Greene & Greene Style Adirondack Chair

There's nothing wrong with the simple lines and straightforward construction of the usual Adirondack chair. But, if you're in the mood for higher style or even greater comfort, this Greene & Greene design could be a perfect fit. Build it from mahogany or cypress for longer life.

By Dana and Michael Van Pelt

The design of this chair's back slats was inspired by the garden gate of the Greene brothers-designed Thorsen house.

As admirers of Charles and Henry Greene's designs in their architectural and interior furnishing, we decided to search the exterior of the historic homes' lawns and gardens for a hint of their well-known style in lawn furnishings — with no luck. We found built-in benches and lawns adorned with traditional Adirondack chairs and wicker furniture, but that was about as close as we got.

When you think about it, a Greene and Greene style Adirondack chair sounds almost like an oxymoron (think "sanitary sewer" or "organized political party"). But in fact, when we combined the two styles, we ended up with a sophisticated design that promised to deliver plenty of summertime comfort.

Desiring a lawn and terrace furniture style to complete a Greene and Greene home, we decided to add the California spirit of the brothers' design sense to the sensible "Yankee" Adirondack chair. As luck would have it, the beautiful garden gate at the Greene brothers' Thorsen house gave us the

Thorsen House Inspiration

The pattern of the Thorsen gate is a clever interplay of positive and negative space, curves and straight lines. We successfully transferred those forms to this chair's back slats. The two side panels of the back mirror one another as they follow the lines of the center piece, curving with the organic lines so in keeping with the Greene brothers' vision. The center piece captures two routed openings, which provide the negative spaces.

Where straight hard lines would be found in a traditional Adirondack chair, such as the arms, legs and stretchers, we employed slight curves to better reflect the Greene and Greene philosophy. Many Adirondack chairs' arm supports and legs stand flat and perpendicular to the seat and lounging leg. We modified this approach by rotating the front leg 90° to the lounging leg, giving the arm extra strength as it captures the leg in its open-ended dado.

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Cloud lifts, faux ebony plugs and a clever interplay of positive and negative space take the usual Adirondack design to new heights in this Greene & Greene inspired chair.

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The Adirondack Chair: An Enduring American Archetype

By Rob Johnstone

"The survival of this original Westport chair is literally a case of "one man's trash is another man's treasure!" I was driving through a small Adirondack town on their annual "big trash" day and spied a chair poking out of a refuse pile. With the owner's blessing, I brought it home, feeling pretty good about myself. If it were beyond repair, I at least had some nice campfire wood. Imagine my surprise, after removing about five gallons of paint chips and paint remover crud, to find an original "Henry Bunnell, July 18, 1905 Westport, NY" stamp on the arm. The chair was certainly not pristine, but it painted up beautifully and is now one of our prized possessions. It sits on our deck in Port Kent, overlooking Lake Champlain, only 30 miles from its origin of manufacture.

— Jim DeGolyer,
Peru, New York

(Photos provided by Bonnie and Jim DeGolyer)

The new century was blooming warm and beautiful on the shores of Lake Champlain in the summer of 1902. At the family vacation house (dubbed Stony Sides), Thomas Lee was confronting a problem. Lee thought he, and the nearly 22 relatives vacationing with him in New York's Adirondack Mountains, might benefit from some comfortable outdoor seating. So, grabbing a hammer, nails and some wide pine boards, Lee walked out to the front lawn and began making a series of chairs: prototypes with slanting backs and wide armrests, with each and every new attempt evaluated by his oh-so-many relatives.

Their unvarnished feedback led to more and more efforts at outdoor leisure seating perfection. The records are unclear as to the exact number of attempts, but with 22 different opinions, not to mention derrieres, to please, one can only guess there were many. Likewise, you have to wonder whether the final version was the result of universal acceptance or builder's exhaustion.

In any case, Thomas built several chairs and they were well received by family and friends. They were all constructed with a single wide board as the back — undoubtedly from old-growth white pine lumber that was plentiful and common in the area. The angles and armrests of those original chairs would be entirely familiar to us today: painted brown or green, they became part of the landscape. And that easily could have been the end of the story. Thomas Lee had no broader ambitions for his invention than the confines of Stony Sides' lawns — a gracious expanse, but a limited

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scope. Then, as they say, the plot thickened.

