

# SWANSEA BENCH



# Kent Swansea Bench KSAB2200

## Specify:

Kent Swansea Bench KSAB2200; 2200mm Long; Grade 316L Stainless Steel, Cold Rolled Electropolished; Iroko Timber treated with Danish Oil; Surface Mounted; Powdercoated end plate to Kent Metallic Black.

The Kent Swansea Bench is an 2200mm long, maintenance friendly bench. This bench features oval legs and Iroko hardwood is used to give a contrasting finish to the seating area. These timber slats feature bullnose edging which gives a smooth surface for users. The design also has anti-skate ridges incorporated.



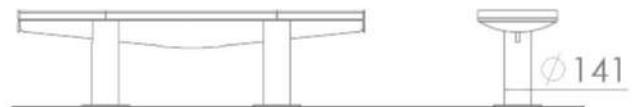
Bullnose edging on timber sides



Anti Skate ridges running front to back



Powder-coated edges to increase visibility

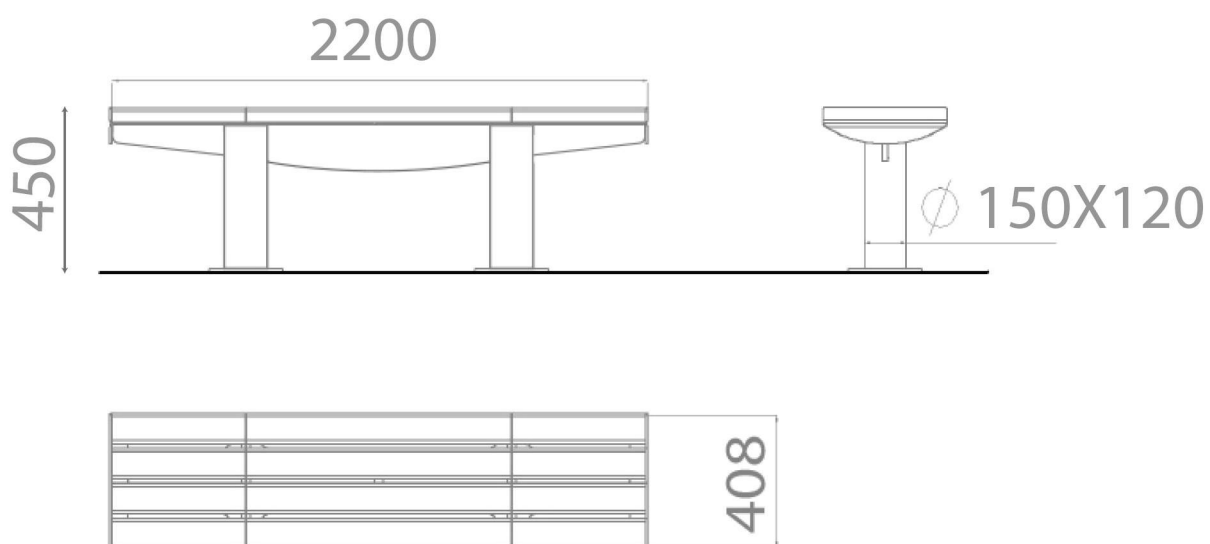


## Product Specification:

- Cold Rolled Electropolished finish
- Grade 316L stainless steel frame
- Powder coated endplates for high visibility
- Anti-skate ridges incorporated through wooden slats
- Bullnose edging provides a smooth finish
- Heavy duty stainless steel Oval legs
- Iroko hardwood timber treated with Danish Oil

## Product Dimensions:

Reference	Height	Width	Length
Kent Swansea KSAB1800	700mm	408mm	1800mm
Kent Swansea KSAB2000	700mm	408mm	2000mm
Kent Swansea KSAB2200	700mm	408mm	2200mm



