PROJECT PLAN



# Impress adults and kids all at once with this sandbox.

This project plan contains instructions for building a deluxe sandbox that features a separate step-up platform, a large rectangle for sand play, a ramp, built-in toy storage, and a lid that triples as a bench backrest and as sun protection.

The construction is simple, with frames, cladding, and hinges as the main operations.

Tackle this project if you'd like a fun outdoor play area that can be closed up and protected when not in use.

Note: Sand not included



**YellaWood** 

**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 <sup>1</sup>/<sub>8</sub>" 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.

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

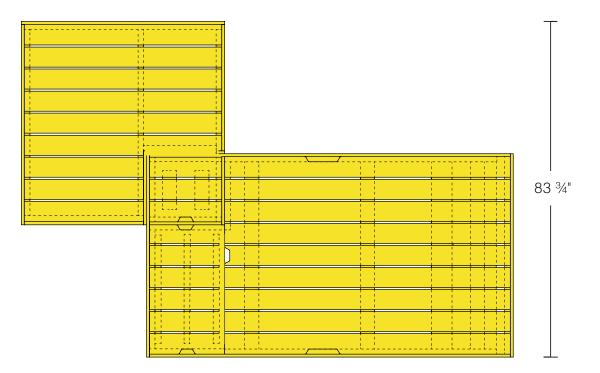
The cut list is based on the following actual dimensions for KDAT board stock:

1x2	<sup>3</sup> ⁄4" x <b>1</b> ½"
1x4	³⁄4" x 3 ¹⁄2"
1x6	³⁄4" x 5 ¹⁄2"
1x8	3⁄4" x 7 1⁄4"
5∕4 <b>x6</b>	1∕8" x 5 1⁄4"
2x2	<b>1</b> ½" x <b>1</b> ½"
2x4	<b>1</b> 3/8" x <b>3</b> 1/4"
2x6	<b>1</b> 3⁄8" x 5 1⁄4"
2x10	<b>1</b> ½" x <b>9</b> %"
4x4	3 1/4" x 3 1/4"

