GSA P100 Facilities Standard.

IBC.

IFC.

LEED v4, v4.1.

NFPA 101.

NFPA 5000.

OSHA 1910.37.b.6.

UL 924.

US State Building Codes.

US State Fire Codes.

* + - * 1. Performance Requirements:

Fluorescent activation.

Non-electrical.

Non-radioactive, non-toxic.

Explosion proof.

Impact resistant.

Maintenance free.

* + - * 1. Design Requirements:

Requires minimum 5 fc (54 lux) fluorescent, mercury vapor or metal halide light on sign face at all times of building occupancy.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until the substrates have been properly constructed and prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean and prepare surfaces thoroughly according to manufacturer's instructions prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with requirements of authorities having jurisdiction, manufacturer's instructions, approved code requirements and submittals, and in proper relationship with adjacent construction.
   4. FIELD QUALITY CONTROL
      1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturers recommendations.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION