



Purlins | Stockwalling | Stub Posts | Agricultural Boarding | Weather Topped Posts  
Fencing Posts | Rails | Carcassing | Fencing Stakes | Sleepers | Treated Plywood | Gates

# The Essential Guide to **Agricultural Building and Fencing Timbers**

Brookridge   
**Timber**

A Division of the Brookridge Group





**Brookridge Timber is a leading supplier of timber and timber related products, servicing the South West for more than 30 years. We offer customers environmentally sourced, quality timber products all produced in-house across a wide range of end uses.**

- National delivery
- Expert advice
- Range of species
- Standard range and bespoke profiles
- Full range of trims, reveals, cills and drips
- In house machining facilities
- In house preservative treatment and coating facilities
- Fire treatment to Euroclass B s1, d0



All Brookridge SMARTWOOD agricultural timbers have been pressure treated with TANALITH wood preservative unless specified.  
See page 12 for more information.

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The Versatility of Timber  
Around The Farm



Life does not get much tougher for timber than being used around the farm. Often exposed to damp or boggy ground, out in all weathers from baking hot to freezing cold, surrounded by livestock and exposed to the elements and decay organisms both above ground and below ground.

Our preservative treated and hardwood Smartwood Agricultural timbers are designed to give you the very best long term performance wherever you are using them. From purlins, cladding, plywoods and stockwalling to create robust farm buildings to a wide range of posts, rails, field gates, stakes and strainers to create safe and secure enclosures.





## PURLINS STOCK SIZES

Pressure Treated to  
Use Class 3

63mm x 175mm x 4.57m  
63mm x 175mm x 4.88m  
75mm x 175mm x 4.57m  
75mm x 175mm x 4.88m  
75mm x 200mm x 4.57m  
75mm x 200mm x 4.88m  
75mm x 225mm x 6.10m  
75mm x 250mm x 6.10m



## T & G STOCKWALLING

Pressure Treated to  
Use Class 3

47mm x 175mm x 3.60m  
47mm x 175mm x 4.57m  
47mm x 175mm x 4.88m  
47mm x 175mm x 6.10m  
47mm x 200mm x 3.60m  
47mm x 200mm x 4.57m  
47mm x 200mm x 6.00m

# Timber Purlins & Cladding Rails

Since July 2014 the EU Construction Products Regulation (CPR) came into effect which requires the timber used in load bearing situations to meet EU standards on structural timber.

All agricultural timber purlins must be strength graded to either C16 or C24 depending on section and load requirement. The strength grading of timber is carried out either by visual

grading or by machine grading to British Standard EN 14081 and the timbers are clearly marked with a stamp to show the strength class individual purlins have been graded to.

Graded agricultural timber purlins are CE marked enabling suppliers to issue customers with a Declaration of Performance (DoP) which clearly defines the criteria used in the grading process.

At Brookridge Timber we stock a wide range of high quality pressure preservative treated timber purlins, all available ex-stock and on short lead times.

In addition to timber purlins, we also stock a complete range of the other timber components, including cladding rails, required to construct a robust agricultural building and customers are able to order exact quantities to complete any project.

## CLADDING RAILS STOCK SIZES

Pressure Treated to  
Use Class 3

75mm x 100mm x 4.57m  
75mm x 100mm x 4.88m  
75mm x 125mm x 4.57m  
75mm x 125mm x 4.88m  
75mm x 125mm x 6.10m  
75mm x 150mm x 6.10m

Full Imperial Lengths



# Tongue & Grooved Stockwalling

Stockwalling, also known as dungwalling or dungboarding, is a robust tongue and grooved softwood board that interlocks to create a strong wall, ideal for cattle and other livestock buildings.

All of our stockwalling is machined in-house from high quality British grown softwood timber sourced from sustainable forests and pressure preservative treated to ensure an extended service life for exterior use.

