



www.Concealite.com

202 Elk Street, PO Box 160
Elkton, SD 57026
Customer Service: (605) 531-5588

ELECTROLUMINESCENT LIGHTING, CG SERIES

Invisi-X Exit Sign

Gypsum Board / Ceiling Pendant

INSTALLATION INSTRUCTIONS

Ordering Information

Exit Sign:

IX - Invisi X Exit Sign, 6 Inch High Letters And Arrows

Mounting Style:

CP - Ceiling Post Gypsum Board

Illuminated Letters / Arrows:

R - Red

G - Green

Power Options:

AC - AC Only Universal 120/277 Volt 60 Hz input

EM - Emergency Battery Backup 4 Hour Run Time Self-Diagnostic Universal 120/277 Volt 60 Hz input

Exit Sign Faces:

SF - Single Face

DF - Double Face Available With Mounting Types

(CP,EWR,EWL,WGB,WGT,WGR,WGL,SMCP,SMHW,SMEWR,SMEWL,SC)

Arrow Configurations:

NA - No Arrows

LA - Left Arrow

RA - Right Arrow

BA - Both Arrows

SA - Single Arrow (Double Face)

IA - Inner Arrows, (Arrows Next To Wall Mounting) Available With Mounting Types (EWR,EWL,GWR,GWL,SMEWR,SMEWL)

OA - Outer Arrows (Arrows Away From Wall Mounting) Available With Mounting Types (EWR,EWL,GWR,GWL,SMEWR,SMEWL)

Options:

NYC - New York City 8 Inch Red Letters

CF - Custom Finish Per Fixture Note U.S. RAL# Required
(Specify Color When Ordering) Available With Mounting Types (SMCP,SMHW,SMEWR,SMEWL,SC)

PLCS - Custom Post Length and Ceiling Slope Degree Angle, Per Sign Dimension Specified In shop drawing PDF.

REM - Remote Power Enclosure is available with (CP,EWL,EWR) Mounting Types and Both Emergency Battery Back Up and AC Only power configurations. The REM enclosure can be located up to 50 feet in distance. (Remote Power Unit is standard for all other Mounting types)

NFPA 72 Standards
Tested to UL Standards





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Important Safeguards **Read and Follow All Safety Instructions**

- ✓ Damp label rated for outdoor applications.
- ✓ Do not mount units where they will be exposed to direct sunlight, radiators, gas or electric heaters. Prolonged exposure to temperatures exceeding 95 degrees Fahrenheit may reduce battery life and void warranty.
- ✓ Use caution when servicing batteries. Battery acid causes burns to skin and eyes. If acid is spilled on skin or in eyes, flush with fresh water and contact a physician immediately.
- ✓ Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- ✓ Do not store or place flammable materials near lamps.
- ✓ The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- ✓ Do not use this equipment for any purpose other than for its intended use.
- ✓ Before wiring to AC service, turn off AC power at fuse or circuit breaker supplying unit.
- ✓ Battery in this unit (if self-contained battery backup series) may not be fully charged. After the AC service is supplied to the unit, let the battery charge for at least 48 hours before performing any tests.
- ✓ Qualified service personnel should perform servicing of this equipment.

Failure to follow published installation instructions or any modifications to the product may damage the unit and will void the warranty.



WARNING! To avoid fire, shock/electrocution, or injury ... **TURN OFF POWER** at circuit breaker or fuse and test to ensure that power is off before wiring. Remove and discard the packaging materials.

