



MILBANK[®]
ENERGY AT WORK

**Enclosed Controls
Product Portfolio**



Milbank is a family-owned, American manufacturer, based in Kansas City, MO. Since 1927, Milbank has set the standard for high-quality metering equipment and enclosures. Milbank's product portfolio includes:

- Single position meter sockets
- Meter combos
- Heavy-duty and instrument-rated metering
- RV/mobile home pedestals
- Terminal/tap boxes
- A/C disconnects
- Enclosures
- Enclosed controls

The Enclosed Control Advantage

Milbank enclosed controls provide a customized solution for power distribution needs. Each product is designed by Milbank engineers according to specified project requirements. Milbank works with municipalities and utilities to develop enclosed controls to suit nearly any specification requirement.

The commercial pedestal is Milbank's most common product from the enclosed controls line. This option provides an attractive, secure, easy-to-install and cost-effective solution for underground remote-site power distribution. Commercial pedestals may be metered, or unmetered, and adapted to a variety of applications. When pedestals are not an option, Milbank offers surface-mounted enclosed controls.

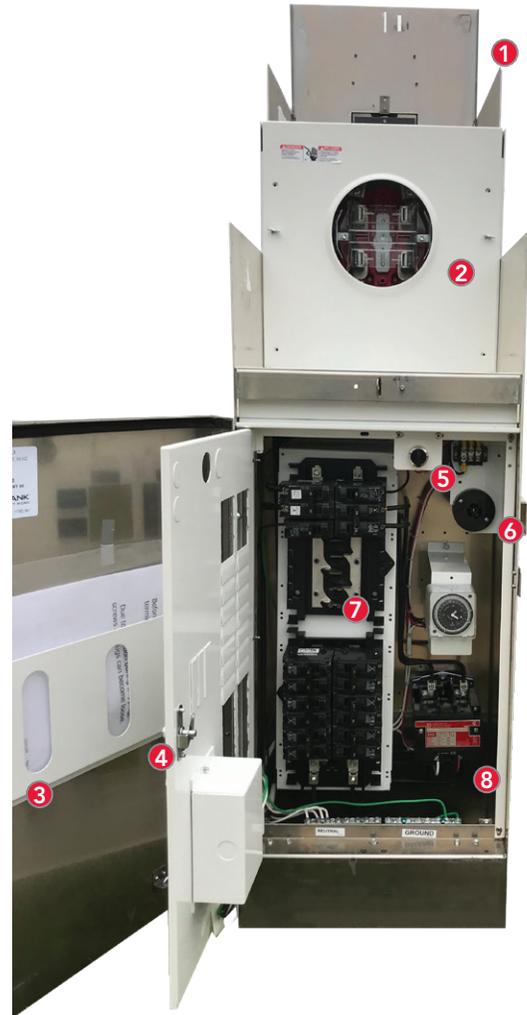


Anatomy of a Common COMMERCIAL PEDESTAL

See the diagram on this page for the common features Milbank's commercial pedestals offer.

Some of the most common applications for commercial pedestals include traffic signals, street lighting, athletic field lighting, site power for events and festivals and power distribution for EV charging stations.

Customization is available beyond the standard options.



- 1 The **meter hood** closes to protect the meter socket and electric meter. A transparent window is included for meter reading purposes.
- 2 The **meter socket** is the connection point of the electric meter. Available in several variants—ringless and ring type, with lever bypass and test switch options.
- 3 The **print pocket** provides a secure place to store wiring diagrams and other reference material.
- 4 The **deadfront** offers access to breaker switches while protecting against other live electric components.
- 5 The **Hand-Off-Auto switch** gives the ability to switch individual circuits to manual (hand) control, to the off position or to automatic control via time clock or other control equipment.
- 6 The **PE receptacle** detects when the level of ambient light is low enough (either from the sun setting or from heavy cloud cover) to activate lighting circuits.
- 7 The **load center** distributes electric energy from the utility to the numerous circuits controlled by the pedestal, utilizing circuit breakers for safety and protection.
- 8 A **contactor** is used for switching circuits with higher current ratings.