These large TGV profiles offered by Brookridge Timber are designed to securely interlock with the next board, preventing drafts but still allowing some movement of the timber as it takes on and loses moisture.

Our pressure preservative treated stub posts allow high performance jointing of any stockwalling project.



## STUB POSTS

Pressure Treated to  
Use Class 4

100mm x 150mm x 2.4m  
100mm x 150mm x 3.0m  
150mm x 150mm x 3.6m







## AGRICULTURAL CLADDING

Pressure Treated to  
Use Class 3

22mm x 100mm x 3.6m

22mm x 100mm x 4.8m

22mm x 150mm x 1.8m

22mm x 150mm x 2.4m

22mm x 150mm x 3.0m

22mm x 150mm x 3.6m

22mm x 150mm x 4.2m

22mm x 150mm x 4.8m

22mm x 150mm x 5.4m

22mm x 150mm x 6.0m

22mm x 200mm x 3.6m

22mm x 200mm x 4.8m

22mm x 225mm x 4.8m

# Agricultural Cladding

Agricultural Cladding is also known as Yorkshire Boarding. It is typically made from 22mm x 100mm or 22mm x 150mm timbers and are available in a range of lengths from 1.8m to 6.1m.

The boards can either be fitted to allow air flow with a gap between the boards or they can be fitted board on board to give a closed structure.

They are generally used as a side and gable cladding on agricultural livestock buildings and are supplied pressure preservative treated to protect them from rot and insect attack.



# Pressure Treated Structural Plywood

WISA Structural Plywood is manufactured in Finland and is made of cross-bonded 3mm thick coniferous veneers and bonded with a weather and boil-resistant phenolic resin adhesive.

Preservative pressure treated in our ISO 9001 audited high pressure treatment

facility our structural softwood plywoods are commonly used in the agricultural industry where additional protection is required against rot and insect attack. These are multi-purpose boards suitable for many and varied constructional end uses.

## STRUCTURAL PLYWOOD

Pressure Treated to  
Use Class 3

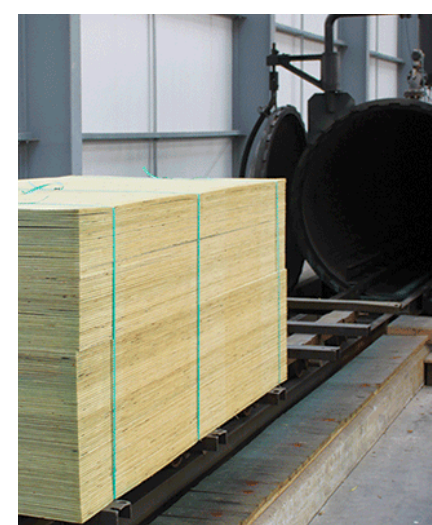
Species: Finnish Spruce  
Softwood Plywood

Board Thickness: 12mm and  
18mm

Sheet Size: 2440mm x 1220mm

Bond Class: EN314-2/Class 3  
Exterior

Grade: G/111







## FENCE RAILS

Pressure Treated to  
Use Class 3

38mm x 88mm x 3.6m

38mm x 88mm x 4.8m

100mm Half Round Rails x 3.6m

100mm Round Poles x 3.6m

47mm x 75mm x 3.0m Cant Rail

47mm x 75mm x 3.6m Cant Rail

# Fencing Systems

Brookridge Timber stocks a comprehensive range of agricultural fencing timber posts. Sourced from long established links with the UK sawmilling market, our range of agricultural posts are made up of 100% pine redwood.

Pine is our chosen species for agricultural posts because of its superior preservative

treatability to ensure a premium long term performance in ground contact conditions. All pine agricultural posts from Brookridge Timber are treated to Use Class 4 - the specification for timber to be used in ground contact as required by BS8417, giving an expected service life of 15 years.

To complement our range of agricultural posts, Brookridge Timber also supplies high quality timber rails all pressure preservative treated to Use Class 3 for use out of ground contact.