### **Deluxe Sandbox** overall size

### YellaWood. Pressure Treated Pine

TOP



### LONG SIDE

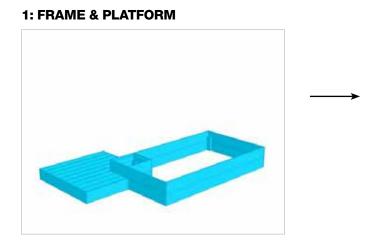


— 122 ¾" -

### SHORT SIDE

$\top$	1
<b>1</b> 4 ½"	·

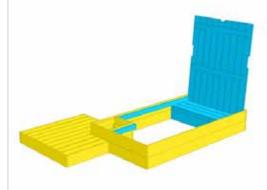
### SEQUENCE OF BUILD



### **3: STORAGE & RAMP**



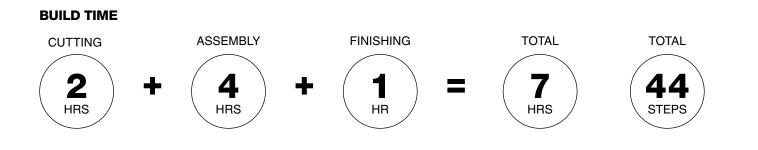




YellaWood. Pressure Treated Pine

### 4: FINISHING





### WHAT YOU'LL NEED

**YellaWood** 

Miter saw

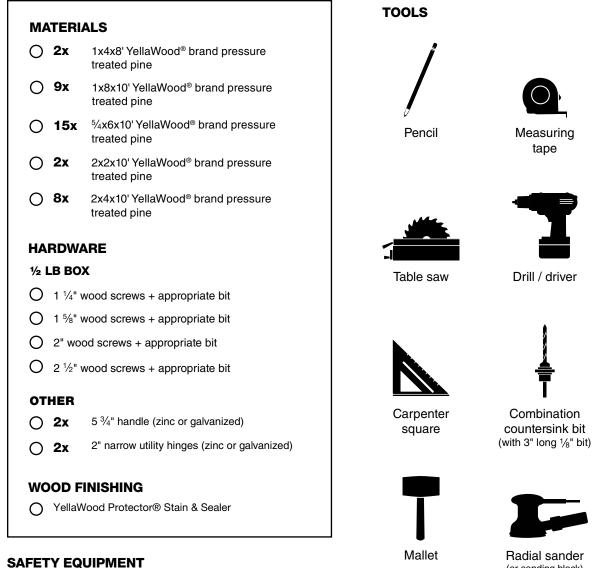
(or chop saw)

Jigsaw

Clamps

(two at least

5' long)



#### Radial sander (or sanding block)



Waterproof

wood glue

(optional)

Brush



Paint/Stain



Damp cloth (optional)

O Safety glasses

O Work gloves O Dust mask

O 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. The cut lists following this page show maximum parts per board. If unsure about board quality, purchase 1 extra piece of each board type.



### 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.

#### 2x4x10' STOCK 8 BOARDS

CROSS-CUT TO	PART	#
29 ¾"	A	1x
46 ½"	В	2x
<b>49</b> 1⁄4"	С	1x
<b>28</b> ¾"	D	1x
<b>19</b> ½"	Е	1x
<b>10</b> 1⁄4"	Р	7x
18"	S	2x
<b>13</b> 1⁄2"	Т	2x
<b>49</b> <sup>3</sup> ⁄ <sub>16</sub> "	V	2x
13 5⁄8"	Х	Зx
<b>49</b> 1⁄4"	Z	1x
87"	AA	1x
<b>29</b> 1⁄2"	BB	1x
20 1⁄8"	CC	1x
<b>15</b> 5⁄8"	DD	1x
68 1⁄4"	EE	1x
16"	JJ	1x

A						AA		
	В				В			
BB				С			CC	
D		DD				EE		
E	Р	Р	Р	Р	Р	Р	Р	
S	S		т	Т		JJ		
	V					V		
X	Х	Х			Z			



CROSS-CUT TO	PART	#
29 <sup>3</sup> ⁄4"	F	1x
<b>18</b> ½"	G	1x
<b>19</b> ½"	Н	1x
<b>31</b> ½"	I	1x
50 <sup>5</sup> ⁄16"	J	1x
50"	K	1x
50 <sup>3</sup> ⁄4"	Ν	4x
90"	0	4x
17"	Q	2x
18"	R	2x
<b>49</b> 1⁄4"	W	1x
49 1⁄4"	Y*	1x

1x8x10' STOCK	
9 BOARDS	

F	G	Н	I		
J			к		
Ν			N		
N			N		
	0			Q	
	0			Q	
	О			R	
	0			R	
W			Y*		

\* Requires detail cuts. See page 8 for diagrams.

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.

**YellaWood** Pressure Treated F

#### <sup>5</sup>/<sub>4</sub>x6x10' STOCK 15 BOARDS

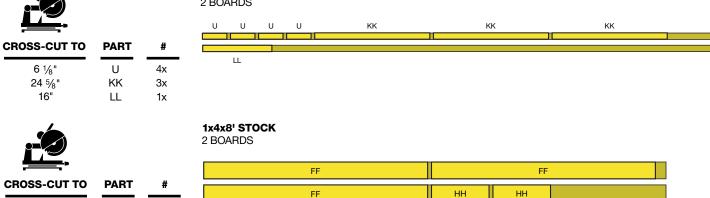
<u> </u>		
CROSS-CUT TO	PART	#
<b>29</b> ¾"	L	3x
<b>49</b> 1⁄4"	M*	9x
<b>71</b> ¼"	GG*	9x
18"	*	Зx
<b>18</b> ¾"	MM*	6x

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

L L		L	
М*		М	
М		М	
М		М	
М		М	
М	II*	II	II
GG*		MM*	
GG*		MM*	
GG*		ММ	
GG			
GG			
GG			

### 2x2x10' STOCK

#### 2 BOARDS



Note: Diagrams not to scale.