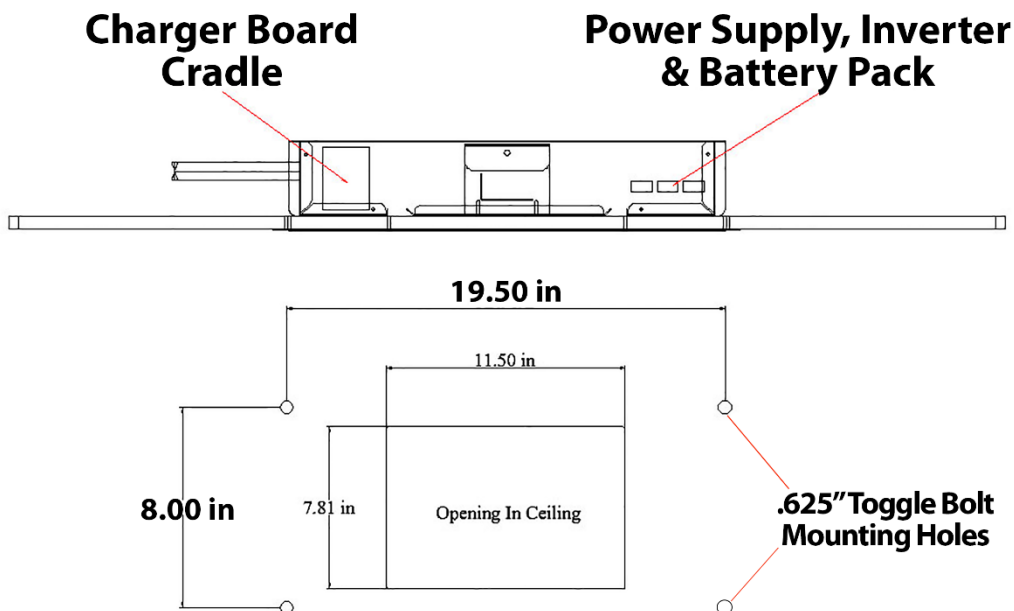
Recessed Flush Gypsum Board / Ceiling Pendant Installation

Step #1: Determine Location

This unit is designed for recessed flush **5/8" deep gypsum board** ceiling pendant mounting for indoor building construction. Determine exit sign egress viewing location as directed by governing Codes, including National and local Code requirements.

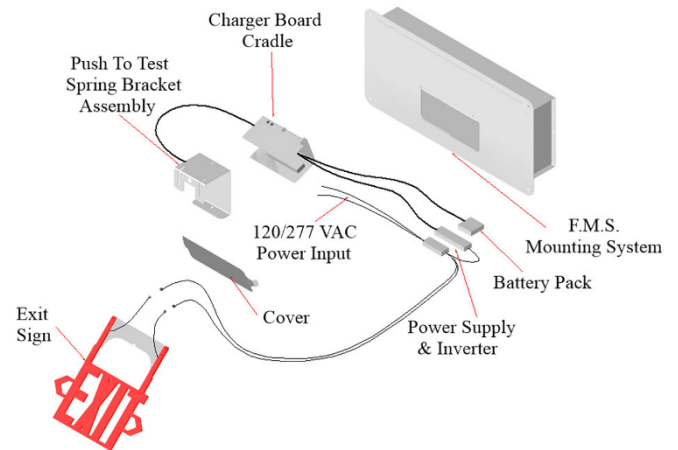
Step #2: Prepare Location

Confirm that the location is clear of obstructions, including electrical and mechanical building systems. The clear area required for recessed flush mounting is 21" long by 8" wide by 3.625" deep within the ceiling area mounting location to completely recess the back box. The recessed back box portion of the exit sign fixture should only be installed into a completely clear, unobstructed, recessed area that allows the exposed exit signage mounting face(s) to be pendant-mounted from the ceiling.

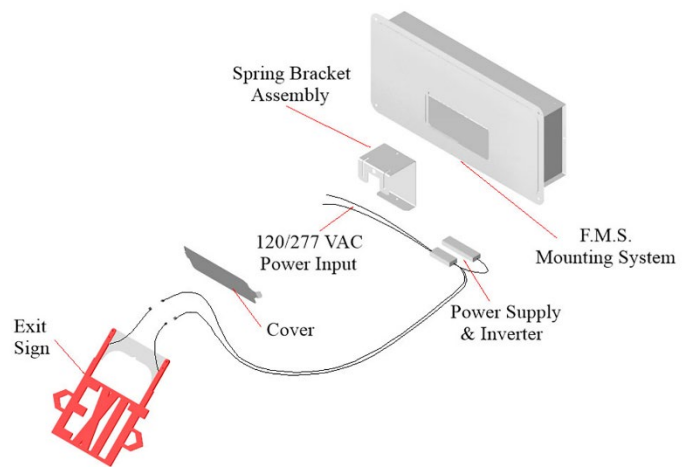


Step #2: Prepare Location (continued)

