



# Home Project Ideas

Using Simpson Strong-Tie® RTC2Z Rigid Tie® Connectors



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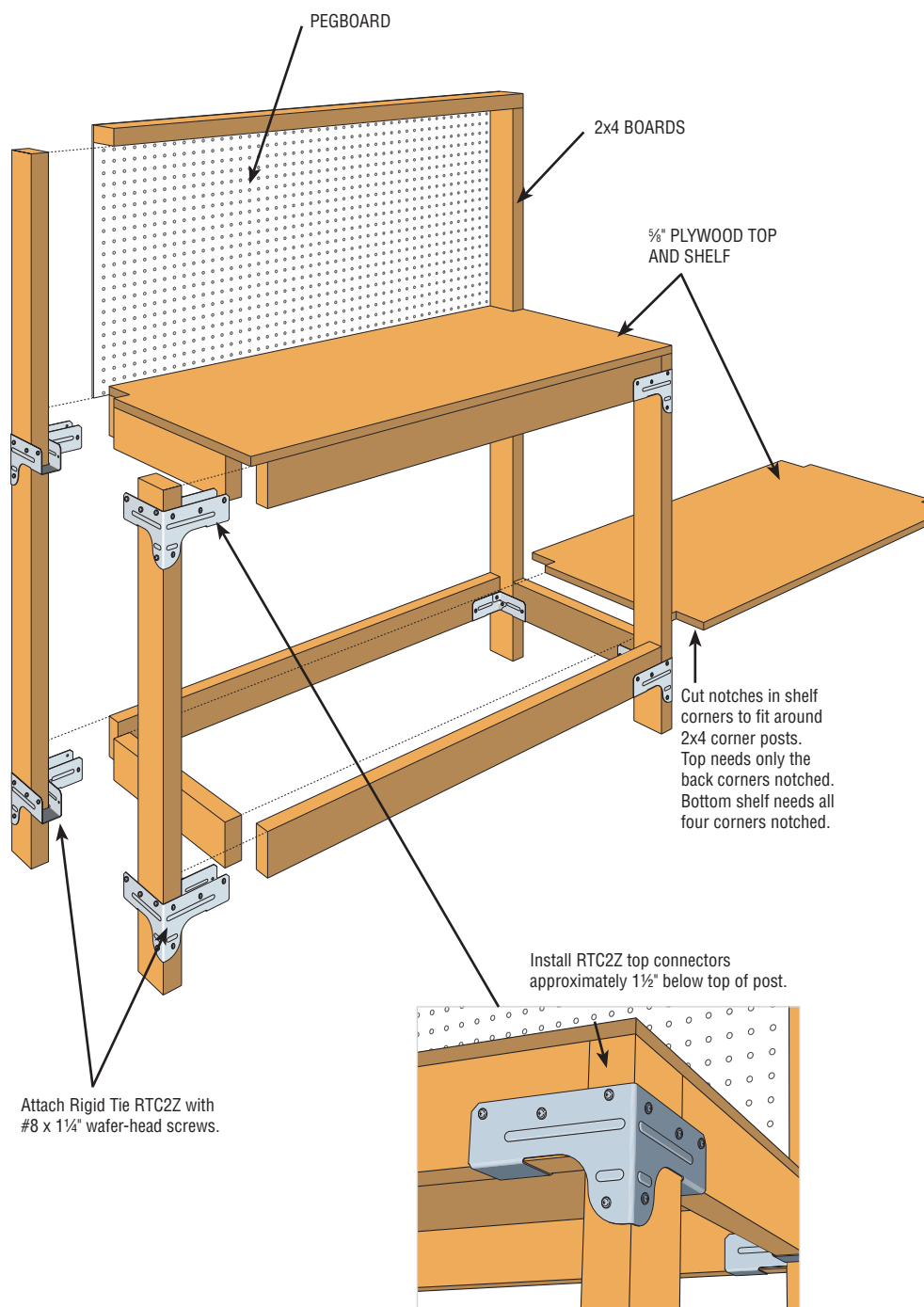


## Heavy-Duty Workbench

Building this 4'-wide workbench is fast and easy with 2x4 lumber and Simpson Strong-Tie® Rigid Tie® RTC2Z connectors. Create a sturdy workbench to act as a storage center and workstation. It's ideal for the garage or basement and can be built in different lengths to accommodate your needs.



Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



### TOOLS YOU NEED

- Saw
- Screw gun
- #2 Phillips head bit
- Tape measure
- Clamps
- Framing square

Rigid Tie RTC2Z connectors are easy to install and strong enough to support even the heaviest boxes, tools or machinery, and can be finished with paint to blend with the style of your home.

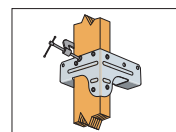
### RIGID TIE RTC2Z CONNECTOR INSTALLATION INSTRUCTIONS

#### 1. CUT LUMBER AND PLYWOOD TO SIZE

Since all of your cuts are straight cuts, Simpson Strong-Tie connectors simplify building with wood.

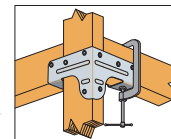
#### 2. INSTALL CONNECTORS ON VERTICAL POSTS

Mark height, clamp connector to post and attach with Simpson Strong-Tie #8 x 1 1/4" wafer-head screws. No predrilling is needed.



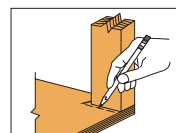
#### 3. CONNECT HORIZONTAL RAILS ON EACH SIDE

Use a clamp to help hold the wood in the seat of the connector during installation.



#### 4. NOTCH CORNERS OF PLYWOOD SHELVES

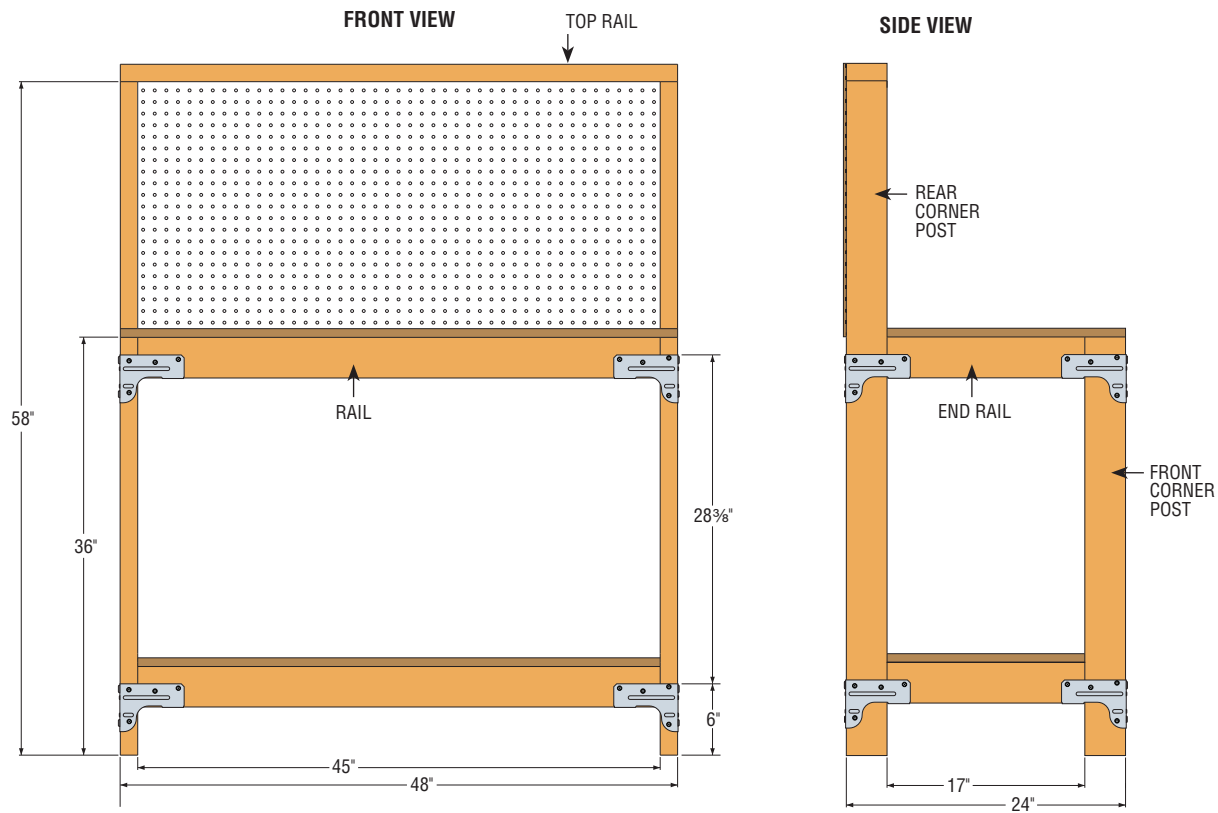
Use a piece of 2x4 on each corner of the shelf, trace and cut to accommodate corner posts (only notch back corners of top shelf).





## MATERIALS AND CUTTING DIAGRAM

### 2' x 4' Heavy-Duty Workbench



#### FOR THIS PROJECT, YOU WILL NEED:

##### LUMBER

- (6) – pieces of 2x4 x 8' lumber
- (1) – 4' x 4' sheet of 5/8" plywood
- (1) – 2' x 4' sheet of 1/4" pegboard

##### SIMPSON STRONG-TIE® CONNECTORS

- (8) – Rigid Tie® RTC2Z connectors

##### FASTENERS

- (1) – BOX Simpson Strong-Tie #8 x 1 1/4" wafer-head screws
- (20) – #6 x 1 1/4" bugle-head screws
- (4) – #6 x 2 1/2" bugle-head screws

#### CUT FROM 2x4 x 8' LUMBER

- (4) – 45" RAILS → (2x)
- (2) – 58" REAR CORNER POSTS & (4) – 17" ENDRAILS → (2x)
- (1) – 48" TOP RAIL → (1x)
- (2) – 36" FRONT CORNER POSTS → (1x)

#### CUT FROM PLYWOOD AND PEGBOARD

##### (1) – TOP/BOTTOM SHELF

24" x 48" 5/8" plywood

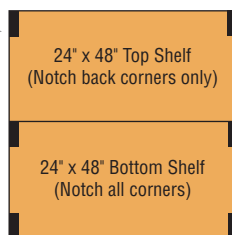
Cut both shelves from

(1) 4' x 4' sheet of 5/8" plywood.

Attach with #6 x 1 1/4" flat-head screws.

##### (1) – 24" x 48" PEGBOARD

Attach with #8 x 1 1/4" wafer-head screws.



**PEGBOARD**  
24" x 48"

The construction plan for this project is designed to be completed by people with basic carpentry skills in standard situations. If your situation is unique, talk with someone with detailed carpentry or construction experience before starting your project. Particular attention was paid to the steps and details in this plan, but they cannot be guaranteed to be error free. Simpson Strong-Tie shall not be responsible for any possible loss, damage or injury resulting directly or indirectly from the information contained here.

