

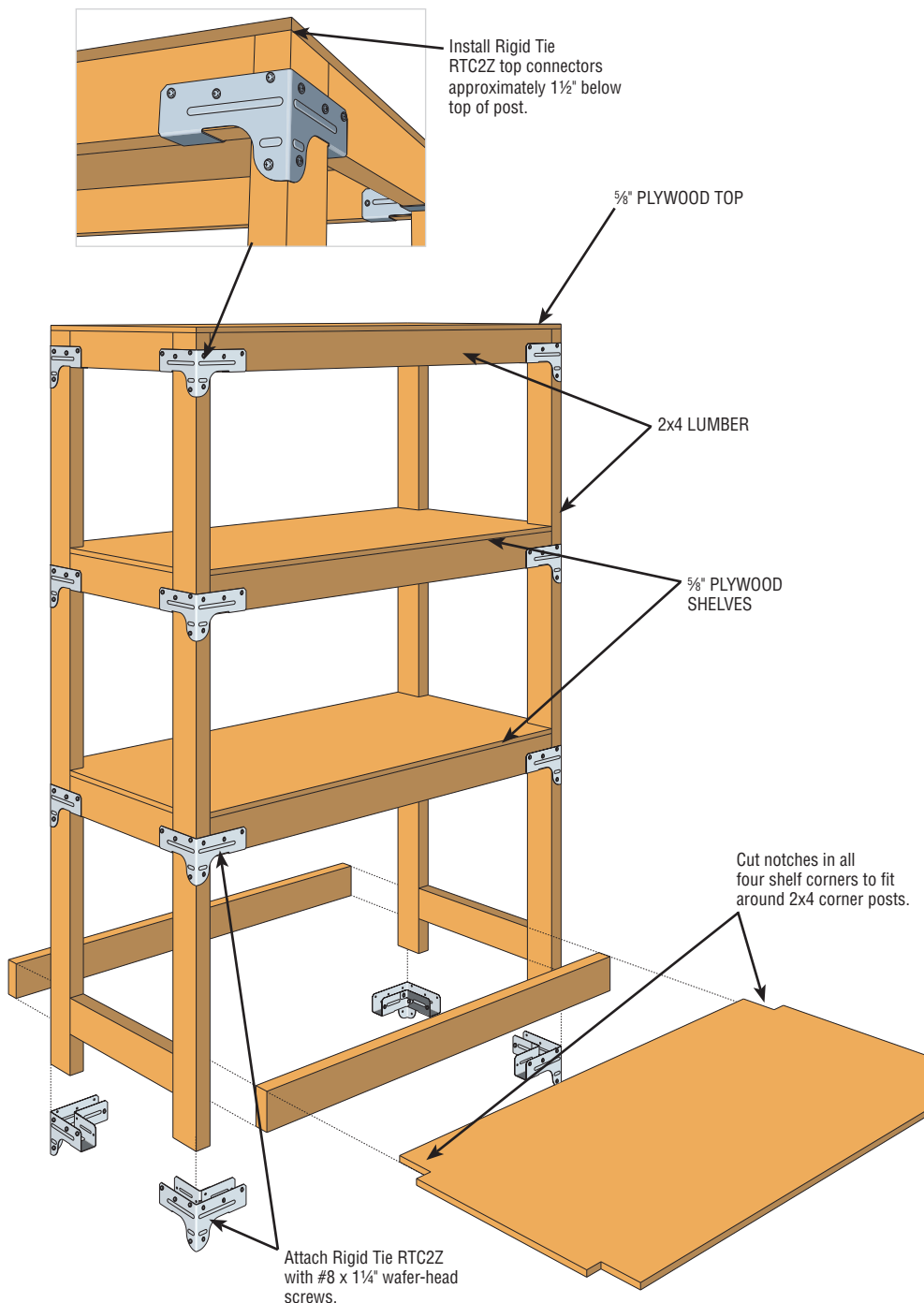


Heavy-Duty Shelving Unit

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.



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.