1. Locate the exit sign panel final position to find the offset mounting location of the recessed back box. Securely fasten the back box to the ceiling construction, using additional blocking material, if necessary.
2. Provide National Electrical Code conduit raceway connections to the recessed back box, utilizing the provided 13/16" knockouts located on the power input side of the recessed back box.
3. After the ceiling materials are installed, provide a 8" x 13.80" opening by removing the ceiling materials ... following along the recessed back box opening.
4. Install the flush mounting system panel flush against the ceiling materials, centering the panel in the recessed back box opening.
5. Mark the four (4) hole locations for the four (4) flush toggle bolts (provided) to secure the panel to the ceiling materials. Drill the four (4) 5/8" diameter holes for the toggle bolts. Install the toggle bolts into the flush mounting system.
6. Apply construction adhesive (not included) onto the back side of the flush mounting system.
7. Insert toggle bolts and mounting panel assembly into the ceiling materials.



Standard and Self-Diagnostic Component Connections



AC Only Component Connections

Step #2: Prepare Location (continued)

8. Securely tighten the four (4) toggle bolts until the mounting panel is flush with the ceiling material. Verify the placement of the mounting panel is aligned parallel to the room dimensions so that the exit sign face will be aligned with the room and level with the ceiling.
9. Provide a single unswitched supply from either a 120VAC or 277VAC branch circuit used for normal lighting in the egress room area. **Note:** For remotely-powered Invisi-X exit sign installations, route two (2) #10 copper AWG rounded raceway branch circuits to the remote location of the designated power supply.
10. **Emergency Self-Contained Battery Backup Input:** Make the proper supply lead branch circuit connections with only UL-recognized wire nuts. If using 120VAC, connect the black and white leads to the building utility power. If using 277VAC, connect the red and white leads to the building utility power. Cap off unused wire.
11. **AC Only Power Input:** Make the proper lead branch circuit connections with only UL recognized wire nuts. For the 120/277VAC lead, (H) connect it to the building power black conductor. For the 120/277VAC common (N) lead, connect it to the building power universal white conductor.
12. Provide exit sign fixture ground conductor connections with only UL-recognized wire nuts between green conductor lead and branch circuit conductors within the junction box.

Step #3: Masking & Painting - Finishing of Flush Exit Sign Mounting Panel

NOTE: Professional attention is recommended to assure the exit sign flush mounting system is completely concealed and invisible in the ceiling area finished material surface.

1. Provide concealing tape and masking coverage around the exposed perimeter edging of the flush mounting panel and adjacent ceiling surface. Maintain minimal masking application coverage along the panel perimeter edging to maintain level surface to be consistent with the exit sign panel and adjacent surfaces. [See diagram next page.]

Step #3: Masking & Painting (continued)

2. Complete by sanding all areas necessary to provide a seamless, feathered, continuous, flush appearance to completely blend into surrounding finish.

3. The flush exit sign metal panel and cover plate are provided with a factory primer-coated finish to accept paints and finishes. Paint/finish the flush exit sign metal panel, and removable access cover plate, as desired, to match surrounding surface finishes/textures. Take care to not allow excessive paint/finish to remain and cure on the inside edges of the flush panel, nor the access cover plate, in order to maintain a flush, finished appearance. **After each paint application has been applied**, remove excess paint build-up that may occur along the inner edges of the flush panel (where cover plate is to be located) to maintain a continuous straight edge line around the cover plate access opening. Keeping excess paint cleaned away from the edges will allow the cover plate to fit flush with the flush mounting panel.

4. **Covering Material:** If the flush panel and cover plate of the exit sign is to be covered with a material such as wallpaper, cloth, laminate, etc., allow the mastic used in application to completely setup. Use a sharp-edged cutting tool, such as a single-edge razor blade or utility knife, to draw against all edges of the two (2) openings for the pendant power posts that extend outward from the flush-mounted panel to the exit sign.