# Kent Swansea

## Bench KSAB2200

### Visible Flange:

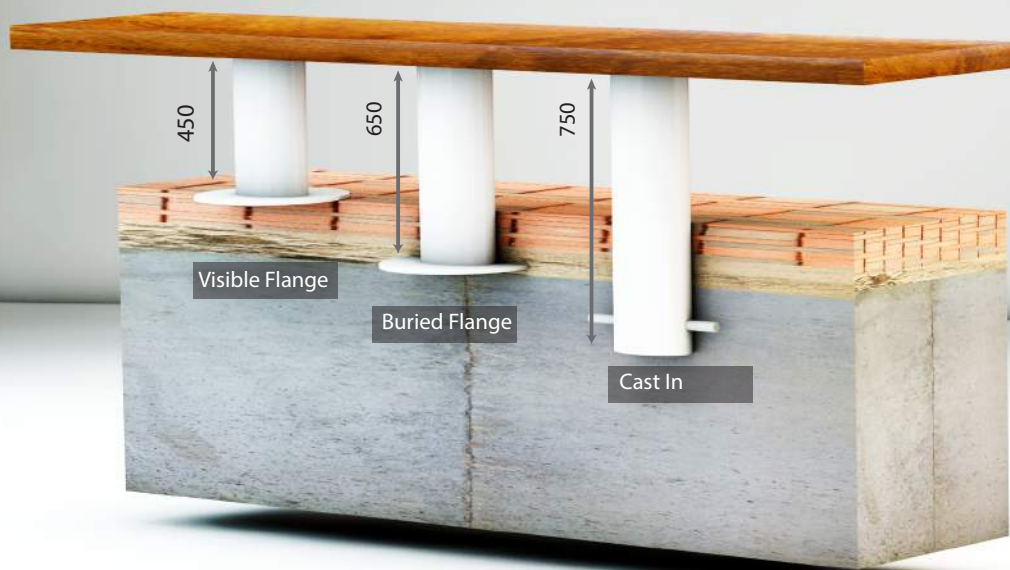
- Ensure that the surface to which the bench is mounted is sufficiently strong.
- Position the bench in the correct location. Mark the holes and drill into the surface.
- Place the bench directly over the holes and then fix the bench to the surface using M12 bolts.

### Buried Flange:

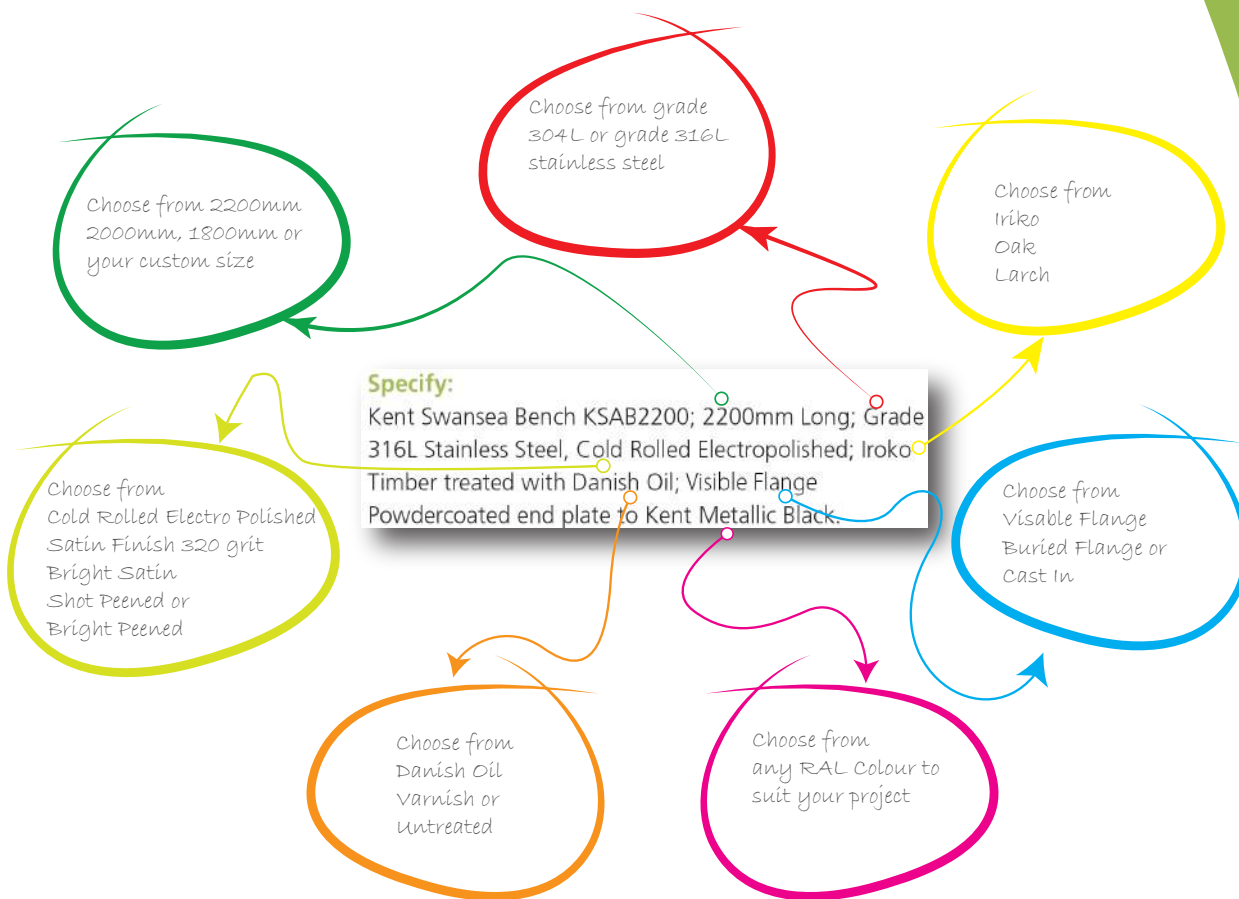
- Cast a foundation 300mm with minimum dimensions of L350 x W350 x D350mm below the surface.
- Once concrete is set follow steps 1-3 as per flange detail above.
- Fill hole with grout and replace slabs to finish of bollard

