

# Tree Bench

## PROJECT PLAN

**YellaWood**  
Pressure Treated Pine



## Create a relaxation destination.

If you have a regal tree in your yard that stands alone, it may be time to build a wrap-around tree bench and take full advantage of its shade and ambiance.

This project features clean lines and geometric shapes and offers a crisp, modern feel to any outdoor space. It fits tree diameters from eighteen to thirty-two inches, and can accommodate a variety of situations.

Although it may appear complex, there is a lot of repetition in this plan which makes the project simpler to tackle. Once the leg assemblies are repeated six times, the seat and back rest planks are set into place. After the six sides are assembled, the entire project is sanded and then partially disassembled so it can be transported to its installation site.

### BUILD TIME

**5**  
HRS

### DIFFICULTY



### COST



# Tree Bench

## IMPORTANT REMINDERS

**Read instructions** to familiarize yourself with the entire process before beginning.

**Always double check measurements** before making cuts - Great Southern Wood is not responsible for incorrect cuts.

**Select and use the best faces** of boards on the outside of assemblies.

**Pre-drill** holes before attaching screws. Set  $\frac{1}{8}$ " drill bit inside combination countersink bit to appropriate depth for each screw length called for.

**Wood glue is optional:** if you choose to use it, apply to surfaces before attaching parts, and be sure to wipe up excess with a damp cloth.

**Check BuildYella.com for updates** to plans and to view the video of this project.

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Because wood stock can vary, dry-fit sub-assemblies as needed to ensure dependent parts align. Make any adjustments needed to part dimensions before final assembly.

The Cut List is based on the following actual dimensions for KDAT board stock:

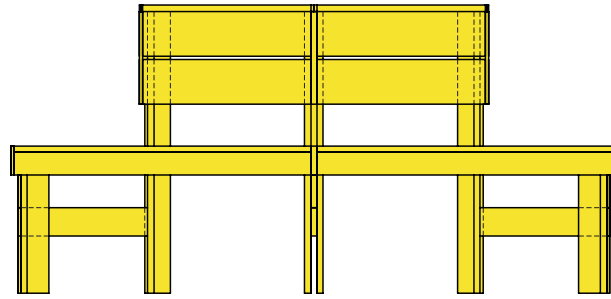
<b>1x2</b>	$\frac{3}{4}$ " x $1 \frac{1}{2}$ "
<b>1x4</b>	$\frac{3}{4}$ " x $3 \frac{1}{2}$ "
<b>1x6</b>	$\frac{3}{4}$ " x $5 \frac{1}{2}$ "
<b>1x8</b>	$\frac{3}{4}$ " x $7 \frac{1}{4}$ "
<b><math>\frac{5}{4}</math>x6</b>	$\frac{7}{8}$ " x $5 \frac{1}{4}$ "
<b>2x2</b>	$1 \frac{1}{2}$ " x $1 \frac{1}{2}$ "
<b>2x4</b>	$1 \frac{3}{8}$ " x $3 \frac{1}{4}$ "
<b>2x6</b>	$1 \frac{3}{8}$ " x $5 \frac{1}{4}$ "
<b>2x10</b>	$1 \frac{1}{2}$ " x $9 \frac{1}{8}$ "
<b>4x4</b>	$3 \frac{1}{4}$ " x $3 \frac{1}{4}$ "

# Tree Bench

## OVERALL SIZE

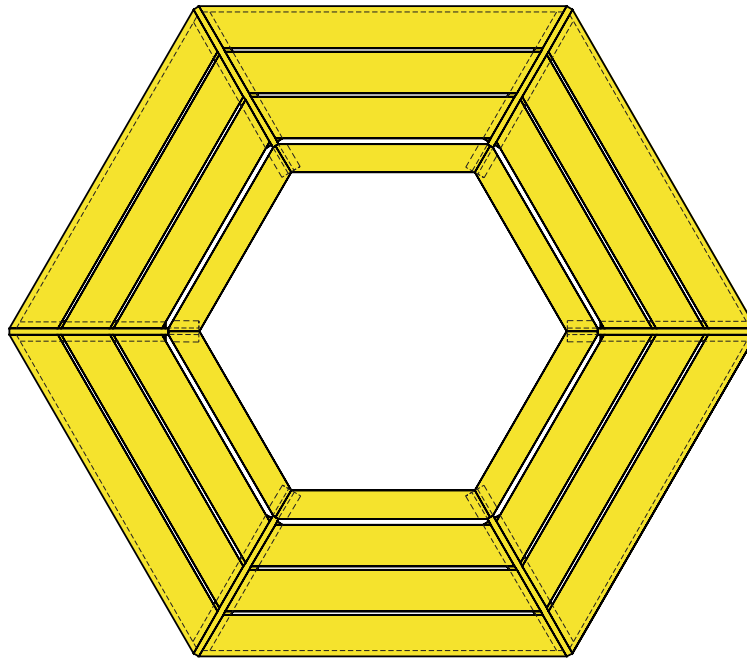
**YellaWood**  
Pressure Treated Pine

**SHORT SIDE- FRONT**



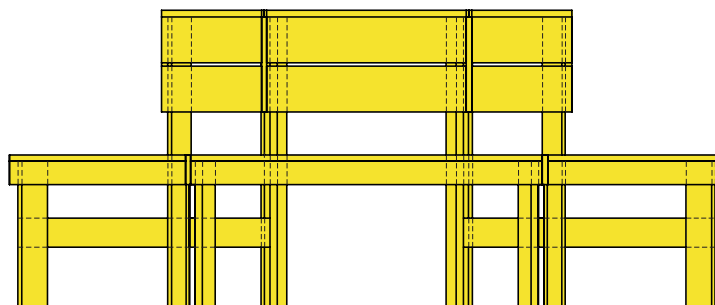
74"

