

# SORRA

## Solar Bench

The Sorra solar bench combines smart technology with contemporary urban design, providing a self-sustaining seating solution powered entirely by the sun. Its durable steel and timber construction, integrated charging ports, and ambient lighting make it both functional and visually striking for modern public spaces.



- Energy Independent
- Smart Functionality
- Sustainable Design
- Low Maintenance
- Contemporary Aesthetic
- Solar Powered
- USB Charging Ports

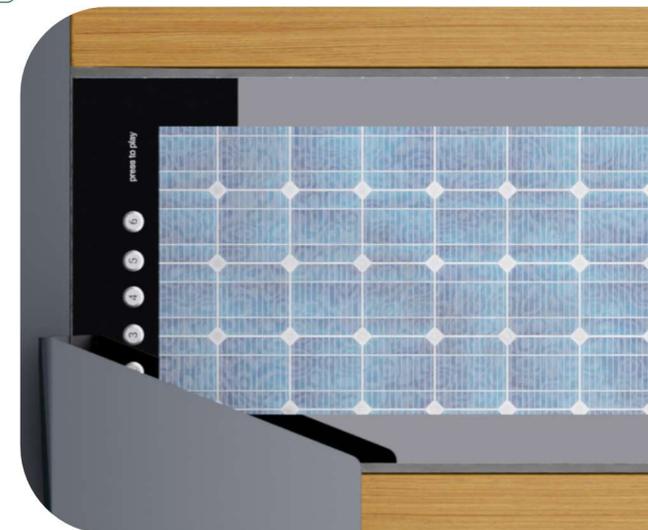


SCAN HERE



**CS**  
Carbon  
Steel

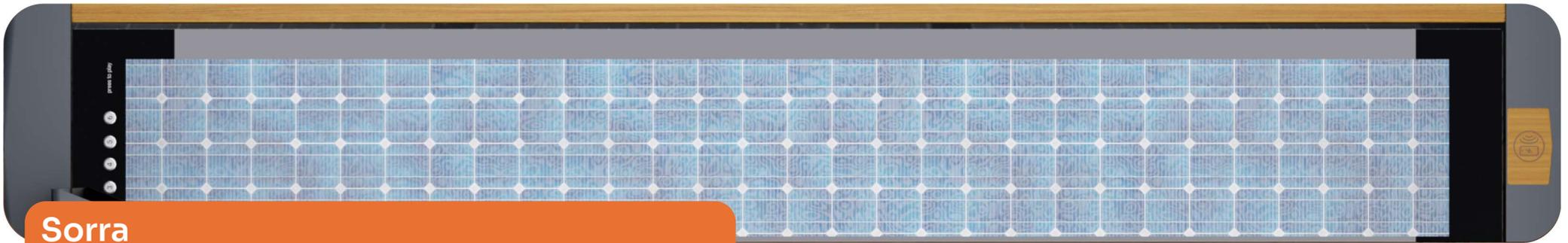
**S**  
Stainless  
Steel



## Specification

Product Type	Solar-powered smart bench
Manufactured to Product Type	ISO 9001:2015 management system BS EN 9001   FSC Certified
Finish	Carbon Steel and Stainless Steel
Heights	2790mm (L) × 780mm (W) × 450 mm (H)
Materials	Iroko hardwood slats with steel frame construction
Wood Specification	FSC®-certified Iroko hardwood, kiln-dried and planed for stability
Weight	180–193 kg
Basic Equipment	Ambient LED lighting; 2 × USB A 3.0 quick charge; 1 × USB C 3.0 quick charge
Electrical / Power	Battery capacity: 36 Ah gel battery; Photovoltaic panel output: 100 W
Operating Range	Temperature: -20 °C to +60 °C
Construction	Folded and welded steel sheet construction; wooden components attached to frame
Photovoltaic / Solar	Solar panels protected by toughened double-layer glass; off-grid autonomous power
Optional Features / Modules (optional)	Inductive wireless charging; Bluetooth speaker / audio module; Wi-Fi hotspot
Connectivity & Smart Features (optional)	USB charging, LED lighting, optional wireless charger, Wi-Fi, audio, etc.
Environmental Impact	Sustainably sourced timber; recyclable metal components
Installation	Bench is bolted to foundation / surface mounting
Maintenance	minimal steel maintenance required. Iroko is naturally a low maintenance material.
Applications	Public parks, gardens, leisure areas, waterfronts, terraces





