

Non-Electric Exit Signs: A Practical Guide for Informed Buyers

Exit signs that require no electricity are a reliable and code-compliant solution for commercial buildings. Known as **non-electric exit signs**, these fixtures provide continuous illumination without wiring or battery backup. This guide walks you through the available types, how they work, and how to determine which one fits your environment.

In this Guide, you'll learn how to choose the right nonelectric exit sign:

- Photoluminescent Exit Signs
- Tritium Exit Signs
- What Are Self-Luminous Exit Signs?
- o Photoluminescent vs. Tritium: How to Choose
- o Maintenance & Compliance
- Are Non-Electric Signs Reliable?
- <u>Lifespan of Each Type</u>
- Cost Considerations
- Making an Informed Decision

Photoluminescent Exit Signs

Photoluminescent exit signs use phosphorescent materials that absorb ambient light and glow in the dark when the lights go out. They require no electricity, wiring, or batteries and are codecompliant when installed in areas with sufficient illumination.



Charge using fluorescent or LED light sources



- Long lifespan with no maintenance
- UL 924 and NFPA compliant
- Ideal for indoor use with consistent lighting

Pro Tip: Install photoluminescent signs where lights stay on during business hours-such as corridors, stairwells, or lobbies.

Tritium Exit Signs

<u>Tritium exit signs</u> use sealed glass tubes filled with tritium gas to create light through radioluminescence. These signs operate 24/7 without external power or light exposure, making them completely independent and ideal for darker or remote locations.

- Self-powered-glow continuously for up to 20 years
- No ambient light needed to function
- No bulbs, wiring, or batteries
- UL 924 listed and code compliant



Highlight: Tritium signs offer set-it-and-forget-it reliability in low-light environments.

What Are Self-Luminous Exit Signs?

"Self-luminous" refers to exit signs that do not rely on electricity or ambient lighting. Tritium signs are the primary type. Because they glow on their own, they are especially helpful in locations where running wiring would be impractical or cost-prohibitive.

- Work without light, power, or maintenance
- Operate in harsh or outdoor environments

Reminder: If a space is remote, always dark, or difficult to access, a self-luminous tritium sign is often the best solution.

Photoluminescent vs. Tritium: How to Choose

Feature	Photoluminescent	Tritium (Self-Luminous)
Power Source	Ambient light	Tritium gas (self-powered)
Use Case	Lit interior spaces	Dark or remote locations
Installation	Mount and go	Mount and go
Maintenance	None	None-responsible end-of-life disposal

Maintenance & Compliance

- Both options meet UL 924 and NFPA 101 requirements
- No monthly testing or bulb replacement
- Photoluminescent signs need consistent light exposure
- Tritium signs should be disposed of via a certified program



Pro Tip: For tritium models, note the expiration date and recycle responsibly when the sign reaches end of life.

Are Non-Electric Signs Reliable?

Yes-both types are known for long-term reliability. Photoluminescent signs glow reliably for over 20 years when properly charged, and tritium signs glow continuously regardless of lighting or power conditions.

How Long Do They Last?

- **Photoluminescent:** 20-25 years in typical use
- Tritium: Available in 10-, 15-, or 20-year models

Cost Considerations

Non-electric exit signs eliminate the ongoing energy cost, labor for monthly testing, and electrical installation expenses. Though unit prices vary, the long-term savings are significant for facilities of any size.

Making an Informed Decision

Photoluminescent exit signs are perfect for well-lit environments that remain occupied during emergencies. Tritium signs shine in areas where lighting is unreliable or non-existent. Both options meet national safety codes, require no electricity, and offer peace of mind during an emergency. Browse our selection of Photoluminescent Exit Signs and Tritium Self-Luminous Exit Signs to find the right fit for your building.