

Exit Sign & Emergency Light Combo Compliance and Safety Guide

Emergency exit lighting is not just a building feature â€" it's a life-safety necessity governed by strict building codes. Every commercial or public building must have clearly marked EXIT signs and adequate emergency lighting to guide people to safety during a power outage or fire.

In this Guide, you'll learn how to stay compliant and safe with exit sign/emergency light combo units:
Combo vs. Standalone Units
Chicago Code
NYC Requirements
Connecticut Specifics
Hazardous Location Basics
Housing Material Options
Battery Backup & Self-Testing
Dry vs. Wet Location Ratings
Conclusion

Emergency exit lighting is a life-safety requirement governed by local and national codes. Exit sign and emergency light combo units simplify installation while satisfying code. Learn how to choose the right one for your city and application.

Highlight: Combo units are ideal for space-saving installations in hallways, exits, and above doors.

Combo Units vs. Standalone Exit Signs and Emergency

Lights

Combo units combine an exit sign with integrated emergency light heads, simplifying installation and maintenance. Use standalone units for large facilities needing custom placement of lighting or signage.

Pro Tip: UL 924 certification is required nationwide. Be sure your fixture is listed before installation.

Chicago: Exceedingly Durable and Bright Exit Lighting

- Only red letters on a white background allowed
- Metal housings required
- High-output lamp heads (12W+) mandated
- UL 924 listing and Chicago-specific approval label required

New York City: Bigger, Brighter Signs with Strict Specs

- 8-inch tall red letters with 1-inch stroke
- Metal housing only no plastic signs allowed
- Must be electrically illuminated no photoluminescent or tritium
- Minimum brightness of 5 foot-candles
- Codified in 2008 under Local Law 26
- Battery backup must activate within 10 seconds



Reminder: Standard exit signs won't pass inspection in Chicago or NYC. Use models with proper city approvals.

Connecticut: State Code Highlights

- IBC/NFPA standards enforced
- Red or green lettering allowed if contrasted
- ISA wheelchair symbol required on accessible signage

Key Factors When Choosing Combo Units

- Installation: Combo units simplify mounting and power wiring
- Battery Runtime: Must support 90 minutes (NFPA 101)
- Energy Use: Modern LEDs draw < 5W
- Certifications: UL 924 + city-specific if required
- Design: Choose edge-lit or recessed for upscale settings
- Durability: Look for wet-location or vandal-resistant ratings
- Cost Efficiency: Save on labor, wiring, and long-term maintenance

Hazardous Location Basics

In certain industrial or chemical facilities, using standard electrical fixtures can pose an ignition risk if flammable gases, vapors, or dust are present. Hazardous location exit sign combos are built with specialized sealed housings to prevent internal sparks from igniting dangerous atmospheres. These rugged units are often referred to as "explosion-proof" exit signs, meaning they are safe to use in volatile environments.

Hazard Classes & Divisions: The National Electrical Code defines three hazard classes and two divisions. Class I involves flammable gases or vapors, Class II covers combustible dust, and Class III is for ignitable fibers. The Division number indicates how frequently the hazardous material is present: Division 1 means the flammable gas/vapor or dust is present during normal operations, while Division 2 means it is only present abnormally (for example, in case of a leak or during maintenance). In other words, a Class I Div 1 combo must be safe in an environment continuously filled with flammable vapor, whereas a Class I Div 2 unit is rated for areas where such vapor might appear only occasionally.

Choosing the Right Rating: If your facility handles flammable chemicals or fuel, you will need to install <u>Hazardous Location exit sign combos</u> that carry the appropriate Class and Division rating. For example, Class I Division 1 combos are required inside environments like paint spray booths, fuel storage rooms, or refineries where ignitable vapors are normally present. Class I Division 2 combos are suitable for adjacent low-risk areas - say, just outside a spray booth or near a gas handling area - where flammable vapors or dust might leak only in an emergency. Always match the combo unit's certification to your location's classified rating (this information should come from your safety officer or engineer).

Pro Tip: Not sure of your area's hazard classification? Consult an electrician or fire marshal, or err on the side of caution by choosing a Division 1-rated combo unit for maximum safety.

