# **WOOD SPECIES USED IN CONSTRUCTION**

### **Southern Yellow Pine Species**

SPECIES COMBINATION	ABBREVIATIONS	SPECIES INCLUDED IN COMBINATION	CHARACTERISTICS	COLOR RANGES
Southern Yellow Pine	SYP	short leaf pine, slash pine and	Heavy, dense and strong. Strongest structural lumber for engineered and framing applications. Cell structure allows for easy pressure treatment.	heartwood is yellow- red to reddish-brown.

#### **SOUTHERN YELLOW PINE LUMBER SPAN CHARTS**

These span charts are based on 1993 AF&PA Span Tables for Joists and Rafters and represent the most commonly available grades of SYP lumber. For other grades & loading conditions & spacing refer to Maximum Spans for Southern Pine Joists and rafters published by the Southern Pine Council. www.southernpine.com. Span charts courtesy of the Southern Yellow Pine Council.

### **Floor Joists**

	SLEEPING ROOMS & ATTICS, 30 PSF LIVE LOAD, 10 PSF DEAD LOAD, L360												
SYP		2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
O.C.	No. 1	No. 2	No. 3	No. 1	No. 2	No. No. No. No. 3 1 2 3				No. 1	No. 2	No. 3	
12"	12-0	11-10	10-5	15-10	15-7	13-3	20-3	19-10	15-8	24-8	24-2	18-8	
16"	10-11	10-9	9-0	14-5	14-2	11-6	18-5	18-0	13-7	22-5	21-1	16-2	
24"	9-7	9-4	7-4	12-7	12-4	9-5	16-1	14-8	11-1	19-6	17-2	13-2	

ALL R	ALL ROOMS EXCEPT SLEEPING ROOMS & ATTICS, 40 PSF LIVE LOAD, 10 PSF DEAD LOAD, L360											
SYP					2x8 Grade			2x10 Grade		2x12 Grade		
O.C.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	10-11	10-9	9-4	14-5	14-2	11-11	18-5	18-0	14-0	22-5	21-9	16-8
16"	9-11	9-9	8-1	13-1	12-10	10-3	16-9	16-1	12-2	20-4	18-10	14-6
24"	8-8	8-6	6-7	11-5	11-0	8-5	14-7	13-1	9-11	17-5	15-5	11-10

ALL R	ALL ROOMS EXCEPT SLEEPING ROOMS & ATTICS, 50 PSF LIVE LOAD, 10 PSF DEAD LOAD, L360											
SYP	SYP 2x6 Grade				2x8 Grade			2x10 Grade		2x12 Grade		
O.C.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	10-2	9-11	8-6	13-5	13-1	10-10	17-1	16-9	12-10	20-9	19-10	15-3
16"	9-3	9-1	7-4	12-2	11-11	9-5	15-6	14-8	11-1	18-10	17-2	13-2
24"	8-1	7-9	6-0	10-8	10-0	7-8	13-4	12-0	9-1	15-11	14-0	10-9

### **Ceiling Joists**

CEILIN	CEILING JOISTS - DRYWALL CEILINGS - & NO ATTIC, 10 PSF LIVE LOAD, 5 PSF DEAD LOAD, L240											
SYP	2x4 2x6 Grade Grade			2x8 2x10 Grade Grade								
o.c.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	12-8	12-5	11-6	19-11	19-6	17-0	26-0	25-8	21-8	26-0	26-0	25-7
16"	11-6	11-3	10-0	18-1	17-8	14-9	23-10	23-7	18-9	26-0	26-0	22-2
24"	10-0	9-10	8-2	15-9	15-6	12-0	20-10	20-1	15-4	26-0	23-11	18-1

# WOOD SPECIES USED IN CONSTRUCTION

# **SYP Species Continued**

CEILI	CEILING JOISTS - DRYWALL CEILING - & ATTICS, 20 PSF LIVE LOAD, 10 PSF DEAD LOAD, L240											
SYP		2x4 2x6 2x8 Grade Grade Grade						2x10 Grade				
o.c.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. No. No. 1 2 3			No. 1	No. 2	No. 3
12"	10-0	9-10	8-2	15-9	15-6	12-0	20-10	20-1	15-4	26-0	23-11	18-1
16"	9-1	8-11	7-1	14-4	13-6	10-5	18-11	17-5	13-3	23-1	20-9	15-8
24"	8-0	7-8	5-9	12-6	11-0	9-6	15-11	14-2	10-10	18-10	16-11	12-10

### **Rafters**

	LIGHT ROOFING, DRYWALL CEILING - 20 PSF LIVE LOAD, 10 PSF DEAD LOAD, L240											
SYP	P 2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
o.c.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	15-9	15-6	12-11	20-10	20-5	16-5	26-0	25-8	19-5	26-0	26-0	23-1
16"	14-4	14-1	11-2	18-11	18-6	14-3	24-1	22-3	16-10	26-0	26-0	20-0
24"	12-6	11-9	9-2	16-6	15-3	11-8	20-3	18-2	13-9	24-1	21-3	16-4