**TOP**



85"

**LONG SIDE - FRONT**



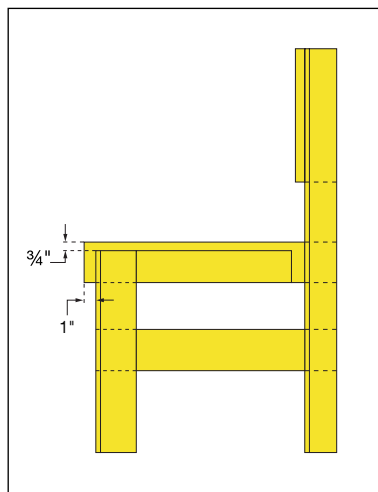
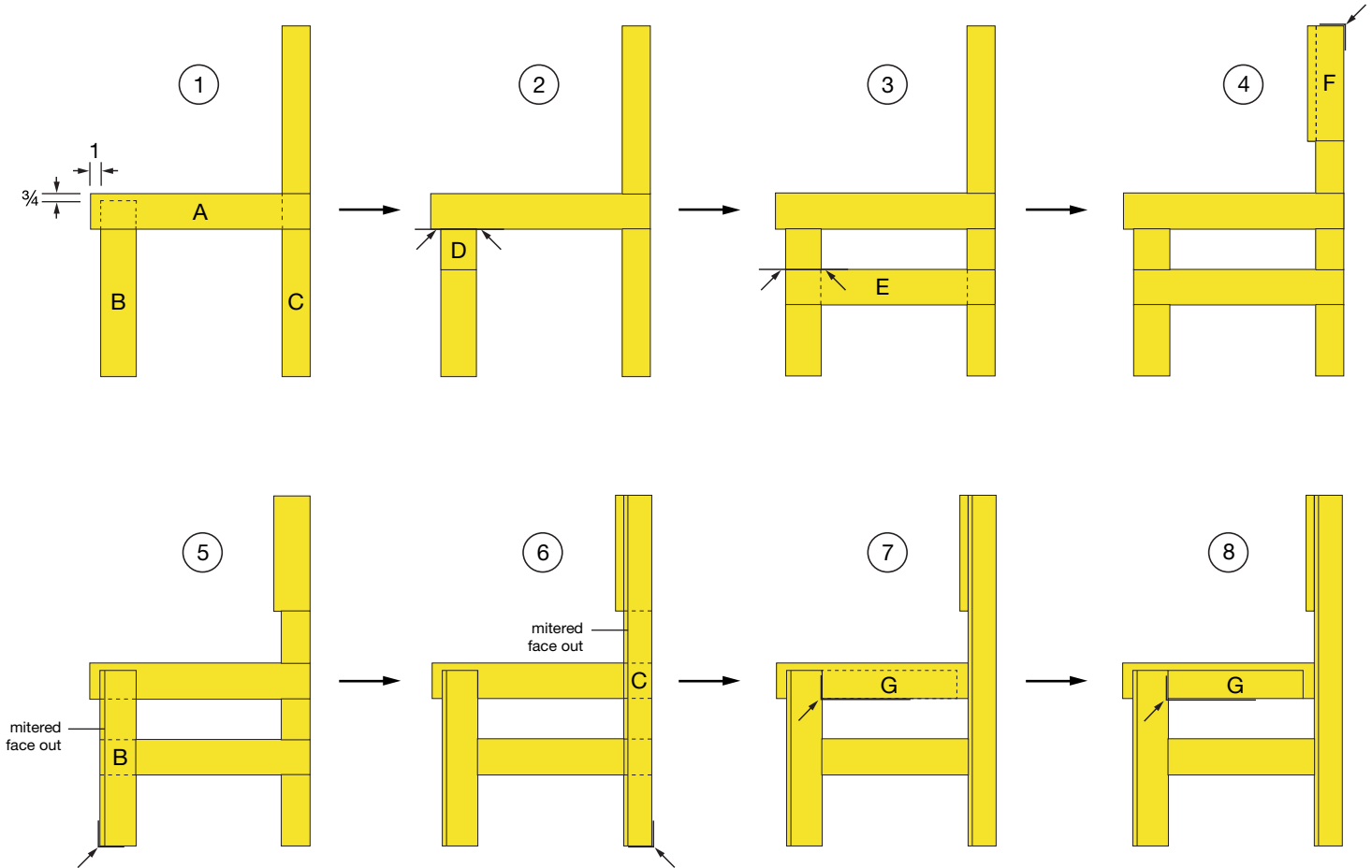
35 1/4"