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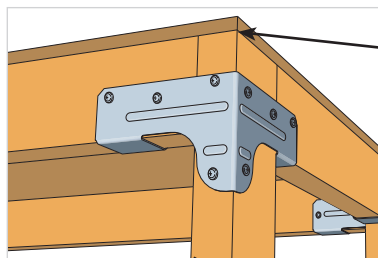
## BUILD-IT-YOURSELF INSTRUCTIONS

# Heavy-Duty Shelving Unit

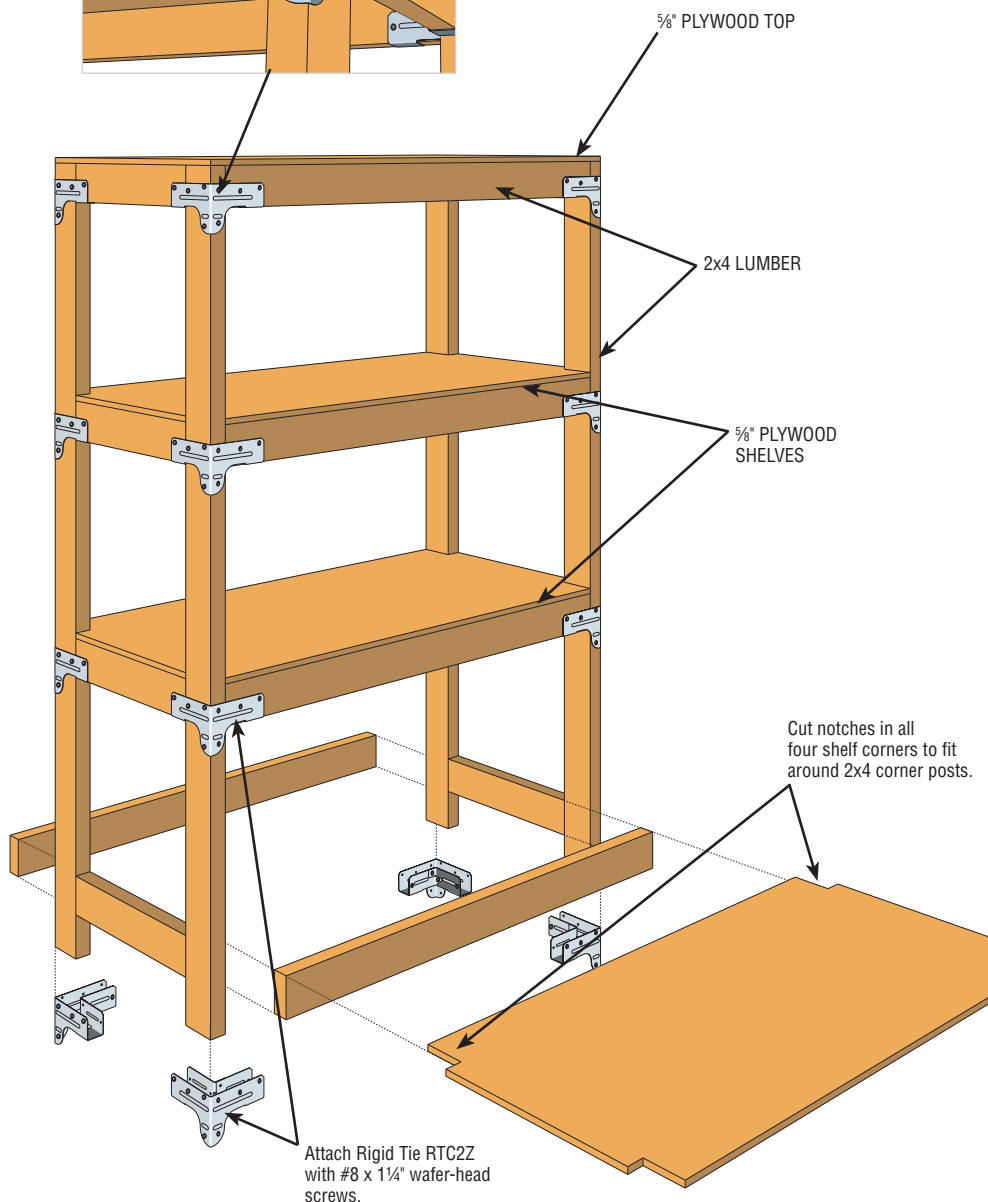
Building this 4'-wide shelving unit is fast and easy with 2x4 lumber and Simpson Strong-Tie® Rigid Tie® RTC2Z connectors. Create an organized, sturdy shelf unit that is ideal for the garage or basement. It can be built in different lengths to accommodate your needs, and is strong enough to hold the heaviest boxes or tools.



Check out our installation and building tip videos at [www.diydoneright.com](http://www.diydoneright.com).



Install Rigid Tie RTC2Z top connectors approximately 1 1/2" below top of post.



### TOOLS YOU NEED

- Saw
- Screw gun
- #2 Phillips head bit
- Tape measure
- Clamps
- Framing square

Rigid Tie RTC2Z connectors are easy to install and strong enough to support even the heaviest boxes, tools or machinery, and can be finished with paint to blend with the style of your home.

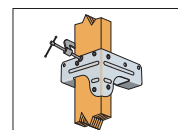
### RIGID TIE RTC2Z CONNECTOR INSTALLATION INSTRUCTIONS

#### 1. CUT LUMBER AND PLYWOOD TO SIZE

Since all of your cuts are straight cuts, Simpson Strong-Tie connectors simplify building with wood.

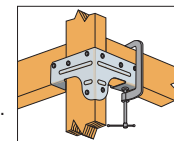
#### 2. INSTALL CONNECTORS ON VERTICAL POSTS

Mark height, clamp connector to post and attach with Simpson Strong-Tie #8 x 1 1/4" wafer-head screws. No predrilling is needed.



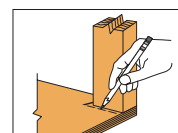
#### 3. CONNECT HORIZONTAL RAILS ON EACH SIDE

Use a clamp to help hold the wood in the seat of the connector during installation.



#### 4. NOTCH CORNERS OF PLYWOOD SHELVES

Use a piece of 2x4 on each corner of the shelf, trace and cut to accommodate corner posts (do not notch top shelf).





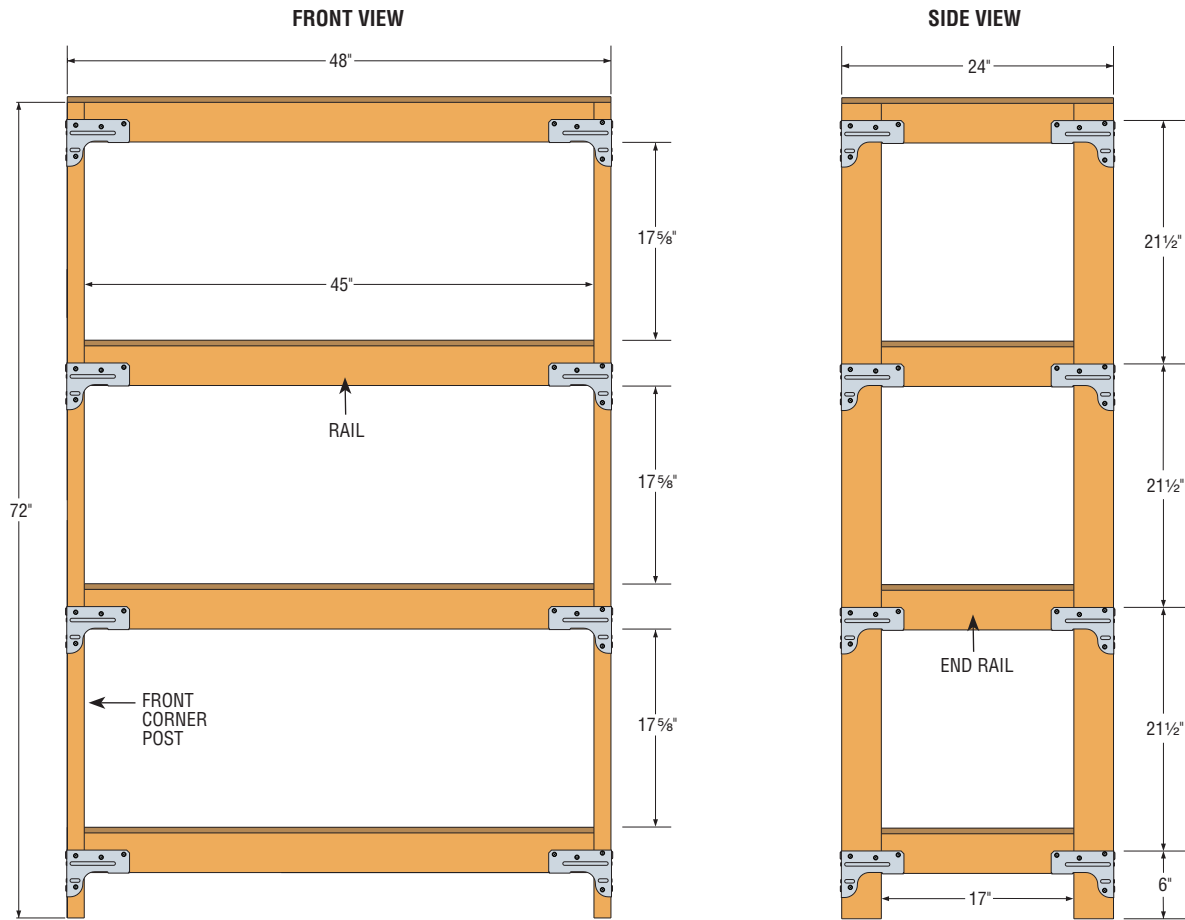


## MATERIALS AND CUTTING DIAGRAM

SIMPSON

Strong-Tie®

### 2' x 4' x 6' Heavy-Duty Shelving Unit



#### FOR THIS PROJECT, YOU WILL NEED:

##### LUMBER

- (9) – pieces of 2x4 x 8' lumber
- (1) – 4' x 8' sheet of 5/8" plywood




##### SIMPSON STRONG-TIE® CONNECTORS

- (16) – Rigid Tie® RTC2Z connectors

##### FASTENERS

- (2) – BOXES Simpson Strong-Tie #8 x 1 1/4" wafer-head screws
- (40) – #6 x 1 1/4" bugle-head screws

#### CUT FROM 2x4 x 8' LUMBER

- (8) – 45" RAILS →  (4x)
- (4) – 72" CORNER POSTS & 17" END RAILS →  (4x)
- (8) – 17" END RAILS →  (1x)

#### CUT FROM PLYWOOD

- (1) – 24" x 48" TOP SHELF → 

- (3) – 24" x 48" LOWER SHELVES → 

Cut top and 3 shelves from  
(1) 4' x 8' sheet of 5/8" plywood.  
Attach with #6 x 1 1/4" flat-head screws.

The construction plan for this project is designed to be completed by people with basic carpentry skills in standard situations. If your situation is unique, talk with someone with detailed carpentry or construction experience before starting your project. Particular attention was paid to the steps and details in this plan, but they cannot be guaranteed to be error free. Simpson Strong-Tie shall not be responsible for any possible loss, damage or injury resulting directly or indirectly from the information contained here.

