

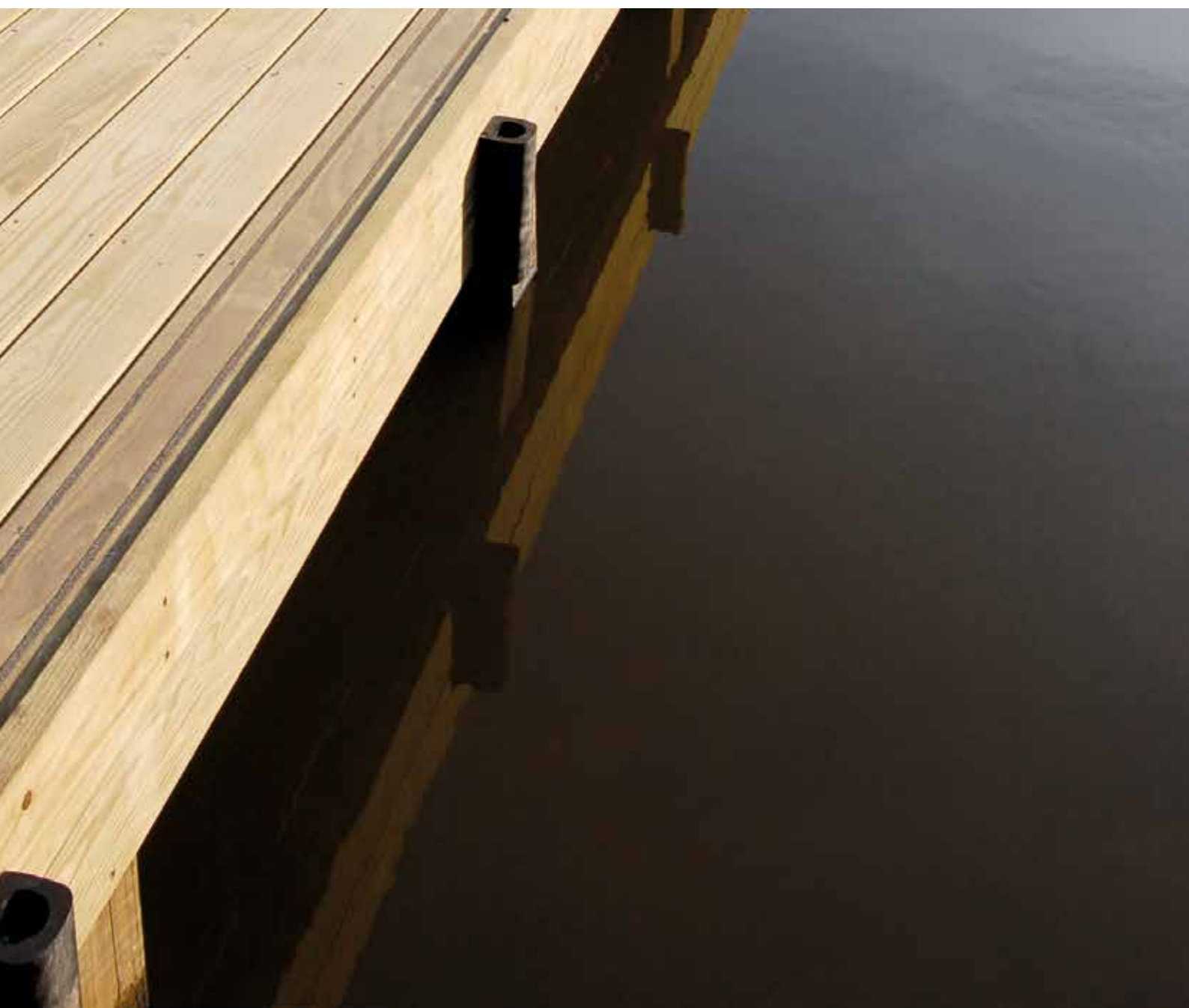


## PRESSURE-TREATED SOUTHERN YELLOW PINE



STRENGTH—APPEARANCE—QUALITY ASSURANCE

[AmericanSoftwoods.com](http://AmericanSoftwoods.com)





# CONTENTS

3	Ideal for pressure-treatment
4	Appearance and strength
5	Sizes and grades
6	Categories and grades
7	Standard sizes
8	Quality assurance
9	The treatment process
10	Construction applications
11	Applications and benefits
12	Commodities
13-14	On-site practices
15	The Green choice

# SOUTHERN YELLOW PINE

The Construction Products Regulation requires a construction product to meet basic requirements for construction works including mechanical resistance and stability. Wood treatment helps timber products meet this requirement. The properties of a timber species influence the quality of treatment that can be achieved. Some species are classed as 'moderately resistant to extremely resistant to treatment', while others are classed as 'permeable', enabling the preservative to penetrate deeper into the timber.

The anatomy of Southern Yellow Pine sapwood permits exceptional depth and uniformity of treatment. This is why it accounts for over 85% of all treated wood purchases in the US! Pressure-treated under a national quality assurance scheme, and the pre-eminent choice of the construction industry in North America, Southern Yellow Pine is now widely available in the UK. This is your guide to its manufacture, specification and use.