We can supply the ideal rail for every fencing project and below are details of our ex-stock items.

## ONE WAY WEATHERED POSTS

Pressure Treated to  
Use Class 4

75mm x 125mm x 1.8m

75mm x 125mm x 2.1m

75mm x 150mm x 1.8m

75mm x 150mm x 2.1m



## STAKES & STRAINERS

Pressure Treated to  
Use Class 4

75mm x 100mm x 1.65m

75mm x 100mm x 1.8m

75mm x 100mm x 2.4m

100mm x 125mm x 1.65m

100mm x 125mm x 1.8m

100mm x 125mm x 2.1m

100mm x 125mm x 2.4m

125mm x 150mm x 2.1m

150mm x 175mm x 2.1m

150mm x 175mm x 2.4m

175mm x 200mm x 2.4m

# Stakes and Strainers

At Brookridge Timber we hold large stocks of fencing stakes and strainers, which offer a versatile and hard wearing option for a range of general purpose fencing, mainly in agriculture projects.

All of our products in this range are manufactured from a pine redwood. Pine is our chosen species for fencing stakes and strainers because of its superior preservative treatability to ensure a premium long term performance in ground contact conditions.

All pine fencing stakes and strainers from Brookridge Timber are pressure preservative treated to Use Class 4 - the specification for timber to be used in ground contact as required by BS8417, giving an expected service life of 15 years.

We also offer some sizes creosoted where a customer has a preference for this type of preservative protection.

## CREOSOTED STAKES & STRAINERS

75mm x 100mm x 1.65m

75mm x 100mm x 1.8m

75mm x 100mm x 2.4m

125mm x 150mm x 2.4m

175mm x 200mm x 2.4m







# Sleepers



## New Sleepers

All the new softwood sleepers offered by Brookridge Timber are produced from UK grown pine redwood and are high pressure preservative treated to User Class 4 ground contact specification as required by BS8417.

### NEW SLEEPERS

Pressure Treated to Use Class 4

100mm x 200mm x 1.8m

100mm x 200mm x 2.4m

125mm x 225mm x 2.4m



## Reclaimed Sleepers

A reclaimed sleeper is likely to have been used for many years on a railway track. Preservative treated with creosote it will still have a very long service life when used in ground contact.

There are many grades of reclaimed sleepers on the market and all reclaimed sleepers from Brookridge Timber are sourced from trusted suppliers who only deliver the top grade A quality.

These reclaimed sleepers are ideal where a project requires a more rustic look and are available ex-stock in the following size. Please remember that these sleepers are in effect second hand there can be a large tolerance on the stated dimensions

### RECLAIMED SLEEPERS

Creosote treated

150mm x 250mm x 2.7m



## Oak Sleepers

Oak is a naturally durable species of timber and as such is ideal to be used in ground contact as a landscaping sleeper. As a durable species it requires no preservative treatment to give a long service life in ground contact.

The oak sleepers supplied by Brookridge Timber are guaranteed to have two good faces and are ideal for special, high profile projects.

### OAK SLEEPERS

100mm x 200mm x 2.4m



# Field Gates



Manufactured in house from kiln dried softwood and high pressure preservative treated to provide a long service life, our field gates are available in a range of sizes to suit most requirements.

Also available ex-stock are our four way weathered gate posts and ironmongery to complete the job.

If a particular sized gate is required please contact us as we can manufacture any size gate you require.

## FIELD GATES

Pressure Treated to Use Class 3  
Our field gates are available from stock in the following widths:

3ft	4ft	5ft
6ft	7ft	8ft
9ft	10ft	12ft

# Four Way Weathered Posts



## FOUR WAY WEATHER POSTS

Pressure Treated to Use Class 4

125mm x 125mm x 2.1m

150mm x 150mm x 2.1m

150mm x 150mm x 2.4m

175mm x 175mm x 2.1m

175mm x 175mm x 2.4m

200mm x 200mm x 2.1m

200mm x 200mm x 2.4m

All of our products in this range are manufactured from a pine redwood and are pressure preservative treated to Use Class 4 - the specification for timber to be used in ground contact as required by BS8417, giving an expected service life of 15 years.