**Note:** Diagrams not to scale.

# Tree Bench

## BENCH FRAME DIAGRAMS

### LAYOUT SEQUENCE PARTS (A) - (G)



**EACH OF THE SIX  
LEGS CONSISTS OF:**

- |            |            |
|------------|------------|
| <b>1x:</b> | <b>2x:</b> |
| Part (A)   | Part (B)   |
| Part (D)   | Part (C)   |
| Part (E)   | Part (G)   |
| Part (F)   |            |

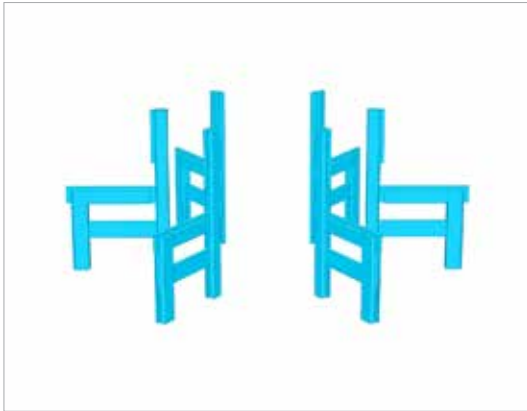
# Tree Bench

## OVERVIEW OF STEPS

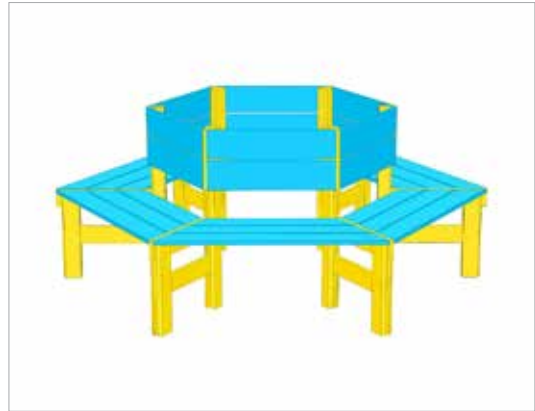
**YellaWood**  
Pressure Treated Pine

### SEQUENCE OF BUILD

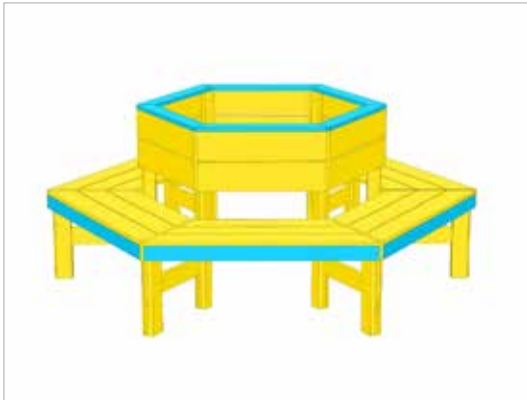
#### 1: BENCH FRAMES



#### 2: SEATS & BACKRESTS



#### 3: CAP PIECES



#### 4: FINISHING & INSTALLATION



### BUILD TIME

CUTTING

**1**

HR

+

ASSEMBLY

**3**

HRS

+

FINISHING

**1**

HR

=

TOTAL

**5**

HRS

# Tree Bench

## WHAT YOU'LL NEED

**YellaWood®**  
Pressure Treated Pine

### MATERIALS

- 15x** 1x4x10' YellaWood® brand pressure treated pine
- 10x** 1x6x10' YellaWood® brand pressure treated pine

### HARDWARE

#### ½ LB BOX

- 1 ¼" wood screws + appropriate bit
- 1 ⅝" wood screws + appropriate bit
- 2 ½" wood screws + appropriate bit

### WOOD FINISHING

- YellaWood Protector® Stain & Sealer

### SAFETY EQUIPMENT

- Work gloves
- Dust mask
- Safety glasses
- Ear protection

### Notes:

Consider using YellaWood® brand KDAT and higher grade products to achieve more professional results.

Choose boards with minimal irregularity to get the most out of the stock. Page 6 shows maximum parts per board. If unsure about board quality, purchase 1 extra piece of each board type.

### TOOLS



Pencil



Measuring tape



Miter saw  
(or chop saw)



Table saw



Drill / driver



Clamps  
(two at least  
5' long)



Carpenter  
square



Combination  
countersink bit  
(with 3" long ⅛" bit)



Radial sander  
(or sanding block)



Damp cloth  
(optional)



Waterproof  
wood glue  
(optional)



Painter's  
tape  
(optional)



