

REAL CEDAR PROJECTS for

OUTDOOR LIVING

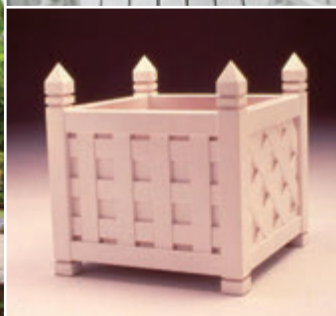


Outdoor Living

Western Red Cedar is suitable for a broad range of functional and decorative applications. In general, applications can be classified into two broad end use groups: first, for those structures such as large buildings in which both the strength and the appearance of exposed wood members are of equal importance; and second, in landscape, park and garden structures where appearance is paramount.

For both use-groups, Western Red Cedar offers the advantages of natural beauty, design flexibility, exceptional dimensional stability and long term durability. Cedar has a long history of withstanding the rigors of time and weather. It is also a recognized structural material with known mechanical and physical properties.

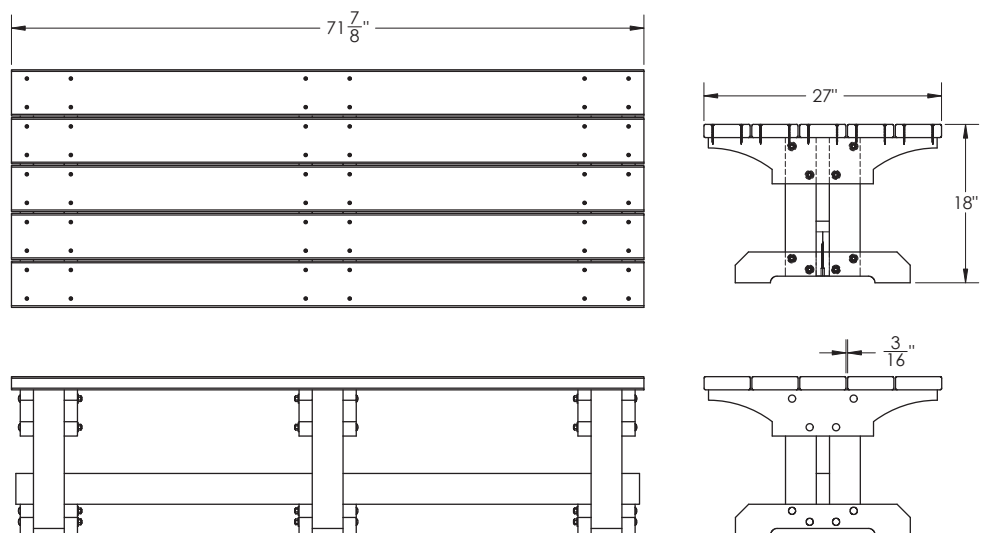




Bench

MATERIAL LIST

- 1 4"x4" x 10'
- 1 2"x6" x 10'
- 3 2"x6" x 12'
- 1 2"x4" x 8'
- 1 2"x4" x 10'
- 12 3" #8 Deck Screws
- 60 2½" #8 Deck Screws
- 24 7"x 3/8" galvanized carriage bolts w/nuts and washers
- small container of waterproof glue (optional)



INSTRUCTIONS

1. Shop for, gather and organize your materials.
2. Prefabricate from the list, sand smooth and stack like-parts together.
3. In this project we will fasten with temporary screws or clamps.
4. Using a square mark the center of the supports and foot planks.
5. Now, mark a center-line on 1 small piece of 2x4 block and use it to align the 2 supports where they should meet the two 4x4 posts.
6. On a bench, lay out a sandwich of support and foot plank, with 2 posts on top and then the opposite support and foot plank. Align with top and bottom of posts and use 2 small off-cuts of 2x4 to assure proper distance between the posts. Clamp together in roughly the right positions.
7. Square the parts using a framing square, then drill the 3/8" holes for the carriage bolts through all 3 pieces as illustrated.
8. Insert the carriage bolts and tighten until snug. (Tighten again after first use). Repeat to construct all frame assemblies.
9. Mark the location of the bench posts on the stringer beam then slide in the stringer beam and secure with 2 screws per post in an unobtrusive location.
10. Install bench planks starting with the straightest one in the center first. Countersink screws slightly and fasten with 3" screws into the supports. Use 3/16" spacers or 2 screwdrivers with 3/16" diameter shafts to space the rest of the boards while you fasten the bench planks.