In the tiny nearby town of Westport, an impoverished friend of Thomas Lee's by the name of Harry Bunnell, a carpenter by trade, desperately needed to generate some income during the long New York winter. Thomas, proud of his summer invention, kindly gave the design to Harry, as something he might build over the winter and sell to vacationers in the summer. Harry immediately saw the potential of the chair and started production. He also, apparently without Thomas's permission, submitted and received a patent on the "Westport Chair" around 1905. "The object of this invention," wrote Bunnell, "is a chair of the bungalow type adapted for use on porches, lawns and at camps and also adapted to be converted into an invalid's chair."

Harry Bunnell continued to build the Westport Chair, and variations on its theme, for the next 20 years. Their popularity, and the success of Thomas Lee's design, was simply remarkable.

The classic Adirondack chair profile is unmistakable in this 1905 "Westy."

The stamp, once again obscured by a coat of paint, reads, "Henry Bunnell, July 18, 1905 Westport NY."

As the design's popularity waxed, the name Adirondack Chair became synonymous with the Westport Chair. As the chair migrated into Canada, it gained the sobriquet of the Muskokas Chair, most significantly in the Big Three Lakes region of Ontario. At the turn of the last century, an original Westport Chair would have sold for around $4 (perhaps less). Today, that same chair, in good condition, might command as much as $1,250.

The seat slats are spaced evenly and secured into place with screw fasteners and plugged to hide the screws. Rather than design a flat seat, we added a gentle contour to make the reclined position more comfortable.

Subtle Design Details

The horizontal stretchers and supports reflect elements of the Asian-inspired "cloud lift," a slight elevation in the lines, a design often found in the Greenes' masterworks.

To further evoke the Greene and Greene essence, we wanted to mimic the ebony accents that are so often seen in their furniture pieces. We used ebony epoxy to form the stylish detail "plugs" in the back slats and arm rests — confident that the epoxy would tolerate the exterior use, which brings with it adverse weather and the beating of the sun.

We decided to use mahogany hardwood (a full 1" thick), which is typical of the wood used by the Greene brothers in their furniture construction. As this is an outdoor project, you could choose other material as well. Lyptus®, a new hybrid lumber on the market, would work well, as would the old standby teak — just be sure that it's plantation-grown if you go that route. We would recommend staying away from cedar or redwood, given that both of these species are extremely soft, but a nice softwood alternative would be cyprus. If you wish to preserve the original wood color, be sure to topcoat with an exterior wood finish that contains UV inhibitors.

All in all, this chair is extraordinarily solid and inviting to sit in. It should age as elegantly as it looks and provide you with many years of relaxed seating. Enjoy building it!

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Create templates of the shaped parts from the gridded drawings on pages 46 to 49. Use the templates to transfer the shapes to each piece as needed.

Shape the parts using a band saw with a 1/4" blade. Some of the cloud lifts and curves require tight corners to be cut.

Step-by-Step Instructions:

All of the pieces listed in the *Material List*, page 47, are noted at the proper dimensions to use with the gridded *Drawings* provided. Enlarge the drawings to full-size and make hardboard or plywood templates of the pieces for best results. Transfer the shapes to your stock by tracing around your templates. (And be sure you save the templates to make additional chairs.)

Beginning the Foundation

1. Make the arms (pieces 1). Trace the arm pattern onto the stock, and then lay out the stopped dado on its lower face. Before you shape the piece on the band saw, mill the stopped dado, using a router and a 3/4" straight bit. Use a clamped-on straightedge to guide your cut.
2. Mill the back arm support and the front legs (pieces 2 and 3). Note that the arm support has one 30˚ edge. After transferring their shapes to the wood, cut out their forms (along with the arms from Step 1) on the band saw. Sand the edges smooth with a spindle sander. (A drum sander chucked into your drill press would work as well.)
3. Cut out the lounging legs (pieces 4). The notch that fits into the front leg should be part of the template. Lay out the three router-made (3/4"-wide) openings on the legs. The two long parallel cuts are decorative. The short cut is actually a mortise to accept the under brace (piece 5). A good way to rout these openings is to use a slotted template that surrounds a rub collar in the router.
4. Next, machine the under brace, forming the tenon with a dado head installed in your table saw. Use a miter gauge and a registration block clamped to your fence. Carefully round the tenons to match the router-made through mortises with a sharp chisel, testing the fit as you go.
5. Break the edges of the legs and back support with sandpaper. Round over the top and bottom edges of the arms with a 1/4" roundover bit.
6. Assemble these pieces using Titebond III® glue and screws. Counterbore the screws that are exposed. Glue plugs into the counterbored holes with the exception of those on the arms. Clamp a support to piece 2 to hold it in the correct position until the back slats are added.
7. Make the rear and front cross slats (pieces 6 and 7). Use your pattern to trace the front cross slat to shape, and cut it out. Mark the rear cross slat to shape (piece 6). It has a 20˚ front edge, so bevel-rip that on the table

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To remove the saw marks, and even to help shape some of the curves, a spindle sander is a very handy tool on this job.