Paint/Stain  
Brush

# Tree Bench

## CROSS-CUT DIAGRAMS



### PREP: CROSS-CUT ALL PARTS

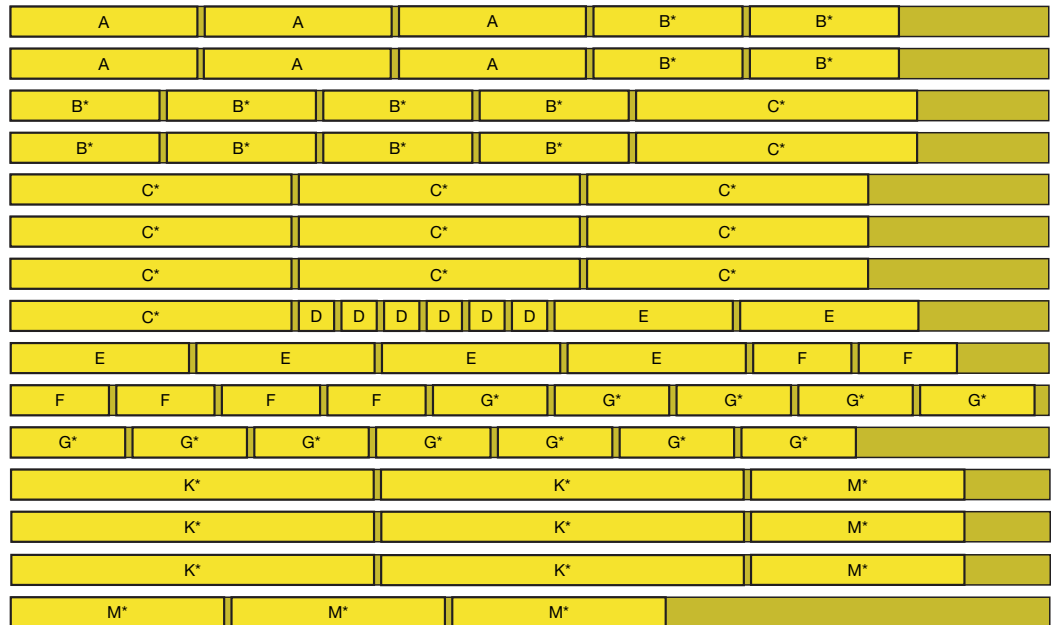
Proceed to cut all parts listed below unless noted otherwise. Be sure to **label all parts** so you know which ones to use for the Assembly Steps that follow.



CROSS-CUT TO	PART	#
21 5/8"	A	6x
17 1/4"	B*	12x
34 1/2"	C*	12x
4"	D	6x
20 5/8"	E	6x
11 3/8"	F	6x
13 1/4"	G*	12x
41 15/16"	K*	6x
23 3/4"	M*	6x

It's important that Part (K) is cut to this dimension, as even a 1/16" can effect assembly.

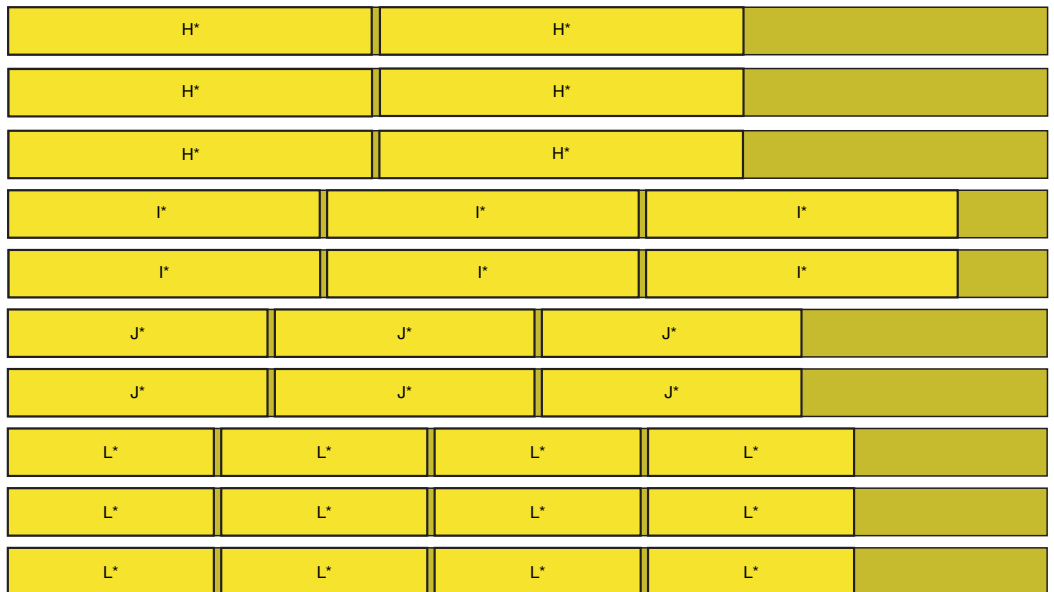
### 1x4x10' STOCK 15 BOARDS



CROSS-CUT TO	PART	#
41 15/16"	H*	6x
36"	I*	6x
30"	J*	6x
23 3/4"	L*	12x

It's important that Part (H) is cut to this dimension, as even a 1/16" can effect assembly.

### 1x6x10' STOCK 10 BOARDS



\* Requires detail cuts. See next page for diagrams.