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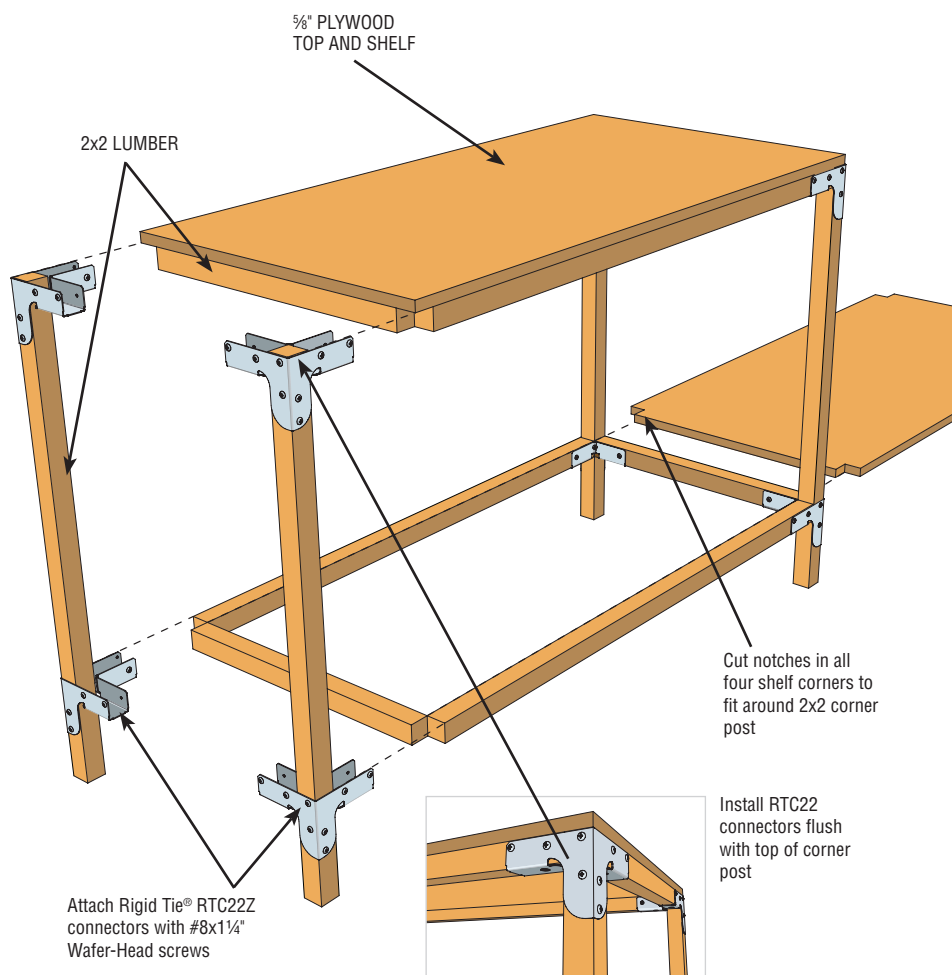
## A FAST WAY TO CREATE A NEW WORK SPACE

# Work Table

Whether you are looking to add work space to your home or college dorm room, building this 4 ft. work table is a breeze with 2x2 lumber and Simpson Strong-Tie® connectors. Create the perfect table to fit your space, customized to fit your needs. Build it in different lengths and widths, and even add more shelves for added storage. Once it's done, get creative with paint to add some flair.

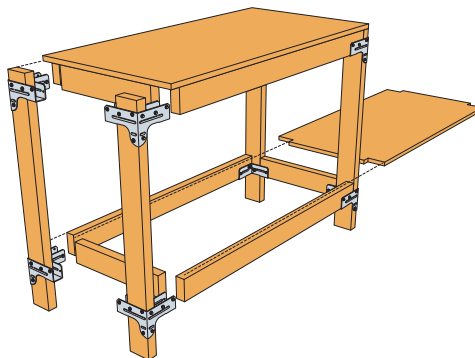


Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



### Need a heavy-duty work table that's ideal for your garage or basement?

Build the perfect work table that can stand up to the most demanding needs. Visit [www.strongtie.com/diydoneright](http://www.strongtie.com/diydoneright) for plans to build a 2 ft. x 4 ft. table using 2x4 lumber and Rigid Tie® RTC22Z connectors.



**SIMPSON**

**Strong-Tie**

®

### TOOLS YOU NEED

- Saw
- Screw gun
- #2 Phillips head bit
- Tape measure
- Clamps
- Framing square

Connectors are easy to install and strong enough to support even the heaviest boxes, tools or machinery, and can be finished with paint to blend with the style of your home.

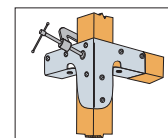
### RIGID TIE® RTC22Z CONNECTOR INSTALLATION INSTRUCTIONS

#### 1. CUT LUMBER AND PLYWOOD TO SIZE.

Since all of your cuts are straight cuts, Simpson Strong-Tie® connectors simplify building with wood.

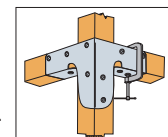
#### 2. INSTALL CONNECTOR ON VERTICAL POST.

Mark height, clamp connector to post and attach with Simpson Strong-Tie® #8x1 1/4" Wafer-Head screws. No pre-drilling is needed.



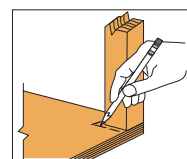
#### 3. CONNECT HORIZONTAL RAIL ON EACH SIDE.

Use a clamp to help hold the wood in the seat of the connector during installation.



#### 4. NOTCH CORNERS OF PLYWOOD SHELVES.

Use a piece of 2x2 on each corner of the shelf, trace and cut to accommodate corner posts.

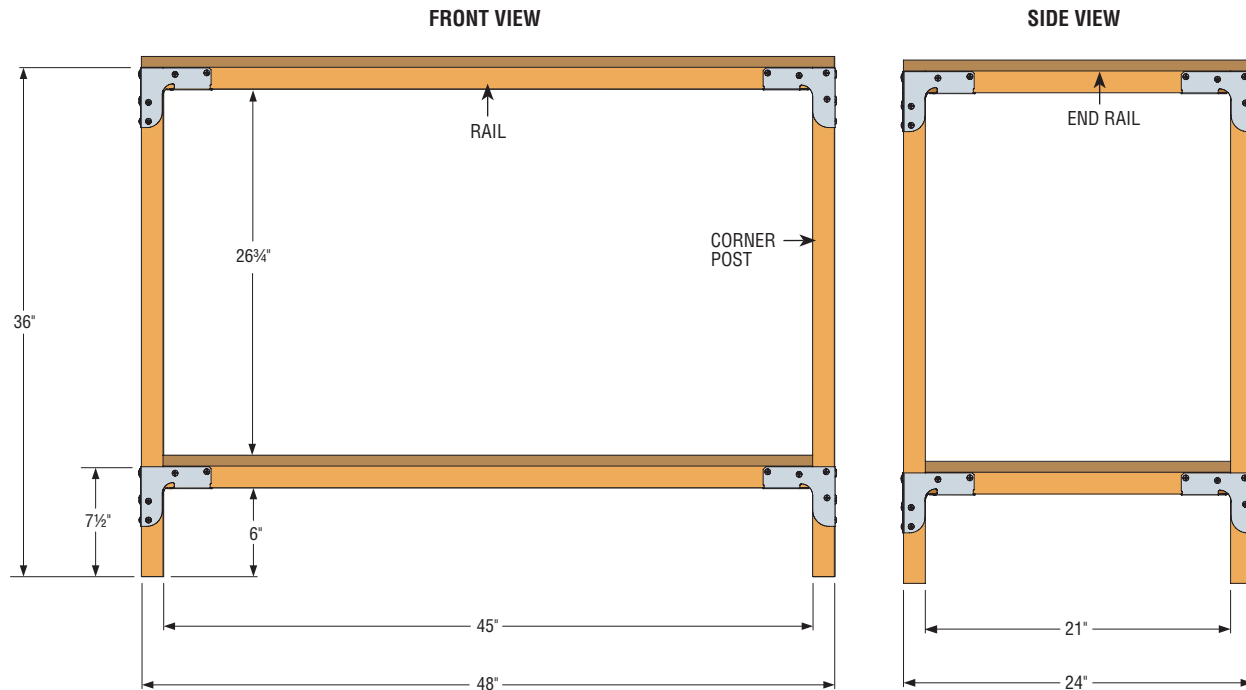




## MATERIALS AND CUTTING DIAGRAM

**SIMPSON**  
**Strong-Tie**

### 2 ft. x 4 ft. Work Table



#### FOR THIS PROJECT YOU WILL NEED:

##### LUMBER

- (5) – pieces of 2x2 8 ft. lumber
- (1) – 4 ft. x 4 ft. sheet of 5/8" plywood

##### SIMPSON STRONG-TIE® CONNECTORS

- (8) – Rigid Tie® RTC22Z connectors

##### FASTENERS

- (1) – **BOX** Simpson Strong-Tie® #8x1 1/4" Wafer-Head screws
- (36) – #8x1 1/4" flat-head screws or 6d finish nails for a more finished surface

#### CUT FROM 2x2 x 8' LUMBER

- (4) – 45" RAILS → (2x)
- (4) – 36" CORNER POSTS → (2x)
- (4) – 21" END RAILS → (1x)

#### CUT FROM PLYWOOD

- (1) – 24" x 48" TOP SHELF → 24" x 48" Top Shelf
- (1) – 24" x 48" LOWER SHELF → 24" x 48" Lower Shelf  
(Notch all corners)

Attach with #8x1 1/4" flat-head screws or 6d finish nails at 8" spacing

**Note:** For a more finished appearance you can explore various types of premium plywood (ie: Birch, Maple, etc.) or 1x lumber options.

*The construction plan for this project is designed to be completed by people with basic carpentry skills in standard situations. If your situation is unique, talk with someone with detailed carpentry or construction experience before starting your project. Particular attention was paid to the steps and details in this plan, but they cannot be guaranteed to be error free. Simpson Strong-Tie shall not be responsible for any possible loss, damage or injury resulting directly or indirectly from the information contained here.*

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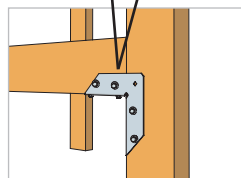
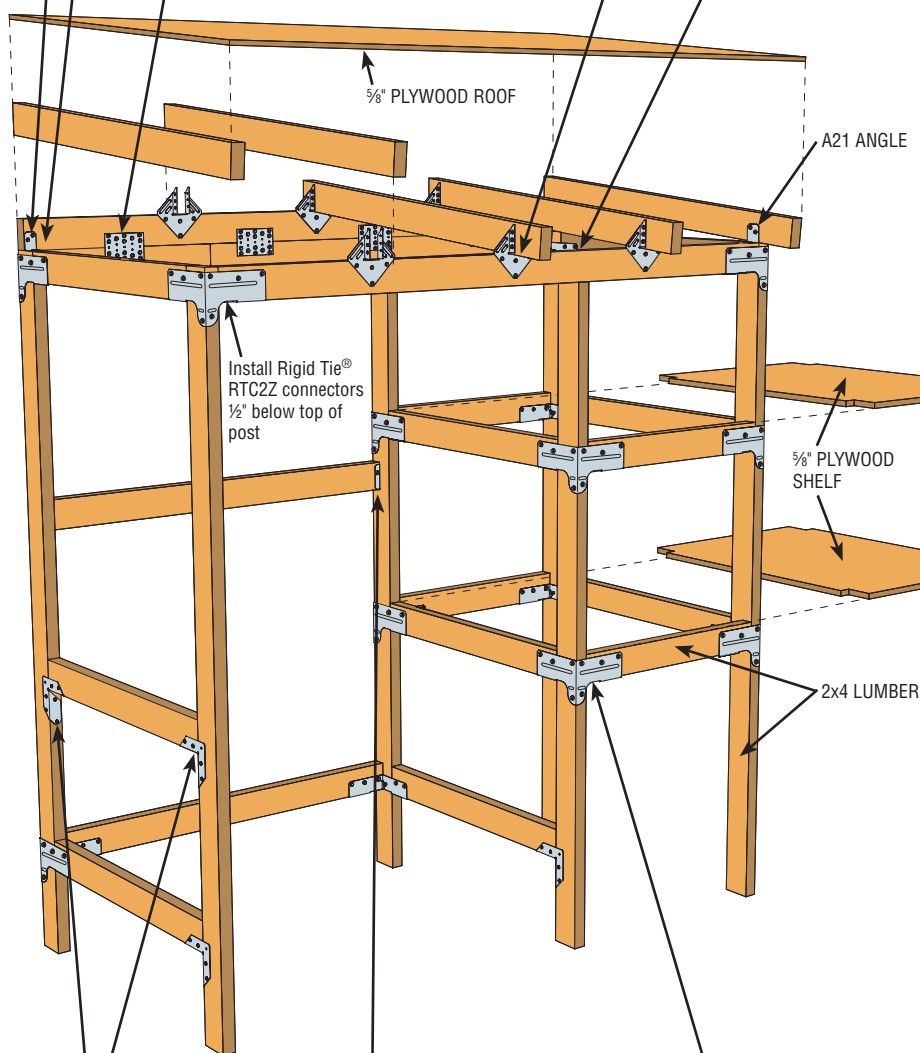
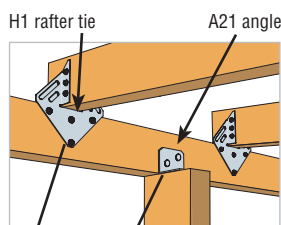
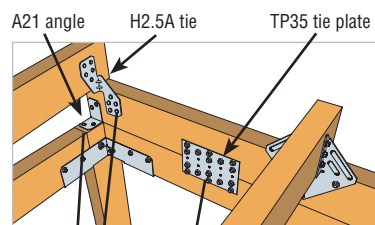
For more inspiration, visit [diydoneright.com](http://diydoneright.com)