NOTE: Painting/finishing of the flush exit sign metal panel, and removable cover plate, must be completely dried and cured prior to completion of the next installation steps. [See Figure 2]

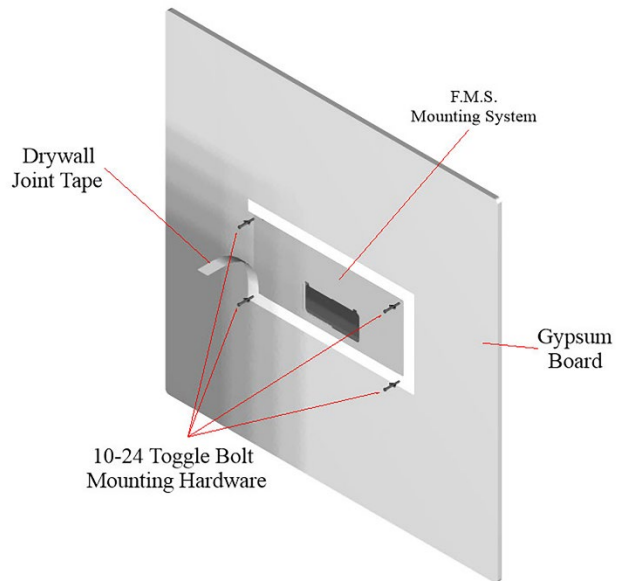


Figure 1

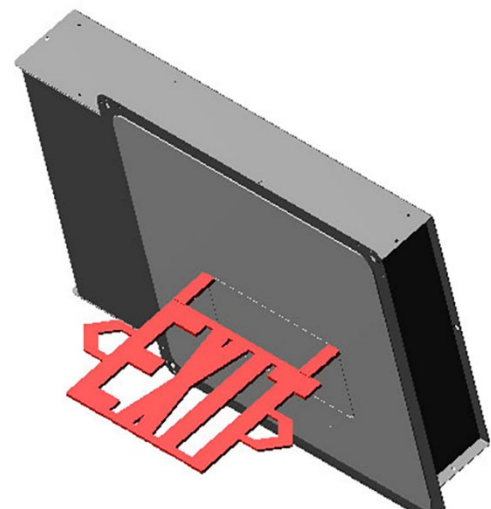
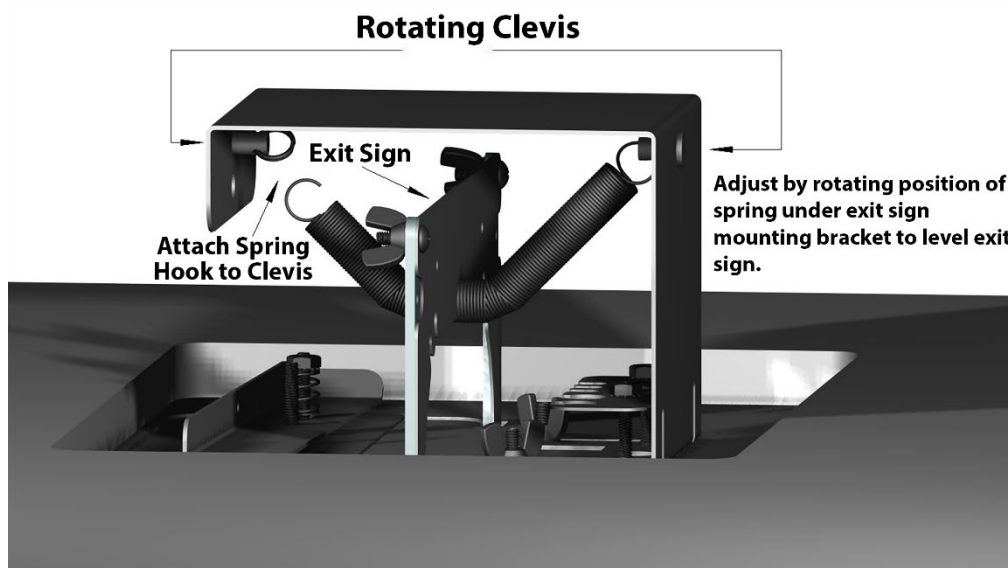