**Note:** Diagrams not to scale.

# Tree Bench

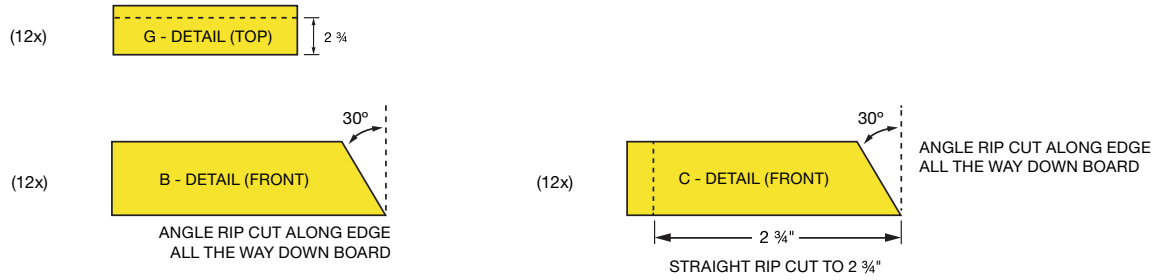
## DETAIL CUT DIAGRAMS

### PREP: DETAIL CUT PARTS

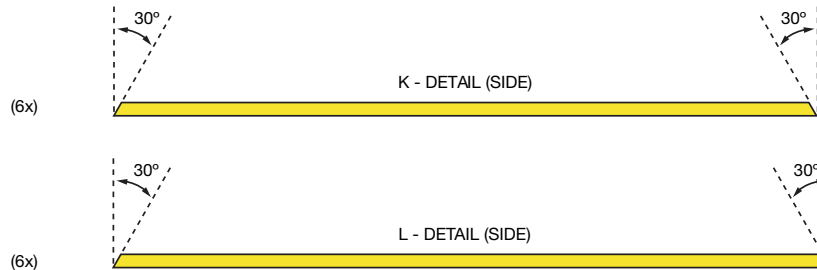
Proceed to cut all parts listed below unless noted otherwise. Be sure to **label all parts** so you know which ones to use for the Assembly Steps that follow.



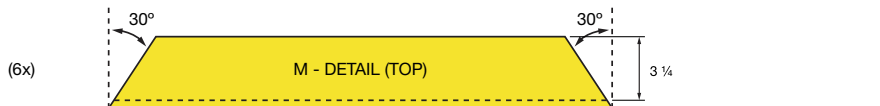
#### RIP CUT & RIP ANGLE CUT



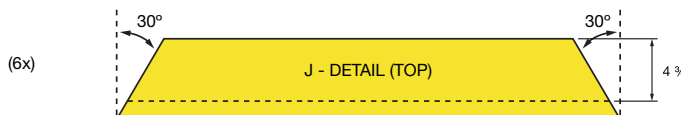
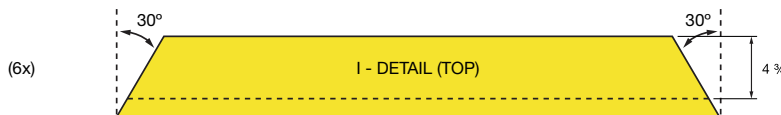
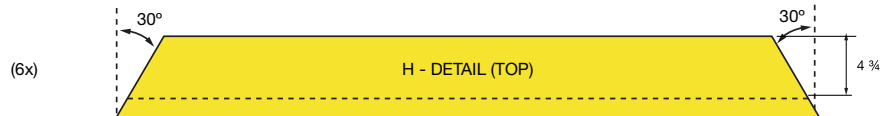
#### CROSS-CUT ANGLE CUT