# IDEAL FOR PRESSURE TREATMENT

## About Southern Yellow Pine

Southern Yellow Pine is not a single species, but a collective term used to describe a group of species made up of loblolly, longleaf, shortleaf and slash pine. All are native to the USA and grow mainly across a broad geographic region from eastern Texas to Virginia. Once felled and processed they are virtually indistinguishable from each other. Even though 97% of American homes are of timber frame construction and more wood is consumed per head in the US than anywhere else in the world, the forests of North America cover the same land area as they did 100 years ago. And, because more trees are planted every year than are harvested, these forests are growing in size.<sup>2</sup>

## Why treat wood?

All timbers, including Southern Yellow Pine, can be subject to attack from fungi and wood-boring insects. The risk is greater where wood is used outdoors, or in applications where it is liable to get wet. Good design and construction



can reduce the risk of the timber getting wet or remaining wet for extended periods, which reduces the risk of biological degradation. However, where wood is persistently exposed to moisture, modern preservative treatments can provide protection.

While some insects are able to attack dry wood, they pose less of a threat in cooler climates, such as the UK, than fungi. In warmer climates, such as Southern Europe, however, termites can pose a threat to construction timber. In view of climate change, protecting timber components against both fungal decay and insect attack will continue to be essential in most climates. For example, the British Standards Institution (BSI) has asked UK Standards Committees to consider how the changing UK climate will influence buildings designed for a life of 60 years or more. One of the major benefits of treated Southern Yellow Pine is that it provides construction professionals with a timber whose durability and mechanical properties are assessed via a third-party quality assurance scheme to demonstrate fitness for a specific end use.

<sup>1</sup> Southern Pine Council, 2009

<sup>2</sup> State of the World's Forests, UNFAO, 2009

# APPEARANCE AND STRENGTH

## Appearance

Southern Yellow Pine has a distinctive and attractive appearance, with a straight but interesting grain pattern, and is available in clear lengths. The sapwood has a yellowish-white hue and the heartwood is red-brown or orange. Growth rings display a distinct difference in colour between early and late growth each year, making it sought after for decorative applications such as decking, panelling and exterior cladding.



## Strength, physical and working properties

Southern Yellow Pine is relatively dense, ranging from 537 – 626 kg/m<sup>3</sup>. This gives it a hardness of 690 on the Janka scale, making it ideal for decking or flooring in areas of heavy traffic.



Strength-graded Southern Yellow Pine is able to achieve strength classes of up to C30, making it one of the stiffest, strongest softwoods available. Southern Yellow Pine graded to meet the requirements of C22 is available in the EU.

Although Southern Yellow Pine contains resin, it is moderately easy to work with machine or hand tools and takes paints or stains readily. A sealer is recommended to prevent any potential resin bleed. It glues well and its high density provides excellent nail and screw-holding.





# SIZES AND GRADES

## Size and grade descriptions

Southern Yellow Pine is available in a number of different size-based categories, principally:

- Dimension Lumber
- Timbers
- Boards
- Radius Edge Decking

**Dimension Lumber** is mainly used for structural applications. It ranges in thickness from 2" (50mm) to 4" (100mm), with a minimum width of 2" (50mm).

**Timbers** is the category for large, heavy structural components, 5" (125mm) thick or more, used for support posts or beams.

**Boards** are no more than 2" (50mm) thick and 4" (100mm) to 12" (305mm) wide. These are suitable for non-structural applications.

**Radius Edge Decking** is produced specifically for decking. Its attractive surface also makes it suitable for other outdoor landscaping structures.

Grading is carried out in line with rules published by the Southern Pine Inspection Bureau (SPIB). In the US, Southern Yellow Pine is graded for appearance as well for strength.

Dimension Lumber and Timbers are the only categories graded for strength and can be assigned a strength class C22 provided they have been graded by a competent strength grader using the National Grading Rule for Dimension Lumber (NGRDL).

All timber sizes are assigned at the sawmill before drying and finishing and should be considered nominal sizes. The metric sizes in this publication are approximate nominal size equivalents. Table 2 (overleaf) lists the range of nominal and actual sizes for the different pressure-treated Southern Yellow Pine categories.

Pressure-treated Southern Yellow Pine is manufactured with all sides planed, giving a superior finished appearance.

**It is important to note that for treated timbers graded for structural use, any changes in cross section may lead to a need for re-grading and re-treatment.**



Photo © Manchester Deck Co.