# Outdoor Storage Center

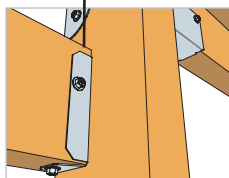
Need extra storage for your lawn mower or gardening tools and supplies? With Simpson Strong-Tie® connectors, it's easy for you to get all of your outdoor goods organized. This sturdy storage center can be completed, from start to finish, in just one day.



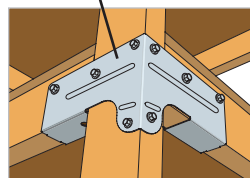
Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



Rigid Tie® RTA2 connector



FB24 bracket



Rigid Tie® RTC2Z connector



## TOOLS YOU NEED

- Saw
- Screw gun
- #2 Phillips head bit
- 1/4" hex drive socket
- Tape measure
- Clamps
- Framing square
- Hammer
- Straight edge

Connectors are easy to install and strong enough to support even the heaviest boxes, tools or machinery, and can be finished with paint to blend with the style of your home.

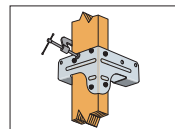
## RIGID TIE® RTC2Z CONNECTOR INSTALLATION INSTRUCTIONS

### 1. CUT LUMBER AND PLYWOOD TO SIZE.

Since all of your cuts are straight cuts, Simpson Strong-Tie® connectors simplify building with wood.

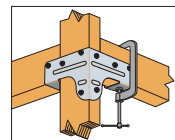
### 2. INSTALL CONNECTOR ON VERTICAL POST.

Mark height, clamp connector to post and attach with Simpson Strong-Tie® #9x1 1/2" Strong-Drive® SD Connector screws.



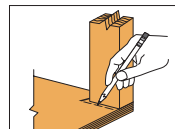
### 3. CONNECT HORIZONTAL RAIL ON EACH SIDE.

Use a clamp to help hold the wood in the seat of the connector during installation.

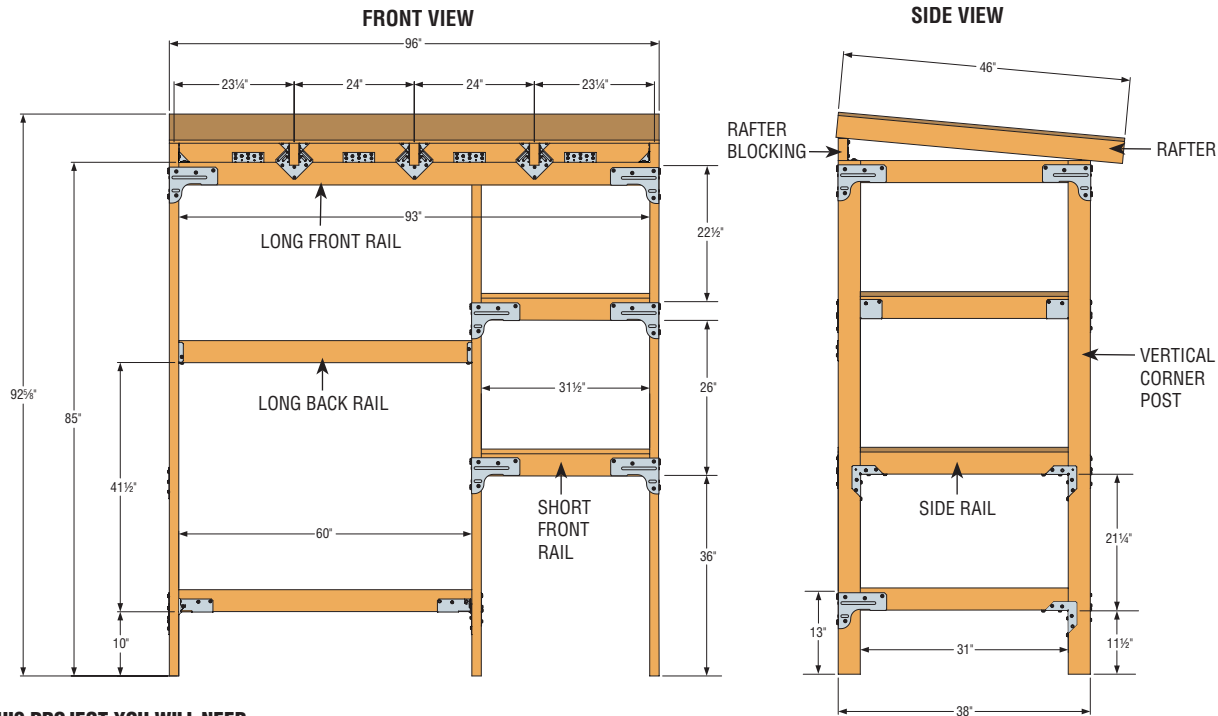


### 4. NOTCH CORNERS OF PLYWOOD SHELVES.

Use a piece of 2x4 on each corner of the shelf, trace and cut to accommodate corner posts.



## Outdoor Storage Center



### FOR THIS PROJECT YOU WILL NEED:

#### LUMBER

- (18) – pieces of 2x4 8 ft. lumber
- (1) – 4 ft. x 4 ft. sheet of 5/8" plywood
- (1) – 4 ft. x 8 ft. sheet of 5/8" plywood

#### SIMPSON STRONG-TIE® CONNECTORS\*

- (14) – Rigid Tie® RTC2Z connectors
- (4) – TP35 tie plates
- (6) – A21 angles
- (2) – FB24Z brackets
- (2) – H2.5A ties
- (6) – H1 rafter ties
- (4) – RTA2Z connectors

#### FASTENERS

- (5) – **BOXES** Simpson Strong-Tie® #9x1 1/2" Strong-Drive® SD Connector screws
- (48) – #8x1 1/4" flat-head screws

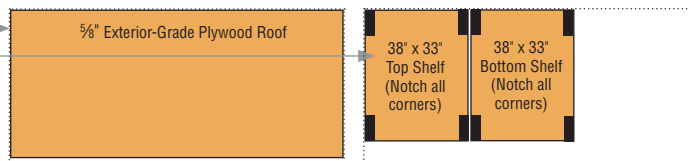
### CUT FROM 2x4 x 8' LUMBER

- (6) – 85" VERTICAL CORNER POSTS → 85" (6x)
- (1) – 96" LONG BACK RAFTER BLOCKING → 96" (1x, no cut)
- (2) – 93" LONG FRONT/BACK TOP RAIL → 93" (2x)
- (2) – 60" LONG BACK RAIL & 31" SIDE RAILS → 60" 31" (2x)
- (4) – 31 1/2" SHORT FRONT/BACK RAILS & (2) – 31" SIDE RAILS → 31 1/2" 31 1/2" 31" (2x)
- (5) – 31" SIDE RAILS (Results in extra scrap rail) → 31" 31" 31" (2x)
- (5) – 46" RAFTERS (Results in extra scrap rafter) → 46" 46" (3x)

### CUT FROM 4' x 8' PLYWOOD

- (1) – 96" x 46" PLYWOOD ROOF
- (2) – 38" x 33" SHELVES

Cut roof and both shelves from (2) 4'x8' sheets of 5/8" plywood. Attach with flat-head #8x1 1/4" screws at 8" spacing.



Use 2x4 x 8' preservative-treated lumber, or non-treated lumber with exterior-grade stain or paint. Dimensions can be modified to fit your specific needs. Use roofing material of your choice. Underlayment and asphalt shingles are recommended. Follow manufacturer's instructions for installation.

**\*CORROSION INFORMATION:** We recommend using our ZMAX® galvanized product for best results on exterior projects and those using preservative-treated wood. These products have a "Z" at the end of the model number (eg. RTC2Z). ZMAX® coated products provide additional corrosion resistance, which is advisable but not required, for non-structural projects like the one shown above. Visit [www.strongtie.com/info](http://www.strongtie.com/info) for critical information.

The construction plan for this project is designed to be completed by people with basic carpentry skills in standard situations. If your situation is unique, talk with someone with detailed carpentry or construction experience before starting your project. Particular attention was paid to the steps and details in this plan, but they cannot be guaranteed to be error free. Simpson Strong-Tie shall not be responsible for any possible loss, damage or injury resulting directly or indirectly from the information contained here.