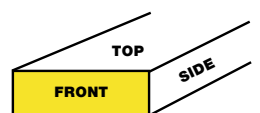
#### RIP CUT



#### CROSS-CUT ANGLE CUT



#### GUIDE



**Note:** Diagrams not to scale.



# Tree Bench

## ASSEMBLY

**YellaWood**  
Pressure Treated Pine

### SECTION 1: BENCH FRAMES

#### TOOLS



Drill / driver



Pencil



Measuring  
tape



Clamps



Combination  
countersink bit



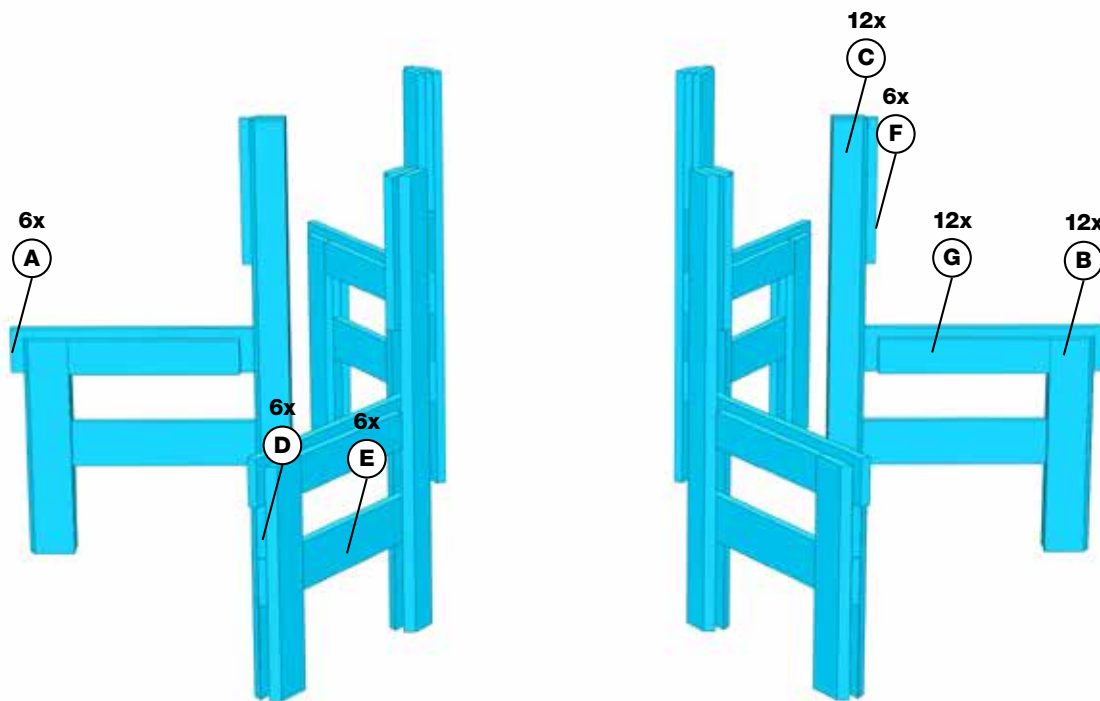
Carpenter  
square

#### SUPPLIES



1 1/4" screws

2 1/2" screws



# Tree Bench

## ASSEMBLY

### SECTION 1: BENCH FRAMES

**\*Use the diagrams on page 4  
for layout dimensions.**

1



Begin by clamping a Part (C) to a work surface miter side down and laying Part (A) perpendicularly on top of it and Part (B) below it. Use the diagrams on page 4 for layout dimensions.

2



Attach Part (A) to (B) and (A) to (C) using two 1 1/4" screws.

3



Next, attach Part (D) below (A) and Part (E) below that. Ensure all edges are flush and use two 1 1/4" screws at a diagonal at either end.

4



Then, install a Part (F) so it is flush with the top and back of (C).

5



Rotate and place a Part (B) as shown. Clamp as needed and secure with 2 1/2" screws. Add second Part (B) to the other side with 2 1/2" screws, avoiding previous hardware.

6



Add a second Part (C) on top of the pieces previously secured, using 2 1/2" screws.

7



Attach Part (G) with 2 1/2" screws so that it is flush with the bottom edge of (A) and butted up against Part (B).

8



Lastly, place a second Part (G) on the opposite side as shown and secure with 2 1/2" screws. Repeat until you have a total of 6 leg assemblies.

# Tree Bench

## ASSEMBLY

**YellaWood**  
Pressure Treated Pine

### SECTION 2: SEATS & BACKRESTS

#### TOOLS



Drill / driver



Pencil



Measuring  
tape



Clamps

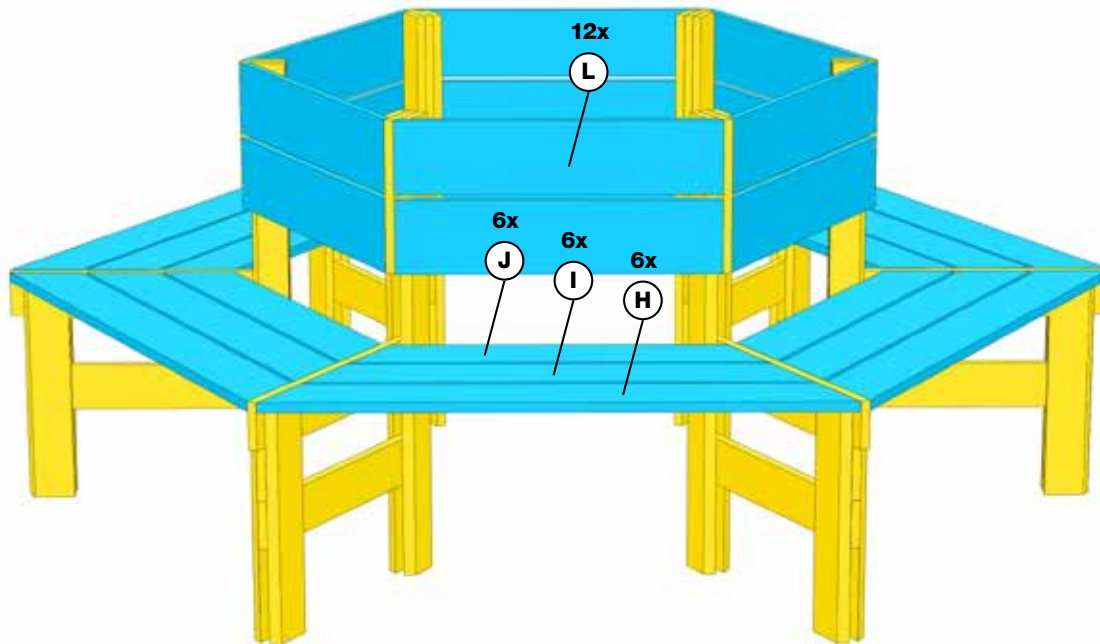


Combination  
countersink bit

#### SUPPLIES



1 5/8" screws



# Tree Bench

## ASSEMBLY

**YellaWood**  
Pressure Treated Pine

### SECTION 2: SEATS & BACKRESTS

9



Place two bench frames upright and Parts (H), (I), and (J) on top as shown. Dry-fit all three before attaching. Evenly space the seat slats and secure with two 1 5/8" screws at each end.