### Cast In:

- Remove pavement and excavate a hole to minimum dimensions of L350 x W350 x D350mm.
- Position your bench in the correct position ensuring correct height and then prop the bench securely.
- Fill the hole with concrete up to the level of the underside of the pavement ensuring a good smooth surface finish.
- Remove props, replace the paving slabs, and ensure that they are well bedded in.



Product Options:



# Kent Swansea

## Bench KSAB2200

### Overview

The Kent Swansea KSAB 2200 is constructed from 316 grade stainless steel and Iroko timber. The external finish of the bench is a cold rolled electropolished finish and has a Danish oil finish on the timber. Anti-skate ridges of stainless steel are incorporated in the design. The bench also has bullnose edging which provides users with a smooth surface. Despite the material's corrosion resistant properties some care is required to maintain a bright appearance. The conditions that the bench is in (Inland or Coastal area), will greatly increase its need for cleaning and care.

### Maintenance

#### Stainless Steel:

Clean the stainless steel components using warm water with a mild detergent with a non-abrasive cloth or sponge. Heavier stains may require the use of a nylon-scouring pad or a stainless steel cleaner. To remove paint or graffiti use a cloth and Alkaline or solvent paint strippers according to type of paint. In the case of a bead blasted finish, where abrasive cleaning is required, always use a random circular rubbing action with a cloth. In the case of brushed finishes the surface consists of uniform fine 'scratches' running in one direction so where abrasive cleaning is required always use a straight back and forward rubbing action in the direction of the grain using soap and warm water. Rust spots or 'tea stains' can occur on the surface of the material, these are normally caused by contamination from ordinary mild steel, particularly in areas where construction work has been undertaken. Such stains can be removed using Rust Remover 410. In cases where the surface is severely stained because of severe environmental conditions or scratched due to misuse, it may still be possible to restore the original finish using chemicals such as Oxalic Acid solution. There are many stainless steel polishes available to enhance the surface finish. We recommend Mister Stainless Ltd. as a provider for stainless steel cleaning products.

#### Timber:

Periodically wash down the wood components using warm water and sponge, removing any dirt or dust. If re oiling is required there is no need to sand the timber down before re-oiling. Once washed down and dried the oil can be applied using a soft brush or rag soaked in the oil. Be careful to avoid drips by going over parts that oil has been applied to. Do not rush applying oil, as drips will occur and will ruin the finish. Best practice is to apply the oil in thin layers allowing the oil to dry before applying more layers. Thin layers will dry very quickly and the more layers that are added the longer the colour will last. A standard recommendation of 3 layers of oil every 6 months should ensure that the oil colour is maintained. If the wood is varnished, or has a stronger treatment, and needs to be reapplied, then sanding of the wood will be required. Sanding the wood will remove all previous finish and will give you the original wood finish. To sand the wood, initially use a strong grit sand paper and decrease the grit after every sand. This will leave you with a smooth finish on the wood. The new treatment can now be reapplied using a brush or rag. Once dry apply treatment again until at least three layers are applied. Once fully dry the wood should be able to cope with the environmental conditions.

## Iroko Timber

### Types of wood finishes

Kent Stainless advise treating the timber with 3 coats of Danish Oil.

Washing clean, removing dirt and algae build up and reapplying the oil every 6 months will keep the rich appearance of the timber.



Untreated



Oil finish

However, the above treatment is for cosmetic purposes – it does little to extend the life of the timber, and if our recommended treatment is followed then maintenance is necessary.



Some architects refer the (greying effect) of aged timber, and many councils will want to benefit of avoiding the reapplication oil every 6 months. Lower maintenance is often a stronger consideration than a contrasting appearance.