Use a trim router equipped with a 1/4" roundover bearing-guided bit to soften the chair's organic shapes.

saw, then cut the slat to shape. Sand both slats smooth.

8. Attach the front cross slat with screws in counterbored holes. Plug the counterbored holes.
9. Locate the position of the rear cross slat by clamping two straight guide boards to the front edge of the back support (piece 2). The boards should be long enough to rest on the under brace. Place the back cross brace in its approximate position on top of the lounging legs and slide it forward until it touches the guide boards. With the arms square to the front legs, and the two angled faces of the back support and the back cross slat flat to the guide boards, you have found the proper location for piece 6. Later in the assembly, the back slats will occupy the space where the guide boards are during this step.
10. Attach the back cross slat with screws in counterbored holes, and plug the counterbores.

Making the Remaining Slats

11. Make all seven seat slats (pieces 8). Attach all but the one closest to the back cross slat. Set that piece aside for now. Secure the rest with screws driven into counterbored holes, and plug the screwheads.
12. While the back looks as if it is made from three pieces of stock, it is actually assembled from five separate pieces (pieces 9 to 11). Cut and shape them from templates as you have with earlier pieces.
13. Glue the narrow and the center back slats (pieces 10 and 11) together, using Titebond III glue.
14. Chuck a 1/4" roundover bit in your router to round over the appropriate edges of the back slats.
15. Test-fit the back slats. (They should stand on top of the under brace, just as your guides did earlier.) Make any necessary adjustments.
16. Make the back top brace (piece 12).
17. Attach the back slats with screws in counterbored holes. Note: the screws driven through the front face of the back slats should be drilled in the decorative pattern indicated in the *Drawings*. Plug the three counterbored holes on the face of the back top brace (piece 12).
18. Now attach the final seat slat as you did the others. It should touch the back slats.

Final Steps

19. Using a sharp chisel, chop shallow square mortises at each of the decoratively drilled screw holes and the exposed screw holes on the arms.
20. Mix black (ebony) two-part epoxy and fill the mortises you just formed. Allow the epoxy to cure.
21. Sand up though all the grits, taking your time. Apply several coats of teak or other exterior oil finish.

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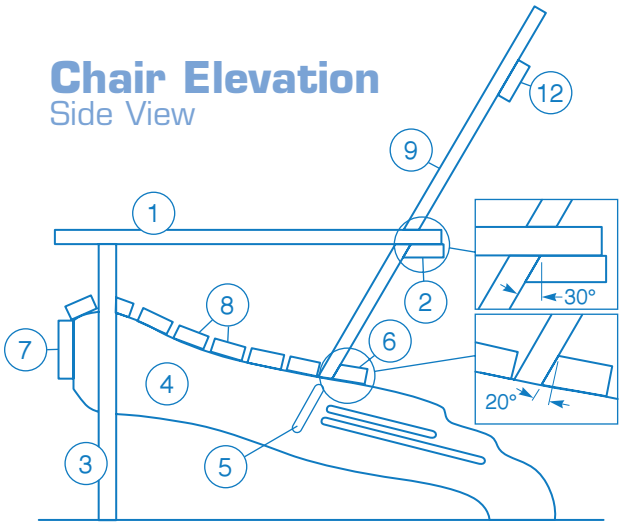
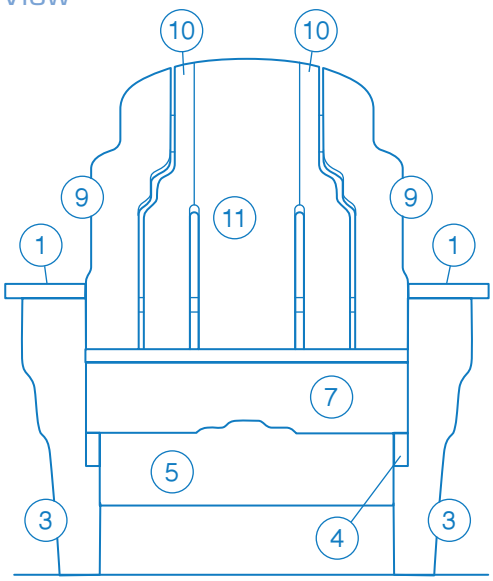
Note: Each square = one inch on all scale drawings