46 1/2"

12"

FF

ΗH

Зx

2x

6 1/8"

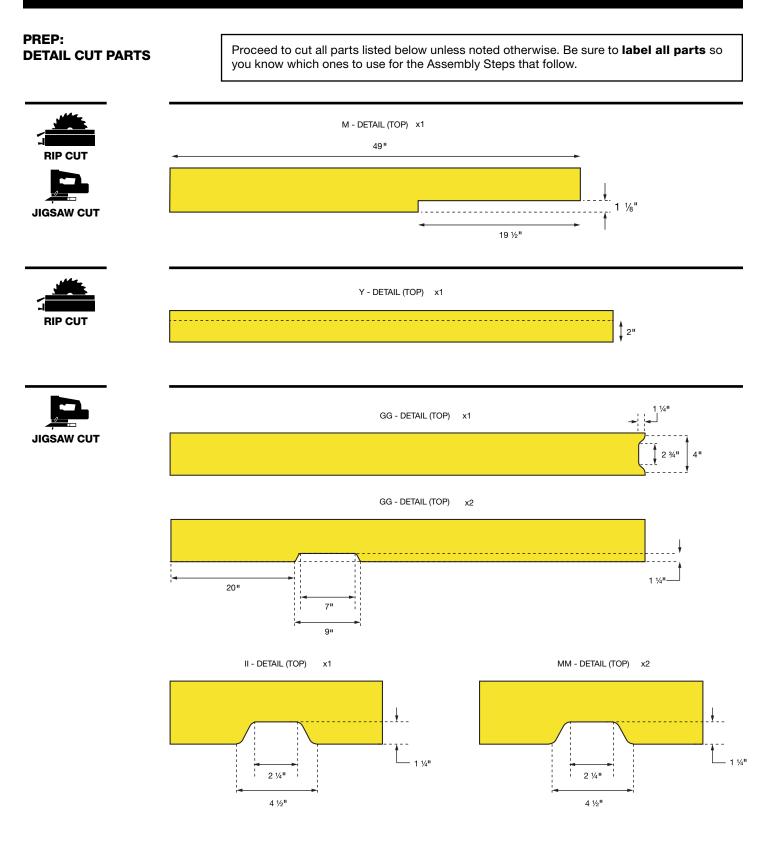
24 5/8"

16"