	MED. ROOFING, DRYWALL CEILING - 20 PSF LIVE LOAD, 15 PSF DEAD LOAD, L240											
SYP	SYP 2x6 Grade				2x8 Grade		2x10 Grade			2x12 Grade		
o.c.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	15-9	15-5	11-11	20-10	19-11	15-3	26-0	23-9	18-0	26-0	26-0	21-5
16"	14-4	13-4	10-4	18-11	17-3	13-2	22-11	20-7	15-7	26-0	24-2	18-6
24"	12-6	10-11	8-5	15-9	14-1	10-9	18-9	16-10	12-9	22-4	19-9	15-2

	MED. ROOFING, DRYWALL CEILING - 30 PSF LIVE LOAD, 15 PSF DEAD LOAD, L240											
SYP	SYP 2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
o.c.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	13-9	13-6	10-7	18-2	17-7	13-5	23-2	21-0	15-10	26-0	24-7	18-11
16"	12-6	11-9	9-2	16-6	15-3	11-8	20-3	18-2	13-9	24-1	21-3	16-4
24"	10-11	9-7	7-5	13-11	12-5	9-6	16-6	14-10	11-3	19-8	17-5	13-4

	MED. ROOFING, DRYWALL CEILING - 40 PSF LIVE LOAD, 15 PSF DEAD LOAD, L240											
SYP	SYP 2x4 Grade			2x6 Grade			2x8 Grade			2x10 Grade		
o.c.	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
12"	12-6	12-3	9-6	16-6	15-11	12-2	21-1	19-0	14-4	25-2	22-3	17-1
16"	11-5	10-8	8-3	15-0	13-9	10-6	18-3	16-5	12-5	21-10	19-3	14-9
24"	9-11	8-8	6-9	12-7	11-3	8-7	14-11	13-5	10-2	17-10	15-9	21-1

# TREATED SYP LUMBER USE GUIDE

Treatment by Chromated Copper Arsenate (CCA)

USE CATEGORY	SERVICE CONDITIONS	USE ENVIRONMENT	COMMON AGENTS OF DETERIORATION	TYPICAL USE
UC1 0.25 pcf	Interior use, damp above ground.	Protected from weather and moisture.	Insects only.	Interior construction.
UC2 0.25 pcf	Interior use, damp above ground.	Protected from weather, subject to moisture.	Decay, fungi, insects.	Interior construction.
UC3A 0.25 pcf	Exterior use, damp above ground.	Coated, exposed to weather, rapid runoff.	Decay, fungi, insects.	Coated millwork, plates.
UC3B 0.25 pcf	Exterior use, coated above ground.	All weather, prolonged wetting.	Decay fungi, insects.	Decking, joists, railings, fence.
UC4A 0.40 pcf	Ground contact or fresh water.	Ground and fresh water contact, all weather cycles.	Decay, fungi, insects.	Fence & deck posts, structural lumber.
UC4B 0.60 pcf	Ground contact.	Servere ground contact, saltwater splash, all weather.	Decay, fungi, insects causing biodeterioration.	Foundations, building poles.
UC5A 2.50	Salt or brackish water, mud zone.	Continuous salt water exposure.	Organisms, Limomia, Quadripunctata.	Pilings, bulkheads.

# Safe Use and Handling of Treated Wood

Caution: Pressure treated wood is preserved with an EPA registered pesticide containing inorganic arsenic. Some chemical may migrate from treated wood into surrounding soil over time or may be dislodged from the wood surface upon contact. Take the following precautions when handling treated wood.

#### **Site Precautions:**

- 1. Do not use for mulch, cutting boards, countertops, beehives, animal bedding or structures, storing of animal or human food.
- 2. Do not use where treated wood may come in contact directly or indirectly with drinking water.

### Safe Handling:

- 1. Sawdust and construction debris should be cleaned up and disposed of properly.
  - a. Dispose of treated wood by ordinary trash collections.
  - b. Do not burn in open fires, fireplaces, stoves or boilers.
  - c. Treated lumber from commercial or industrial use may be burned in incinerators or boilers in accordance with state and federal regulations.
- 2. Avoid frequent or prolonged inhalation of sawdust.
  - a. Saw, sand and machine outdoors.
  - b. Wear goggles, dust mask.
- 3. Wear gloves when handling treated lumber.
- 4. Wash hands before eating, drinking, toileting, and using tobacco.
- 5. Laundry all work clothes before reuse and separately from other clothes.

For additional information contact the American Wood Preservers Institute at **1-800-282-0600** or visit **www.ccasafetyinfo.com**