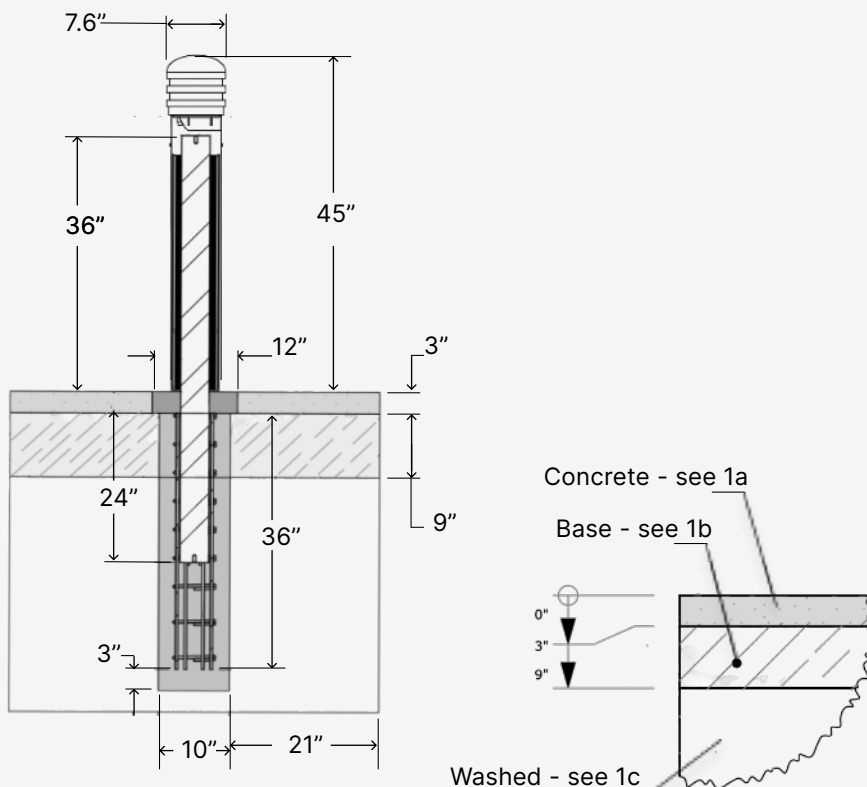


IMPORTANT: Carefully read all instructions before installing the fixture. Ignoring these guidelines could result in death, severe injury, or significant property damage. Keep these instructions for future use.

⚠ WARNING! RISK OF FIRE, ELECTRIC SHOCK, OR SERIOUS INJURY

- Always turn off power at the circuit breaker before beginning installation, maintenance, or service on the fixture.
- Installation should be carried out by a certified electrician in accordance with the National Electrical Code (NEC) and applicable local regulations.
 - Confirm compatibility between the fixture's rated voltage and the electrical supply before connecting.
 - LED elements are delicate electronic parts. Do not tamper with sealed sections of the fixture or touch LEDs with bare hands or tools.
- Avoid installing the fixture on circuits shared with heavy-duty equipment such as HVAC systems or motors, as this may expose it to harmful power surges.
 - The included driver or transformer must not be bypassed or substituted. Use the fixture only in its original configuration.
- Fixtures must be connected in parallel, each with independent leads. Do not connect in series or daisy-chain multiple units.
- Factory-installed wiring must remain unmodified. Do not cut or alter pre-stripped coaxial or pendant cables.
- When making electrical connections, use only UL-certified waterproof connectors suitable for outdoor use.
- Ensure the mounting surface or foundation is stable, level, and structurally capable of supporting the fixture's weight.
- Select proper mounting hardware for the specific surface type. To preserve the powder-coated finish, avoid direct contact with concrete or rough materials that may cause abrasion or chipping.

INSTALLATION DIAGRAM



MINIMUM GROUND CONDITIONS REQUIRED PER ASTM F3016

1a. Concrete shall have a minimum unconfined compressive strength of 3000 psi.

Provide one layer of #3 (Ø3/8") rebar spaced at 12" each way, with 1-1/4" cover at the bottom (rebar not shown in diagram.)

1b. Sub-base shall consist of Type A, Grade 1 crushed limestone road base, compacted to not less than 90% of standard Proctor density.

1c. Washed sand shall be classified as SP - poorly graded sand and compacted to a minimum of 90% of the maximum dry density, in accordance with AASHTO T99.