COMMON APPLICATIONS



Municipal Power

Traffic Signals
Street Lighting
Public WiFi
Battery Backups
Security/Surveillance

Site Power

Fairgrounds
Portable Offices
Festivals
Holiday Lights
Farmers' Markets

Communications

Cell Towers
Telephone Vaults
5G and Small Cell

Motor Control

Irrigation
Sprinklers
Lift Stations
Gates
Pumps

Outdoor Lighting

Sports Complexes
Parking Lots
Rail Yards
Landscaping
Subdivision Entrances

Power Distribution

EV Charging
ATMs



Enclosed Controls: The Alternative to Strut & Backboard

Surface-mounted enclosed controls provide a more safe and aesthetically pleasing substitute to strut and backboard systems.

✗ Vulnerable to power theft

✗ Longer installation

✗ Visually disruptive to green spaces and cityscapes

✗ Larger footprint

Surface-Mount Enclosed Controls

Surface-mount enclosed controls were originally developed for the communications industry but are currently adaptable for a variety of applications. These products have the same flexibility of larger enclosed controls but have a smaller footprint and additional mounting options.





Features and Benefits

- Easy and efficient installation.
- Overhead and underground entry and exit in the same unit.
- Meter and components in one enclosure.
- Can be mounted on multiple surfaces.
- Multiple bypass options available.
- Small footprint.
- Weather resistant.
- Eliminates the need for connecting components.
- Wire in - Wire out.

COMPACT PRODUCT

Traffic

Traffic flow within our new connected roadway transportation system depends on intelligent traffic lights, dynamic message signs and cameras. Milbank enclosed controls provide circuit protection to electrical loads and control components, as well as alternate power source options to keep power moving to critical traffic technology.





Battery Backup (left)

- Available with or without batteries.
- Switching equipment.
- Thermally-controlled fans.
- Dual meter option for secondary loads.

Slimline (right)

- 12-inch (shown) and 20-inch wide available.
- Side utility section allows for close placement to walls and other obstructions.
- Doesn't require a large space; smaller footprint.

TRAFFIC



Outdoor Lighting

Milbank enclosed controls are a safe and secure way to protect outdoor lighting electrical distribution and control components. Common applications include parking lot lighting, pathways, parks, bus stops and more.



Pictured: Switched Load Center

Common Options

- Contains a load center for “always on” loads that includes a main circuit breaker, as well as a load center connected to a PE receptacle and contactor for timed, controlled loads.
- Optional light shield for PE receptacle to prevent light cycling from vehicle headlights.
- Available in customized colors.
- Exposed meter option for unobstructed signal transmission with AMR systems.

OUTDOOR LIGHTING

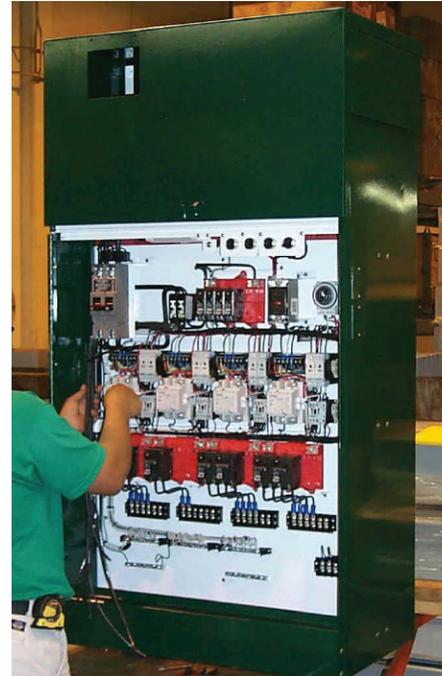
Sports Lighting

Athletic lighting systems often require more advanced controls. Milbank enclosed controls are engineered to work with these systems, allowing space for timers, pushbutton starts and buzzers to warn before the lights turn off.



Features and Benefits:

- Capable of four separate remote light “on” buttons, ideal for larger tennis courts and other athletic field complexes.
- Can include remote monitoring and control equipment to track usage and ensure the system is functioning properly.
- Additional power distribution can be added to feed loads such as concession stands, scoreboards, utility sheds and more.



