

# All Steel Seats

All steel furniture is widely specified to address the vandalism problems encountered in today's hostile environments. Although the seats can be cold to sit on, this furniture will survive where other types will not. Unless driven into by vehicles the only part of these seats that normally suffers damage is the surface finish. We offer these seats in two alternative finishes: Acrylic Coating or Street-Tough. Acrylic Coating is suitable if funds are restricted and vandalism is not expected to be serious. It is not suitable for sea front environments,

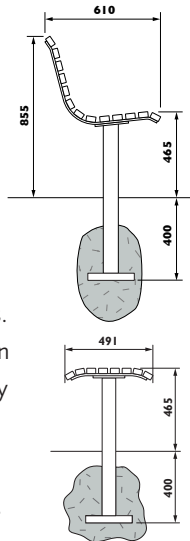
where rusting would rapidly occur. Our Street-Tough finish combines the durability of Galvanising to ISO 1461 with an attractive maintainable coating. These finishes are described in detail on page 82. The range includes stylish products for high profile areas, as well as heavily built utilitarian items. We also manufacture complimentary ranges of all steel litter bins (see page 46 - 54) and picnic furniture (see page 57 - 60) These seats can be specified for commemorative purposes for which several types of plaque are available (see pages 3 - 6).

All Steel Seats



## CLARENDON SEAT & GREENWICH BENCH

These very popular all steel fully welded designs have tubular legs or a single post mounting attached by tamper resistant bolts. The seat is a very comfortable shape, and can be supplied with or without arms. They are equally suited to town centre or park applications. The seat design can very easily be adapted to provide disabled access by moving the arms, and adding additional arms. One of the illustrations below shows a version with an inset arm, which enables a reasonably ambulant wheelchair user to join other occupants on the seat.



- Street-Tough finish in dark green 14C40 as standard. Acrylic Coating available. Eleven other standard colour options at no extra cost (see page 85) Also available in any other B.S. or RAL colour for a surcharge
- Supplied with extended legs or single post mounting (SPM) (for concreting in), as standard. Also available with either pedestal base legs (for bolting down), or ground anchoring version (see pages 74 - 75)
- Pedestal base option can be bolted down with K1 rawl bolts, K4 extended rawl bolts, or K12 extended rawl bolts
- Slats 30 x 50 x 2mm hollow
- Cradle frames 50 x 12 mm flat
- Legs 76 x 3mm or 140 x 5mm (for SPM) circular hollow
- Length 1800mm, weight approx. Clarendon 80kg. Greenwich 57kg.
- Supplied partially assembled, with legs to bolt on
- For installation recommendations see page 29



*Clarendon Seat with arms*



*Clarendon Seat in 14C40 dark green*



*Clarendon Seat DA with arms positioned for disabled access*

*Clarendon Seat with single post mounting in RAL 3004 maroon*



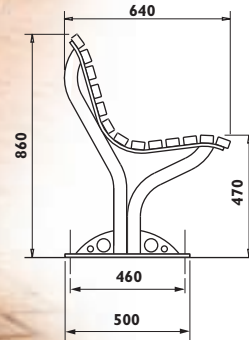
*Greenwich Bench in 20C40 dark blue*

## PLYMOUTH SEAT

*Plymouth Seat*

Organically curved, with a hint of the traditional about it, this attractive seat has been designed for contemporary environments. It is supplied as standard in pedestal base form.

- Street-Tough finish as standard. Acrylic Coating available.
- Twelve standard colour options at no extra cost (see page 85). Also available in any other B.S. or RAL colour for a surcharge
- K5 (225mm long), or K11 (400mm long) galvanised ground fixing extensions are available to concrete the seat in
- K1 rawl bolts, K4 extended rawl bolts, or K12 extended rawl bolts are available to bolt the unit down
- Slats 30 x 50 x 2mm hollow
- Legs 50 x 3mm circular hollow
- Length 1800mm, weight approx. 95kg.
- Supplied fully assembled
- For installation recommendations see page 29



All Steel Seats

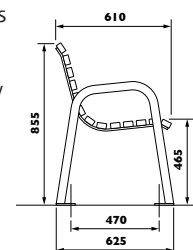
## ARLINGTON SEAT



*Arlington Seat*

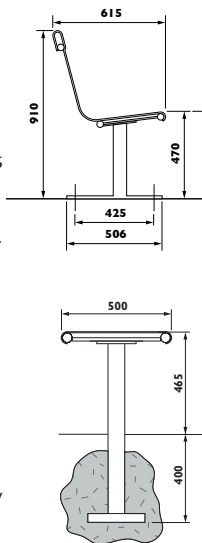
Similar to the Clarendon, but with elegant tubular arms and legs, this seat is otherwise made to the same high specification. Arms are a standard feature of this seat.