# CATEGORIES AND GRADES

**Table 1. Commercial product categories and grades of Southern Yellow Pine**

Grade	Description
<b>Dimension Lumber: Thickness range 2" to 4" (50mm to 100mm). Width 2" (50mm) and above</b>	
No.1	Recommended for construction where high strength, stiffness and good appearance are desired.
No.2	Recommended for most general construction uses where moderately high design values are required. Knots permitted, as long as they are well spaced.
No.3	Properties meet a wide range of design requirements. Recommended for general construction applications where visual appearance is not a consideration. Many pieces would qualify as No.2 grade except for the presence of a single limiting characteristic.
No.1 Prime	Recommended where appearance and strength are prime considerations. Based on No.1 grade, with appearance-limiting factors, such as knots, largely excluded.
No.2 Prime	Recommended where appearance and strength are prime considerations. Based on No.2 grade, with appearance-limiting factors, such as knots, largely excluded.
<b>Timbers (large dimension structural components): 5" x 5" (125 x 125mm) and above</b>	
Select Structural	Recommended for applications where high strength, stiffness and good appearance are required.
No.1 & No.2	Similar properties to corresponding grade of dimension timber above.
No.3	This grade is not strength/stiffness rated but is an economical general purpose grade for applications where strength rating is not critical. It is not approved for structural applications in Europe.
<b>Boards (not strength rated): 1" to 1½" (25mm to 38mm) thick, 2" (50mm) and wider</b>	
No.1	Superior appearance material suitable for a wide variety of internal, decorative and joinery applications.
No.2	Good quality, general purpose material for cladding (treated for external use).
No.3	Serviceable quality where more economical material is acceptable, e.g. cladding.
<b>Radius Edge Decking (not strength rated): 1¼" (32mm) thick, 4" to 6" (100mm to 150mm) wide</b>	
Premium	High quality material for decking boards where appearance is important.
Standard	Slightly less restrictive visual selection criteria than Premium grade. Makes an excellent product to use where natural characteristics such as larger knots are permitted.
<b>Finish (non-structural, dressed and dry<sup>1</sup>) for decorative applications</b>	
C&Btr	Recommended where high quality surface appearance/finish is required. Generally clear, although a limited number of pin-knots are permitted. Highly suitable for use unfinished or with translucent stains.
C	Excellent for paint, stain or natural finish where appearance specification is less exacting. Reasonably clear, but a limited number of small surface cracks (checks) and small tight knots are permitted.
D	Economical and serviceable finish grade. Suitable for paint and stain or left natural.

<sup>1</sup> Moisture content (mc) varies by thickness. For 1" - 1½" (25mm to 38mm) nominal thicknesses, mc should not exceed 15% unless specified as kiln-dried, when the maximum mc is 12% for 90% of pieces and 15% for 10% of pieces.

**Table 2. Standard sizes of pressure-treated Southern Yellow Pine (based on SPIB grading rules)**

	Thickness					Width				
	Nominal	Actual				Nominal	Actual			
		Dry (<19% mc)		Green (>19% mc)			Dry (<19% mc)		Green (>19% mc)	
	inches	inches	mm	inches	mm	inches	inches	mm	inches	mm
Dimension Lumber	2	1½	38			2	1½	38		
	2½	2	51	2¼	52	3	2½	64	2⅞	65
	3	2½	64	2⅞	65	4	3½	89	3⅞	90
	3½	3	76	3¼	78	5	4½	114	4⅞	117
	4	3½	89	3⅞	90	6	5½	140	5⅞	143
						8	7½	184	7½	190
						10	9¼	235	9½	241
						12	11¼	286	11½	292
						14	13¼	337	13½	343
						16	15¼	387	15½	394
						18	17¼	438	17½	444
Timbers	5" and thicker	½" off nominal		½" off nominal		5" and wider	½" off nominal		½" off nominal	
Boards	Nominal	Actual			Nominal	Actual				
	inches	inches	mm		inches	inches	mm			
	1	¾	19		2	1½	38			
	1¼	1	25		3	2½	64			
	1½	1¼	32		4	3½	89			
					5	4½	114			
					6	5½	140			
					7	6½	165			
					8	7½	184			
					9	8¼	210			
					10	9¼	235			
				11	10¼	260				
				12	11¼	286				
				over 12	¾" off nominal		19mm off nominal			
Radius Edge Decking	Nominal	Actual			Nominal	Actual				
	inches	inches	mm		inches	inches	mm			
	1¼	1	25		4	3½	89			
					5	4½	114			
				6	5½	140				

# QUALITY ASSURANCE

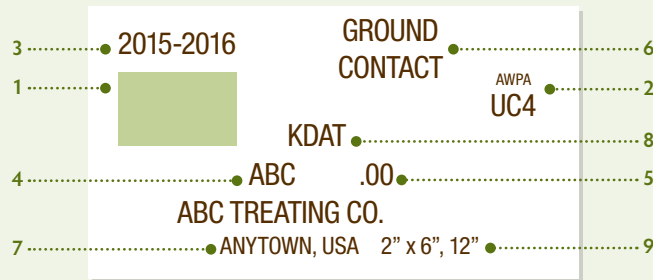
## Unique third-party scheme

The US timber industry operates a third-party quality assurance scheme that requires every piece of Southern Yellow Pine to be clearly marked with its grade and other information relating to its production, such as the manufacturer and moisture content at time of grading.

The grading and marking of the wood are monitored by third-party inspection bodies accredited by the American Lumber Standards Committee (ALSC). All products must be manufactured in accordance with US product standard PS20 published by the US Department of Commerce. Fig.1 shows examples of the grade marks on Southern Yellow Pine.

