highwood® SPA CABINETS
NATURE'S CLOSEST RIVAL

SPA RESTORATION KIT

INSTALLATION INSTRUCTIONS

Please read through this instruction sheet once before starting your project.

Tools:

- Minimum requirement: hammer, saw & drill, staple gun
- Staples/screws/brad nails – length depends on your specific spa model (see steps)
- Optional (but recommended): finish air nail gun, jigsaw or circular saw

Time required for project:

- 4-6 hours

Contents of your *highwood*® spa restoration kit:

- 1-1/2" wide tongue & groove (T&G) boards
- 3" wide T&G boards
- 1-1/2" x 1/4" trim strips

General Information:

The ***highwood***® material in your kit is the world's most advanced synthetic wood – providing you with a "new spa" look at a fraction of a new spa cost. This material can be used indoors or outdoors, is very durable and color-fast and will look good year after year without the need for maintenance. This kit can be assembled by anyone with a passion for D.I.Y projects and with access to simple woodworking tools. Our material cuts, drills, and nails just like regular wood.

In this kit, you will find all of the pieces required to retrofit the exterior of a spa (max skirt ht of 36") with corners ranging from a true 90 degree square corner though a 16" radius corner.

There are 2 different width T&G boards in your kit. One is 1-1/2" wide and the other is 3" wide. The 3" width board will be used to make up the straight sides of the spa and the 1-1/2" boards will be used to make the corners. There are also 8 – 1-1/2"x ¼" strips that will be used as trim to cover the transition from the straight panels to the corners.

Step 1 – Removing your old panels

Start by carefully removing all of the straight "side" panels from the frame.

You should measure each panel accurately, and carefully record the locations of the mounting screw holes. Also, if applicable, carefully note the size and locations of any accessories that mount on (or through) the cabinet side panels. This includes accessories such as speakers, lighting, stereos, etc. Finally, document the location, size and setbacks of the "backing material" on these side panels. Typically panels are assembled by the manufacturer by stapling and/or gluing a wood or plastic backing material to the cabinet boards.

Suggestion: It is a good idea to make a simple sketch of each panel and designate its location on the spa: front, back, left, right. A well documented sketch with accurate dimensions will be helpful during assembly. In addition to the Sketch, take a digital photo of each panel front and back – so that you have a visual record (see image 1)

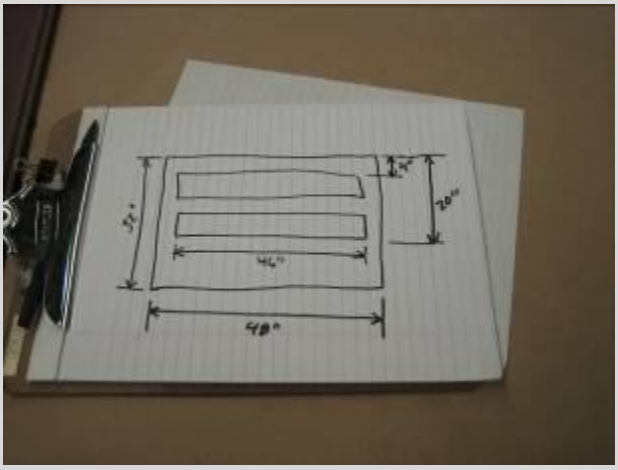


Image 1: Sketch of side panel, showing dimensions with backboard location

After you have documented the old panels, it is time to disassemble them. Separate the old boards from the backing material. It is best to keep the backing material to reuse with your new ***highwood***® boards (see image 2).

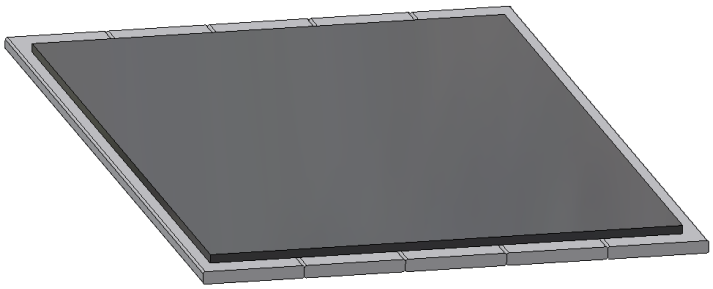


Image 2 – Old boards with backing material

If the cabinet boards are only stapled to the backing, then use a claw hammer or small pry bar to remove the boards. However, some spa manufacturers glue and staple the backer material to the boards. Depending on the quality of this glue, you may not easily be able to separate the backer material from the cabinet boards. If this is the case, you can measure the size and thickness of the backer and have your local lumberyard cut new backers for you. Simply try to replace with the same thickness backing material – which is commonly made from very inexpensive wood such as plywood, OSB (oriented strand board) or pine strips (1x2, 1x3 or 1x4s).