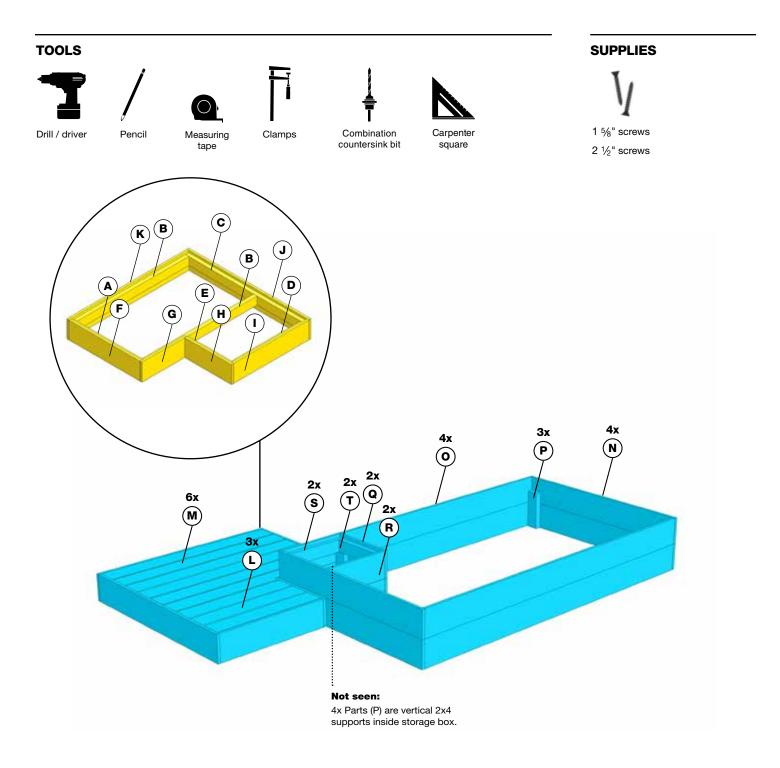
7

### **DETAIL CUT DIAGRAMS**





### SECTION 1: FRAME & PLATFORM



### SECTION 1: FRAME & PLATFORM



Begin by creating three sides of a rectangle from Part (A) and two Parts (B). Use a carpenter square to maintain 90° and secure with two 2  $\frac{1}{2}$ " screws per joint.

### 2



Add Parts (C), (D), and (E) to the long side as shown.

### з 🗆



Then, lay two Parts (M) under the frame to offset it and face the frame with Parts (F) - (K) using 1 5%" screws.



Clamp as needed and work your way around the frame, connecting the edges first and then securing to the frame.



Flip over assembly. Lay in the flooring boards Part (M) and Part (L) using  $\frac{1}{4}$ " spacers. Then, pencil-mark a screw guide so the 1  $\frac{5}{6}$ " screws connect the frame underneath.





Finish securing all of the flooring boards at either end and in the middle.



To make the sandbox rectangle, secure the ends of Parts (N) and (O) with 1 5%" screws using a square to maintain 90° and clamps as needed.





Drop in a Part (P) at the four corners.





Secure with 1 <sup>5</sup>/<sub>8</sub>" screws.



10

### SECTION 1: FRAME & PLATFORM



### Now you can add the second layer on top of the frame. First secure the edges together with 1 5%" screws.

11 🗌



Then attach the top layer to the 2x4 corner pieces – Parts (P) – with 1  $\frac{5}{8}$ " screws.

12 🗌



Work your way around the perimeter.

### 13 🗌



Lay in Parts (Q) and (R) as shown on page 9. Use a carpenter square to ensure they are perpendicular to each other and to the outer walls.





Secure them together with 1 5%" screws.





Drop in two more Parts (P) and secure the ends of the L-shape to these pieces with 1  $\frac{5}{8}$ " screws. Then attach Parts (P) to the outer walls.





Add a third Part (P) to the corner of the storage box.





Secure the second layer in the same manner as was used for the outer walls. Use 1 %" screws.

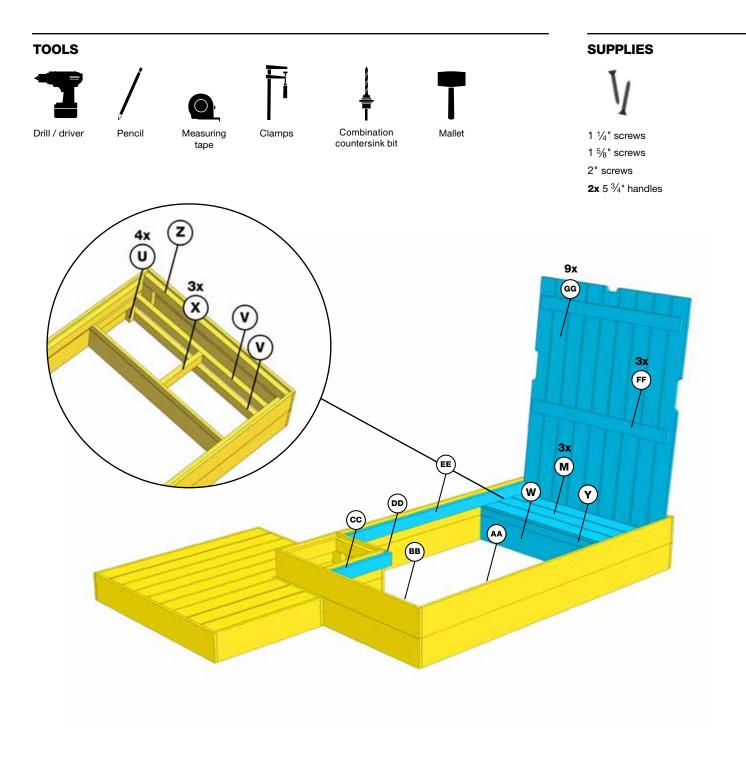




Finally, lay Parts (T) and (S) on top of Parts (P) as shown. Secure these from the outside of Parts (Q) and (R) with three 1.5%" screws per wall. These will provide a lip for the storage lid to rest on.