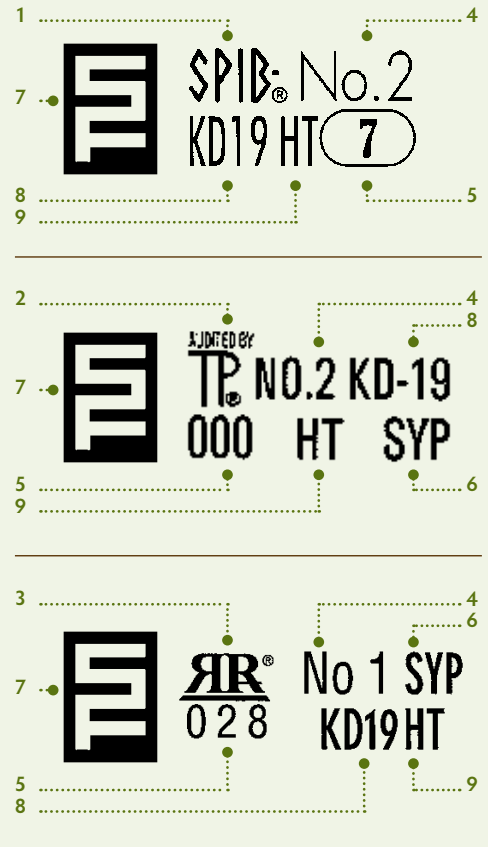
It is impossible to tell by visual inspection if wood has been treated correctly for its application. That is why the treatment quality mark is so important. It provides assurance that any Southern Yellow Pine product is treated by a qualified treater under a quality scheme audited by an independent inspection body accredited by the American Lumber Standards Committee (ALSC). The mark identifies the treater, the preservative used, the standard to which it was treated, its Use Class category and the inspection body that confirmed its quality. An example of a Southern Yellow Pine treatment quality mark is shown in Fig.2. These can be ink-stamped on the wood but appear more typically as printed plastic tags stapled to each piece of timber.

Fig. 2 Example of quality mark for treated Southern Yellow Pine – plastic tag or ink marked



1. Inspection body logo
2. Application Use Class (US Standards are the same as UK and EU Use Classes)
3. Year of treatment
4. Preservative type used for treatment, e.g. ACQ
5. Preservative retention achieved
6. End use application description
7. Treating company details
8. Air-dried (DRY or ADAT) or Kiln-Dried After Treatment (KDAT)
9. Dimensions and/or product class

Fig.1 Examples of typical Southern Yellow Pine grade marks



1. Inspection body: Southern Pine Inspection Bureau (SPIB)
2. Inspection body: Timber Products Inspection (TP)
3. Inspection body: Renewable Resource Associates (RRA)
4. Grade of timber
5. Sawmill identification number
6. Timber species – SYP (Southern Yellow Pine)
7. Logo of sawmill – optional
8. Moisture content (mc): KD19 = Kiln-dried to 19% mc
9. HT = Heat treated

Note: a number of organisations are accredited by ALSC to inspect or grade Southern Yellow Pine products in accordance with SPIB rules. In addition to the three listed above, these include: Northeastern Lumber Manufacturers Association (NELMA), West Coast Lumber Inspection Bureau (WCLIB), Western Wood Products Association (WWPA) and California Lumber Inspection Service (CLIS).



# THE TREATMENT PROCESS

## Preservatives approved for use

The preservatives approved by the Environmental Protection Agency (EPA) in the US for Southern Yellow Pine contain the same biocides approved for use by regulators under the Biocidal Products Directive in Europe and are based on copper and organic biocides such as Copper Azole (CA) and Alkaline Copper (ACQ).<sup>1</sup>

## The pressure-treatment process

Timber components, machined to their finished dimensions and at an appropriate moisture content, are impregnated with preservatives in large pressure vessels, where the combination of vacuum and high-pressure drives the preservative into the wood. As the sapwood of Southern Yellow Pine is easy to impregnate, some components will be treated right the way through. Once inside the wood cells, the preservatives react with the wood to become permanently bonded to the cell walls in a process called 'fixation'.

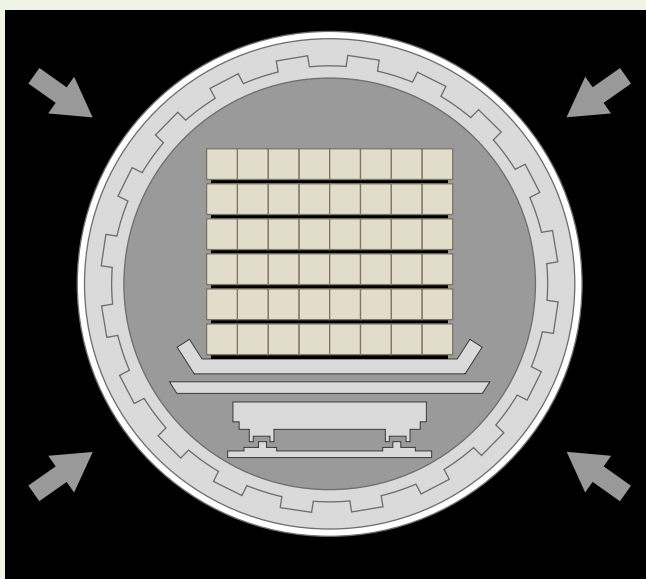
## Tailoring treatment to end use

The required preservative penetration and retention reflect the use to which the wood will be put. A component intended for permanent ground contact is treated to provide a higher retention and depth of penetration than external cladding, which in turn requires greater protection than internal structural timber. In the US, treatment requirements are set by the American Wood



Protection Association (AWPA). In the UK, BSI sets out the requirements for preservative treatment of solid wood for different end uses in the standard BS 8417.