- Street-Tough finish in dark green 14C40 as standard. Acrylic Coating available. Eleven other standard colour options at no extra cost (see page 85). Also available in any other B.S. or RAL colour for a surcharge
- Supplied with pedestal base legs (for bolting down), as standard
- K5 (225mm long), or K11 (400mm long) galvanised ground fixing extensions are available to concrete the seat in
- K1 rawl bolts, K4 extended rawl bolts, or K12 extended rawl bolts are available to bolt the unit down
- Slats 30 x 50 x 2mm hollow
- Cradle frames 50 x 12 mm flat
- Arms and Legs 44 x 3mm circular hollow
- Length 1800mm, weight approx. 75kg.
- For installation recommendations see page 29



## GROSVENOR SEAT & HAMPSTEAD BENCH

The seat has an elegant curved back with a particularly comfortable sitting position, and is suitable for town centres and other areas where appearance is important. Arms are a standard feature of the seat. Both the seat and bench have a heavy all welded steel construction, with a choice of gull wing or tubular legs, attached by tamper resistant bolts.



*Grosvenor Seat with tubular legs*



*Grosvenor Seat with gull wing legs*

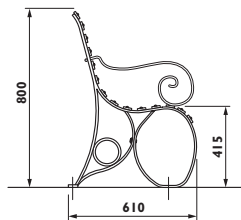
- Street-Tough finish as standard. Acrylic Coating available. Twelve standard colour options at no extra cost (see page 85) Also available in any other B.S. or RAL colour for a surcharge
- Supplied with extended legs (for concreting in), as standard. Also available with pedestal base legs (for bolting down)
- Pedestal base option can be bolted down with K1 rawl bolts, K4 extended rawl bolts, or K12 extended rawl bolts
- Length 1800mm, weight approx Grosvenor 100kg. Hampstead 56kg
- Supplied partially assembled, with legs to bolt on
- For installation recommendations see page 29

*Hampstead Bench in black*



## MALVERN SEAT

Elegant yet practical, this design dates from the end of the last century. Unlike the originals this version is fully galvanised after manufacture as standard. Subtle detail alterations have been made to the seat to make it both stronger and easier to manufacture, without compromising the integrity of the original design.



*Malvern Seat in 14C40 dark green*

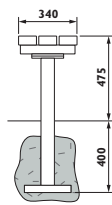
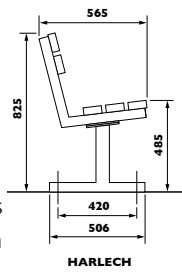
- Street-Tough finish in dark green 14C40 as standard.
- Eleven other standard colour options at no extra cost (see page 85). Also available in any other B.S. or RAL colour for a surcharge
- K5 (225mm long), or K11 (400mm long) galvanised ground fixing extensions are available to concrete the seat in
- K1 rawl bolts, K4 extended rawl bolts, or K12 extended rawl bolts are available to bolt the unit down
- Slats 40 x 8mm flat
- Frames 30 x 6mm flat, and 30 x 10mm flat

- Length 1800mm, weight approx. 80kg.
- Supplied fully assembled
- For installation recommendations see page 29

## HARLECH SEAT & NEWPORT BENCH

These designs are cost effective, immensely strong and resistant to vandalism. They are Street-Tough finished as standard, but if costs need to be kept down can be specified in our Acrylic Coating.

- Street-Tough finish in dark green 14C40 as standard. Acrylic Coating available. Eleven other standard colour options at no extra cost (see page 85). Also available in any other B.S. or RAL colour for a surcharge
- Supplied with extended legs (for concreting in), as standard. Also available with either pedestal base legs (for bolting down), or ground anchoring version (see pages 74 -75)
- Pedestal base option can be bolted down with K3 rawl bolts, or K10 extended rawl bolts
- Slats 50 x 100 x 2mm hollow
- Frames 50 x 50 x 3mm hollow (with 50 x 75 x 3mm hollow legs)
- Length 1800mm, weight approx Harlech 61kg. Newport 40kg.



- Length 2400mm, weight approx Harlech 87kg. Newport 53kg.
- Supplied partially assembled, with legs to bolt on
- For installation recommendations see page 29

All Steel Seats

## CAST IRON SEATS AND BENCHES WITH STEEL SLATS

All three of our cast iron ended styles - the Georgian, the Victorian and the Grafton - can be specified with steel slats. For full specifications, refer to page 21



## ALL STEEL LITTER BINS

We manufacture a range of very robust all steel litter bins to compliment our all steel seats. For full specifications, refer to pages 46 - 54



Summary of fixing options available for all steel seats																		
	Pedestal Base	Extended Legs	Ground Anchor	K1	K1T	K3	K3T	K4	K4T	K5	K5C	K5T	K10	K10T	K11	K11C	K11T	K12
Clarendon	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Greenwich	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Plymouth	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Arlington	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Grosvenor	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hampstead	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Malvern	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Harlech	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Newport	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

# Installation Recommendations

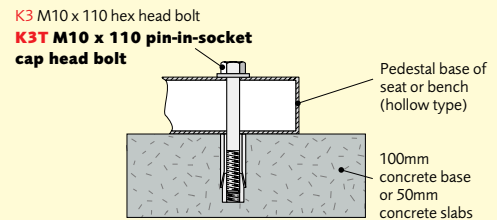
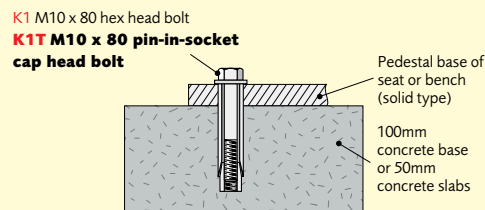
## 1. Extended legs for concreting in

As standard, all of the products in this range except the Arlington are supplied with extended legs to concrete them into the ground. This method suits grassed areas, small block pavements and areas which will have a final surface of bituminous macadam. It is a very secure method of fixing, but involves excavating the ground. The assembled seat is accurately positioned into 400mm deep holes which are filled with concrete bedding. This can be laid to the final ground level to form a concrete pad around the seat. If stopped short to allow for other ground finishes, the pavements or macadam are laid around the legs of the seat after the concrete bedding has set.