Figure 2

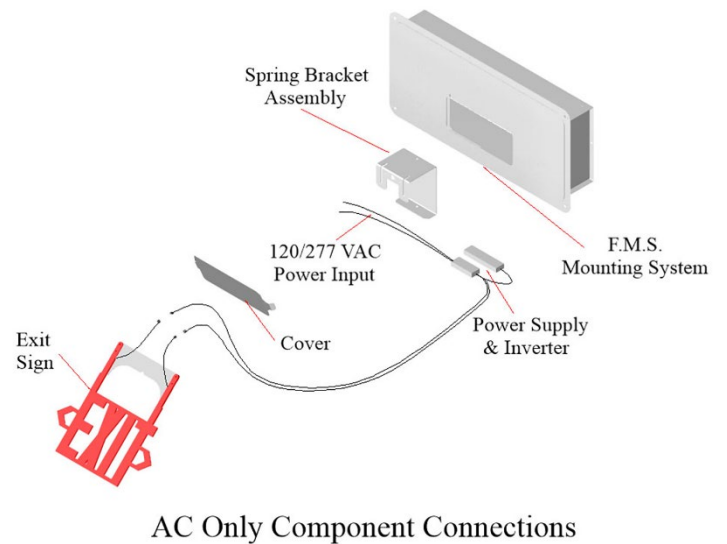
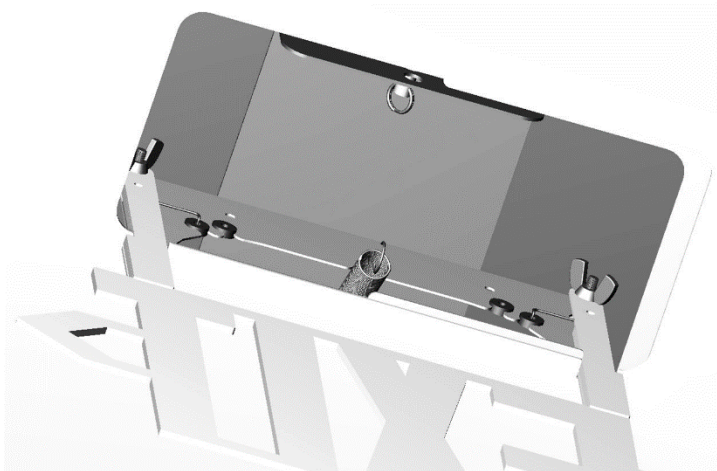
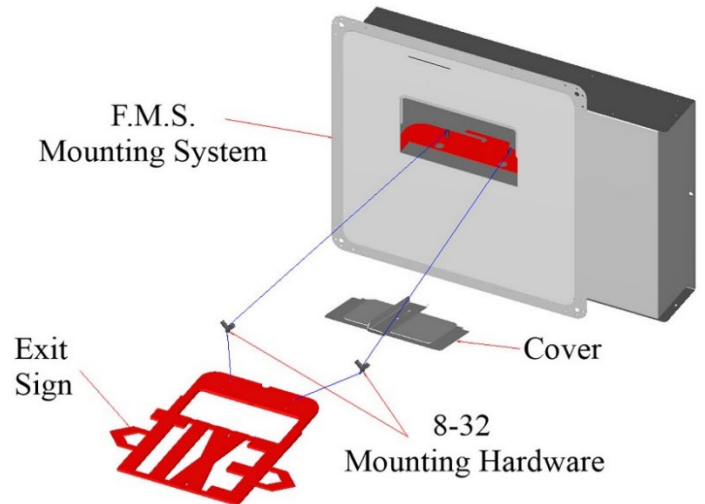
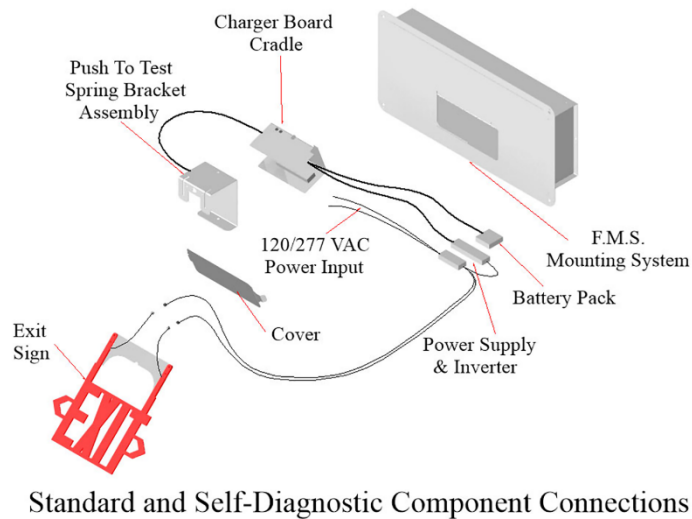
Step #4: Energizing the Illuminated Exit Sign