European standards and the AWPA categorise wood applications into Use Classes (UC) or Use Categories respectively. These describe the risk of wetting and biological agents of deterioration under each. Both standard-setting bodies follow similar UC and Use Category classifications. Southern Yellow Pine marked with an AWPA UC4 quality label will meet the requirements for UC4 applications in Europe provided the preservative manufacturer agrees that AWPA treatment (penetration and retention) meets the requirement for this UC in Europe. Table 3 sets out the Use Categories and Use Classes for timber components in the USA and Europe.



## Drying after treatment: ADAT and KDAT

All wood treated with a waterborne preservative has a high moisture content in the treated zone after preservation. Post-treatment drying reduces the risk of shrinkage defects developing during transit and reduces the weight for shipping and handling. Re-dried Southern Yellow Pine is marked KDAT when it has been kiln-dried after treatment, or ADAT or DRY when it has been air-dried. The moisture content to which the component has been dried is also indicated on the quality label or ink mark.

<sup>1</sup> A range of preservatives for the treatment of Southern Yellow Pine is approved by EPA in the USA. A full list is available from the American Wood Protection Association (AWPA) at [www.awpa.com](http://www.awpa.com)

# CONSTRUCTION APPLICATIONS

**Table 3. Use Categories/Use Classes for wood and examples of service situations**

AWPA Use Category	BSEN Use Class	Service conditions*	Common Agents of Deterioration*	Typical service situation**	Examples***
UC1 <sup>1</sup>	UC1	Interior construction. Above ground. Dry.	Insects only.	Internal, with no risk of wetting.	All timbers in normal pitched roofs except tiling battens and valley gutter members. Floor boards, architraves, internal joinery, skirtings. All timbers in upper floors not built into solid external walls.
UC2	UC2	Interior construction. Above ground. Damp.	Decay, fungi and insects.	Internal, with risk of wetting.	Tiling battens, frame timbers, timber frame houses, timber in pitched roofs with high condensation risk, timbers in flat roofs, ground floor joists, sole plates (above damp proof course), timber joists in upper floors built into external walls.
UC3A	UC3.1	Exterior construction. Above ground. Coated and rapid water run-off.	Decay, fungi and insects.	External, above damp proof course (dpc). Coated.	External joinery, including roof soffits and fascias, bargeboards etc., cladding, valley gutter timbers, external structural load bearing timbers.
UC3B	UC3.2	Exterior construction. Above ground. Uncoated or poor water run-off.	Decay, fungi and insects.	External, above damp proof course (dpc). Uncoated.	Fence rails, gates, fence boards, agricultural timbers not in soil/manure contact, and garden decking timbers not in contact with the ground.
UC4A General Use	UC4	Ground contact or fresh water.	Decay, fungi and insects.	Timbers in permanent contact with the ground or below dpc. Timbers in permanent contact with fresh water. Timbers exposed to the particularly hazardous environment of cooling towers.	Fence posts, gravel boards, agricultural timbers in soil/manure, earth-retaining walls, poles, sleepers, playground equipment, decks and boardwalk support columns, bridge support, bollards, lock gates and revetments, cooling tower packing (fresh water).
UC4B Heavy Duty					
UC4C Extreme Duty					

\* taken from AWPA Table 2-1    \*\* taken from BS EN 335    \*\*\*taken from BS 8417

<sup>1</sup> AWPA standards list three sub-classes under UC4, and EN 335-1 only one. The level of treatment approved for any UC4 category under the AWPA scheme should meet the requirements for Use Class 4 in the EU. Preservative suppliers should be consulted to ensure AWPA treatments (retentions and penetrations) meet the requirements of European national standards to provide the desired service lives set out in these. If in any doubt about UK applications and specifications for treated wood contact the Wood Protection Association ([www.wood-protection.org](http://www.wood-protection.org)).



# APPLICATIONS AND BENEFITS

## Applications for pressure-treated Southern Yellow Pine

Because of its inherent strength, treatability and beauty, pressure-treated Southern Yellow Pine has become the principal timber choice in North America for construction, landscaping and engineering applications. Table 4 provides a schedule of the most popular solid timber and panel commodities, together with their Use Class specification required for preservative protection. These Use Class codes appear on the quality mark or label. Southern Yellow Pine has become strongly associated with commodities and applications, such as:

### Flooring

Hardwearing, with an attractive surface, suitable for domestic as well as public floors, where damp or high humidity may be an issue.

### External cladding

Available in a variety of profiles in a natural pressure-treated finish, or with factory-applied coatings.

### Truss rafters

Its inherent strength permits longer spans and smaller cross-sections.

### Outdoor decking and boardwalks

Southern Yellow Pine dominates the decking and boardwalk sector in the US.

