



Lantern

98% Shade Coverage

There are three fundamental elements which make up The Lantern:

The glowing lantern as a unifying element through the city.

A sophisticated and thoughtful use of materials, with prosperity in mind.

Compatibility with other public realm elements provides cohesion.

The design of the fiberglass roof shelter is aimed at it being an urban lantern. During the day natural light dapples off of its shape, and at night light illuminates and inspires. The Lantern becomes a critical feature in the makeup of Los Angeles, acting as a connector of people. It unifies, provides equity of shade and design elegance.

Fiberglass is the material of choice for the shelter canopy. It's lightweight, with extraordinary strength. It's corrosion free, and highly resistant. It's easy to work with, with minimal maintenance. Fiberglass is known for its very low embodied energy.

The Lantern is designed for the future. We are witness to an industry which is evolving. And to that, the future of flax fiber instead of glass fiber. Natural fibers are lighter, incur less energy to produce, and have enhanced biodegradability. The Lantern could be at the epicenter of sustainability for Los Angeles. Products en masse which lead toward a more sustainable, resilient, and forward-thinking public realm.

The Lantern is aimed at urban compatibility. It is a lean design which provides maximum shade with minimal structure. It's expressive

ceiling and rounded corners are akin to Project Room's winning design for the L.A. Lights the Way streetlight competition. The Lantern is built to fit in, while also accomplishing a safe, comfortable, and thoughtful experience.

Materials

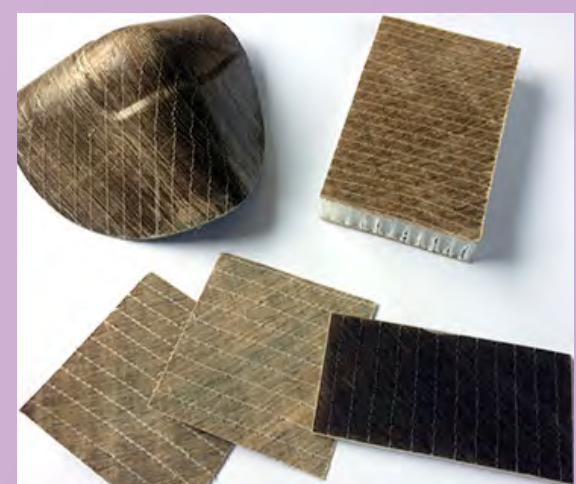
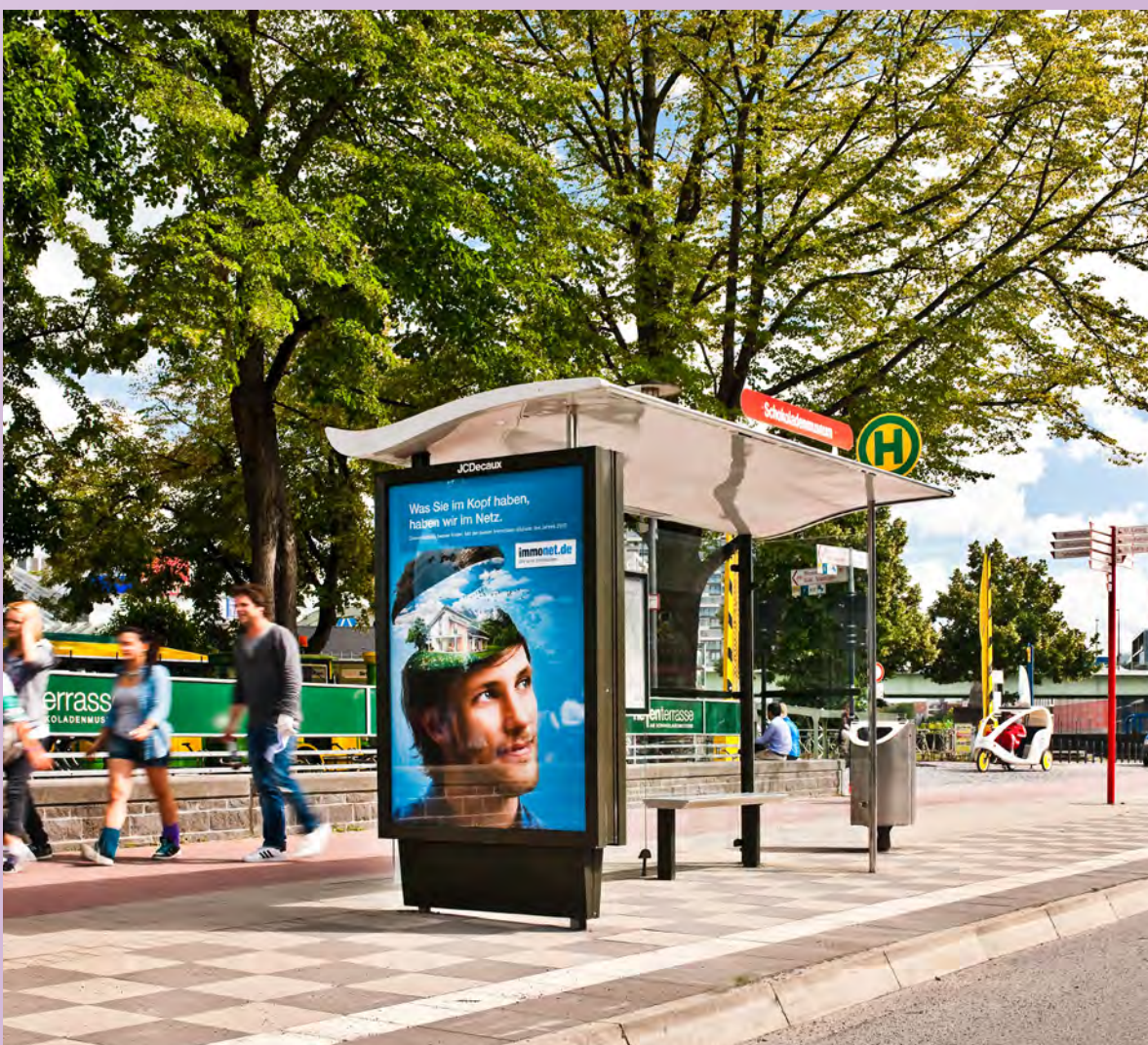
The shelter canopy in both the "Flat 2028" and "The Lantern" utilizes fiberglass.