## Sorra

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## Benefits:

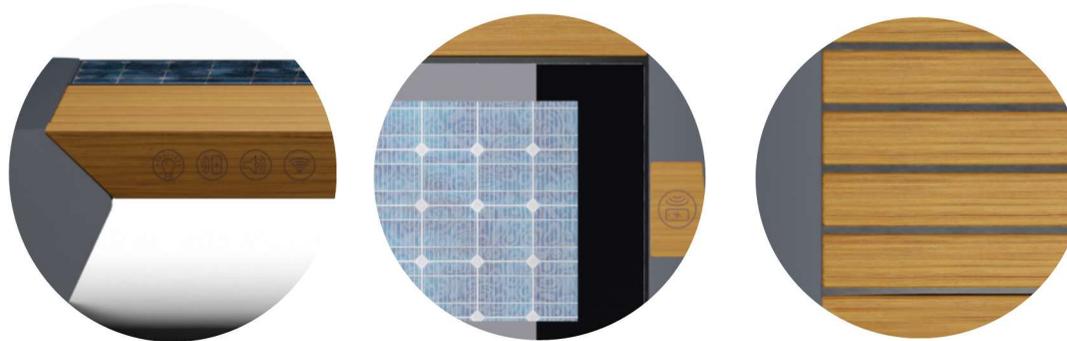
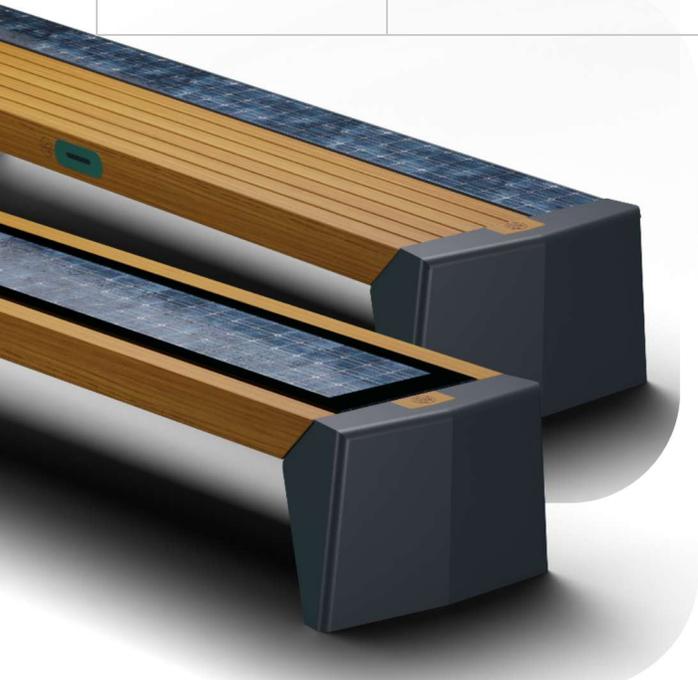
- Energy independent: Fully solar-powered with integrated photovoltaic panels, allowing off-grid operation and zero running costs.
- Smart functionality: Equipped with USB and optional wireless charging, LED lighting, and Wi-Fi modules to support modern urban connectivity.
- Sustainable design: Utilises renewable solar energy and responsibly sourced materials, reducing environmental impact and promoting sustainability.
- Contemporary aesthetic: Combines modern materials, clean lines, and optional custom finishes to complement a wide range of architectural environments.

## Suitable for:

- parks and green spaces
- education / campus environments
- commercial and mixed-use developments
- urban public spaces
- private developments

**Stock**

Finish	Seating Dimension	Wood Type	Battery Type	LED Lighting	Item Code
<b>Full solar strip</b>					
Carbon Steel	2780mm x 450mm x 690mm	Iroko	2A 10W LiFePO4 40AH	4.8W neutral white	SBO2FBN450T030L2780S
Stainless Steel					SBO1FBN450T030L2780S
<b>Half solar strip</b>					
Carbon Steel	2790mm x 450mm x 785mm	Iroko	2A 10W LiFePO4 40AH	4.8W neutral white	SBO2HBN450T030L2780S
Stainless Steel					SBO1HBN450T030L2780S



# Product & Installation Guide

## Tools Required

- Drill
- Spirit level
- Tape measure

## Fixings Included

- Nuts & Bolts
- Wood-to-frame screws
- Washers

## 1. Site preparation & foundations

Select a flat, stable concrete or paved base large enough for the bench footprint. Ensure the surface is level and free from debris. If running power conduits or data lines, install these before the bench arrives.