Brookridge  
SMARTWOOD  
AGRICULTURAL TIMBERS

# Pressure Preservative Treatment

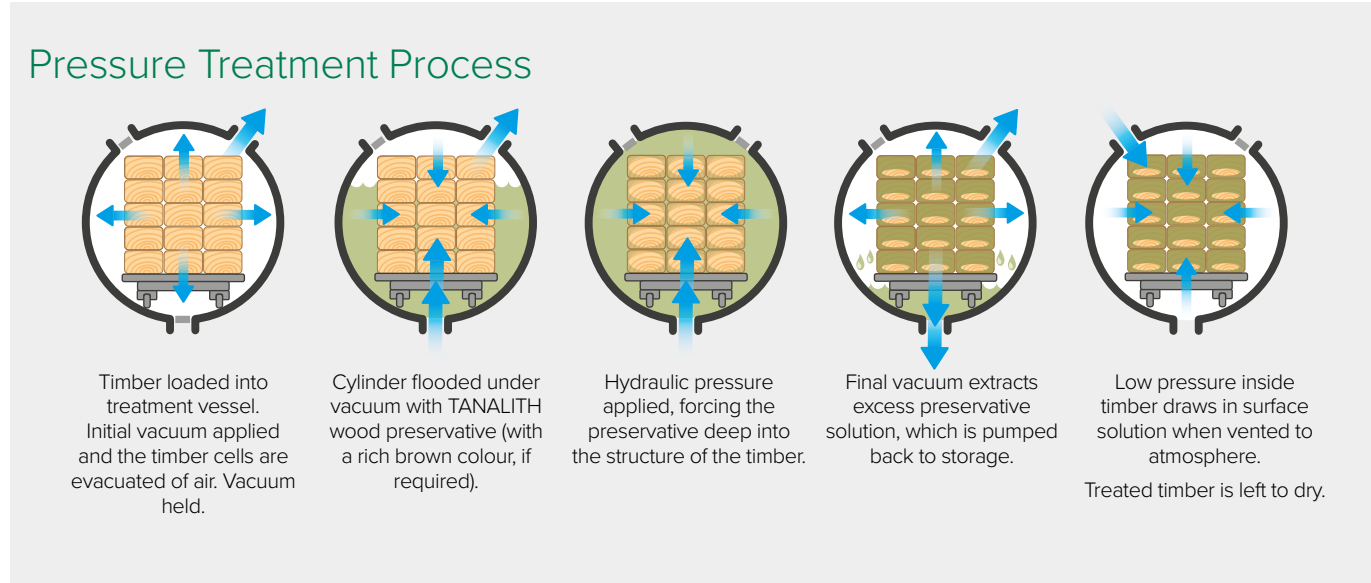
To help ensure long term performance of our softwood timbers, they are preservative treated with latest generation TANALITH wood preservative from Lonza Wood Protection, against the threat of decay and insect attack.

Brookridge Timber use an industrial high pressure impregnation process to force the TANALITH preservative, now incorporating

award winning BARamine™ technologies, into the wood structure. This protection is in the timbers for good - no further treatment is required.

The resulting TANALISED treated timbers are a pale green colour as standard. Brookridge Timber can also offer a rich brown colouration if required. Both will slowly weather to a honey brown and eventually to a natural silver grey.

All of the timbers offered in our range of agricultural and fencing products are high pressure treated through our in house ISO 9001 audited high pressure treatment process.



## Treated Timber Use Classes

Through BS 8417, the industry Code of Practice for the preservative treatment of timber, the eventual end use of preservative treated timber is classified into one of the 5 main categories shown in the table below. These Use Classes, defined in BS EN 335-1, are based on the potential threat to the timber from decay or insect attack in its eventual application.