A lightweight and extraordinarily strong material, it is corrosion free, and highly resistant to the elements. It is easy to work with and repair as well as requiring minimal maintenance. Fiberglass is a versatile material is known for its very low embodied energy and durability.

In the future, the ceilings could be made of a natural-fiber fiberglass substitute, "fibre de lin", which incorporates plant-based fibers and binding agents into a product that has enhanced biodegradability. An evolving composite material industry

led by firms such as Ekoa will soon be ready to produce natural-composite fiber materials on a larger scale than currently available. We can envision this material being an approved material for the City in the future.

Transit shelters can be the embodiment of sustainable and resiliency goals Los Angeles already espouses.



Shade Schedule

The Lantern

The "shade schedule" below compares the shade provided by the original "Flat" and the newly designed "Lantern". This hourly analysis gives a snapshot of the ability for each orientation and modular components to cast shade on the waiting area inside and in front of the shelter.

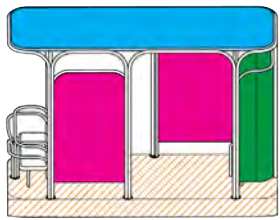
Based on our analysis and design process, the newly designed "Lantern" accomplishes 98% shading year-round.

Legend:

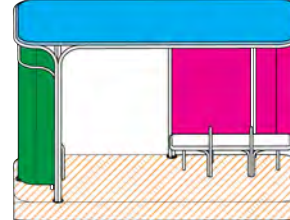
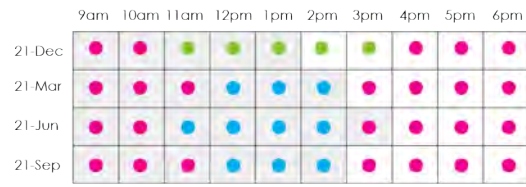
- side panel casts shade
- back panel casts shade
- roof panel casts shade
- empty space indicates shelter is in the sun

A dot indicates that shade is present at the indicated time. The color of the dot shows which panel is providing the shade.

