

Guide Specification Camino Benches & LED lighting Kits

1.0 GENERAL

1.1 WORK INCLUDES

- A. Provision of Camino Benches

1.2 RELATED WORK

- A. Section 061000 Rough Carpentry
- B. Section 062000 Finish Carpentry
- C. Section 129300 Site Furnishings
- D. Section 265633 Path Lighting
- E. Section 265626 Landscape Lighting

1.3 SUBMITTALS

- A. Product Data: Manufacturer's standard catalog cut sheets.
- B. Samples: As required for color selection or material thickness only.
- C. Layout Drawings: for standard product applications, showing bench layout to clients. To show product codes, installation, and integration with other work as necessary
- D. For custom applications, showing critical sizes and dimensions for installation and integration with other work.
- E. Environmental Product Declarations (EPDs): Submit third-party verified and product-specific EPDs for the specified materials, demonstrating compliance with ISO 21930, 14025, and 14044, or equivalent standards.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Unwrap & inspect benches after delivery for signs of damage during transit.
- B. Protect benches from damage during storage and handling.
- C. Store benches indoors if possible. Do not stack.

1.5 PROJECT CONDITIONS

- A. Contractor to provide level area to support benches.
- B. Protect units from damage by adjacent work.
- C. Lighting option - Contractor to provide 110/277 power source located in accordance with Tournesol product details and layout drawings.

1.6 WARRANTY

- A. Benches will be free from defects in material and/or workmanship for a period of 3 years from invoice date.
- B. LED lighting Kits: Electrical components will have a 5-year warranty for parts replacement only. Installation by building maintenance or electrician. Warranty voided if LED kit is modified without manufacturer approval.
- C. Warranty does not apply to damages from alteration, misuse, or installation damage.

- D. Normal use of these products may result in scratches, nicks, and dents. These are considered normal wear, and is not the responsibility of the manufacturer.
- E. Manufacture will, at its option repair, replace, or refund the purchase price of products that are deemed defective by an authorized representative.

2.0 PRODUCTS

2.1 ACCEPTABLE PRODUCTS/MANUFACTURERS

- A. Camino Benches, manufactured by Tournesol Siteworks LLC. 2930 Faber St., Union City, CA 94587 Tel: (800) 542-2282 Tournesol.com

2.2 CAMINO BENCH

A. Materials

1. Lumber for Benches and Backs: Lumber for bench and backs: Thermally Modified Oak rectangular planks 2" x 6". CNC routed with T-nut receivers. Other woods available per specification
2. Frame: ASTM A1011 12 ga. (0.105") hot rolled carbon steel sheet laser cut, brake formed and welded, With ¼" Carbon steel welded endplates.
3. Arms, Inhibitors & Back Brackets: ASTM A1011 ¼" hot rolled carbon steel sheet, laser cut, formed, and welded.
4. Fasteners: All fasteners are 304 commercial grade stainless steel.

B. Fabrication:

1. Fully Assembled Benches: Benches to be fully assembled and with Backs, arms, and Inhibitors. Modular systems with multiple connecting benches will be dry fit in factory to verify layout.
2. LED kit option: LED kits to be kitted with mounting components, LED bar, Driver, and fasteners. Assembly on site

C. Performance Characteristics:

1. Lumber: – All corners and edges to be rounded or eased. All attachment points to be internal and not visible from the top of the bench. Lumber to be profiled and/or shaped with minimum surface smoothness of 20 KCPI. No tear-outs or knife-knicks. Pilot holes required for all attachment points.
2. All Carbon steel Components All exposed sharp edges and weld splatter removed.

D. Finishes:

1. Lumber – Apply exterior grade penofin to all surfaces.
2. Carbon Steel Following fabrication of planter shall be cleaned utilizing abrasive grit blasting. This process removes the outer layer of steel prior to powder coating for maximum adhesion. Corrosion-resistant zinc rich undercoat shall be applied, 1-2mils thick. The protective topcoat shall be polyester powder.

- E. Sizes:
1. Standard Sizes Standard units are fabricated in collections of Straight, 45, and 60 Degree sizes. See manufacturer catalog for available options.
 2. Custom – Custom sizes available with Length adjustments form 36” to 108” and Custom angles.

2.2 LED LIGHTING KITS

- A. Materials:
1. LED Strip Lights – Aluminum extrusions with encapsulated IP67 LEDs. 2700K with optimal illumination. 96CRI with 283 lumens per foot. 8” Barrel connectors for plug n play connections. UL tested for exterior wet Locations.
 2. LED Driver – 96watt universal 110-277v Phase or 0-10 Dimming Class 2 driver. 24vDC IP 66 indoor/outdoor rated. 1 driver powers 4 benches max.
 3. LED & Driver Bracket – 16Ga ASTM A240 304 stainless steel, laser cut and formed.
- B. Fabrication:
1. Kits Created in Factory: Lighting and electrical components to be kitted with brackets for field assembly to benches.
- C. Performance Characteristics:
1. Electrical Certifications:
 - UL / CUL Listed Wet Location (IP 66/67)
 - RoHs Compliant
 - Buy American Act
 - Red List approved
 - JA8-2016 (Compliant with California’s Title 24 regulations)
 - IDS Dark Sky Compliant
 - (5)year parts replacement on defective components in normal operating conditions.
 2. Optimal Lighting Configurations LED systems designed to accommodate standard bench sizes to optimal lighting output.

3.0 EXECUTION

3.1 PREPARATION

- A. Benches Prior to fabrication, contractor shall verify as-built dimensions of installation area to ensure proper size, fit and quantity required.
- B. LED Lighting Kits Ensure all site provided electrical is installed per electrical code, and located to access electrical boxes in Bench.

3.2 INSTALLATION

- A. Benches install in accordance with instructions at locations indicated in shop or layout drawings. Source 3/8" diameter non-corrosive anchoring hardware when securing to cement Pad.
- B. Lighting Kits install in accordance with manufacturer LED Kit instructions. Be sure to test lighting elements and refer to troubleshooting guide if needed.