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Suggested Tool List

Below you will find the suggested tools for a deep cage CrashCore Bollard installation

EQUIPMENT

- Skid Steer with 10" Auger & Bucket Attachments
- Core Drill with 12" Diamond Core Bit
- Small Concrete Mixer or 5 Gallon Bucket with Concrete Paddle Mixer
- Gas-Powered Generator
- Wet/Dry Vacuum
- Pressure Washer
- Portable Work Lights (If Night Work)
- Cordless Blower
- Pallet Jack with 5000 lb Capacity
- Cordless Impact Driver
- Dumpster

HARDWARE & SUPPLIES

- Fast-Setting Concrete Mix with Minimum 3000 psi — Approximately 2 ft³ Per Bollard
- 1/4" x 1-3/4" Tapcon Self-Threading Concrete Anchors
- 3/16" Carbide Tip Masonry Drill Bit
- 5/16" Hex Impact Socket
- 5/16" Allen Key or Hex Bit
- Towels or Rags for Clean Stainless Steel
- Stainless Steel-Safe Cleaner

TOOLS

- Chalk for Marking Concrete
- Chalk Line or Laser
- Tape Measure
- 24" Push Broom
- 7" Corn Hand Broom
- Finishing Trowel
- Flat Transfer Shovel
- Round Point Shovel
- Level
- Extension Cord
- 48" Post Hole Digger
- Wheelbarrow
- Web Slings for Lifting at least 1000 lb Capacity
- Square with at least 2 ft Blade
- 3/4" Water Hose with Hose Head Nozzle
- Steel Drilling Hammer or Dead Blow Hammer Shut-Off Valve Wrench (Water Security Key)
- 2 Adjustable Pipe Wrenches
- Utility Knife
- String or Wire
- Digging Bar
- Camera or Smart Phone

PPE

- | | | |
|------------------|-------------------|----------|
| • Dust Mask | • Steel Toe Boots | • Gloves |
| • Eye Protection | • Ear Protection | |

Contingency Equipment List

- | | | |
|---------------------|---------------------------------|----------------|
| • Cones Cation Tape | • Jack Hammer | • Masking Tape |
| • Metal Barricade | • 1/2" - 13 Tap | • Tarp |
| • Steel Tamper | • 3/8" or #3 x 36" Rod or Rebar | |

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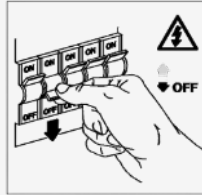


Step 1

Carefully unpack the fixture and inspect all components for damage before beginning installation.

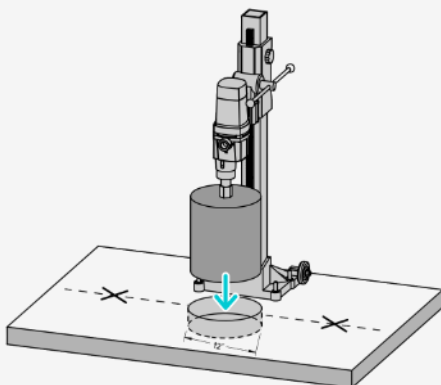
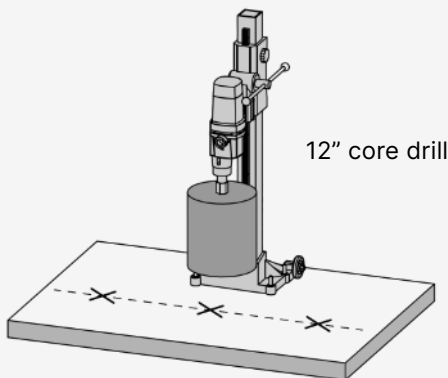
Ensure that the contractor has routed electrical wiring to the installation location and that the power supply is switched off.

Always check for hazards such as water pipes, gas lines, and underground wiring before digging. Note: You may need a permit to dig to certain depths or in certain locations.



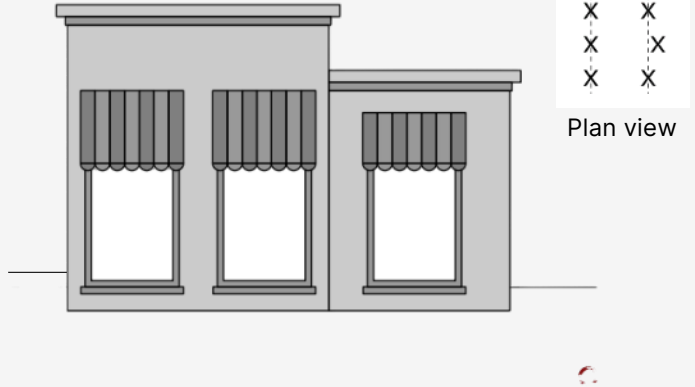
Step 3

Use the 12" core drill to drill through concrete. Keep it clean — use the wet vac to make sure concrete slurry doesn't stain the sidewalk or enter drains.