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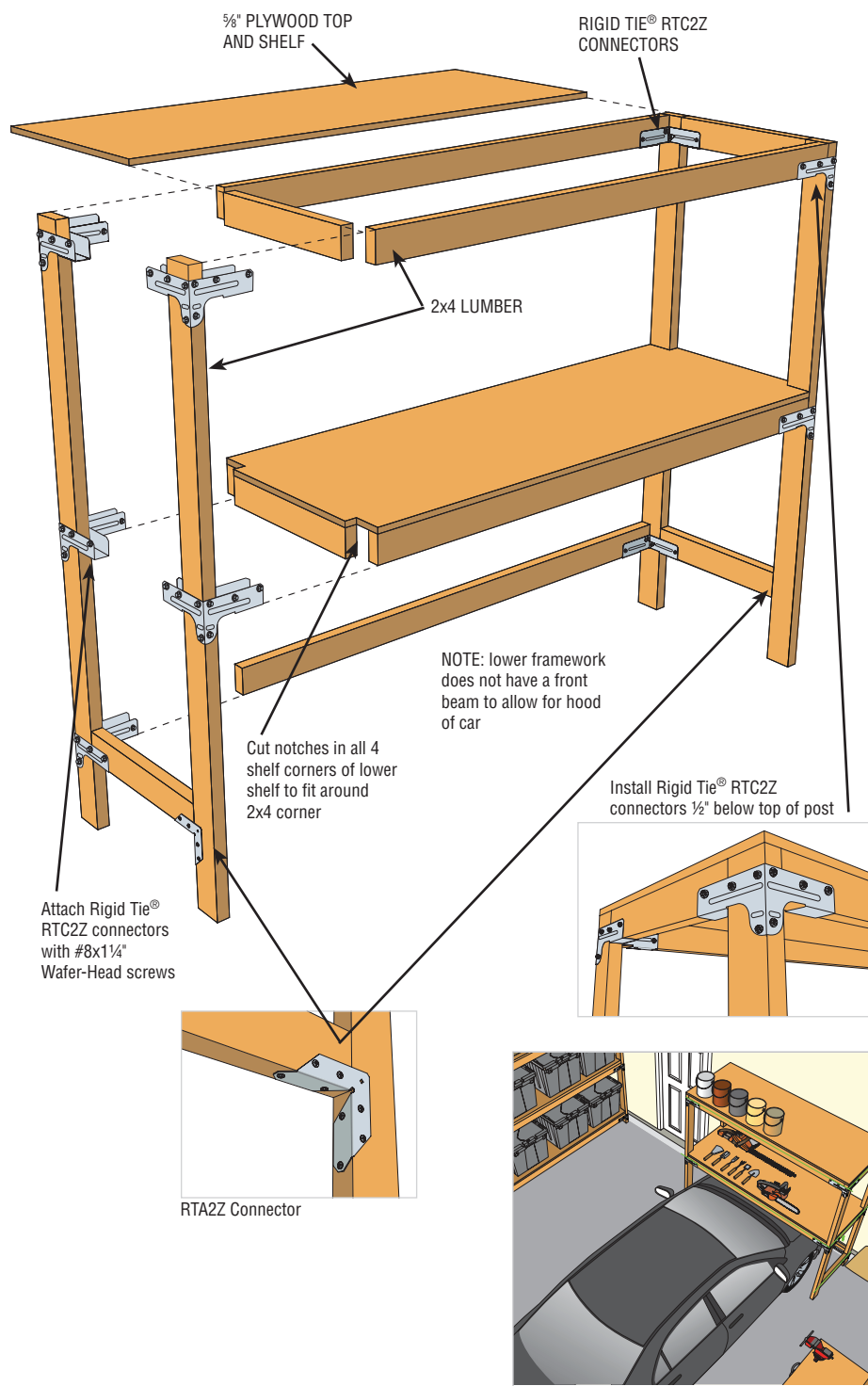
EXTRA STORAGE MADE EASY

# Over-Car Garage Shelving Unit

You can find extra storage on the back wall of your garage by using the space above your car's hood. This simple, unique way of building a strong storage unit is fast and easy with 2x4 lumber and Simpson Strong-Tie® Rigid Tie® RTC2Z connectors. Custom size the width and depth to fit your particular storage needs and still have plenty of room for your vehicle.



Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



## TOOLS YOU NEED

- Saw
- Screw gun
- #2 Phillips head bit
- Tape measure
- Clamps
- Framing square

Connectors are easy to install and strong enough to support even the heaviest boxes, tools or machinery, and can be finished with paint to blend with the style of your home.

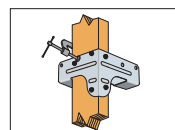
## RIGID TIE® RTC2Z CONNECTOR INSTALLATION INSTRUCTIONS

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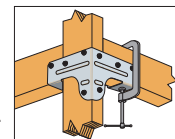
### 2. INSTALL CONNECTOR ON VERTICAL POST.

Mark height, clamp connector to post and attach with Simpson Strong-Tie® #8x1 1/4" Wafer-Head screws. No pre-drilling is needed.



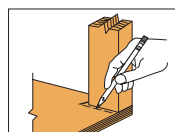
### 3. CONNECT HORIZONTAL RAIL ON EACH SIDE.

Use a clamp to help hold the wood in the seat of the connector during installation.



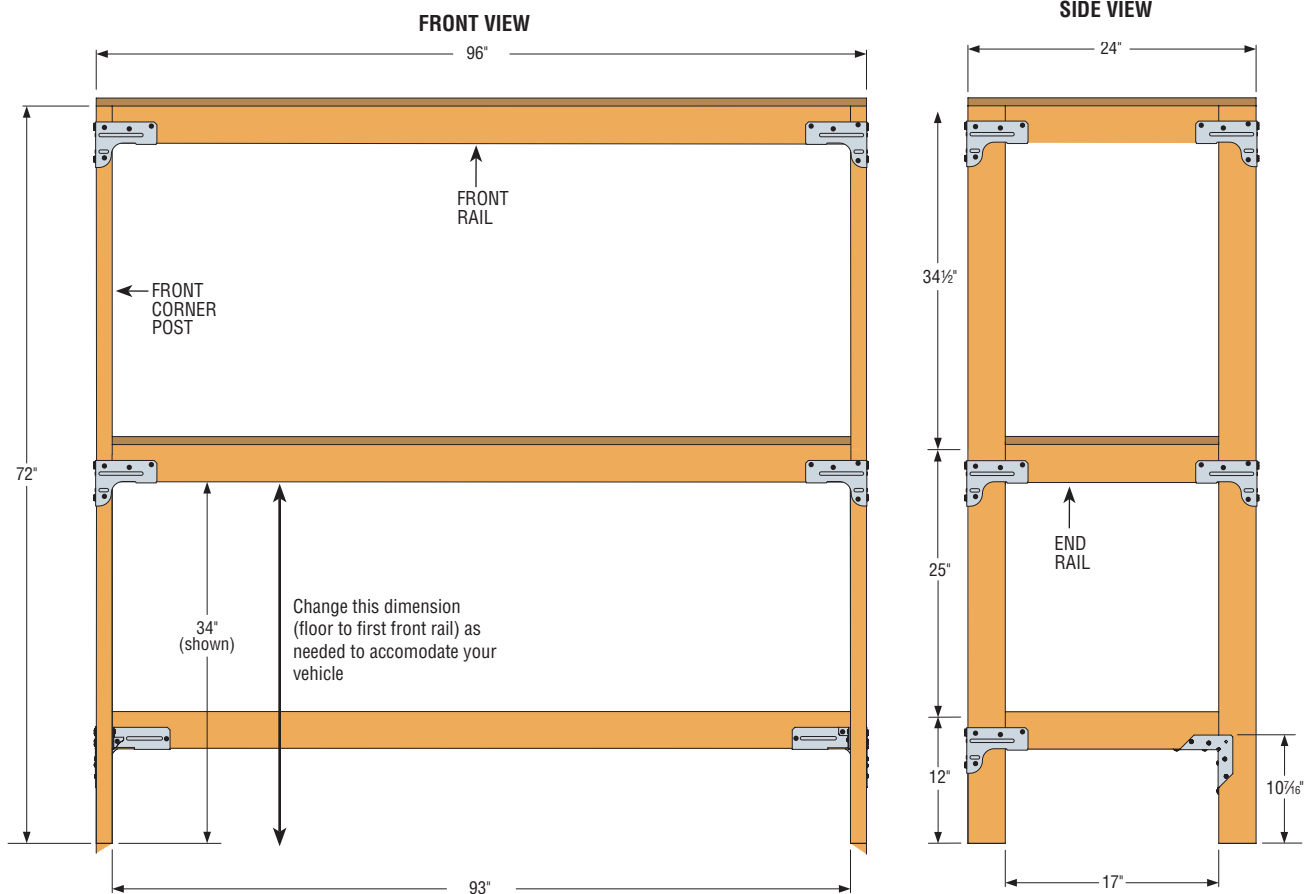
### 4. NOTCH CORNERS OF PLYWOOD SHELVES.

Use a piece of 2x4 on each corner of the shelf, trace and cut to accommodate corner posts.



## 8 ft. x 2 ft. Over-Car Garage Shelving Unit

Note: Verify vehicle width and hood height before finalizing design.



### FOR THIS PROJECT YOU WILL NEED:

#### LUMBER

- (10) – pieces of 2x4 8 ft. lumber
- (1) – 4 ft. x 8 ft. sheet of ¾" plywood



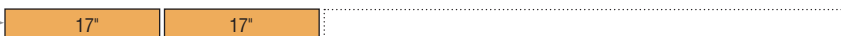
#### SIMPSON STRONG-TIE® CONNECTORS

- (10) – Rigid Tie® RTC2Z connectors
- (2) – Rigid Tie® RTA2Z connectors

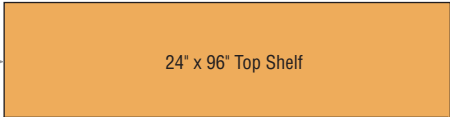
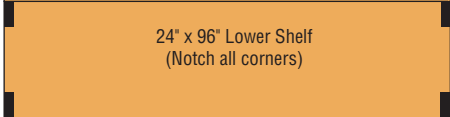
#### FASTENERS

- (2) – **BOXES** Simpson Strong-Tie® #8x1¼" Wafer-Head screws
- (60) – #6x1¼" flat-head screws

### CUT FROM 2x4 x 8' LUMBER

- (5) – 93" RAILS →  (5x)
- (4) – 72" CORNER POSTS & 17" END RAILS →  (4x)
- (2) – 17" END RAILS →  (1x)

### CUT FROM 4' x 8' PLYWOOD

- (1) – 24" x 96" TOP SHELF →  24" x 96" Top Shelf
- (1) – 24" x 96" LOWER SHELF →  24" x 96" Lower Shelf (Notch all corners)

Attach with #6x1¼" flat-head screws

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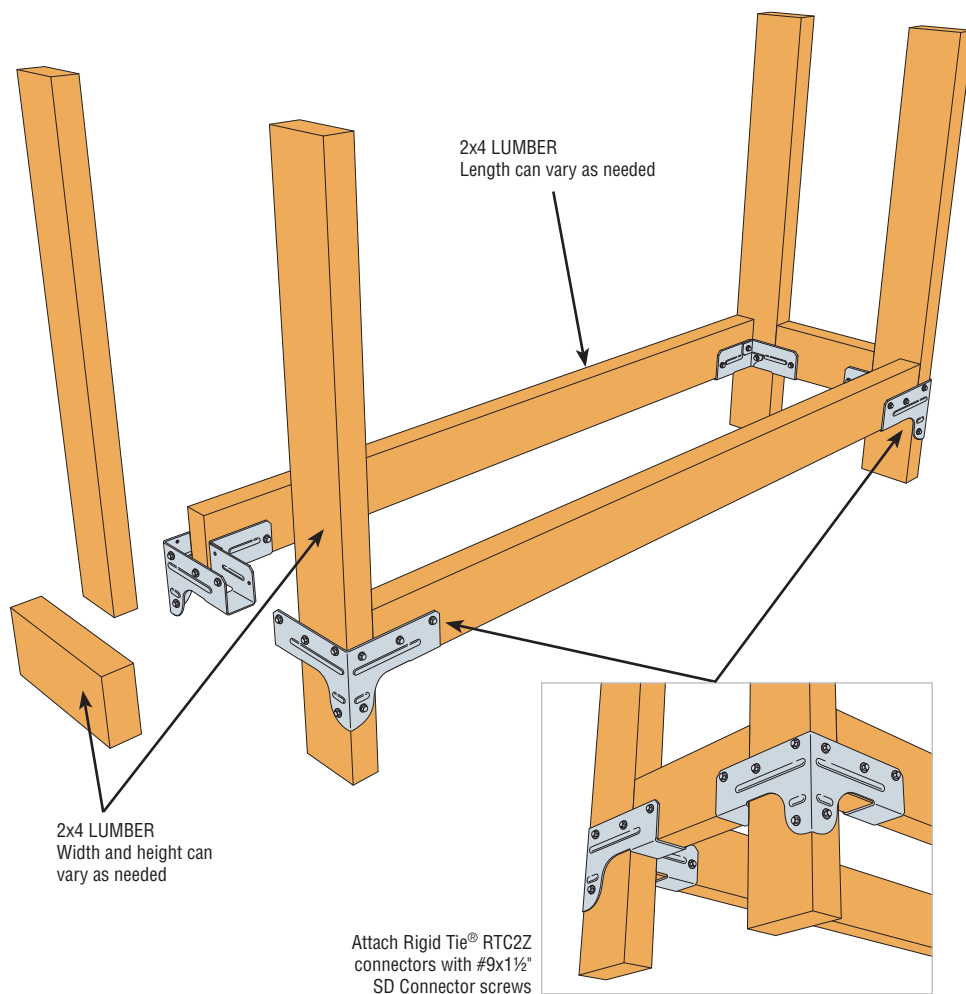
## STACK LOGS NEAT AND CLEAN

# Log Holder

This sturdy log holder makes stacking easier and keeps your firewood organized and off the ground. Use 2x4 preservative-treated lumber with Simpson Strong-Tie® Rigid Tie® RTC2Z connectors to build this log holder any size you need in less than an hour.



Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



### TOOLS YOU NEED

- Saw
- Screw gun
- ¼" hex head socket
- Tape measure
- Clamps
- Framing square

Connectors are easy to install and strong enough to support even the heaviest loads.

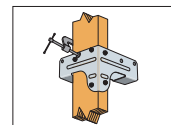
### RIGID TIE® RTC2Z CONNECTOR INSTALLATION INSTRUCTIONS

#### 1. CUT LUMBER TO SIZE.

Since all of your cuts are straight cuts, Simpson Strong-Tie® connectors simplify building with wood.

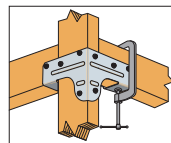
#### 2. INSTALL CONNECTOR ON VERTICAL POST.

Mark height, clamp connector to post and attach with #9x1½" Strong-Drive® SD Connector screws.



#### 3. CONNECT HORIZONTAL RAIL ON EACH SIDE.

Use a clamp to help hold the wood in the seat of the connector during installation.



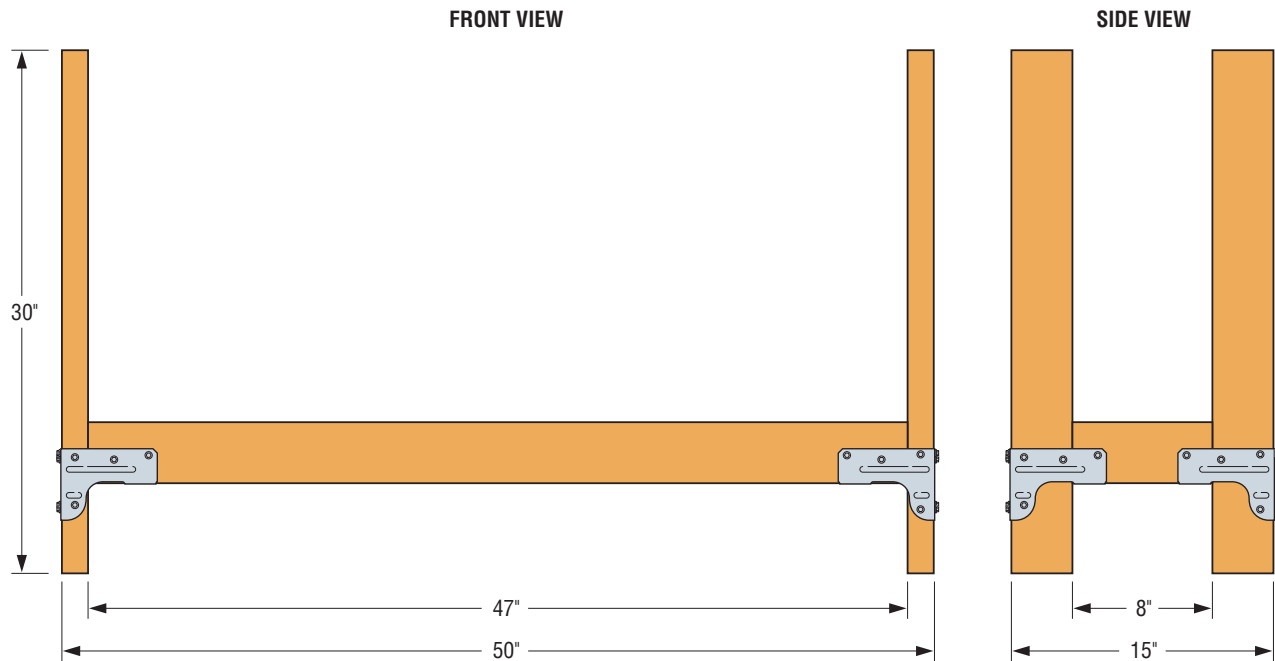


## MATERIALS AND CUTTING DIAGRAM

SIMPSON

Strong-Tie®

### Log Holder



#### FOR THIS PROJECT YOU WILL NEED:

##### LUMBER

(3) – pieces of 2x4 8 ft. lumber

##### SIMPSON STRONG-TIE® CONNECTORS\*

(4) – Rigid Tie® RTC2Z connectors

##### FASTENERS

(1) – **BOX** Simpson Strong-Tie® #9x1½" Strong-Drive® SD Connector screws

#### CUT FROM 2x4 x 8' LUMBER

(2) – 47" RAILS →  (1x)

(3) – 30" CORNER POSTS →  (1x)

(2) – 8" ENDRAILS & (1) 30" CORNER POST →  (1x)

Use 2x4 8 ft. preservative-treated lumber or non-treated wood with exterior grade stain or paint. Dimensions can be modified to fit your specific needs.

**\*CORROSION INFORMATION:** We recommend using our ZMAX® galvanized product for best results on exterior projects and those using preservative-treated wood. These products have a "Z" at the end of the model number (ex. RTC2Z). ZMAX® coated products provide additional corrosion resistance, which is advisable but not required, for non-structural projects like the one shown above. Visit [www.strongtie.com/info](http://www.strongtie.com/info) for critical information.

*The construction plan for this project is designed to be completed by people with basic carpentry skills in standard situations. If your situation is unique, talk with someone with detailed carpentry or construction experience before starting your project. Particular attention was paid to the steps and details in this plan, but they cannot be guaranteed to be error free. Simpson Strong-Tie shall not be responsible for any possible loss, damage or injury resulting directly or indirectly from the information contained here.*

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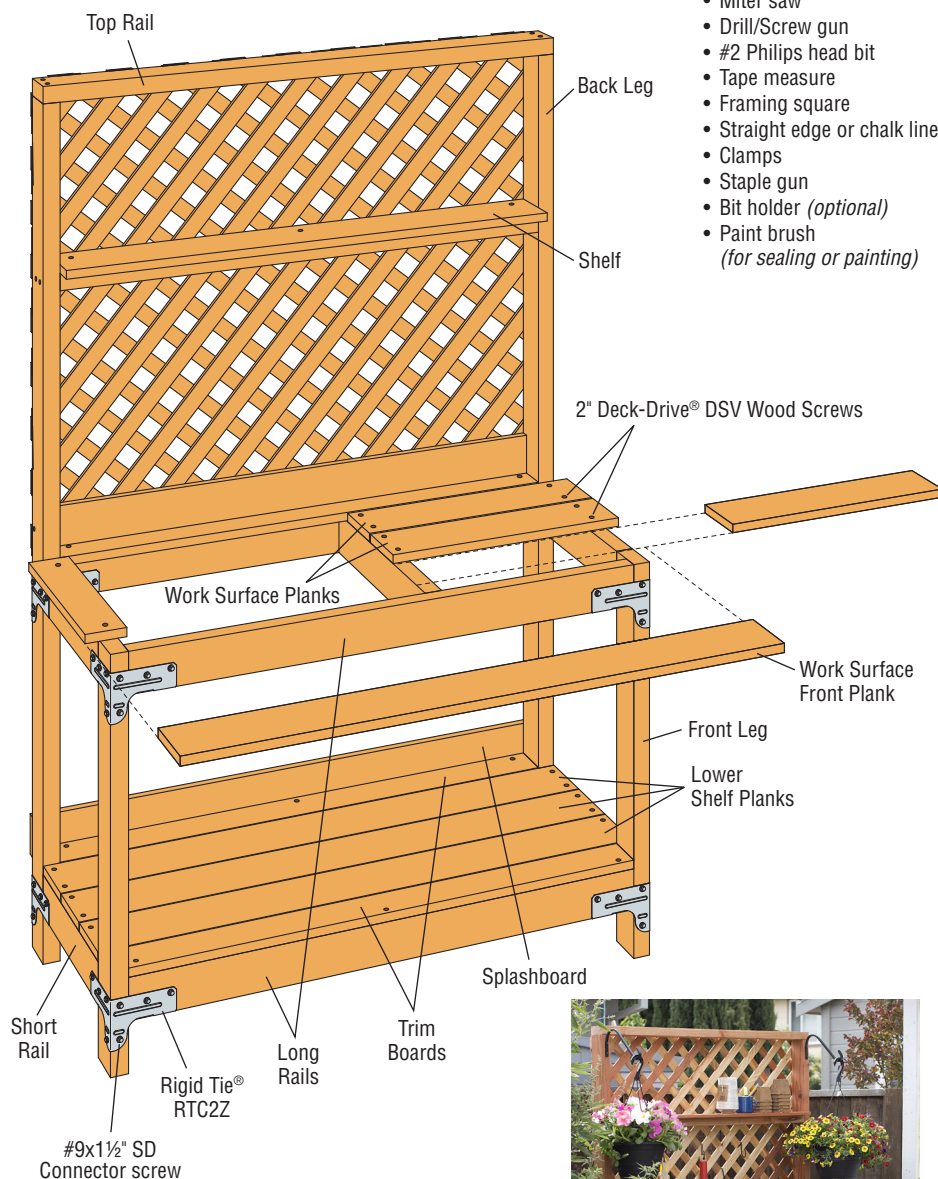
CREATE A ONE-STOP SPOT FOR GARDENING

# Outdoor Potting Bench

Building your own 4 ft. wide potting bench that includes a soil bin for potting or re-potting plants is fast and easy with 2x4 lumber and Simpson Strong-Tie® Rigid Tie® RTC2Z connectors. Create this sturdy potting bench with cedar, redwood or preservative-treated wood with a wood stain for a natural look, or use non-treated lumber and protect and personalize it with your favorite paint color.



Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



## TOOLS YOU NEED

- Saw
- Miter saw
- Drill/Screw gun
- #2 Philips head bit
- Tape measure
- Framing square
- Straight edge or chalk line
- Clamps
- Staple gun
- Bit holder (optional)
- Paint brush (for sealing or painting)

## INSTALLATION INSTRUCTIONS

### 1. MEASURE AND CUT LUMBER.

All of your lumber cuts are straight cuts, which make it easy to install the RTC2Z corner connectors.

### 2. INSTALL CONNECTORS ON EACH VERTICAL LEG.

Mark height, clamp RTC2Z connector to leg and attach with #9x1½" Strong-Drive® SD Connector screws.

### 3. CONNECT SHORT AND LONG RAILS ON EACH SIDE, TOP AND BOTTOM.

Use a clamp to help hold the wood in the seat of the connector.

### 4. INSTALL CENTER SUPPORT BOARDS.

On the bottom, measure 22" in from the inside left short rail and attach the center support board with a 2" Deck-Drive™ DSV Wood screw from the back. Toenail the front DSV screw into the inside of the front horizontal rail. On the top, measure 26" in from the inside of the left short rail and attach the support board the same as the bottom.