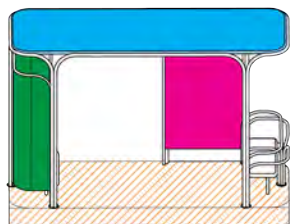
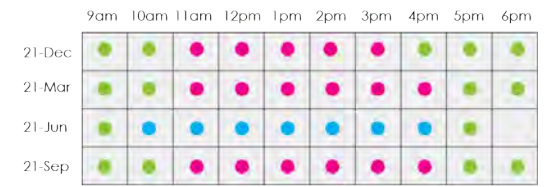
The background color refers to the shade analysis for La's current bus shelters. A grey fill means that the shelter currently in use provides shade at this time.



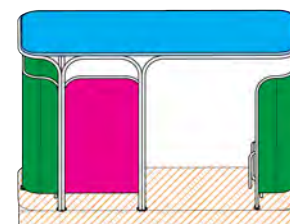
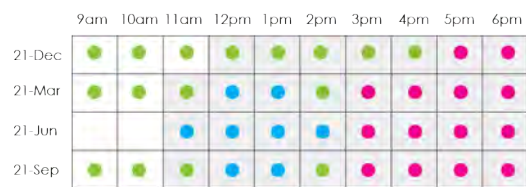
Northbound



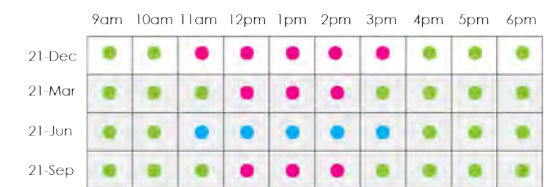
Eastbound



Southbound



Westbound



Olive St / 5th St Northbound, Downtown, CD 14
 Single standard shelter with ad panel, interactive information kiosk, leaning bars, litter/recycling bins, vending kiosk