In these cases Kent is happy to supply untreated timber for seating and benches



Untreated & aged

## Iroko Timber

**Timber Species:** Iroko (*Milicia excelsa*, *Milicia regia*)

AKA: odum (Ghana and Ivory Coast), mvule (East Africa), kambala (Zaire), bang (Cameroons), moreira (Angola), tule, intule (Mozambique)

**Wood Type:** - Hardwood

**Environmental:** Listed in the IUCN Red List of Threatened Species as LR - Lower Risk (near threatened): close to being classed as Vulnerable. Also meets CITES Appendix II criteria

**Distribution:** Iroko has a wide distribution in tropical Africa, from Sierra Leone in the west, to Tanzania in the East. The Tree (*Milicia excelsa*) attains very large sizes, reaching 45m or more in height and up to 2.7m in diameter. The stem is usually cylindrical and mostly without buttresses. It occurs in the rainforests, and mixed deciduous forests.

**The Timber:** When freshly cut, or when unexposed to light, the heartwood is a distinct yellow colour, but on exposure to light it quickly becomes golden-brown. The sapwood is narrow, being about 50mm to 75mm wide, and clearly defined. The grain is usually interlocked and the texture is rather coarse but even, and the wood weighs on average 660 kg/m<sup>3</sup> when dried. Large, hard deposits of calcium carbonate called 'stone' deposits, are sometimes present in cavities, probably as a result of injury to the tree. They are often enclosed by the wood and not visible until the time of sawing, though the wood around them may be darker in colour, thus giving an indication of their presence.

**Drying:** The timber dries well and fairly rapidly, with only a slight tendency to distortion and splitting.

**Strength:** Iroko has excellent strength properties, comparing well with teak, though weaker in bending and in compression along the grain.

**Working Qualities:** Medium to Difficult

**Durability:** Durable

**Treatability:** Extremely Difficult

**Moisture Movement:** Small.

**Density:** 660 kg/m<sup>3</sup>

**Texture:** Medium.

**Availability:** Regular.

**Price:** Low to Medium.

**Chemical Properties:** Occasional deposits of stone may occur

**Use(s):** Bridge construction, Exterior joinery, Interior joinery

**Colour(s):** Yellow brown



## Recommended treatment

### Danish Oil

Danish Oil is a special formulation developed by Rustins Ltd. based on Tung Oil, also known as Chinese Wood Oil. The oil is extracted from nuts, similar in size to a Brazil nut, growing on species of trees found mainly in China and some areas of South America. After processing the oil is blended with synthetic resins to improve hardness, and other vegetable oils. Driers and solvents are added to improve the performance and application properties, so that Danish Oil may be applied with a rag or brush.

The special ingredients used in the manufacture of Danish Oil penetrate deep into all types of timber, drying to a hard, durable and water resistant seal. Unlike varnishes it does not leave a thick film on the surface which may peel, chip or craze on ageing. The oil dries quickly in 4 to 6 hours, depending on ambient temperature and humidity, producing a non tacky surface. It does not, therefore pick up dust as will wood treated with linseed oil. As it is a hard drying oil, it may be used as a primer or sealer on bare wood before applying other finishes, if required. Danish Oil may be used on interior and exterior woodwork and can be overcoated with a varnish or paint at any time, if it is desired to alter the appearance.

It's easy to use

- Apply liberally with a clean rag or brush and wipe off the surplus oil after a few minutes.
- Allow to dry and repeat. New wood generally requires 3 applications.
- Absolutely no skill is required for application, as even when the oil is applied with a brush, it does not have to be brushed out in the same way as a varnish. The brush is merely used to spread the oil liberally over the surface.

For an outstanding finish the last coat of Danish Oil may be applied by rubbing over the surface with fine steel wool 000 grade, or a scouring pad, such as Scotchbrite. Then wiping off the surplus with a soft cloth. This will remove any "nibs" on the surface and leave the surface with a silky-smooth finish.

Exterior woodwork, will require re-oiling annually or more frequently. For instance, oily hardwoods tend to be more resistant than softwoods and oak which may need more attention.

The durability on exterior woodwork can be improved by diluting Danish Oil with equal parts of White

Spirit for the first application. This will improve the penetration. Three undiluted coats should then be

applied. When applied to previously oiled, or varnished surfaces, or after repeated oiling of new wood, the surface may develop a slight gloss. This can be removed by rubbing with the grain with 00 or 000 steel wool and wax polish, finishing off with a soft cloth.