For instance, internal building timbers in Classes 1 and 2 will be under less threat than timbers used externally in ground contact - Use Class 4. Therefore, Use Class 4 timbers will require a higher degree of protection.

USE CLASS	TYPICAL SITUATION
<b>1</b>	Internal, dry - eg. upper floor joists
<b>2</b>	Internal, risk of wetting - eg. tile battens
<b>3.1</b>	Outdoors, coated, above ground - eg. soffits/cladding
<b>3.2</b>	Outdoors, uncoated, above ground - eg. cladding/fence rails
<b>4</b>	Direct soil or fresh water contact - eg. fence posts

**All of the timbers offered in our range of agricultural and fencing products are high pressure treated to either Use Class 3.2 or Use Class 4 requirements.**



## Treatability

It should be noted that the treatability of timber varies between species. If a specific wood species is to be specified, care should be taken to ensure that a species chosen is appropriate to the treatment requirements. e.g. European whitewood is slightly durable but cannot be easily treated to Use Class 4 for use in ground contact.

Treatability refers to how easily timbers can be penetrated with vacuum pressure preservative treatments.

The four levels of treatability in BS EN 350-2 are 'easy', 'moderately easy', 'difficult', 'extremely difficult' and any specifier should cross reference their chosen species with this standard.

Brookridge Timber takes great care in only using the correct species which will treat to the required Use Class and the high pressure preservative treatment process is fully audited by our preservative treatment solution provider.

Additionally all of the company processes are audited by a third party and Brookridge Timber has achieved ISO 9001 recognition and our preservative treatment process is covered by this recognition.

## Natural Durability of Timber Species

This list is not exhaustive but provides details on some of the more popular species used in the UK.

DURABILITY	TIMBER TYPE	TIMBER SPECIES
1. Very Durable	Softwoods <b>Hardwoods</b>	- <b>Afromosia</b> <b>Greenheart</b> <b>Opepe</b> <b>Iroko</b> <b>Teak</b>
2. Durable	Softwoods <b>Hardwoods</b>	Canadian Western Red Cedar <b>Ekki</b> <b>Sweet Chestnut</b> <b>American White Oak</b> <b>European Oak</b> <b>American Mahogany</b>
3. Moderately Durable	Softwoods  <b>Hardwoods</b>	UK Western Red Cedar Douglas Fir Siberian Larch European Larch  <b>Malaysian Keruing</b> <b>African Mahogany</b> <b>Red Grandis</b>
4. Slightly Durable	Softwoods          <b>Hardwoods</b>	Scots Pine Canadian Hem Fir Corsican Pine European Spruce Parana Pine Canadian Spruce Pine Fir Radiata Pine Silver Fir European Redwood American Hem Fir  <b>American Red Oak</b> <b>English Elm</b>
5. Not Durable	Softwoods <b>Hardwoods</b>	- <b>Alder</b> <b>Silver Birch</b> <b>European Horse Chestnut</b> <b>Sycamore</b>



# A Guide to EN 14081

## Timber Strength Grading and Strength Classes in Agricultural Buildings

Since July 2014, all timber purlins within a steel frame or timber frame agricultural building have to carry a CE certificate which is a declaration of performance and certificate of factory control.

When using timber in an agricultural building it is vital to ensure that the purlins and other structural timbers used in its construction are strong enough for the highest expected load.

Agricultural timber purlins are therefore strength graded and this is simply a prediction of the strength of an individual piece of timber.

Certain strength reducing defects in a piece of timber are vital to living tree.

These include:

- **Moisture Content**
- **Fissures**
- **Knots**
- **Wane**
- **Slope of Grain and Shape (bow and twist)**

Strength grading identifies these defects and assesses their impact on the strength of a piece of timber, both individually and combined.