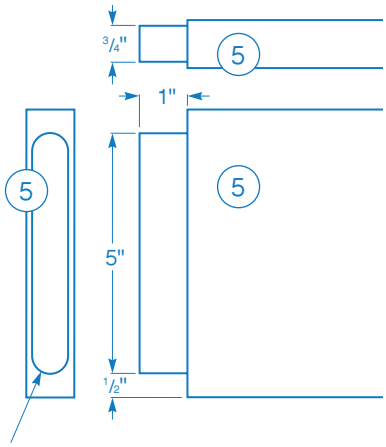
Chair Elevation
Side View



Chair Elevation
Front View

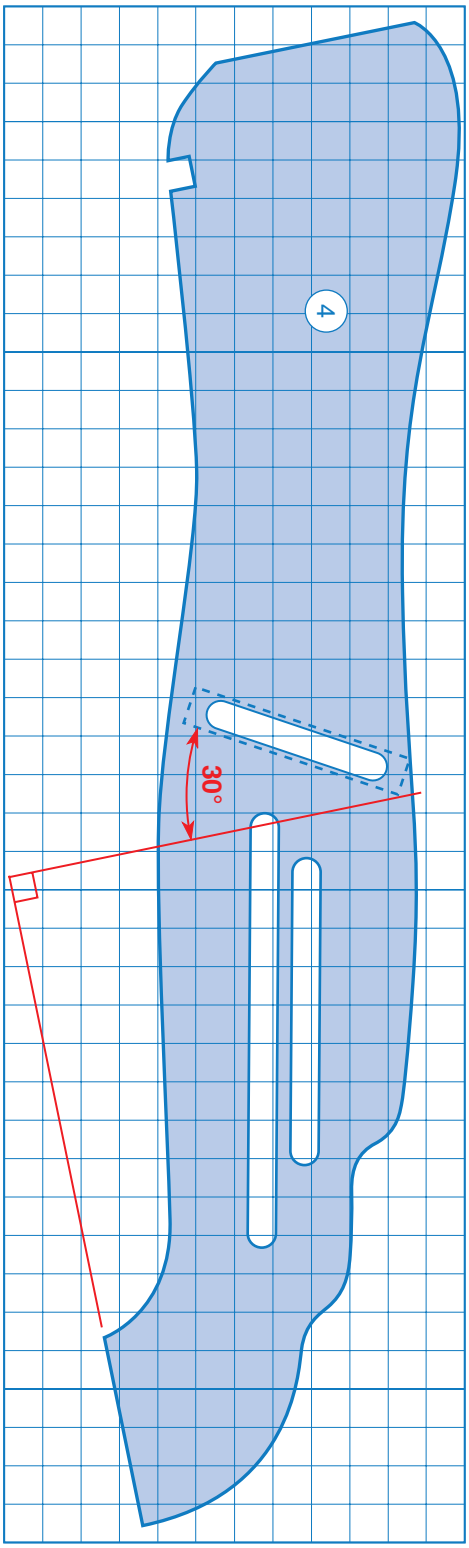


Under Brace Tenon
Top, Front and End Views



Roundover tenon to match mortise

Grid Drawing: Side Lounging Legs



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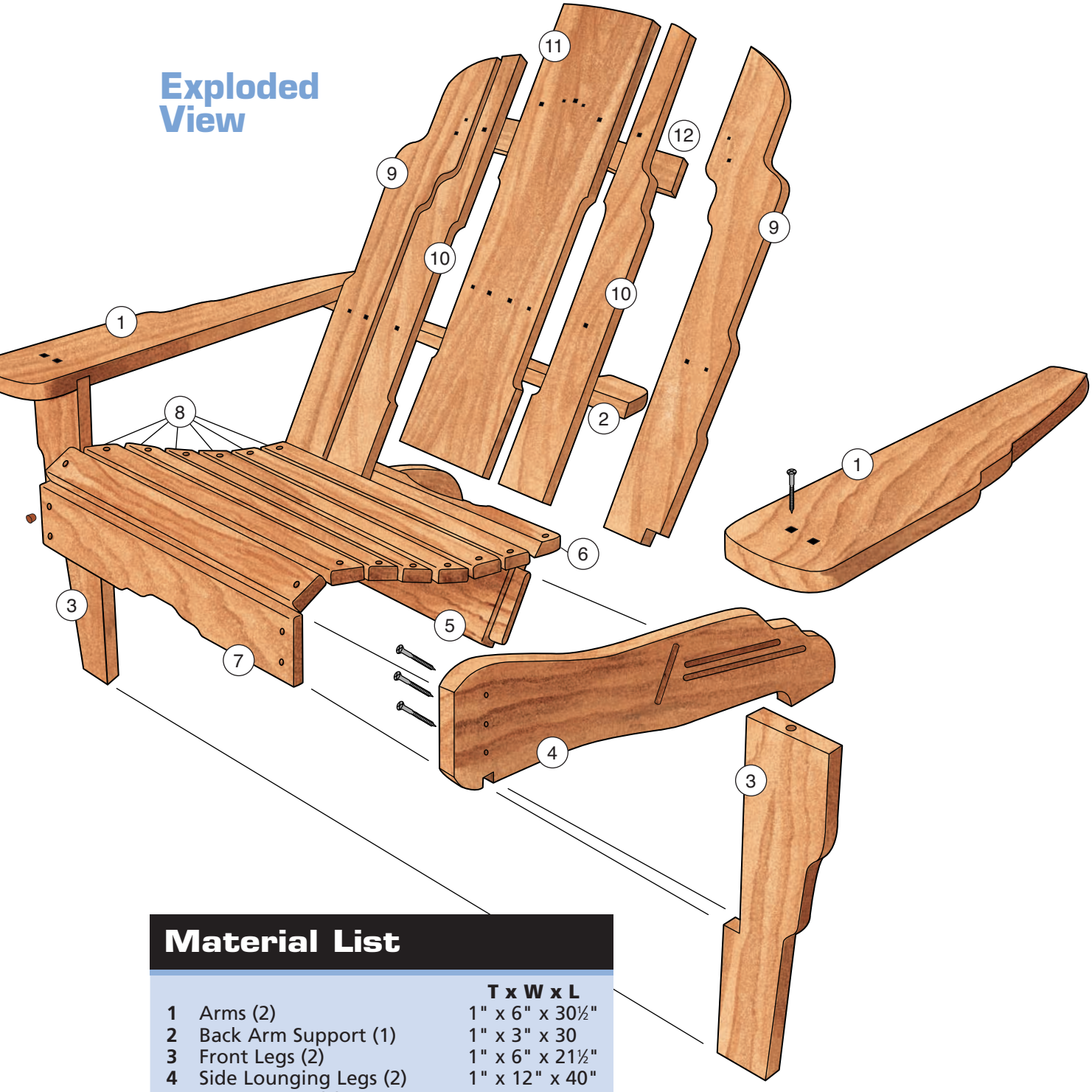
Exploded View



Material List

		T x W x L
1	Arms (2)	1" x 6" x 30½"
2	Back Arm Support (1)	1" x 3" x 30
3	Front Legs (2)	1" x 6" x 21½"
4	Side Lounging Legs (2)	1" x 12" x 40"
5	Under Brace (1)	1" x 6" x 25"
6	Rear Cross Slat (1)	1" x 2½" x 25
7	Front Cross Slat (1)	1" x 4½" x 25"
8	Seat Slats (7)	1" x 2½" x 25"
9	Back Outside Slats (2)	1" x 8" x 31¾"
10	Back Narrow Slats (2)	1" x 4" x 32¾"
11	Back Center Slat (1)	1" x 8" x 32¾"
12	Back Top Brace (1)	1" x 3¼" x 19"