SPORTS LIGHTING

EV Charging

As electric vehicle usage increases, so does the need for EV charging stations. Milbank designs customized power distribution solutions for EV charging stations.



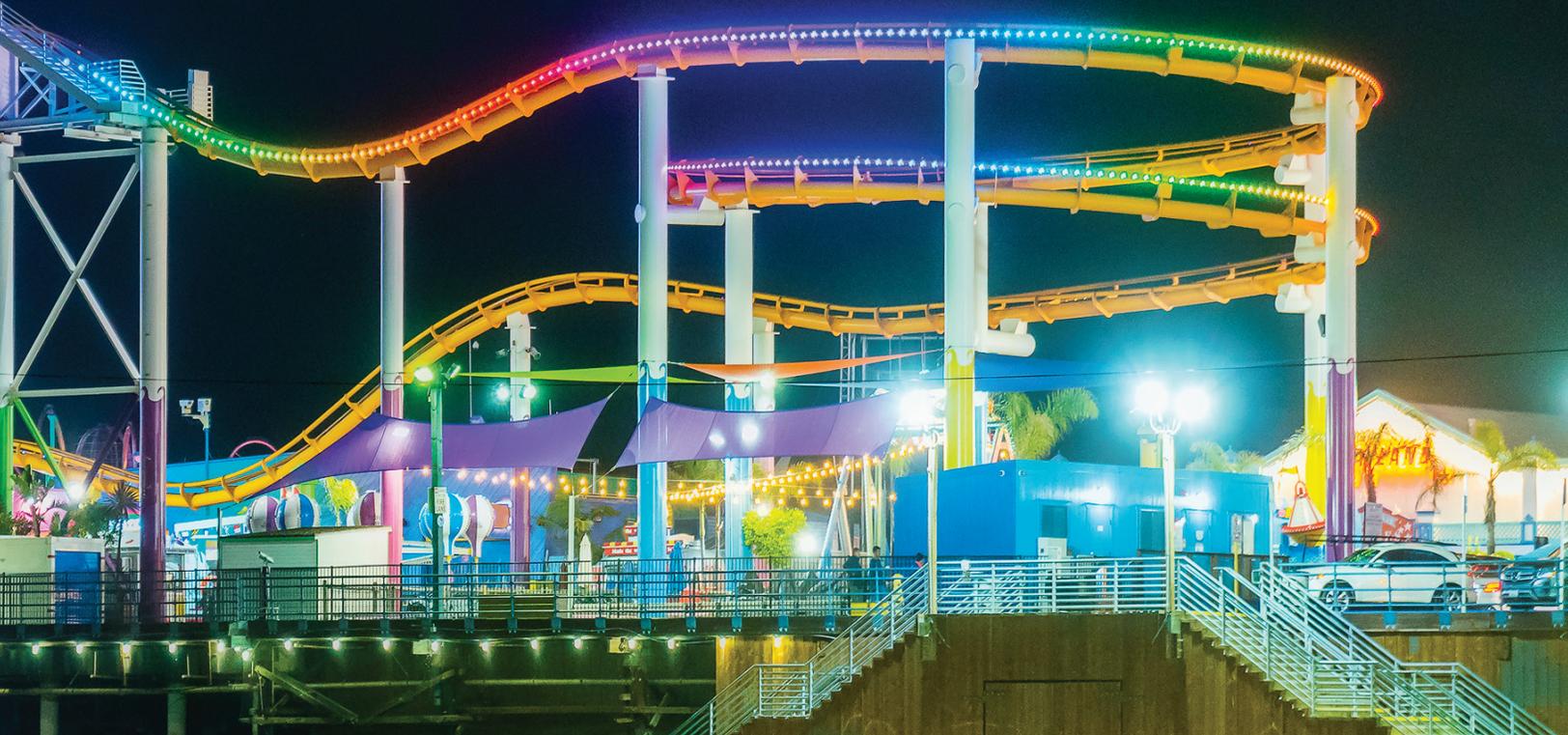


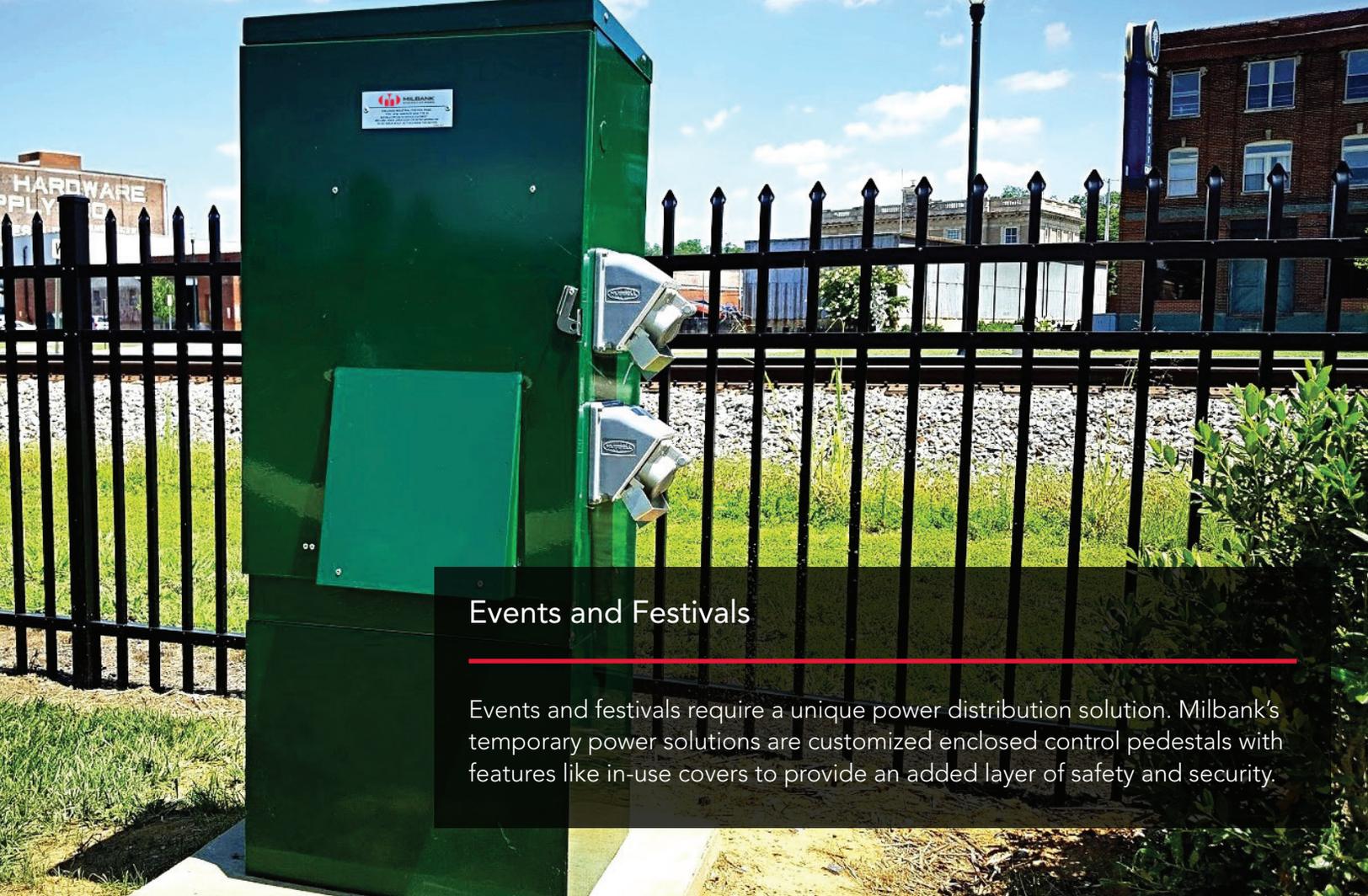
- Available with non- and single-metered options.
- Dual-metered option available for applications when lighting and EV charging need to be metered separately.
- Offered in single- or three phase-configurations.
- Dual voltages available in the same unit.

EV CHARGING



HOW WILL ENCLOSED CONTROLS POWER YOUR NEXT PROJECT?