### 5. ATTACH TOP RAIL AND SHELF.

Attach the top rail to the end posts with 2½" bugle-head screws. Measure down 16" from the rail and attach shelf between vertical posts with 1½" screws.

### 6. INSTALL TRIM AND SPLASH BOARDS.

Start at the bottom and attach trim board to the front and back long rails between the legs with 2" screws. Then, attach the splash-board on the back of the legs. On the top, install the remaining trim board between the back legs.

### 7. INSTALL TOP AND BOTTOM PLANKS WITH DSV SCREWS.

Start at the bottom. Attach the three 48" planks to the short rails, leaving a ¼" gap between each plank. For the top work surface, attach the left 17½" plank first to the short rail and then attach the right-hand side planks, leaving a ¾" gap between each one. Next, attach the front work surface plank so that it's flush with the left plank. The soil bin will fit inside the top opening.

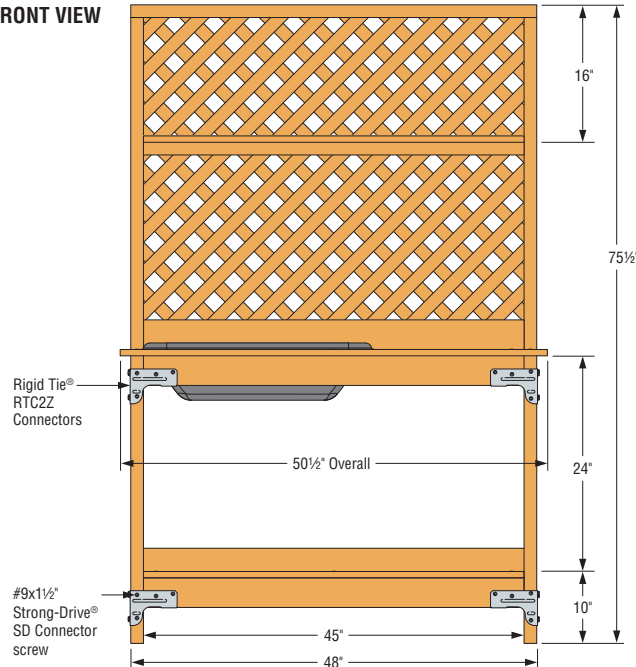
### 8. INSTALL LATTICE.

Use a clamp to hold the lattice in place on the back legs and attach with 2" screws. Attach a splashboard to the bottom of the lattice with a staple gun.

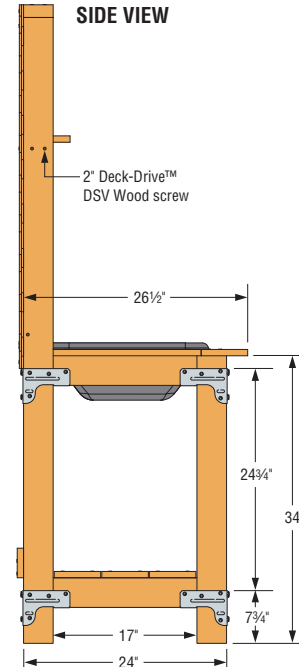


## Outdoor Potting Bench (2 ft. x 4 ft.)

FRONT VIEW



SIDE VIEW



### FOR THIS PROJECT YOU WILL NEED:

#### LUMBER\*

- (7) – pieces of 2x4 8 ft. lumber
- (3) – pieces of 1x4 8 ft. lumber
- (1) – piece of 1x6 8 ft. lumber
- (3) – piece of 1x6 6 ft. lumber
- (1) – 4 ft. x 8 ft. sheet of redwood lattice

#### CUT FROM 2x4 x 8' LUMBER

- (4) – 45" LONG RAILS → (2x)
- (2) – 34" FRONT LEGS → (2x)
- (1) – 21" CENTER SUPPORT (TOP) →
- (1) – 48" TOP RAIL → (2x)
- (1) – 45" TOP SHELF SUPPORT → (2x)
- (2) – 74" BACK LEGS → (2x)
- (4) – 17" SHORT RAILS → (2x)
- (1) – 21" CENTER SUPPORT (BOTTOM) →

#### CUT FROM 1x4 x 8' LUMBER

- (3) – 45" TRIM BOARDS → (2x)
- (1) – 45" WORK SURFACE SPLASHBOARD → (2x)
- (1) – 48" LOWER SHELF SPLASHBOARD → (2x)
- (1) – 17 1/2" WORK SURFACE PLANK (LEFT) →

#### CUT FROM 1x6 x 8' LUMBER

- (1) – 50 1/2" WORK SURFACE FRONT PLANK → (2x)
- (1) – 45" TOP SHELF → (2x)

#### CUT FROM 1x6 x 6' LUMBER

- (3) – 48" LOWER SHELF PLANKS → (3x)
- (3) – 21 1/2" WORK SURFACE PLANKS (RIGHT) →

#### CUT FROM 4'x8' SHEET

- (1) – 48" x 43" REDWOOD LATTICE →

### SIMPSON STRONG-TIE® CONNECTORS AND FASTENERS

- (8) – Rigid Tie® RTC2Z connectors
- (1) – 100-qty box Simpson Strong-Tie® #9x1 1/2" Strong-Drive® SD Connector screws for exterior use (Model No. SD9112R100)
- (1) – 1-lb. box Simpson Strong-Tie® #10x2" Deck-Drive™ DSV Wood screws for exterior use (Model No. DSVT212R1LB)
- (4) – 2 1/2" bugle-head screws (included in WBSK kit)

### OTHER

- Soil bin (27 1/2" x 19 3/4" x 6")
- Exterior-grade paint or stain (optional)

\* Use cedar, redwood, preservative-treated wood or non-treated wood with exterior-grade paint or stain.

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Give Your Chickens Space and Comfort

# Chicken Coop

Provide the space your chickens need to be happy, healthy, comfortable and productive. This customizable coop, built with Simpson Strong-Tie® connectors and fasteners, provides roomy and secure housing for three large birds or numerous smaller ones.

**SIMPSON**

**Strong-Tie**

®



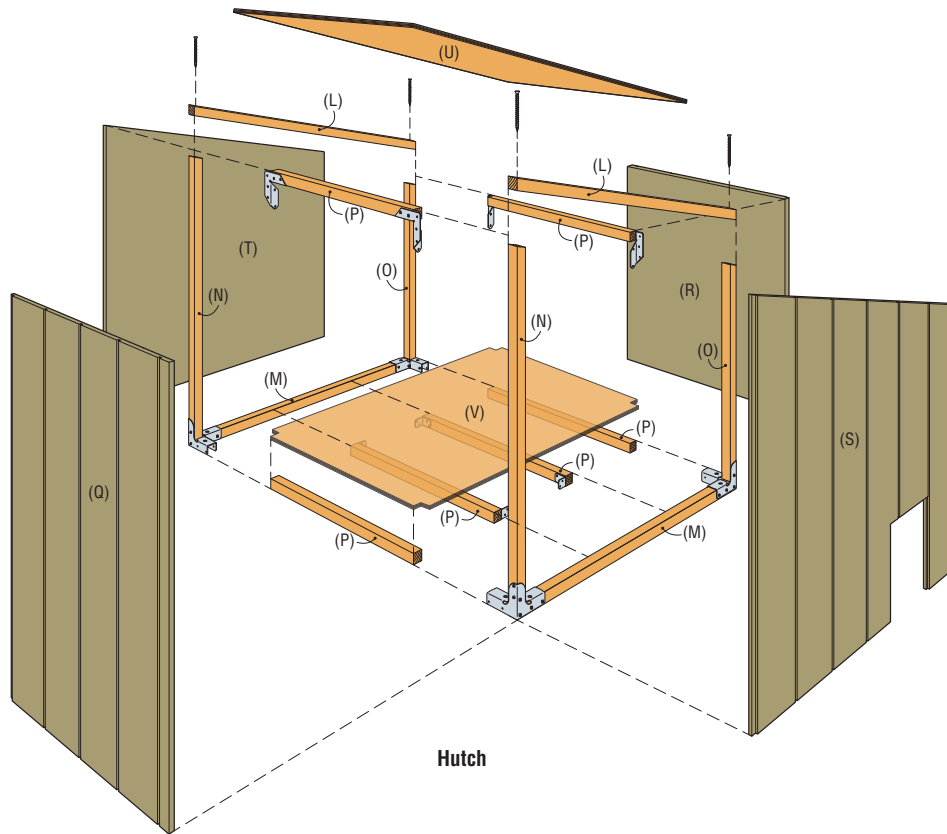
Check out our installation and building tip videos at [diydoneright.com](http://diydoneright.com).



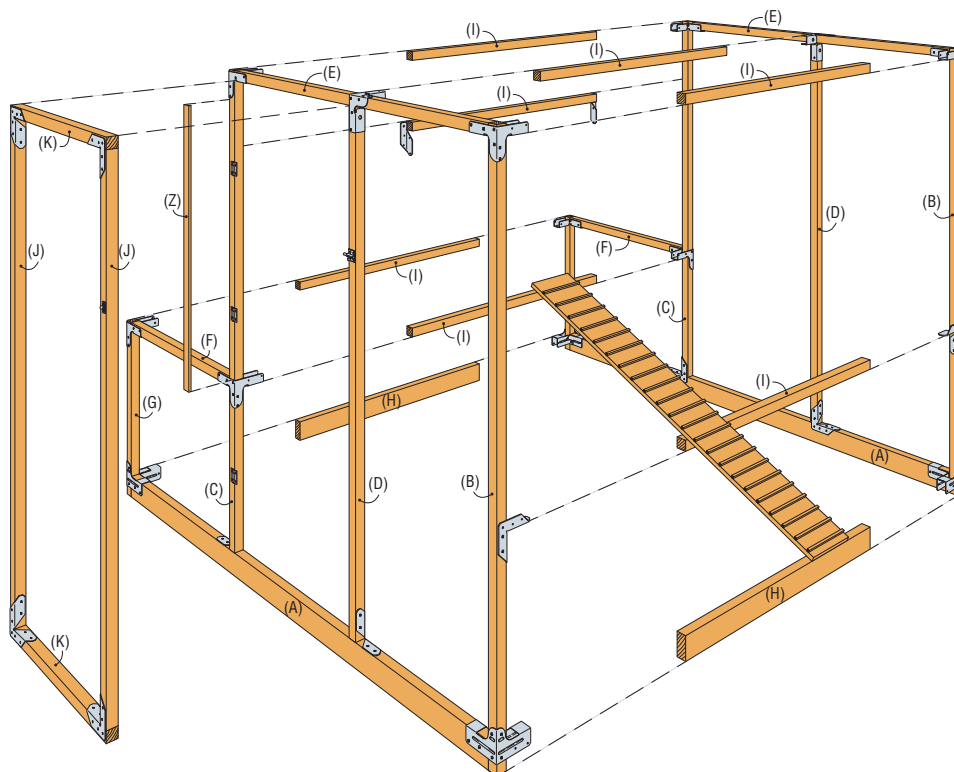
Our guidelines provide a starting point for a basic, functional design. Here are some tips that will help ensure installation goes smoothly and safely.