10



Start at the front slat, then secure the last. The middle slat is last so that spacing can be adjusted if needed.

11



Add another bench frame and seat slats to continue the hexagonal shape. Continue until the entire structure is combined.

12



Next, attach Parts (L) to the top of the bench frame, forming the backrests. Use two 1 5/8" screws at either end.

13



Attach the lower Part (L) so it is 1/4" below the top Part (L).

# Tree Bench

## ASSEMBLY

**YellaWood**  
Pressure Treated Pine

### SECTION 3: CAP PIECES

#### TOOLS



Drill / driver



Pencil



Measuring  
tape



Clamps



Combination  
countersink bit

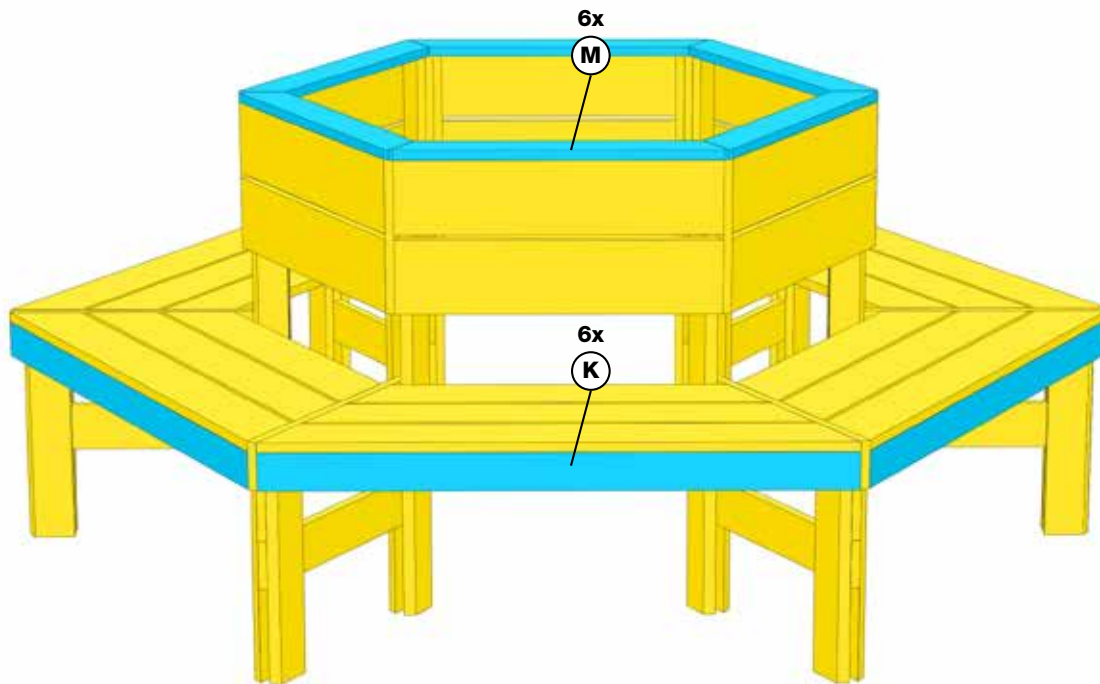


Miter saw  
(or chop saw)

#### SUPPLIES



1 5/8" screws



# Tree Bench

## ASSEMBLY

### SECTION 3: CAP PIECES

14



Now that the seat and backrest slats have created a strong unit, place and attach Parts (K) along the bottom edges, evenly spacing between Parts (A). Use two 1 5/8" screws at an angle.

17



Place Parts (M) back on the structure and attach with two 1 5/8" screws.

15



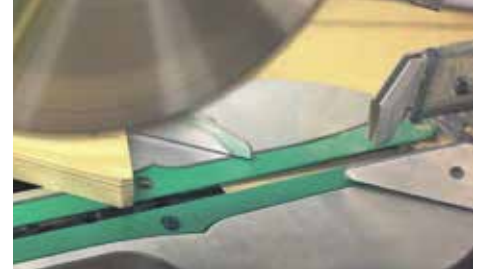
Place the top caps - Parts (M) - around the structure and make any cross-cut adjustments if needed. Then, use a pencil to mark the underside of where two (M)s meet, flush with Part (F).

18



Work your way around the unit until all top cap pieces are in place.

16



After marking each (M), take these pieces to the miter saw and remove the corners. Be sure to label which part goes where.

# Tree Bench

## FINISHING



### SECTION 4: FINISHING & INSTALLATION

#### TOOLS



Radial sander  
(or sanding block)



Drill / driver



Painter's  
tape



Paint/Stain  
Brush



YellaWood® brand products provide the best available pressure treated lumber protection against rot, fungal decay and termites. Sanding edges is recommended to reduce snags and splintering. At a minimum, we recommend annual application of a water repellent. You can also paint or stain it if you prefer.

19



Ease any sharp edges using a radial sander or sanding block with medium grit. Apply preferred finish to the wood.

20



After the finish is cured, label all parts on one section and detach the backrest, seat, and cap pieces.

21



Group and remove these pieces.

22



Repeat these steps on the side two over from this one.

23



Now you have two assemblies and two slat groups that can be moved and re-assembled outdoors around the tree trunk.