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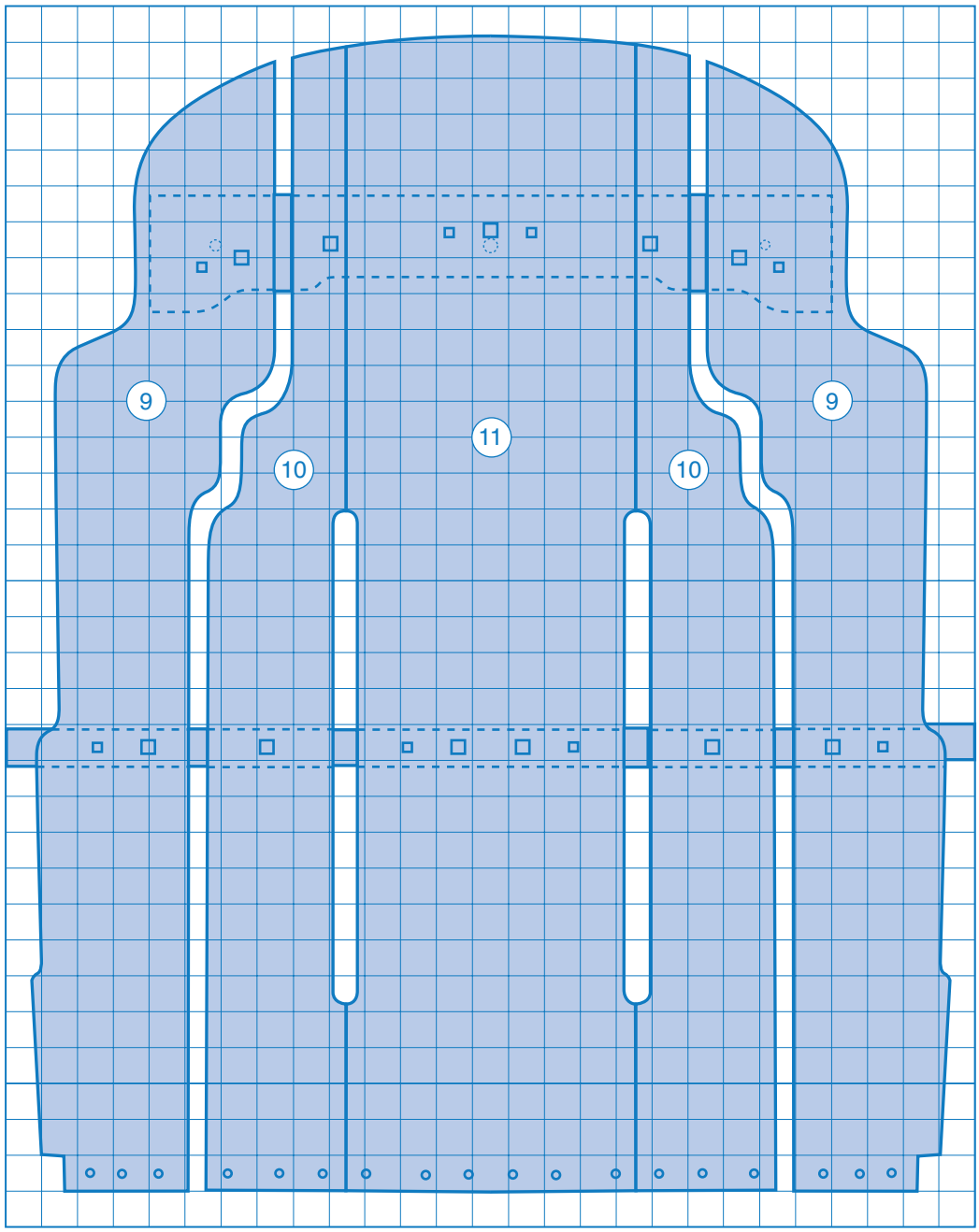
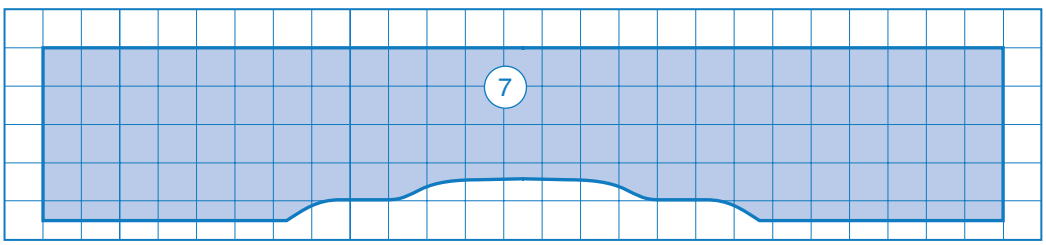
Grid Drawings: Back Slats, Front Cross Slat