### SECTION 2: BENCH SEAT



### SECTION 2: BENCH SEAT





Begin the bench seat structure by attaching a Part (U) to a Part (V) at either end, ensuring that it is square and flush with the top edge of Part (V). Use  $1 \frac{5}{10}$ " screws.

### 20



Then, do a similar operation with Parts (U) and (W).

21 🗌



Drop in this assembly to the sandbox rectangle and place it so that Part (W) is 18  $\frac{7}{8}$ " from the front of the back wall. Secure it to the outside walls with 1  $\frac{5}{8}$ " screws.





Drop in the first assembly to the back so that Part (V) is 3 7/3" from the front of the back wall. Secure it in the same manner as in the previous step.



23



On a work surface, attach three Parts (X) to a Part (V) so they are evenly spaced and the outside parts are square and flush with the edges of Part (V). Use two 2  $\frac{1}{2}$ " screws per joint.

24



Place this assembly on top of the two you just installed and use a mallet if needed as it may be a snug fit.



Attach the left and right side of the frame from the outside walls using 1  $\frac{5}{3}$ " screws.





Place a second layer – Part (Y) – on top of Part (W) and secure it to the frame assembly.





Now you can lay the seat slats by securing three Parts (M) on top of the frame with  $\frac{1}{4}$ " spacers. Begin at the front of the seat and maintain flush with the front edge. Use two 1  $\frac{5}{8}$ " screws per joint.



ASSEMBLY

### SECTION 2: BENCH SEAT

28



To create a lip for the sandbox lid, attach Parts (Z) - (EE) inside the perimeter of the outer walls so they are  $7/_8$ " inset from the top of the walls. Use 2" screws.

### 29

32



Work your way around the entire inside of the sandbox area.

30 🗌



Use clamps as needed.





To create the lid/backrest, lay out nine Parts (GG) on a work surface with  $\frac{1}{4}$ " spacers and place three Parts (FF) on top as battens. There should be a handle cutout on the top in the middle and on the sides. Use  $1\frac{1}{4}$ " screws.





Test that the lid lays flat on top of the lip, and then test that it slides behind the bench seat to form the backrest/shade. Use the handles and cutouts to assist in lifting.



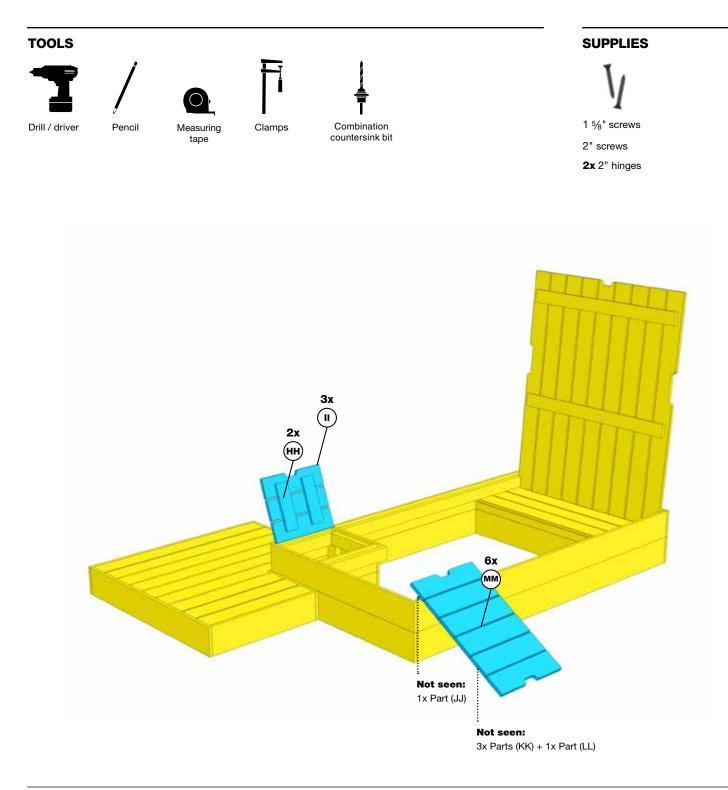
Ensure all edges are flush and that the assembly maintains 90°. Use two screws per board. The first and third Parts (FF) are located 5" from the edges of Parts (GG), and the second is placed 25" below the top one. (You can adjust this middle board to whatever is a comfortable lifting height.)