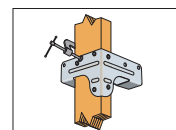
RIGID TIE RTC2Z CONNECTOR INSTALLATION INSTRUCTIONS

1. CUT LUMBER AND PLYWOOD TO SIZE

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

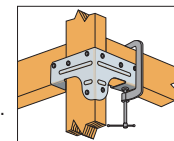
2. INSTALL CONNECTORS ON VERTICAL POSTS

Mark height, clamp connector to post and attach with Simpson Strong-Tie #8 x 1¼" wafer-head screws. No predrilling is needed.



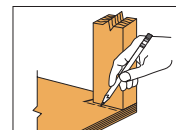
3. CONNECT HORIZONTAL RAILS ON EACH SIDE

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).

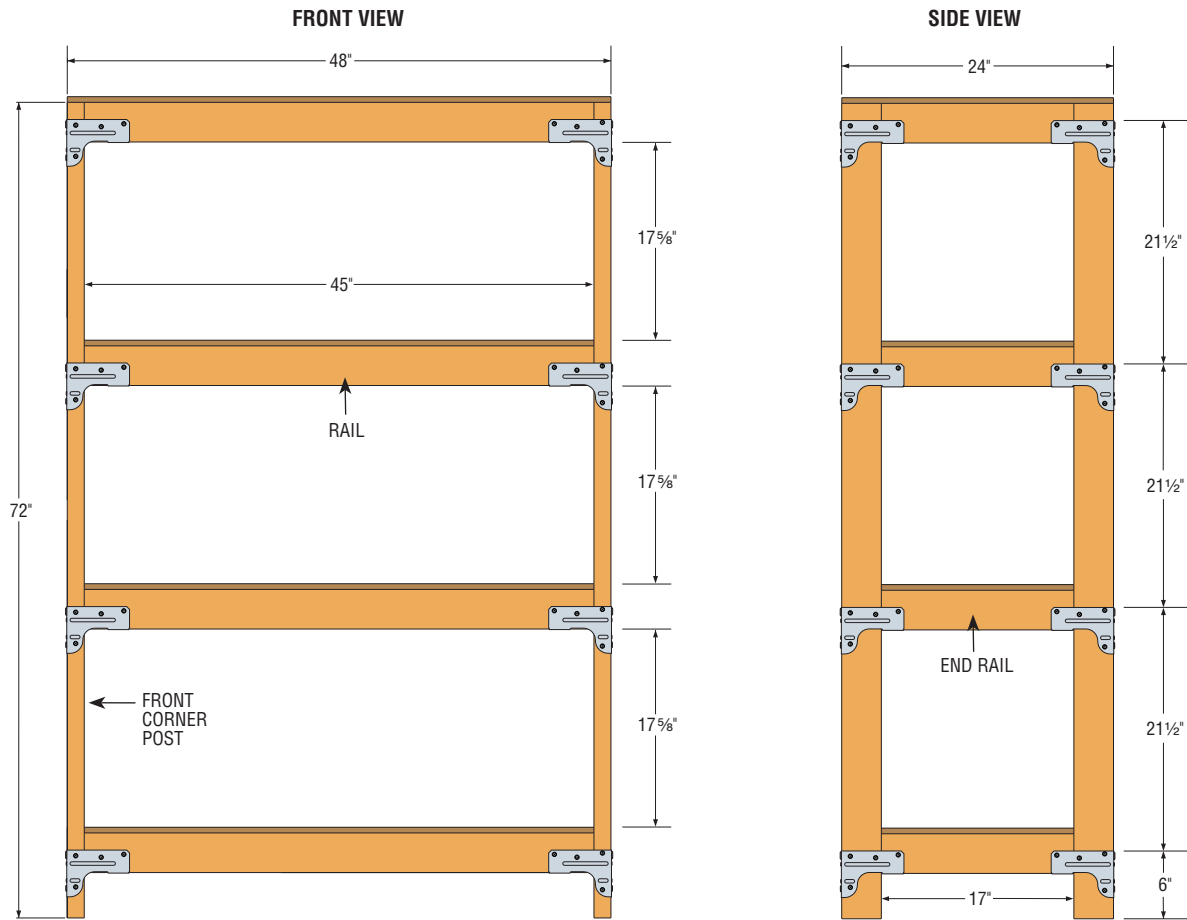




MATERIALS AND CUTTING DIAGRAM



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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