24



We recommend long lasting YellaWood Protector® semi-transparent stain and water repellent wood sealer, the only stain backed by the famous Yella Tag. Follow manufacturer's recommendations for application.

**CONGRATULATIONS. ENJOY YOUR NEW TREE BENCH!**

# Tree Bench

GALLERY OF IMAGES





# Tree Bench

## FASTENER & HARDWARE INFORMATION



### FOR INTERIOR OR EXTERIOR APPLICATIONS

Use fasteners and hardware that are in compliance with the manufacturer's recommendations and the building codes for their intended use. As with any good design and construction practices, treated wood should not be used in applications where trapped moisture or water can occur. Where design and/or actual conditions allow for constant, repetitive or long periods of wet conditions, only stainless steel fasteners should be used.

### FOR EXTERIOR APPLICATIONS

The following minimum galvanization levels may be used for connectors, joist hangers, fasteners and other hardware that are placed in direct contact with exterior applications of micronized copper treated wood:

- **Fasteners** – nails, screws, etc.                      ASTM – A 153 (1 oz/ft<sup>2</sup>)
- **Hardware** – connectors, joist hangers, etc.        ASTM – A 653 G90 (0.90 oz/ft<sup>2</sup>)

The effects of other building materials within a given assembly, along with environmental factors, should also be considered when selecting the appropriate hardware and fasteners to use for a given project containing treated wood.

Stainless Steel fasteners and hardware are required for Permanent Wood Foundations below grade and are recommended for use with treated wood in other severe exterior applications such as swimming pools, salt water exposure, etc. Type 304 and 316 are recommended grades to use.

### ALUMINUM

Aluminum building products may be placed in direct contact with YellaWood® brand products used for interior uses and above ground exterior applications such as decks, fencing, and landscaping projects. Examples of aluminum products include siding, roofing, gutters, door and window trim, flashing, nails, fasteners and other hardware connectors. However, direct contact of treated products and aluminum building products should be limited to code-compliant construction applications that provide proper water drainage and do not allow the wood to be exposed to standing water or water immersion.

We recommend you contact the aluminum building products manufacturer for its recommendations regarding use of its aluminum products in contact with treated wood in ground contact applications or when exposed to salt water, brackish water, or chlorinated water, such as swimming pools or hot tubs.

Also check with the aluminum building products manufacturer regarding compatibility with other chemicals and cleaning agents and the use of their aluminum products in commercial, industrial, and specialty applications such as boat construction.

YellaWood® brand pressure treated products are treated with preservatives (the "Preservatives") and preservative methods and technologies of unrelated third parties. For details regarding the Preservatives, methods, and technologies used by Great Southern Wood Preserving, Incorporated, see [www.yellowood.com/preservative](http://www.yellowood.com/preservative) or write us at P.O. Box 610, Abbeville, AL 36310. Ask dealer for warranty details. For warranty or for important handling and other information concerning our products including the appropriate Safety Data Sheet (SDS), please visit us at [www.yellowood.com/warranties](http://www.yellowood.com/warranties) or write us at P.O. Box 610, Abbeville, AL 36310. YellaWood®, YellaWood Protector® and the yellow tag are federally registered trademarks of Great Southern Wood Preserving, Incorporated.

Great Southern Wood Preserving, Incorporated makes no warranties expressed or implied as to the fitness for a particular purpose of this plan.

# Tree Bench

## IMPORTANT INFORMATION

**YellaWood®**  
Pressure Treated Pine

- Consult the end tag to determine which preservative or preservative system was used in the treatment of that particular product. YellaWood® brand products may be used in direct contact with aluminum building products when limited to code-compliant construction applications that provide proper water drainage and do not allow the wood to be exposed to standing water or water immersion.
- Use fasteners and other hardware that are in compliance with building codes for the intended use.
- Do not burn preserved wood.
- Wear a dust mask and goggles when cutting or sanding wood.
- Wear gloves when working with wood.
- Some preservative may migrate from the treated wood into soil/water or may dislodge from the treated wood surface upon contact with skin.
- Wash exposed skin areas thoroughly.
- All sawdust and construction debris should be cleaned up and disposed of after construction.
- Wash work clothes separately from other household clothing before reuse.
- Preserved wood should not be used where it may come into direct or indirect contact with drinking water, except for uses involving incidental contact such as fresh water docks and bridges.
- Do not use preserved wood under circumstances when the preservative may become a component of food, animal feed or beehives.
- Do not use preserved wood as mulch.
- Only preserved wood that is visibly clean and free of surface residue should be used. If the wood is to be used in an interior application and becomes wet during construction, it should be allowed to dry before being covered or enclosed.
- Mold growth can and does occur on the surface of many products, including untreated and treated wood, during prolonged surface exposure to excessive moisture conditions. To remove mold from the treated wood surface, wood should be allowed to dry. Typically, mild soap and water can be used to remove remaining surface mold. For more information visit [www.epa.gov](http://www.epa.gov).
- Projects should be designed and installed in accordance with federal, state and local building codes and ordinances governing construction in your area, and in accordance with the National Design Specifications (NDS) and the Wood Handbook.

### **DISPOSAL RECOMMENDATIONS**

Preserved wood may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with federal, state and local regulations.