







TIMBER BOLLARDS







INTRODUCTION

Timber bollards

Timber offers a timeless elegance and being a natural material, ages gracefully. Whereas a large run of cast iron or steel bollards may present visually imposing barriers, timber bollards harmonise well with both natural and man-made environments, especially as the material weathers over time. Furnitubes' timber bollards come in a range of styles and materials to suit a wide variety of applications and budgets - from the finely detailed and quality finish of the premium Ashdown and Epping hardwood ranges, to the plainer style of Garrick bollards. All ranges are offered in several standard sectional sizes and four standard heights above ground between 500mm and 1000mm, although other sizes can be readily supplied on special request. Machined feature grooves (into which reflective tape can be applied for improved visibility) are offered on all bollards, with selected ranges available with further options of pre-drilled holes to accept rails, eyebolts for connecting chainlink and fitted D.f.T. sign plates.

Ashdown bollard range

Premium range circular hardwood bollards with a domed top, ideal for urban applications.

Epping bollard range

Premium range square hardwood bollards with a four-way weathered top, popular for residential areas.

Garrick bollard range

Basic range square bollards with chamfered edges, available in green oak or pressure treated softwood.

Note: machined feature grooves, and reflective tape fixed therein, are optional extras on all timber bollards, not standard features; please state your requirement when making your enquiry.



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Ashdown is a premium range of circular bollards with a high quality machined finish, including a domed top to aid water run-off. The range is particularly suited therefore to urban applications where pedestrians may come into close contact with the bollards, although they are also popular in roadside verge situations. Opepe - classified as Very Durable hardwood with good fire resistance - is the standard material for the Ashdown range, finished with a coat of woodstain to provide a soft sheen finish and extend the rich colouration as the timber weathers over time.

ASHDOWN

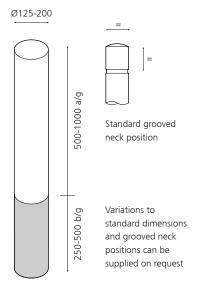
Above ground:	500mm	600mm	800mm	1000mm
Below ground:	250mm	300mm	400mm	500mm
Ø125mm	ARP 125/750	ARP 125/900	ARP 125/1200	ARP 125/1500
Ø150mm	ARP 150/750	ARP 150/900	ARP 150/1200	ARP 150/1500
Ø175mm	ARP 175/750	ARP 175/900	ARP 175/1200	ARP 175/1500
Ø200mm	ARP 200/750	ARP 200/900	ARP 200/1200	ARP 200/1500

STANDARD SPECIFICATION:

Opepe hardwood with Sadolin Woodstain finish, colour 'Mais' (Material is subject to availability - alternatives may be offered including Wallebe and Greenheart) Note: sizes stated are nominal; finished sizes may be reduced due to machining tolerances

OPTIONS:

With grooves and optional reflective tape Pre-drilled to accept circular steel rails Pre-fitted eyebolts for chainlink connection Reflective plates, discs or D.f.T. sign plates (only bollards with grooves)



Refer to table for standard section and above / below ground dimension combinations





Refer to table for standard section and above / below ground dimension combinations

EPPING RANGE

Above ground:	500mm	600mm	800mm	1000mm
Below ground:	250mm	300mm	400mm	500mm
125mm sq	ESP 125/750	ESP 125/900	ESP 125/1200	ESP 125/1500
150mm sq	ESP 150/750	ESP 150/900	ESP 150/1200	ESP 150/1500
175mm sq	ESP 175/750	ESP 175/900	ESP 175/1200	ESP 175/1500
200mm sq	ESP 200/750	ESP 200/900	ESP 200/1200	ESP 200/1500
225mm sq	ESP 225/750	ESP 225/900	ESP 225/1200	ESP 225/1500
250mm sq	ESP 250/750	ESP 250/900	ESP 250/1200	ESP 250/1500

STANDARD SPECIFICATION:

Opepe hardwood with Sadolin Woodstain finish, colour 'Mais'

(Material is subject to availability - alternatives may be offered including Wallebe and Greenheart) Note: sizes stated are nominal; finished sizes may be reduced due to machining tolerances

OPTIONS:

With grooves and optional reflective tape

Pre-drilled to accept circular steel rails

Pre-fitted eyebolts for chainlink connection

Reflective plates, discs or D.f.T. sign plates

Removable bollard with galvanised mild steel or stainless steel socket



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TIMBER BOLLARDS - GARRICK RANGE

Budget-range square bollards

Garrick square bollards are a basic range product in a choice of Green Oak or Pressure Treated Spruce / Whitewood in a planed finish with a four-way weathered top and chamfered edges. As with all other timber bollards, the Garrick is offered in plain form, with grooves and the option of reflective tape.