## 2. Position to frame

Place the steel frame sections on the prepared base. Align them to the correct layout and ensure the fixing points correspond with the anchor positions. Lightly bolt together, leaving fixings slightly loose for alignment.

## 3. Fix to sub-base

Mark the fixing holes through the frame baseplates. Drill to the recommended depth using the appropriate masonry bit, then insert expansion anchors. Reposition the frame and secure it to the base, tightening all fixings evenly.

## 4. Test the system

Once all electrical components are connected, test the system in daylight. Confirm that the solar panel is charging the battery and that USB ports and LED lighting function correctly. Replace covers and secure any cable glands.



## Handling & Hazards



### CORNERS & EDGES

Wear gloves



**BE SAFE!** Wear gloves high visibility clothing, hard hats and any other PPE



**HEAVY SEGMENTS!** Requires two persons to lift each segment – or mechanical lifting device.



**HEAVY ITEMS!** Wear steel toe protection

## DISCLAIMER

These instructions are for guidance only and the installer is responsible to use their discretion to install the products in the best possible way for their respective application. Kinley Systems will not be held liable for product failure or poor performance because of poor quality installation. If any errors are found in this guide, please email us at [sales@kinley.co.uk](mailto:sales@kinley.co.uk)

## SUPPORTING DOCUMENTS

More information on our products can be found at [www.kinley.co.uk](http://www.kinley.co.uk) in the Resource Centre.

# Product & Installation Guide

## Applications

The Sorra Solar Bench provides a modern and sustainable seating solution for public spaces such as parks, promenades, and urban plazas. Equipped with solar panels, USB, and wireless charging, it combines comfort, functionality, and energy independence ideal for smart city environments.

## Installation information

Delivered fully assembled, the bench is designed for easy installation. It features a stainless steel or powder-coated steel structure and wooden slats. The bench is to be fixed to a concrete foundation using expansion bolts through pre-drilled base plates. Electrical modules are prewired for easy connection.

## Storage & Handling

The bench is delivered fully assembled. Store in a dry, covered area before installation. Handle using suitable lifting equipment to prevent damage to wooden and electronic components. Avoid impacts and moisture exposure during storage.

## Fire Protection

Constructed with non-combustible metal components and treated timber, the bench presents minimal fire risk. Timber slats can be coated with additional fire-retardant treatment where required.

## Protective Equipment

Installers should wear appropriate PPE including safety boots, gloves, and eye protection. Use hearing protection if drilling into concrete. Follow standard electrical safety procedures when connecting solar and USB components.

## Stability

Once anchored to the base, the bench offers excellent stability and load-bearing strength. For best performance, install on a level, cured concrete surface, ensuring all fixings are tightened and the solar panel faces optimal sunlight.

## First Aid

The Health and Safety Regulations 1981 require all construction sites to have the following:

A first aid box with enough equipment to cope with the number of workers on site.

An Appointed Person to take charge of first-aid arrangements. The Appointed Person looks after first aid equipment and facilities and calls the emergency services when required. Appointed Persons do not need first aid training.

A First Aider who has undertaken training and holds an HSE approved qualification to administer first-aid. This means that they must hold a valid certificate of competence in either:

- First aid at work (FAW) issued by a training organisation approved by HSE
  - Emergency first aid at work (EFAW) issued by a training organisation approved by HSE
  - A recognised Awarding body of Ofqual/Scottish Qualifications Authority.
- The number of first aiders will depend on the site. Information should be clearly displayed on site telling workers the name of the Appointed Person(s) or First Aider(s) and where to find them.

## Environmental Issues

The Sorra Solar Bench uses renewable solar energy, reducing reliance on the power grid. Its modular design, recyclable steel frame, and FSC-certified timber ensure minimal environmental impact and long service life.

## Supporting Documents

Further resources, including CAD drawings and installation guides, are available at [www.kinley.co.uk](http://www.kinley.co.uk)