NOTICE: Do not energize the incoming branch circuit power to exit sign fixture power supply assembly unit until the entire installation is complete.

1. Connect the exit sign pendant mounted assembly to the interior spring bracket assembly located behind the flush mounting panel. Fasten and secure the exit sign pendant signage to the two (2) threaded nuts on the spring bracket plate with the two (2) #8-32 $\frac{3}{4}$ " screws.
2. Connect the exit sign panel keyed exit lead wire connector to the matching power supply connector.
3. Adjust the final vertical position of the exit sign pendant signage to the desired position by rotating the spring within the recessed back box area either clockwise or counterclockwise as required.
4. Connect the battery backup lead connectors to the power supply assembly battery input lead connectors.
5. Install the cover plate onto the flush mounting panel by first inserting the cover fully into the recessed back box area. Then, retract outward until the spring retainer cross support bracket edge remains in the back box. Now, slide the cover along the exterior of the flush panel opening until the access cover is fully installed in the finished flush mounted position. To remove the access cover, reverse this process.
6. Remove protective film from Exit sign EL Panel sign faces and mirrored sections.



Installation Sequence Diagrams



Manual Testing: Battery Backup Units Only

1. Testing the operation of the unit is accomplished by depressing the recessed, concealed, momentary push-to-test switch located within the exit sign flush panel. To test the unit, visibly locate the round hole opening on the flush mounting plate. Insert a paper clip, or similar diameter round object, into the opening to depress the switch and operate the unit in emergency testing mode. Restore the unit to normal mode by removing the inserted paper clip.
2. Power and charge status visible illumination indicators are viewed through the exit sign's flush panel concealed, momentary push-to-test hole opening.

Troubleshooting: Symptoms and Possible Corrective Measures

➤ *Unit does not operate illuminate.*

- 1) Verify AC power is energized to the unit.
- 2) Replace LED charger board.

➤ *Unit does not illuminate during emergency mode.*

- 1) Verify battery backup keyed male/female plug connection is secure.
- 2) Install new battery backup pack.
- 3) Contact factory.

Routine Care: Taking a Unit Out of Service

1. Do not use harsh cleaning chemicals to clean the exit sign. Lightly dust the debris from the sign, and dust it routinely.
2. If a unit is to be deliberately taken out of service for an extended period, and when the unit includes optional EM separate emergency power battery/charger unit, the optional



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emergency unit male/female keyed plug-in connector within the exit sign LED circuit board area should be disconnected from the battery pack so that the battery pack will go into storage in a fully charged condition. Disconnect and remove the input 120VAC or 277VAC, as applicable, power connections as per emergency power unit manufacturer's recommendations. If there is any chance that a unit taken out of service may later be used on a different VAC circuit, tag the unit's current primary input selection as either 120VAC or 277VAC, as applicable.

Warranty

All Concealite fixtures are tested and are guaranteed to be free from defective materials and workmanship for a period of three years (3) from date of shipment, under normal operations and proper use. Correction of all defects shall be by replacement or repair (at our discretion) and shall constitute fulfillment of all manufacturer's obligations. We will not allow any charge for labor, materials, etc. that does not have our written approval before the work has begun. Damage incurred in handling or in transit are not covered. Any other warranty, expressed or implied, is hereby void. Modifications to the product or failure to follow these installation instructions will void the warranty.

Save These Instructions