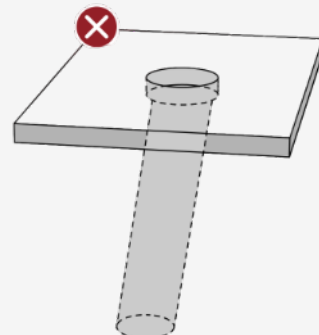
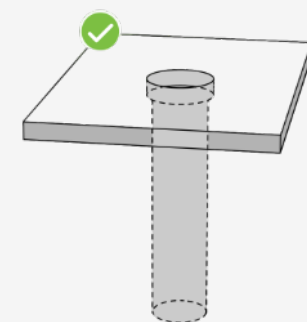
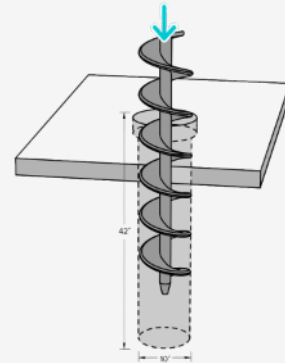
Step 2

Layout and mark bollard locations per print.



Step 4

Using the 10" auger remove earth from hole. Auger 10" diameter hole 42" deep.

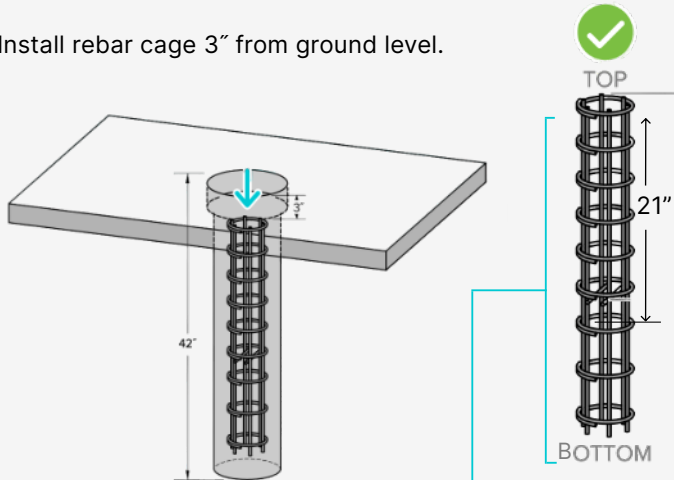


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Step 5

Install rebar cage 3" from ground level.

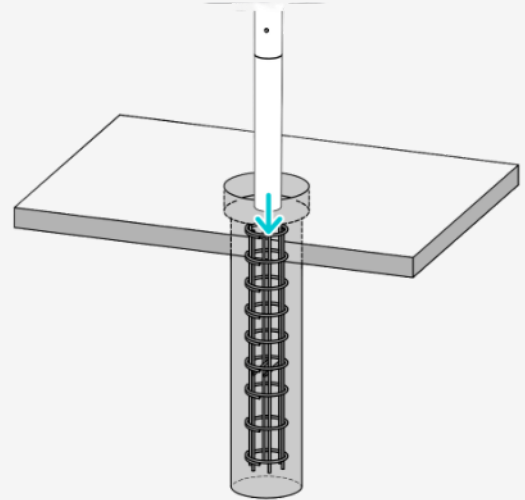


NOTE:

Ensure top of cage is oriented correctly.
Note the top of cage is flat and bottom of cage has extended rebar

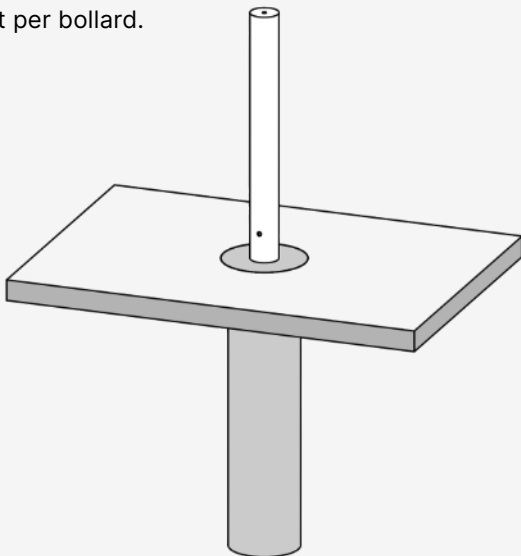
Step 6

Lower the core into the cage. Ensure one tapped hole is facing the parking lot and core is plumb.



