



**TIMBER
DEVELOPMENT
UK**

Build

B.60.01-03

Date Published

1 November 2024

Document Type

Timber Knowledge Sheet

Category

Build

Audience

Designer | Landscaper |
Manufacturer

Theme

Applications

Author

Kirsty Connell-Skinner
for TDUK

Cover image

Luke O'Donovan

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Timber Garden Structures

Timber can create garden structures buildings that are durable, with natural aesthetics that can enhance an outdoor space.



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1 November 2024	Timber Knowledge Sheet	Build	Installer Merchant Designer	Applications	Kirsty Connell-Skinner for TDUK

Timber Garden Structures

A natural, durable and sustainable material, timber can be the basis for many beautiful and practical garden structures. Careful design, specification, and ongoing maintenance will maximise the service life for timber structures in a garden.

A wide variety of garden structures can be made from timber. These can be categorised as follows:

- **Buildings**, including sheds, gazebos, greenhouses, and garden offices
- **Planting structures**, such as trellises and pergolas
- **Ground surfaces** such as timber **decking**
- **Fences** and boundary markers
- **Furniture**, including arbors, benches and picnic tables
- **Play equipment**, including climbing frames and swing sets.

This timber knowledge sheet focuses on the design, construction and care of timber garden buildings. Please refer to the following timber knowledge sheets in the series for guidance on other timber garden projects:

- **B.60.01-02** *Timber Landscape Architecture*
- **B.60.01-02.01** *Timber Fencing*
- **B.60.01-02.02** *Timber Playgrounds*
- **B.60.01-03.01** *Timber Decking*.

Arbor, Pergola or Trellis?

All three of these timber garden structures are lattice-based, formed from a crisscross timber framework - known as a **trellis** - through which climbing plants can grow.

An **arbor** is a timber bench seat with latticed panels forming a framework for climbing plants, while a **pergola** is much larger and more open, without integral seating.

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Timber Garden Building Types

A garden can be enhanced with the following common timber structures:

- **Shed**

A simple, single-storey roofed structure, often used for storage and as a workshop in a garden.

- **Summerhouse or garden office**

In the UK, the majority of summerhouses and garden offices are secondary spaces within gardens used as an additional room, for relaxation in warm weather or to assist in working from home. They are less substantial than Nordic huts, also known as summerhouses, which are larger dwellings more like a cottage.

- **Greenhouse**

A greenhouse is a structure that allows a gardener to regulate climatic conditions, such as temperature and humidity, to provide optimum plant growing conditions. They are also known as glasshouses or hothouses. The rigid structure can be formed of timber with a transparent material such as glass or polycarbonate to capture the heat and light of the sun.

- **Gazebo**

A pavilion structure, often octagonal or turret-shaped, a gazebo is usually freestanding, roofed, and open on all sides.

- **Treehouse**

A timber platform constructed around, next to, or among the trunk or branches of one or more mature trees above ground level. These can range from play spaces for children through to luxury accommodation.



IMAGE: A much-loved and frequently restored UK timber shed (Photo by Bob Harvey)



IMAGE: Traditional timber Alpine greenhouse at the Royal Botanic Garden Edinburgh (Photo by Author)



IMAGE: Alnwick Gardens treehouse (Photo by Christine Westerback)

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Installation

Timber garden structures can usually be purchased as kits consisting of pre-formed panels to be nailed together. Other structures, such as summerhouses, may require screws or coach bolts to fit together.

The timber in such kits is usually pre-treated with pressure-impregnated preservatives and does not require additional treatment prior to installation. However, the structure should be erected correctly to prevent degradation due to moisture:

- Install floors off the ground on pre-treated timber supports on a concrete or paving slab base.
- Take care not to damage roofing felts and ensure roof coverings like shingles or slates are correctly fixed to prevent leaks.

Garden buildings will not need planning permission, provided they adhere to the following requirements:

- Height from existing ground level to the eaves is below 2.5m
- Internal size is smaller than 15m² with no sleeping accommodation
- The building is placed at least 1m from the boundary of the property and not closer to a road than the original building itself.

Professional advice should be sought in unusual cases, and further restrictions apply in conservation areas. Any electrical connections must comply with safety standards. All verandas, balconies and other platforms including treehouses require planning permission, with the exception of decking up to 300mm above ground level.

Weathering and Maintenance

Uncoated timber will weather to a silvery-grey colour within 18 months to two years following installation. To retain a particular shade, timber garden buildings will need to be stained or painted every few years. This can also help extend the life of existing garden timbers.

Dry spells during the winter months are the ideal times to treat timber structures with wood preservative and stains in well-ventilated spaces.

Repairing glasshouse panes and shed roofs during the summer to inhibit water ingress later in the year helps prevent fungal decay. Greenhouse guttering should also be checked to remove debris.

All pre-treated timber offcuts should be disposed of in landfill or through commercial or industrial incinerators, and not domestic bonfires.

Pallets and Railway Sleepers

It is increasingly popular to upcycle timber pallets and railway sleepers in gardening projects, including raised beds and garden furniture.

Pallets should be checked to ensure they are not part of a functioning pool, where the pallet will be reused following repair and repatriation for further supply chain transport of goods.

Older railway sleepers may have been treated with creosote, which is no longer permitted for amateur uses in Europe. All such timbers should be isolated from ponds using pond liners.