Refer to table for standard section and above / below ground dimension combinations

GARRICK RANGE

Above ground:	500mm	600mm	800mm	1000mm
Below ground:	250mm	300mm	400mm	500mm
125mm sq	GAR 125/750	GAR 125/900	GAR 125/1200	GAR 125/1500
150mm sq	GAR 150/750	GAR 150/900	GAR 150/1200	GAR 150/1500
175mm sq	GAR 175/750	GAR 175/900	GAR 175/1200	GAR 175/1500
200mm sq	GAR 200/750	GAR 200/900	GAR 200/1200	GAR 200/1500
225mm sq	GAR 225/750	GAR 225/900	GAR 225/1200	GAR 225/1500
250mm sq	GAR 250/750	GAR 250/900	GAR 250/1200	GAR 250/1500

STANDARD SPECIFICATION:

Green Oak or Pressure Treated Spruce / Whitewood (softwood)

Note: sizes stated are nominal; finished sizes may be reduced due to machining tolerances

OPTION:

With grooves and optional reflective tape

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Whilst timber bollards offer an attractive appearance that suits both urban and rural environments, the material may not highly visible, especially at night and when the timber begins to naturally weather and blend with the surroundings, which can be an issue in trafficked areas. The simple addition of reflective features on the bollards can overcome this, and if sensitively executed does not detract from the appearance of the timber. Bands set within machined grooves are arguably the most effective means of applying reflective features as this reduces the likelihood of the material being removed. On premium range timber bollards reflective discs and plates can be set in machined recesses or simply surface-mounted. Traffic regulation signplates can be readily attached to larger sized bollards; we recommend that D.f.T. guidance is followed and / or the advice of a highways engineer sought to ensure that appropriate sized plates are used. Where bollards alone do not provide a sufficiently robust barrier to control pedestrian movements, selected timber bollards can be supplied with machined holes to form end- and through-posts for steel rails, or fitted with eyebolts for a chainlink connection. We are happy to advise on the feasibility of any other variations / add-on features to our standard range of timber bollards or to discuss any unique design that you may wish to explore.



TIMBER BOLLARDS - GENERAL SPECIFICATION

Product / material selection

When selecting timber bollards, consideration should be given not only to design and dimensions, but also to the most suitable materials and finish for your application. Set out below is a summary of the available timber materials, their characteristics and other general information.

TIMBER CHARACTERISTICS

Botanical name:

Origin:

Colour:

Durability:*
Density:

Treatment:

Notes:



OPEPE

Ashdown, Epping ranges

Nauclea diderrichii West Africa

Yellow / orange

Very Durable

740 kg/m³

Sadolin Woodstain, 'Mais' colour

Opepe bollards are supplied in naturally seasoned material in a smooth sanded finish, which combined with its naturally very durable characteristics, offers the premium choice in terms of appearance and longevity. The Sadolin coating complements the natural colour of Opepe and provides a soft sheen to the finish which can last up to 6 years.



OAK (GREEN)

Garrick range

Quercus robur / Quercus petraea Europe

Varied, pale yellow - pink

Durable

770 kg/m³

None (natural)

The term 'green oak' refers to timber that is typically freshly sawn from relatively newly felled trees. It is timber that has not been through a process of natural or mechanical drying, and has an average moisture content of 30% and is therefore subject to some movement as it seasons in situ. Green Oak generally hardens as it ages. Natural tannins in oak are prone to leaching out of the timber in the early stages of weathering, which can stain surrounding hard surfaces.



SPRUCE / WHITEWOOD

Garrick range

Picea Abies / Abies Elba

Scandinavia

Pale cream

Moderately Durable** (treated)

510 kg/m³

BASF-Wolfman CX 10

This impregnated wood preservative treatment improves the lifespan of softwoods in the external environment by protecting it against wood-destroying organisms. It is advisable that any sections cut on section are further treated with preservative, particularly if the product is being installed in the ground. Using softwoods from production forestry lowers the use of exotic hardwood species.