## 2. Rawl bolts (K1, K1T, K3, or K3T)

Pedestal base seats can be rawl bolted to an existing surface of sound concrete, or well laid traditional size concrete or stone slabs, using these M10 rawl bolts. This method is not normally suitable for installing seats onto small block pavements. The bolts in these options are stainless steel.

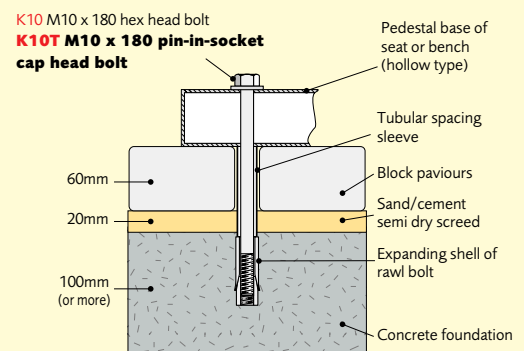
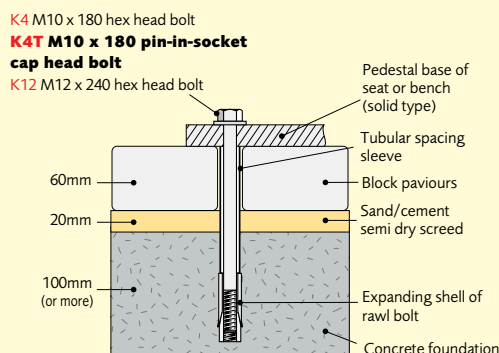
- **K3** have hex head bolts
- **K3T** have tamper resistant pin-in-socket socket cap head bolts to reduce the risk of unauthorised removal



## 3. Extended rawl bolts and spacers (K4, K4T, K12, K10 or K10T)

For the installation of pedestal base seats onto small block pavements, typically 60mm thick, we recommend either the K4, K4T, K10 or K10T M10 x 180 extended rawl bolts, or K12 M12 x 240 extended rawl bolts, with semi collapsible spacing tubes. The spacing tubes hold the rawl bolt shell in the concrete (which must be laid beneath the pavements) whilst the bolt is being tightened. It is recommended that the pavements in the area of the seat are bedded on top of the concrete using a semi dry sand cement screed about 20mm thick. These kits are also suitable for fixing seats onto surfaces of bituminous macadam, laid on top of concrete. The bolts in these options are stainless steel.

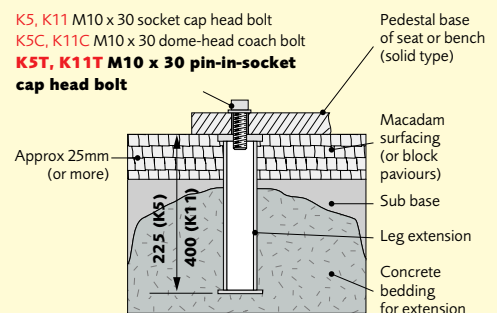
- **K4, K10, K12** have hex head bolts
- **K4T, K10T** have tamper resistant pin-in-socket socket cap head bolts to reduce the risk of unauthorised removal



## 4. Galvanised ground fixing extensions (K5, K5C, K5T, K11, K11C or K11T)

These extensions have the advantage of offering a very strong and permanent installation, though they are more work than the K2 or K4 fixing kits. This means of fixing is suitable for grassed areas, small block pavements and macadam surfaces. The extensions are bolted to the feet of the seat and then accurately positioned in the concrete bedding, using the seat as a template. After the concrete securing the extensions has set, the seat is removed, and the final surface is laid to the tops of the extensions. The seat is then returned to the site and finally bolted down. All the bolts in these options are stainless steel. The K5 options are 225mm long, and the K11 options are 400mm long.

- **K5** and **K11** have socket cap head bolts.
- **K5C** and **K11C** have coach bolts (which are very tamper resistant, but difficult to remove if ever the seat needs to be moved).
- **K5T** and **K11T** have tamper resistant pin-in-socket socket cap head bolts to reduce the risk of unauthorised removal.



## 5. Ground anchoring frames

For the installation of pedestal base frames (which are specially adapted) onto existing suitably firm grassed areas and bituminous macadam surfaces, ground anchors can be used. This will only work for macadam surfaces laid onto earth or hardcore, as opposed to concrete. This cost effective installation method is fully described and illustrated on pages 74 - 75