Suggestion: If you want to save the work of documenting the panels and disassembly, simply measure and cut new backer material to match the old. You can use the old panel as an exact template to work from when building the new panels.

Step 2 - Building new panels

Find a large smooth flat surface to work on. Make sure the surface is clean and won't scratch the new boards.

Suggestion: A flat 4x8 sheet of ¾" plywood makes a great work surface!

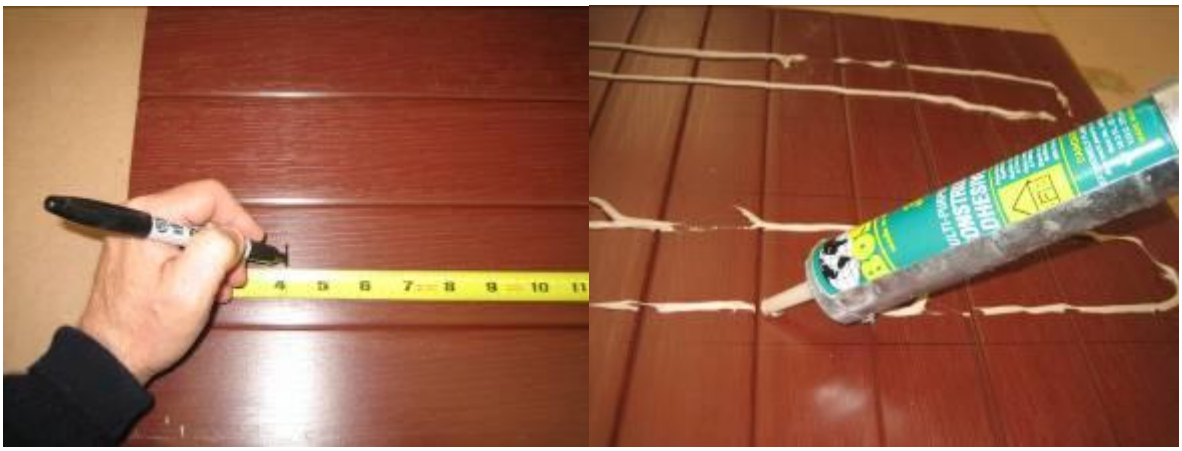
Cut the new 3" T&G to length (image 3), matching the exact height measurement of the old panel and lay out enough 3" T&G to build a panel slightly wider than your old panel. (You will trim any extra panel width later.)

Image 3: Trimming the 3" T&G to the correct height

Lay out all the boards and make sure that the tongue and grooves are pressed tightly together. Check also that your new panel is square and the bottom edge of the boards are in a straight line (see image 4). If you don't have a carpenter's square, a good way to check that your panel is square is to take a diagonal measurement from the corners…if the measurements are EXACTLY the same, your panel is square.

Image 4: Checking the T&G is square and tightly assembled

Next, place the backer material in its proper location. Check to make sure you have the proper set backs from your drawings/template. Mark the backer location and apply several beads of construction adhesive onto the boards where the backer will go. Then, place the backer into position (see images 5 thru 8)



Images 5&6: Mark backer location & apply adhesive

Images 7&8: Beads of adhesive in backer location & backing boards pressed in place

Suggestion: A pneumatic stapler/nailer will make quick work of these next steps. If you don't have one - you can rent one at a local hardwardhardware/improvement store. Whether done by hand or by a pneumatic fastener, you will need to find the correct length of staple/brads. The correct length is: Backer thickness + 0.250". So if your backer material is 0.250" thick then your fastener should be 0.75500" long. (0.25"+0.250"= 0.75500")

IMPORTANT: Before you apply any staples/brads, test them on scrap pieces of the cabinet board and backer material (from the off-cuts). If the air pressure is set too high on your staple gun, you can easily push the fastener too deep into the backing material and it will protrude from the face of the cabinet boards.

Staple/nail the backer material onto your panel (image 9) ensuring that each T&G board is stapled to the backer. Make sure you have several staple/nails into each cabinet board.