Weathering and maintenance

As timber is exposed to the elements in an external environment, its moisture content fluctuates in response to changing climatic conditions. In turn, this will lead to the material 'moving', with fissures and surface cracks opening and closing as an unavoidable natural process. As the timber weathers, its colour will change - generally fading as the natural colour of the freshly sawn timber desaturates. There is a wide range of pigmented coating products on the market which can be applied to either newly supplied or aged timbers if a strong colouration of the timber is required throughout the lifespan of the product, though this will necessitate regular ongoing maintenance.

Legally sourced timber

All timber bollards can be supplied in certified material from sustainable sources if required, with a certified chain of custody that tracks the timber throughout the supply chain and is verified through the invoicing process.

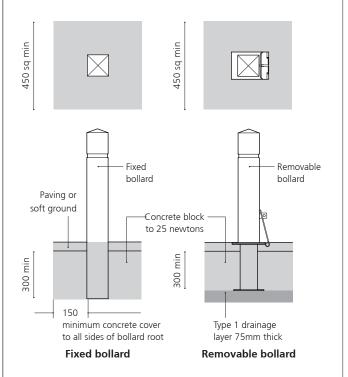
- * The durability of timber is based on the results of placing testing heartwood samples into the ground, fully exposed to the elements, with the number of years before decay becomes obvious determining the durability of the natural (untreated) timber into one of five classifications:
 - Cl. 1. Very Durable: 25+ years; Cl. 2. Durable: 15-25 years; Cl. 3. Moderately Durable: 10-15 years; Cl. 4. Non-Durable: 5-10 years; Cl. 5. Perishable: 0-5 years. The heartwood of species with a rating of Durable or Very Durable can be successfully used in exterior situations without the support of preservative treatments. Further information on durability classification and timber generally can be found on the Timber Trades Federation Website at http://www.ttf.co.uk
- ** Without preservative treatment Spruce / Whitewood is classified as Non-Durable. With the specified treatment, performance improves to Moderately Durable.



TIMBER BOLLARDS - INSTALLATION + REMOVABLE VERSIONS

Installation details

It is important that bollards have a suitable foundation so that they remain firmly in place if they are knocked at any time. Shown below are the minimum recommended requirements for concrete foundation block for bollards in a typical installation in normal ground conditions. Particular attention should be paid to setting the bollard at the specified depth below ground / height above ground. For removable bollard sockets ensure the hinge plate is set flush to ground level in its closed position. The professional advice of a highway / civil engineer should be sought if there are any queries regarding the ground conditions or doubts over the suitablity of the foundation.

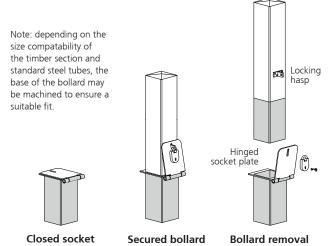


Removable bollards

Removable versions are offered for Ashdown and Epping timber bollard ranges, comprising a galvanised mild steel or stainless steel socket and a bollard fitted with a locking hasp, suitable for securing with an FB14 padlock (please order separately). Consideration should be given to the lifting weight of the bollard when selecting a specific model. The simple socket allows for ease of operation and is convenient for situations where a bollard needs to be removed quickly and / or frequently, but please note that the bollard is a loose fit in the socket and is not 100% rigid (but can't be removed if locked) and is not designed for vehicular overrun. The dimensions of the socket hinge plate depends on the bollard type, size & shape at ground level.

Operation

The base of the socket should be cleared of any build up of debris which could prevent the bollard from being inserted to its full depth. Fold back the hinge plate and insert the bollard into the open socket in the orientation shown, rotate the plate over the locking hasp and secure with a padlock. On removing the bollard, check there is no debris on the top face of the socket before lowering the hinge plate into the closed position. If installed correctly, the plate will be flush with the surrounding ground so as not to present a trip hazard. Socket hinges should be lubricated regularly to ensure continued smooth operation.



TIMBER BOLLARDS



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Furnitubes*

3rd Floor, Meridian House, Royal Hill, Greenwich

LONDON SE10 8RD

T: +44 (0)20 8378 3200 sales@furnitubes.com www.furnitubes.com