Step 7

Mix & place 3,000 PSI minimum concrete into the hole to ground level — estimated concrete approximately 2 cubic feet per bollard.



NOTE:

Ensure core is plumb

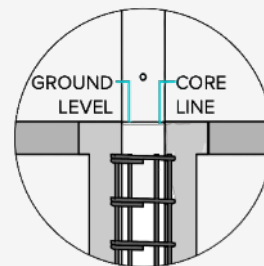


TOP VIEW



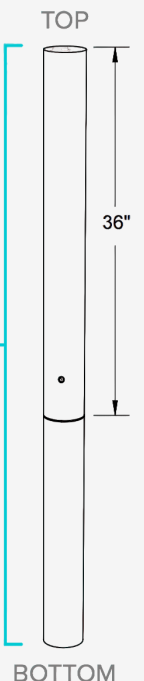
PARKING LOT

SIDE VIEW



NOTE:

Ensure top of core is oriented correctly.
Note the tapped hole should be above the grooved core line.

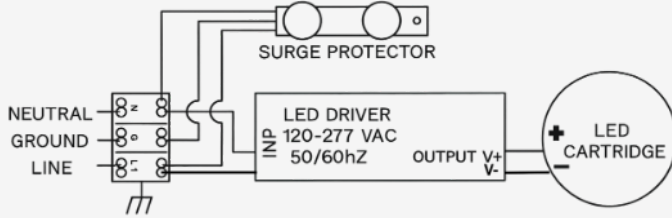


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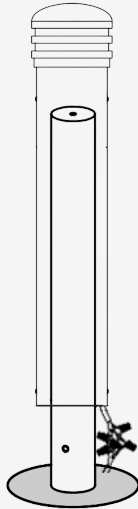


Step 8

Wait until the concrete has fully set.



Connect the wires as follows: black to line (L), white to neutral (N), and green or bare copper to ground (GND), using the wire nuts included in the hardware kit. Make sure excess wires are secured away from any metal surfaces to prevent contact.



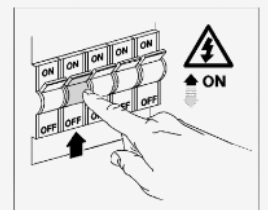
Step 9

Place the cover onto the installed base and fasten it securely using the provided screws.



Step 9

Once installation is complete, turn the power ON at the main fuse box. The fixture should now operate properly.



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MAINTENANCE NOTES

Clean fixture surfaces using a soft cloth and mild detergent.

What to Avoid

- Do not use abrasive cleaners or scouring pads.
- These can scratch the powder coat, exposing aluminum to oxidation.
- Avoid strong solvents like acetone, paint thinner, or alcohol-based cleaners.
- They can break down the powder coating's integrity.
- Don't use high-pressure washers too close to the surface.
- Excessive pressure may damage seals and finishes.
- Never clean under direct sunlight or while hot.
- This may cause streaking or spotting.

LIMITED WARRANTY

A We Lighting warrants that its outdoor bollards and column luminaires are free from defects in materials and workmanship under normal use and conditions for a period of [5 years] from the original date of purchase. This warranty is valid only when the product is installed and operated in accordance with the instructions provided in this manual, the National Electrical Code (NEC), and all applicable local building and electrical regulations.

This warranty does not apply to:

- Damage resulting from improper installation, failure to follow installation instructions, or insufficient maintenance.
- Use with incompatible or unstable power supplies, including unauthorized modifications of the fixture or its components.
- Mechanical damage, corrosion, or deterioration caused by installation in conditions that exceed the product's rated specifications (e.g., extreme temperature, humidity, wind load).
- Electrical failure due to power surges, lightning strikes, voltage irregularities, or operation on circuits shared with inductive loads (e.g., HVAC units, pumps, motors).
- Mounting on unstable or unapproved foundations, including surfaces not rated to bear the weight or vibration load of the fixture.
- Installation in submerged or continuously wet environments, unless explicitly rated for such conditions (e.g., IP68 or higher).
- Exposure to aggressive substances such as road salt, industrial chemicals, oil, or airborne pollutants that may degrade the materials or finish.

Warranty Claims:

To initiate a warranty claim, please contact A We Lighting's Customer Service team. You will be required to provide:

- Proof of purchase (invoice or receipt)
- A detailed description of the problem
- Photographic evidence of the issue, including installation site and close-up views of the defect

A We Lighting reserves the right to inspect the product (either on-site or via return shipping) to determine whether it qualifies for coverage under this warranty.

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