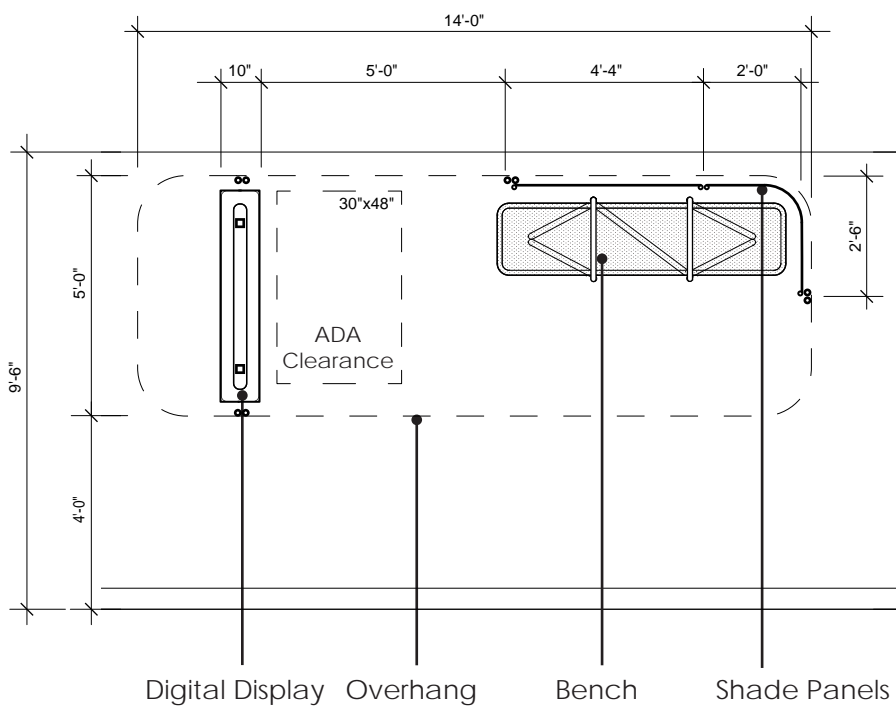
Lantern

Classic Model

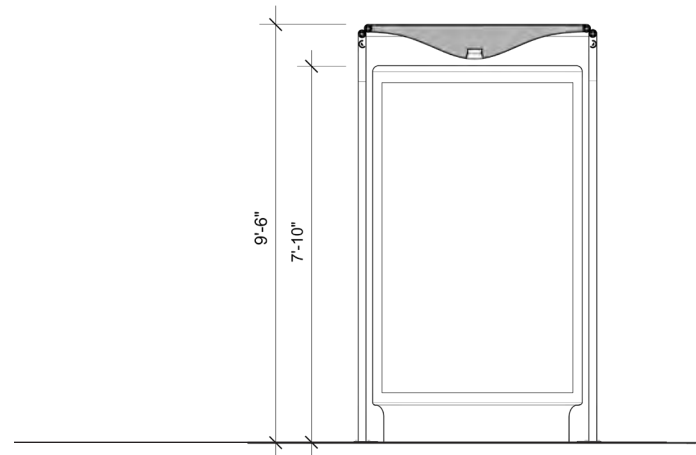


Lantern without Ad

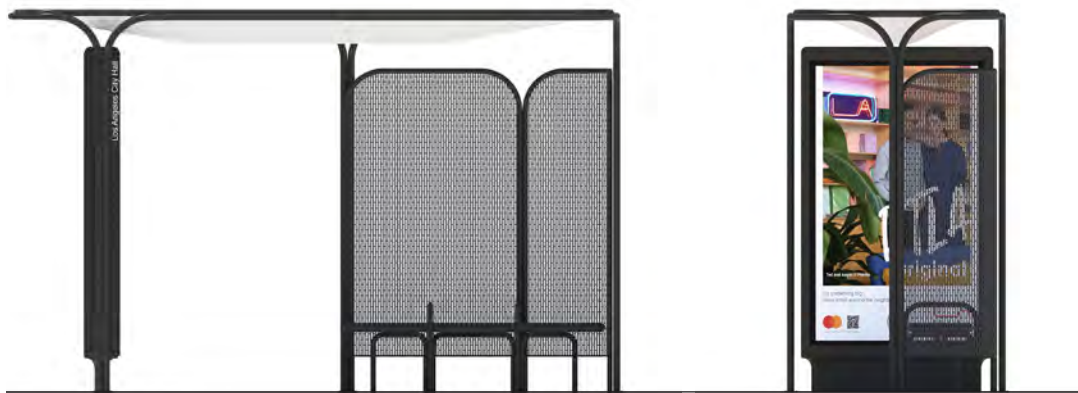
Lantern with Ad



Lantern Plan
Scale: 1/4" = 1'-0"



Lantern Section
Scale: 1/4" = 1'-0"



Lantern Front Elevation
Scale: 1/4" = 1'-0"

Lantern Side Elevation
Scale: 1/4" = 1'-0"

The Lantern has a roof structure with highly flexible perimeter column locations. Modular shade panels fit along the perimeter in traditional back and side orientations and now include an added front orientation.

The Lantern can be customized to include more seating and leaning furniture and up to four shade panels that come in two sizes.

The shade panels are made from a medium gauge perforated galvanized steel with a vertically oriented round slot pattern. The structural elements comprising the shelter are galvanized powder coated steel.

A number of adjustments can be made to accommodate narrow sidewalk conditions.

Kit of Parts



- A. High-efficiency recessed light fixture
 - B. Optional "Lantern" lighting. Linear indirect LED strip lighting
 - C. Cap for standard digital display
 - D. Digital display
 - E. Base for standard digital display
 - F. Real-time arrival display
 - G. Fiberglass roof with optional PV panels
 - H. Roof ring beam
 - I. Fiberglass ceiling panel material alternate: natural fiber composite panel
 - J. 60mm paired column structure
 - K. Built-in lean bar, one or two pairs of bars
 - L. Stand -alone lean bar
 - M. Shade panel 1, flat
 - N. Shade panel 2
 - O. Communications panel (5G & Public WiFi)
 - P. Bench for four
 - Q. Bench for three
 - R. Bench for two
- *Also Available
 - USB Charging
 - Hand Sanitizer

Alternate Configurations / Colors



Northbound
 Teal



Eastbound
 Steel Grey



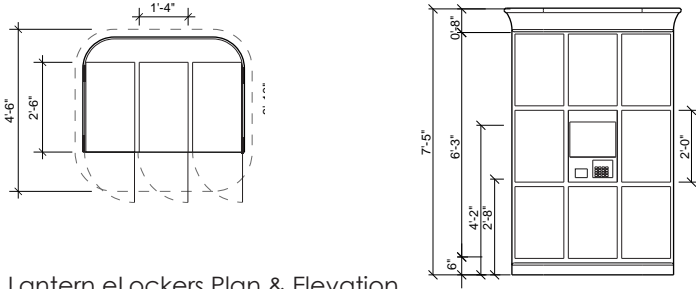
Southbound
 Ochre



Westbound
 Coral

Lantern

Program Elements



Lantern eLockers Plan & Elevation
Scale: 3/16" = 1'-0"