Housing Material Options

The material of the combo unit's housing affects its durability, appearance, and suitability for certain environments. Most exit sign combos are made from either thermoplastic (a type of flame-retardant plastic) or metal (usually aluminum or steel). Here's how to decide which is best for your needs:

- **Thermoplastic:** Light-weight, affordable, and ideal for most indoor installations. Thermoplastic combo units are typically white or black and are very cost-effective. They include fire-resistant plastic construction and come standard with battery backup. However, plastic may not be as durable in harsh environments or high-traffic areas, and some local codes (like Chicago's) prohibit plastic housings in favor of metal.
- **Die-Cast Aluminum:** A premium option that offers superior durability and a polished look. Diecast aluminum exit sign combos feature rugged metal housings (often with brushed, black, or white finishes) and combine efficiency with architectural appeal. They resist corrosion and wear, making them suitable for factories, warehouses, or even upscale offices and restaurants. Many city-specific codes requiring "metal housing" can be satisfied by aluminum units. If you need a sturdier unit, consider <u>die-cast aluminum combo models</u>.
- **Steel:** Steel housing combo units are the toughest choice, often used for heavy-duty or vandalresistant applications. They are common in hazardous location models and environments where impact or extreme conditions are a concern. Steel combos tend to be heavier, but offer maximum protection. In practice, a well-built die-cast aluminum unit provides similar strength for most needs, but steel may be preferred for the most demanding industrial settings.

Battery Backup & Self-Testing

Battery Backup: Nearly all hardwired exit sign/emergency light combos include an internal battery that kicks on when building power is lost. This battery backup feature is critical - by code, emergency egress lights must remain illuminated for at least 90 minutes during an outage. The combo unit's battery is continually charged during normal operation and automatically provides power to the sign and lamp heads if the electricity fails. For peace of mind, be sure any unit you install has a battery backup and is UL 924 listed for emergency use. All of our standard <u>battery backup exit sign combos</u> are designed to meet the 90-minute runtime requirement.

Self-Diagnostic Testing: Many modern exit sign combos offer a self-testing (self-diagnostic) feature that automatically performs the required monthly and annual tests. Instead of maintenance personnel manually pressing the "test" button every 30 days, a self-testing unit will periodically initiate its own test routine per NFPA 101 and UL 924 standards. The unit's onboard diagnostics will momentarily switch to battery power to ensure the lamps and battery function correctly. A built-in LED indicator then reports the status - typically, a green light means all is well, while a red or flashing light indicates the unit has detected a problem. With self-testing combos, you no longer need to physically cut power monthly; you simply check that the indicator shows normal operation during your inspections. This feature greatly reduces maintenance labor and ensures you won't miss a required test. If maintaining dozens of units or more, choosing a <u>self-testing exit sign combo</u> can save time and help guarantee code compliance.

Highlight: A self-testing combo unit automatically performs the NFPA-required 30-second monthly and 90-minute annual tests and will alert you (via a red indicator light) if anything fails - a huge time-saver for busy facility managers.

Dry vs. Wet Location Ratings

It's important to choose a combo unit suited to your environment - especially if it may be exposed to moisture. Standard exit/emergency combos are intended for *dry*, *indoor* locations (offices, schools, etc.). If you need to install units outdoors or in damp areas, look for models explicitly rated for those conditions. There are two special ratings to be aware of besides "dry": damp location and wet location.

- Dry Location (Indoor): Suitable for any normal indoor space where the unit won't be exposed to significant moisture. Use cases: hallways, office interiors, retail stores, apartments.
- Damp Location Rated: Designed for high-humidity indoor areas or covered outdoor areas where
 moisture is present but will not directly splash or flow onto the fixture. Use cases: sheltered
 exterior corridors, parking garages, canopy-covered entrances, large indoor bathrooms or indoor
 swimming pool rooms. Damp-rated combos have extra protection (such as corrosion-resistant
 materials and gaskets) to handle condensation and occasional humidity. For example, our damplocation exit sign combos use sealed housings to prevent moisture intrusion.
- Wet Location Rated: Built to withstand direct exposure to water, rain, or hose spray. These units feature fully sealed enclosures (often gasketed polycarbonate or fiberglass) to keep out water and dust. Some wet-location models include thermostatic heaters to maintain battery performance in freezing conditions. Use cases: outdoor building exteriors above exit doors, unenclosed stairwells, wash-down areas in factories or kitchens, or any location where the combo could be rained on or

sprayed. Be sure to choose a wet-location rated combo for any unsheltered outdoor installation.

In code terms, a "damp location" is generally defined as an area subject to occasional moisture or condensation, whereas a "wet location" is one where water or other liquids can drip, splash, or flow onto the electrical equipment. If there's any doubt about conditions, it's safer to upgrade to a wet-location unit (a wet-rated fixture will perform fine in a damp or dry setting, but not vice versa).

Reminder: Never use a standard indoor-only (dry) combo unit outside or in wet areas. If your exit sign could get wet or exposed to weather, always install a wet-location rated model to avoid premature failure and code violations.

Conclusion

Code-compliant combo units simplify egress lighting and signage. Ensure UL 924 listing, confirm your city's specific requirements, and match features (hazardous location rating, housing type, outdoor/wet labeling, self-testing, etc.) to your building's environment. View <u>our full selection of exit sign/emergency light combos</u>.