### Landscaping

Pergolas, arbours, gazebos, screening, fencing, outdoor furniture, path and border edges, earth retaining walls – the landscaping applications for pressure-treated Southern Yellow Pine are endless.

### Bridges

Large size Southern Yellow Pine is popular for permanent public and private bridges.

### Freshwater piers and pontoons

Use Class 4 treated is ideal for freshwater piers and pontoons.

### Post and frame buildings

Post and frame structures are increasingly popular, not only for agricultural buildings, but also as economical structures for commercial and residential applications.

## Benefits of using Southern Yellow Pine

### Strength and stiffness

Southern Yellow Pine is the strongest softwood structural timber in the US. In the UK it can be graded to C22.

### Cost saving

Wood is a cost-effective construction material. Southern Yellow Pine's high strength class means designers can reduce cross-sectional sizes to save money. Drying after treatment minimises rejects caused by shrinkage.

### High density

With a Janka hardness rating of 690, Southern Yellow Pine provides an extremely hard-wearing floor or deck surface, which holds fixings well.

### Superior treatability

The high sapwood to heartwood ratio and wood cell character mean preservative penetration is deep and consistent.

### Natural beauty

Attractive grain pattern and colour make it ideal for uncoated external cladding when treated.

### Dimensional stability

Southern Yellow Pine dimension timber less than 50mm (2") thick is dried to a moisture content of 19%, reducing the potential for warping and cupping during transport and storage, minimising waste.

### Independent quality verification

Southern Yellow Pine is graded and treated in accordance with an independent quality assurance scheme. Grade quality and treatment standard are marked on each piece.

### Helping the environment

Unlike most building products, wood from well-managed sources is a genuinely sustainable material with a low carbon footprint. The more wood is used the more we mitigate climate change by sequestering CO<sub>2</sub>.

# COMMODITIES

**Table 4. Southern Yellow Pine commodities and Use Class treatment categories in the USA**

Commodity	Use Class	Commodity	Use Class
Bender board (path edge former)	4A	Purlins	
Cant strips (roofing felt fillet)	3B	Above ground, interior	1-2
Cladding (siding) external	3A-B	Above ground, exterior	3A-B
Cribbing (trench support)	4C	Shakes and shingles	3B
Cross arms (transmission pole)		Sill sole plates	2
General use	3B	Skirtboard, external	4A
Critical, hard to replace	4A	Stakes (sawn), agricultural	4A
Decking (commercial)		Ties, bridge	4A
Above ground exterior	3B	Trusses	
Building construction, general	4A	Roof, dry or damp	1-2
Bridge, critical, severe decay threat	4B	Floor, above ground	3B
Decking (residential)		<b>Timber</b>	
Above ground		Above ground, interior, dry or damp	1-2
Deckboards	3B	Above ground, exterior:	
Deck balustrade components	3B	Coated or rapid water run-off	3A
Joists	3B	Uncoated or poor water run-off	3B
Ground contact		Ground or fresh water contact	
Joists	4A	Non-critical components	4A
Support posts	4A	Critical, difficult replacement	4B
Expansion boards	4A	Critical, structural components	4C
Fascia boards	3A-B	Agricultural, industrial, structural	
Fence pickets	3A-B	Brine storage and retaining walls	4A
Fence rail	3A-B	Trench walls and important structural	4B
Flooring		Cooling towers	4A
Above ground, interior		Marine out of water	
Dry	1	Salt water splash, above ground	4B
Damp	2	Salt water splash, ground contact	4C
Residential/commercial verandah	3B	Permanent wood foundation (PWF)	4B
Flooring, block		<b>Wood composites</b>	
Above ground, low humidity	2	Plywood	
Above ground, high humidity	3A	Interior, dry or damp	1-2
Frame studding	1-2	Farm, subflooring, roof decking	3B
Furniture		Agricultural, highway, industrial	4A
Indoor	1	Marine, salt water splash	4B
Outdoor, above ground	3B	Permanent wood foundation (PWF)	4C
Outdoor, ground contact	4A	Glulam members (treated after gluing)	
Furring strips		Interior, dry or damp	1-2
Indoor	2	Above ground, structural	3B
Outdoor	3B	Highway structural, low decay	4A
Gazebo timber (garden structures)	3A-B	Critical, high or severe decay	4B-C
Handrails/guardrails, highway	3B	Glulam members (treated prior to gluing)	
Joinery, trim	3A-B	Interior, dry or damp	1-2
Joists		Above ground, structural	3B
Above ground, interior, dry or damp	1-2	Highway structural, low decay	4A
Building, above ground, exterior	3B	Glulam poles	
Ground contact or fresh water	4A	Parallel strand timber	
Landscaping timber	4A	Interior, dry or damp	1-2
Lattice panels	3B	Structural	3B
Pergola	4A	Highway, structural, general	4A
Piles, sawn		Critical, high or severe decay	4B-C
Structural support	4B	Laminated veneer timber	
Structural support, critical	4C	Interior, dry or damp	1-2
Poles, sawn		Structural	3B
Agricultural/farm	4A	Highway, structural, general	4A
Structural building	4C	Critical, high or severe decay	4B-C
Posts, sawn		Laminated veneer timber	
General, fence, deck, highway fence	4A	Interior, dry or damp	1-2
Agricultural use, spacer blocks	4B	Structural	3B
Important building structural	4C	Highway, structural, general	4A
		Critical, high or severe decay	4B-C