Secure two 5  $\frac{3}{4}$ " handles with provided hardware onto the middle batten so that they are 6" in from the left and right side. Center them within the width of Part (FF).

### SECTION 3: STORAGE & RAMP



### SECTION 3: STORAGE & RAMP

35



Assemble the lid upside down within the storage box cavity for a sure fit. Place two 2" hinges at the back, three Parts (II) and two Parts (HH) with the handle at the top as shown. Secure with two 1  $\frac{5}{8}$ " screws per joint.

### 36

39



Flip the lid over and secure evenly spaced hinges to the frame.

37 🗌



Test that the lid opens smoothly and lays flat when closed.





Lay the lid/backrest onto the lip, then close the storage lid.



Now you have the cavity that will hold the ramp when not in use. Create a frame with Parts (JJ) - (LL) as shown using 2" screws, and then clamp this assembly so it is flush with the existing 2x4 lip.



Clamp two Parts (MM) – the ones with the handle cutouts – to the assembly at either end. Ensure they continue the line of the boards next to them on the lid.



Remove the assembly and place facedown on a work surface. Secure the top and bottom parts to the frame with 1 <sup>5</sup>/<sub>8</sub>" screws. Use clamps as needed.

42



Then, insert the remaining Parts (MM) evenly spaced and secure the frame to these with two 1  $\frac{5}{6}$ " screws per joint.



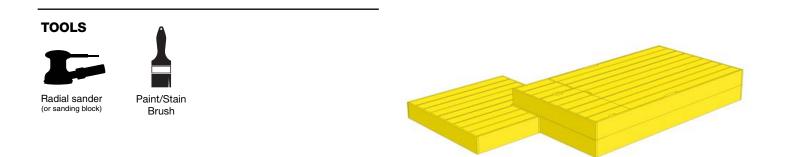
40



The assembly can now be used as a ramp or as a lid when the sandbox is not in use.



### SECTION 4: FINISHING



YellaWood<sup>®</sup> 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.



Ease any sharp edges using a radial sander or sanding block with medium grit. Apply preferred finish to the wood. Add twelve to fourteen (50lb) bags of play sand and desired toys. 45



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



Closing the sandbox helps protect the sand from leaves and debris.

### **Optional:**

Attach the platform to the sandbox on-site if desired.

CONGRATULATIONS. ENJOY YOUR NEW DELUXE SANDBOX!

GALLERY OF IMAGES





### 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:

<ul> <li>Fasteners – nails, screws, etc.</li> </ul>	ASTM – A 153 (1 oz/ft²)
• 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<sup>®</sup> 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<sup>®</sup> 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.vellawood.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.yellawood.com/warranties or write us at P.O. Box 610. Abbeville. AL 36310. YellaWood®, YellaWood Protector<sup>®</sup> and the yellow tag are federally registered trademarks of Great Southern Wood Preserving, Incorporated.

YellaWood

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

### **IMPORTANT INFORMATION**

- Consult the end tag to determine which preservative or preservative system was used in the treatment of that particular product. YellaWood<sup>®</sup> brand products may be used in direct contact with aluminum building products when limited to codecompliant 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 preservatives 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.
- 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 Specification<sup>®</sup> (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.

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