### Visual Strength Grading

Visual strength grading applies a set of rules which define the maximum limits of strength reducing characteristics and a individual piece of timber is assigned a grade based on these.

### Machine Strength Grading

Machine strength grading relies on established correlations between the strength of timber and other properties that are measured by a test such as the stiffness of a piece of timber and the size, location and density of knots. Depending on how the piece of timber performs under this test it is assigned a strength grade.

Either of the described grading techniques is acceptable under EN 14081 and they provide assurance that the strength of individual pieces of timber in an agricultural building where required will exceed the design requirements.

Load bearing purlins in an agricultural building must be graded to either C16 or C24 depending on the section of the purlin and the load requirement.

Structural timber used in the construction of an agricultural building falls within the

framework of the Construction Products Regulation and there is a legal obligation for these timbers to be CE marked by the supplier and each individual piece should have a stamp containing the following information.

- **Manufacturer Name**
- **DoP Reference Number**
- **Strength Class**
- **Dry Graded or Wet Graded**
- **CE Symbol**
- **Number of the Notified Body**
- **Machine or Visual Grade reference**
- **Timber Species Reference**

It is a requirement that the marks on the timber are clear and legible and indelible.

All Brookridge Timber agricultural building timbers carry these specific details.

This is a short overview of the EN 14081 standard as it impacts on the majority of softwood structural timber used in the construction of agricultural buildings in England and Wales. Details of the complete standard are available from various publications.

## Strength Class by Species

SOURCE AND SPECIES	GRADING RULES	GS	SS	SPECIES STAMP
British Pine	BS4978 + EN14081	C14	C22	WPNN
British Spruce	BS4978 + EN14081	C14	C18	WPCS
British Douglas Fir	BS4978 + EN14081	C14	C18*	PSMN
British Grown Larch	BS4978 + EN14081	C16	C24	WLAD
European Redwood	BS4978 + EN14081	C16	C24	PNSY
European Whitewood	BS4978 + EN14081	C16	C24	WPCA

\*Cross section over 20,000mm<sup>2</sup> = C24



## Delivery Service or Collection

With our own fleet of lorries, Brookridge Timber offer a local delivery service that is reliable and efficient. We offer a twice weekly service to counties in the South West:

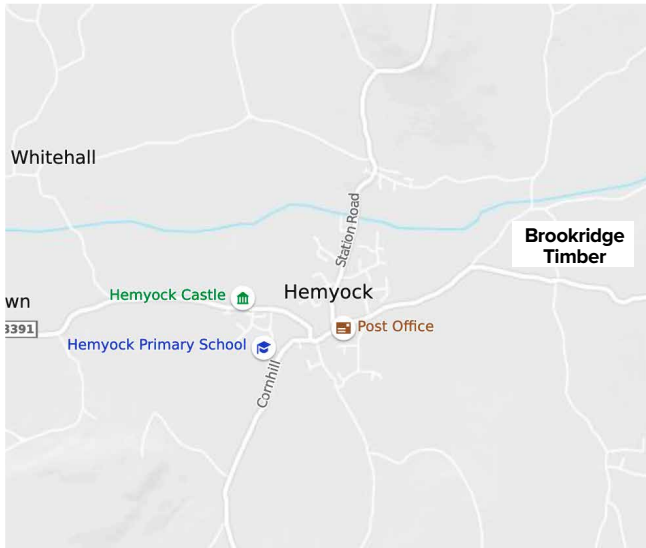
- Gloucestershire
- Dorset
- Wiltshire
- Devon
- Somerset
- Cornwall

To order, give your local depot a call or visit our online shop - **brookridgestore.com**

Collection is also an option at both locations - see below to find us.



## How to Find Us



DEVON  
Hemyock, Devon, EX15 3PF  
Telephone: **01823 680546**



SOMERSET  
Bristol Rd, Dunball Somerset, TA6 4TE  
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[www.brookridgetimber.co.uk](http://www.brookridgetimber.co.uk)

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