# ON-SITE PRACTICES

## Metal fixings

Properly treated and installed, Southern Yellow Pine has been shown to give a service life of several decades, so it makes sense to use metal fixings that will last as long as the wood. Choice of fixing is important when using wood treated with metal-based preservatives. This is because of the potential for accelerated corrosion between the metal in the preservative and the metal fixings. The problem can be eliminated by using fixings made from corrosion-resistant materials, such as stainless steel, galvanised, or resin coated steel. If in doubt, always check with the manufacturer about the suitability of the fixing for use with treated wood.



## Adhesives

A construction adhesive suitable for treated wood may be used for extra holding power at structural joints and under horizontal components, such as deck boards applied over joists. Adhesive is not a substitute for metal fixings such as screws and bolts. Make sure the manufacturer of the adhesive approves it for use with treated wood.

## Storage

All wood, including treated wood, will lose or gain moisture, shrinking and expanding until it has adjusted to the conditions in which it is used. Appropriate storage on site before and during installation is important. Always store treated wood in the same manner as untreated timber. The procedures set out below are given as good practice guidance:

- Inspect Southern Yellow Pine on delivery for proper grade and treatment quality marks
- Unload onto a dry surface – not in a wet or muddy area
- Elevate the timber on regularly spaced bearers to raise it clear of the ground in order to protect it from wetting and allow for ventilation
- If the timber is damp, allow a week or two for it to dry and adjust to the site environment. Sticking each layer with small battens will assist this process
- Store exterior products in a covered outdoor area. If this is not practical, cover treated wood stored outdoors with non-porous waterproof sheeting, allowing space for ventilation around the timber
- Bring framing timber under cover as soon as possible
- Store interior products like flooring and joinery in the enclosed, conditioned area where installation will take place
- Always use timber components in the order in which they are received – stock rotation is important.

# ON-SITE PRACTICES

## Installation

All timber should be installed in accordance with the standards and building regulations required by the site or building control authority. Where these are not applicable, general good practice installation procedures should be followed. Where treated Southern Yellow Pine is cross-cut, notched or bored on site, the exposed untreated wood should be given two liberal brush coats of a preservative compatible with the preservative used in the original treatment process. Rip sawing, regularising or planing should not be undertaken unless the component is to be retreated according to the appropriate Use Class.