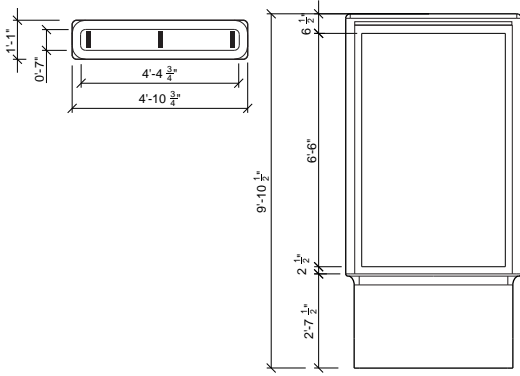


Litter / Recycling
Each 2'-8" L x 1'-7" Ø
(25 gal.)

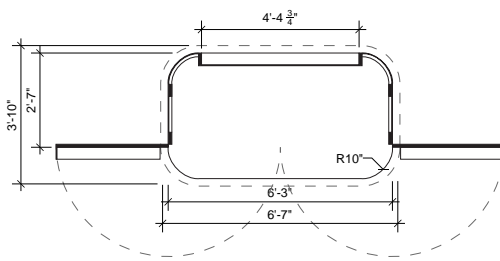
Interactive Information Kiosk
1'-11" W x 4" D x 6'-7" H

Bus Stop Pole
6" W x 6" D x 10'-3" H

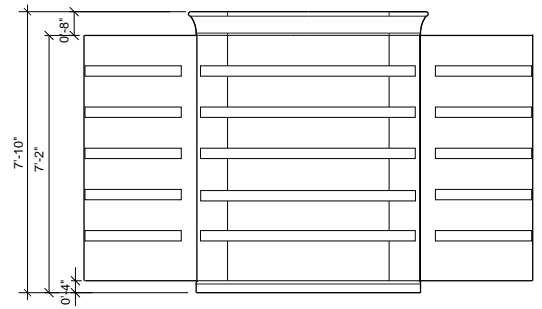
eLockers
4'-11" W x 2'-6" D x 7'-5" H



Lantern Urban Panel Plan & Elevation
Scale: 3/16" = 1'-0"



Lantern Vending Kiosk Plan & Elevation
Scale: 3/16" = 1'-0"

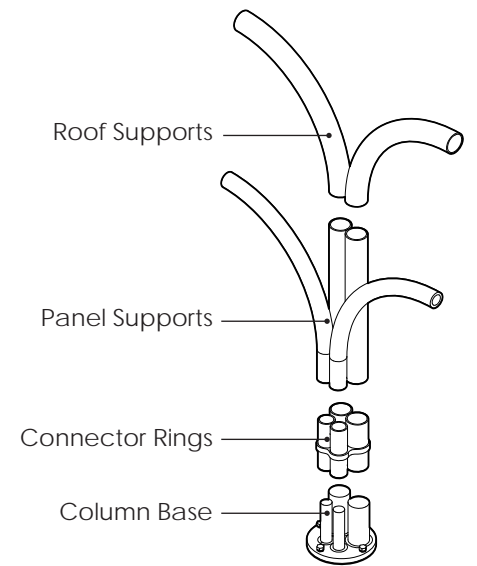


Urban Panel
4'-11" W x 1'-1" D x 9'-10" H

Vending Kiosk Front and Back Views
6'-3" W x 3'-10" D x 7'-10" H

*Also Available

- "Blade" Rotating Bench with Integral Vertical Shade
- EV/Charging Stations
- Bollards
- Hand Washing Station
- Public Toilets
- Pillars
- Cooling Station
- Corrals for Scooters/Bicycles
- Traffic Barriers



Pairs of columns are tied together with steel connector rings. Up to three additional columns supporting shade panels or lean bars, are bundled together to form one cluster that sits on a base plate.



Crenshaw/MLK Westbound Leimert Park, CD 10
Single standard shelter, real time arrival display, litter/recycling bins