Events and Festivals

Events and festivals require a unique power distribution solution. Milbank's temporary power solutions are customized enclosed control pedestals with features like in-use covers to provide an added layer of safety and security.



- High-amperage main breakers for heavy loads.
- Receptacles are tailored to specifications, including standard GFI and cam-lock.
- Metered and non-metered configurations available.
- Customized color and finish options.

EVENTS & FESTIVALS

Multiple Sizes Available

Milbank enclosed controls are offered in multiple sizes, ranging from the 12-inch Slimline to the new 46-inch instrument-rated option. Enclosed control specialists are available through Milbank to help you choose the appropriate size for your application.





12-inch

Slimline

- 12-inch
- 20-inch



16-inch

Standard CP

- 16-inch
- 24-inch
- 32-inch
- 44-inch



46-inch

Instrument Rated

- 32-inch
- 42-inch
- 46-inch

AVAILABLE SIZES





Embedded Concrete

- Pad-mount: Available for all pedestal sizes.
- Anchor Bolt: Kit comes with four 18-inch bolts.



Wall- and Pole-Mount

- Custom cabinet sizes.
- Available in aluminum to reduce weight and make for an easier installation.
- Several latch and locking mechanisms available.



Direct Bury

- Use with any 12-inch Milbank Slimline pedestal.
- No concrete required.
- Shorter pieces reduce cost of shipping.

MOUNTING OPTIONS



For more information, visit

milbankworks.com



MILBANK[®]
ENERGY AT WORK



MILBANK[®]
ENERGY AT WORK

Case Studies

Case Study: Energys (formally KCPL) EV Charging

Background & Challenge

In January of 2015, KCP&L announced its plan to rapidly expand its network of 40 public electric vehicle charging stations. The “Clean Charge Network” now consists of nearly 1,000 EV charging stations- more than any other US city.

KCP&L wanted a single power distribution device with meter and service panels to streamline construction, along with disconnect switches and load panels. They also wanted a solution that came with a more efficient installation process that didn't require a support structure for mounting.



“Milbank was able to custom tailor products for our needs and meet the rapid deployment timeline. The product solution streamlines field construction and provides an aesthetically pleasing installation.”

—Ed Hedges, KCP&L Project Engineer

The Solution

Milbank engineers worked closely with KCP&L to design a safe, durable and sleek enclosed control with minimal impact on streetscapes. The pedestals are UL listed, lockable, sealable and metered, per KCP&L's specifications. In addition to providing a solution to fit KCP&L's specific needs, Milbank's enclosed controls saved time, money, space and materials.

Implementation

The KCP&L edition of Milbank's enclosed control was designed for a quick and repeatable installation. As the project evolved, KCP&L found that different designs were needed based on location, type and number of charging stations. Milbank was able to pivot and easily produce designs that fit these updated needs. KCP&L is currently using five different Milbank models.

Case Study: Lighting Controls Retrofit in Chicago



The Problem

The Skyway Toll Bridge connects Northwest Indiana to Chicago's South Side. This nearly eight-mile bridge was built by the City of Chicago in 1958. The bridge had 19 aging lighting control cabinets that needed to be replaced with one standard-sized cabinet. The challenge was creating cabinets according to the specific size requirement that could also fit various types of bases and structures.



The Solution

Milbank engineers designed replacement cabinets to suit the City of Chicago's requests. Each cabinet was the same size with adjustable openings to work with the different structures. The new applications have custom features and a more aesthetically pleasing appearance.



Case Study: Traffic Control Battery Backup in Minnesota



The Problem

The metering cabinets throughout Hennepin County, MN were rusting and in desperate need of an upgrade. County officials were in the market for a metering cabinet with a backup battery. The challenge was that the entire cabinet had to fit on the traffic signal cabinet pad, a 17-inch-wide space.



The Solution

Milbank worked with Hennepin County's specifications to engineer a stacked solution with utility access located in the back of the cabinet. The cabinet featured custom components like a photocell receptacle, pushbutton switch, and eight-circuit loader and four battery shelves.









MILBANK[®]
ENERGY AT WORK

milbankworks.com