Image 9: Staple the backing board to the T&G pieces

Now trim the width of the panel to the same width as your old panel. Pay special attention to maintain any setbacks as on the old panel. You may use a jig saw or circular saw to trim the panel…clamp a straight edge in place to maintain an accurate straight cut (see image 10).

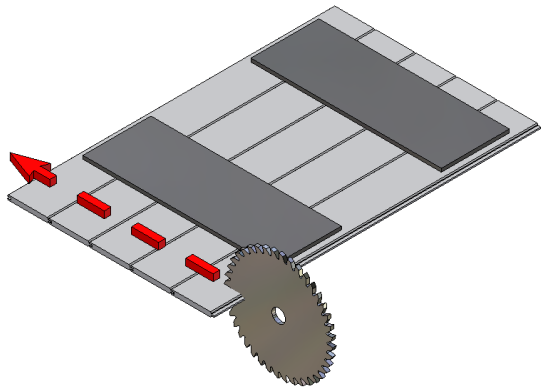


Image 10: Trimming excess material to get correct panel width

Repeat this process for all 4 side panels – all 4 finished panels should look something like below (images 11& 12 - front & back of panel shown):

Image 11&12: Assembled panel (front & back)

Step 3: Corners

Moving back to your spa, measure and document the height of your current corner boards. Place a mark on the frame (top and bottom) with a pencil, to show where the corner starts and stops (a crosshair on each corner effectively shows both the height and width of the corner pieces – as shown in image 13). Do this on all 4 corners.

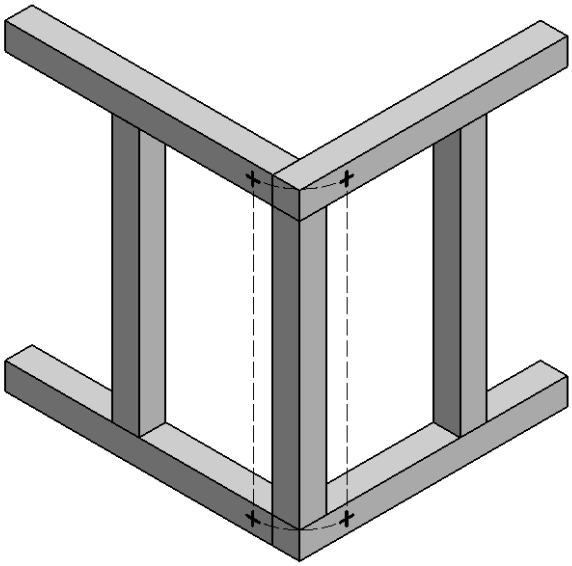


Image 13: Marking corner locations on frame of the spa

Carefully remove the corner boards, taking care not to damage the frame of the spa. If necessary, cut the new 1-1/2" T&G corner boards to the proper length.

By placing the tongue into the groove of your new 1-1/2" corner pieces, assemble enough corner boards together to cover the corner of the spa. Note that only one side of the 1-1/2" T&G is embossed. Be sure the embossed side is facing out. These 1-1/2" T&G pieces should be nailed directly onto the wood frame by nailing through the tongue as per image 14 below. Nail on an angle so that the groove of the next board can smoothly latch onto the tongue of this board. Please note the use of glue on the frame to help secure the corner trim pieces.

Image 14: Carefully staple into the inside edge of the tongue

Step 4: Final Assembly and Trim

Fasten your newly assembled side panels onto each side of the spa, attaching them to the frame using the same fasteners/fastener locations that the old panels used. (Check back to confirm these on your drawings/photos/template (see images 15 thru 18).

Image 15&16: Pre-drilling the panel & screwing it into position

Image 17&18: Panel is attached (close up & full view)

Once the side panels are in position, glue and finish nail the trim strips onto each end of the panel (see images 19 & 20) . Make sure that the trim strips are plumb and adequately cover the gap between the side panel and the corner assembly. Repeat this on each side of the spa.


Images 19&20: Staple trim into position (covering gap between side panels & corner section). Note: trim strips are shown in a different color to highlight their location.

Finally, stand back and admire your work – and your beautiful new ***highwood***® cabinetry!

Warranty Registration

Your ***highwood***® spa cabinet is proudly made in the USA and comes with a 25-year limited manufacturer's warranty for residential applications and a 15-year limited manufacturer's warranty for commercial applications.

Thank you for choosing a Highwood USA product.