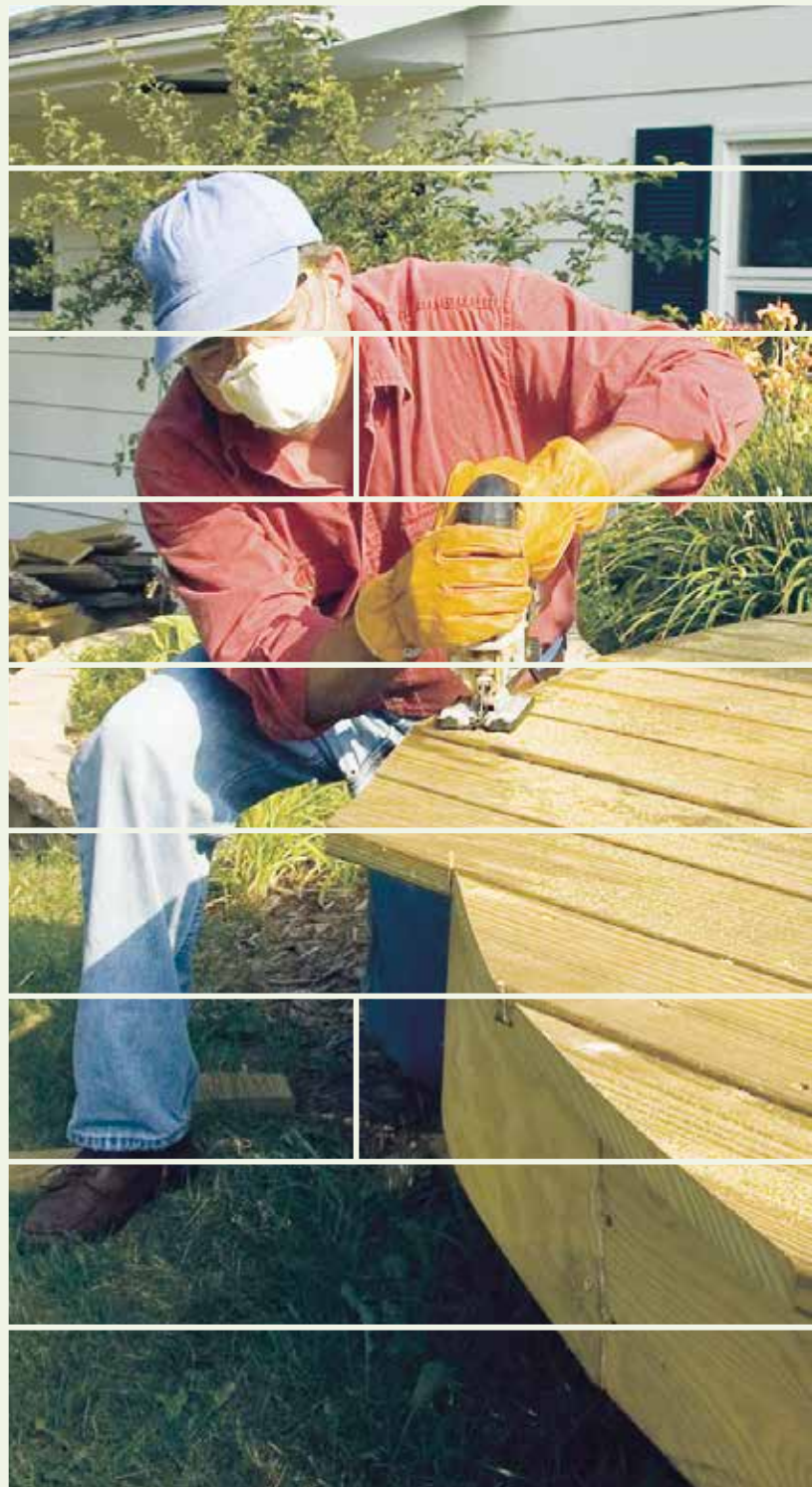
## Handling and disposal

All building materials should be handled and disposed of responsibly during use and at the end of their life. The guidance below relates to wood that has been treated with an approved wood preservative.

- Avoid frequent or prolonged inhalation of any sawdust
- Saw or machine wood outdoors to avoid an accumulation of airborne sawdust, and always wear a dust mask
- Wear goggles or safety spectacles when using power tools – saws, drills etc. – to protect eyes from flying particles
- Wear gloves when working with wood. After working with wood, and before eating, drinking, using the toilet or smoking, wash exposed skin areas thoroughly
- Because preservatives and sawdust may accumulate on clothes, they should be washed before re-use. Always wash work clothes separately from other household clothing.

Wherever possible, redundant treated timber should be reused. Appropriate disposal strategies may be to landfill or incinerate. For disposal, talk to your local waste management authority or the preservative supplier.

Treated wood waste must not be supplied for use as animal bedding or litter, or be used in barbeques or domestic fires.





# THE GREEN CHOICE

Wood products are the most environmentally responsible building material available. Naturally renewable, wood acts as a carbon store and comes from forests that act as carbon sinks. In the US, forests are

widely recognized as stable and well-managed. Today, they cover about the same area as a century ago, and the growing stock has actually increased by 11% from 74,913 million m<sup>3</sup> in 1990 to 82,941 million m<sup>3</sup> in 2010.<sup>9</sup>

Wood products are the only major building products with a third-party certification system in place to verify their origination from sustainably managed resources.



## Sustainable resources

Wood products are produced from trees, a naturally renewable resource. More wood is grown each year in the U.S. than is harvested.



## Responsible manufacturing

Waste is virtually eliminated when trees are used to make wood products. Bark, trims and sawdust are used as an energy source to help power wood production facilities. It takes far less energy and fossil fuels to produce wood products than to manufacture concrete and steel.



## Quality construction

As a building material, wood offers a unique combination of benefits, including strength, affordability, ease-of-use and environmental superiority.



## Recycle, renew

At the end of their initial service life, wood products are easily recycled for other uses. Wood contributes fewer greenhouse gas emissions than recycled steel and concrete.



## Renovation, upgrade

The flexibility of wood makes renovating a home easy and affordable. Wood is builder-friendly, as well as environmentally friendly. Wood also enhances the aesthetic value of a home when used as flooring, cabinetry, furniture and moulding.



## Long service life

The durability of wood products contributes to the long life of a home. Wood products also store carbon, reducing the amount of carbon in the atmosphere.

<sup>9</sup> Global Forest Resources Assessment, FAO, 2010



Copyright © 2018 Southern Forest Products Association. All rights reserved.

[AmericanSoftwoods.com](http://AmericanSoftwoods.com)

## Contact us

This publication has been compiled by Southern Forest Products Association (SFPA) on behalf of American Softwoods as a service to buyers, users and specifiers of wood building materials. SFPA is a non-profit trade promotional group supported by the producers of Southern Yellow Pine. A primary objective of SFPA is to provide information to those interested in the industry's products. SFPA is not involved in grading, testing, manufacturing or treating Southern Yellow Pine products. The information provided in this publication is given in good faith. The conditions under which timber is used in construction may vary widely, as does the quality of workmanship. Accordingly, neither SFPA nor American Softwoods warrant the technical data, timber design or performance in completed structures.

For more information visit [AmericanSoftwoods.com](http://AmericanSoftwoods.com)

Southern Forest Products Association  
6660 Riverside Drive, Suite 212  
Metairie, LA 70003 USA

Tel: 001-501-443-4464  
[www.SouthernPineGlobal.com](http://www.SouthernPineGlobal.com)  
Email: [mail@sfpa.org](mailto:mail@sfpa.org)