- Assembly requires at least two people.
- Customization of chicken coop dimensions and location of openings will affect the cut list and material list; plan ahead to ensure you have your materials before construction.
- Use cordless tools, such as impact drivers and gas-powered nail guns, to speed up the building process.
- Verify lumber cuts with field conditions to account for uneven ground, inconsistencies in the wood and other unanticipated variables.
- Take a cross tape measurement of the posts before securing to help keep them square. Then temporarily brace vertical posts with scrap lumber and braces while you plumb the posts vertically.
- Use the suggested clamps. By clamping, you free up hands for making the necessary adjustments.
- Use screws rather than nails for bracing so you can make adjustments. Nails are appropriate for the siding and roofing.
- Consider the desired height of the chicken coop when selecting your ramp. Having an extra ramp available is convenient when the ramp in use requires cleaning.

**What You Will Need**

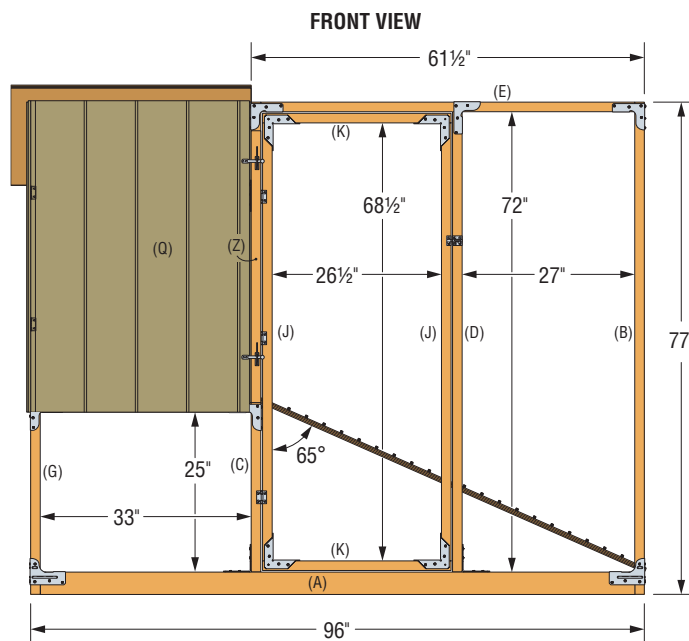
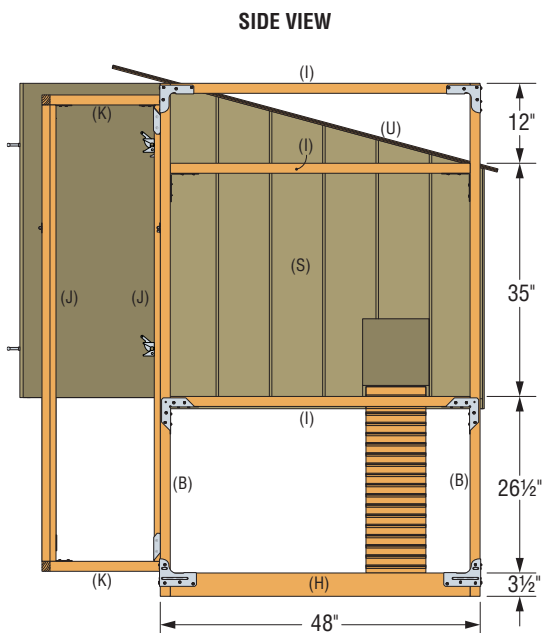


**Hutch**



**Coop Frame**

## What You Will Need



### FOR THIS PROJECT YOU WILL NEED:

- Circular saw (optional: chop saw)
- Power drill with Phillips bit and Torx bit
- Pencil
- Tape measure
- Speed square
- Staple gun

### SIMPSON STRONG-TIE® CONNECTORS AND FASTENERS

- (14) Rigid Tie® RTC22 connectors
- (16) Rigid Tie RTA2Z connectors
- (4) Rigid Tie RTC2Z connectors
- (4) A21 angle connectors
- (4) Deck-Drive™ DSV WOOD Screws (2 1/2", DSVT212)
- (4) boxes Simpson Strong-Tie® Wafer-Head Screws (#8 x 1 1/4", SD8x1.25) (for Rigid Tie connectors)
- (1) box Deck-Drive™ DSV WOOD Screws (1 5/8", DSVT158)

### LUMBER

- (21) pieces 2x2 x 8'
- (3) pieces 2x4 x 8'
- (1) piece 2x1 x 8'
- (1) piece 1x10 x 8'
- (8) pieces 3/8" x 3/8" x 3'
- (1) piece 4" x 8" x 1/2" plywood
- (2) pieces 4" x 8" x 1/2" plywood siding panel

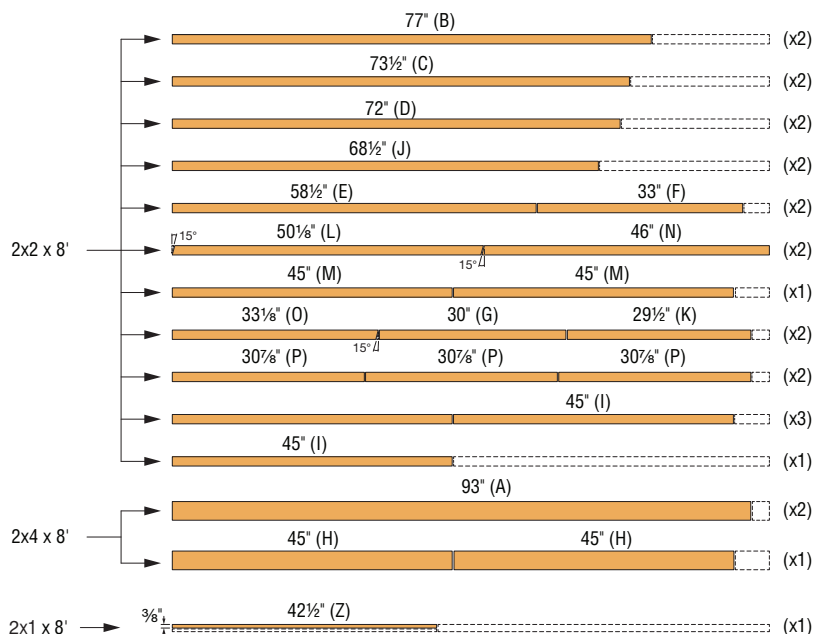
### OTHER MATERIALS

- (5) Hinges
- (3) Slide locks

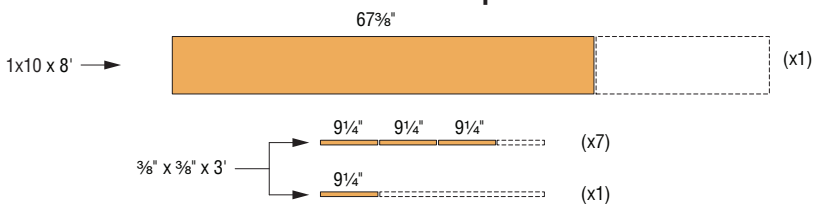
### NOTES:

1. It is recommended that water-resistant sheathing or a water barrier be used.
2. It is recommended that water-resistant lumber such as redwood or cedar is used. If you use pine, use a water-resistant finish on the wood to extend the life of the chicken coop.

### Coop Frame and Hutch Frame



### Ramp







# Give Your Chickens Space and Comfort



## What You Will Need

### INSTALLATION INSTRUCTIONS

#### • CUT LUMBER TO SIZE

Since all of your cuts are straight cuts, Simpson Strong-Tie® connectors simplify building with wood. (See page 3 for cut details.)

#### • ASSEMBLE COOP

Assemble coop sidewall using pieces (A) through (G), RTC22, RTA2Z and RTC2Z connectors as shown. Repeat for other coop sidewall. Join coop walls using two cross pieces (H), seven cross pieces (I) and RTA2Z connectors.

#### • ASSEMBLE COOP DOOR

Assemble coop door by attaching pieces (J) and (K) to four RTA2Z connectors as shown.

#### • ASSEMBLE HUTCH FRAME

Assemble hutch sidewall using pieces L, M, N, O, (4) DSV212 screws and RTC2Z connectors. Repeat for second hutch sidewall. Join sidewalls using six cross pieces (P) and A21.

#### • ATTACH HUTCH SHEATHING

Cut hutch floor (V) and roof (U) from 1/2" plywood. Cut hutch sloped sides (T, S) from siding. Cut hutch square sides (Q, R) from siding. Attach hutch floor (V) to hutch frame using DSVT158 screws. Using the same screws, attach sloped sides (T, S) to hutch frame. Attach square side (Q) using hinges to hutch frame. Attach square sides (R) to hutch frame. Attach roof (U) to hutch frame. Add any preferred roofing material (corrugated material, shingles, cedar shake, etc.) at this point, if desired.

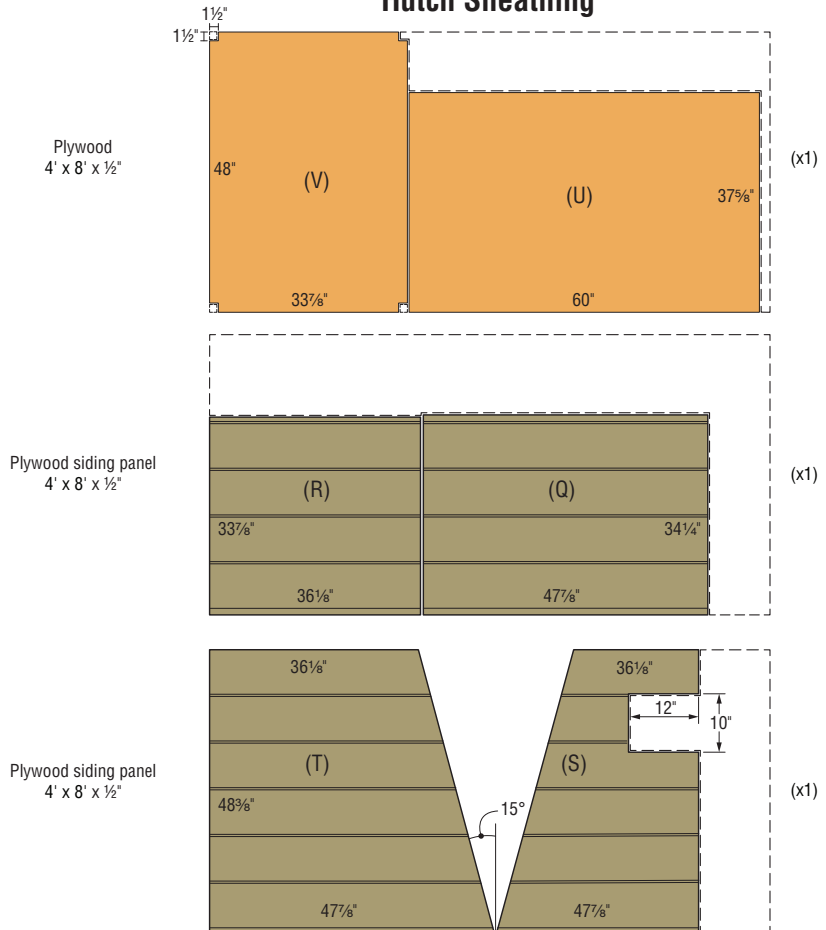
#### • ADD CHICKEN WIRE

Roll chicken wire out over doorframe and staple around entire perimeter. Cut chicken wire to fit. Roll chicken wire over coop frame using the same process, being careful not to cover the door bay and spots where the hutch will sit.

#### • FINAL ASSEMBLY

With a helper, set the completed hutch on the coop frame. Open hutch side door (Q) and, from the inside, use DSVT158 screws to attach door to coop frame. Attach completed door frame to door bay on coop frame using hinges. Attach preferred hardware to both hutch side door and coop door for fastening and locking. Add venting to hutch depending on your needs and local climate.

### Hutch Sheathing



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