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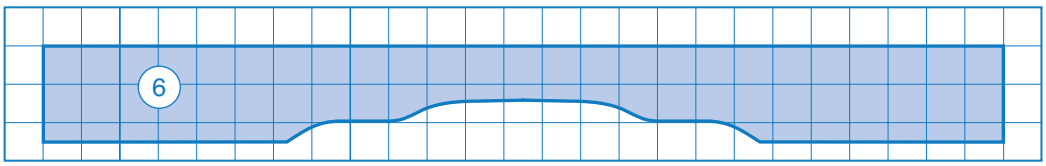
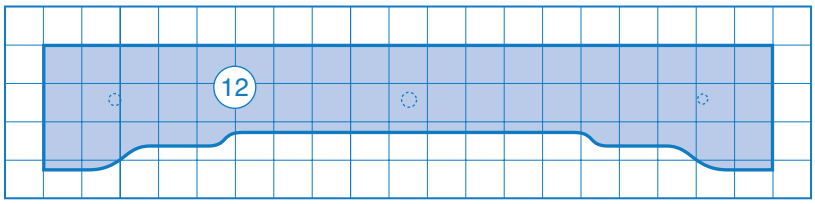
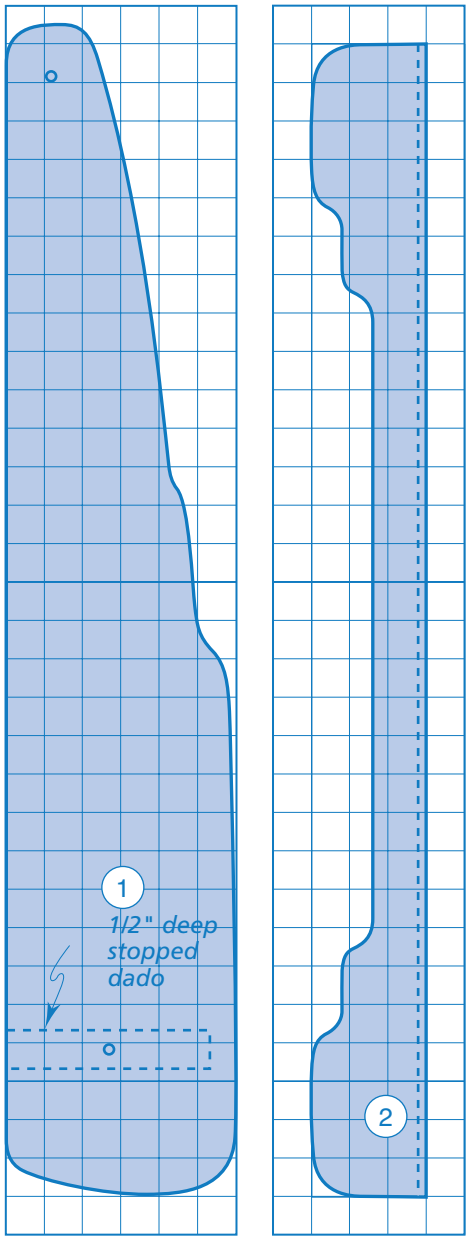
Grid Drawings: Rear Cross Slat, Back Top Brace

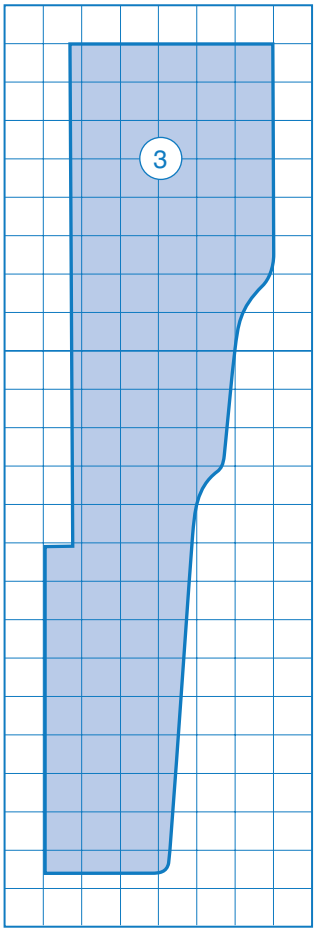






Grid Drawings: Arms, Back Arm Support

Grid Drawing: Front Leg



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