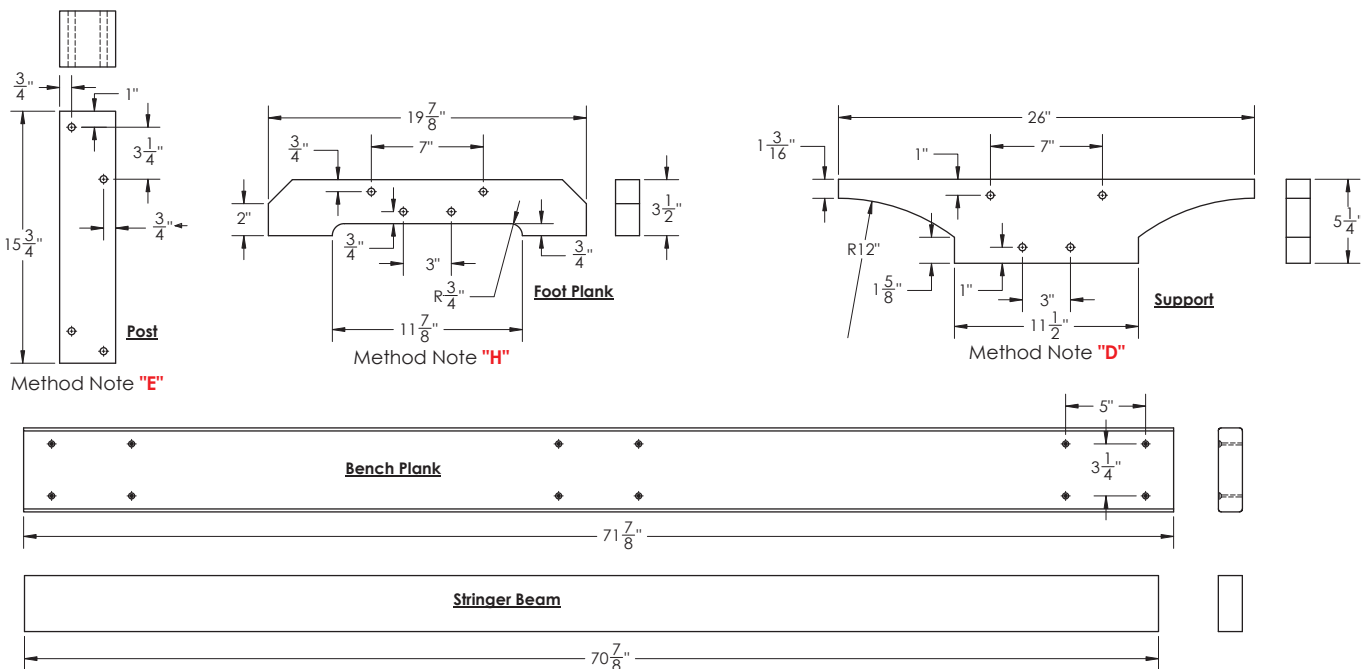
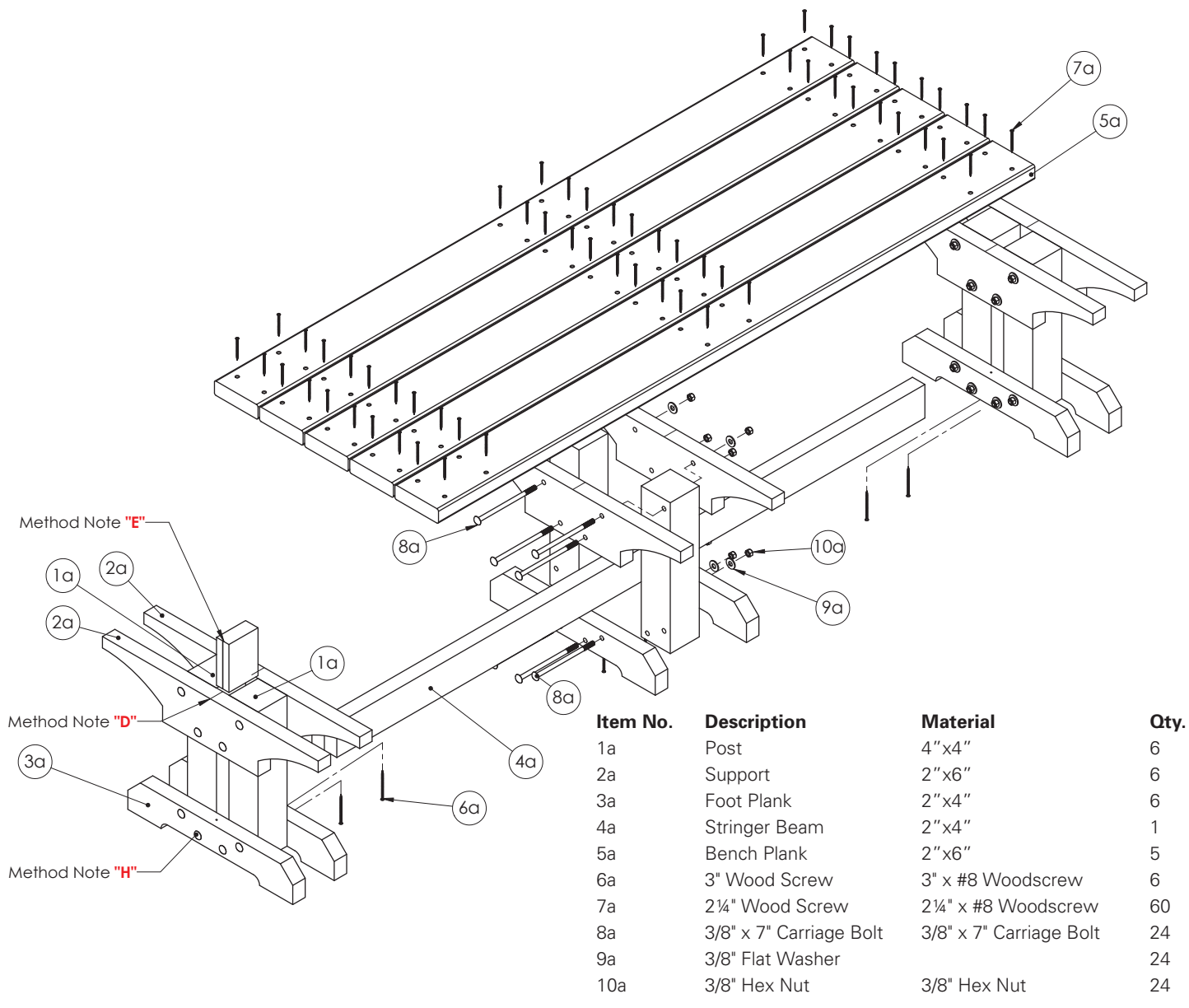
11. Optional Method—countersink the screws securing the bench planks a little deeper (3/8") and use the tapered plug cutter on a drill press to create plugs. Use off cuts to make the plugs and try to match the grain and tone so that the screws are invisible. Let adhesive set and trim off excess plug material with a flush cut saw.

12. Remove all sharp edges with sandpaper, remove dust and apply finish.

**Plan designed by Garden Structure (www.gardenstructure.com). It is an artist's conception and is intended as general reference only. The Western Red Cedar Lumber Association does not warrant the accuracy of the information herein. Always follow local and national building codes.*

RECOMMENDED TOOLS

- 3 small off-cuts of 2x4
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing square
- Adjustable wrench or socket set
- 3/8" countersink and pilot bit and tapered plug cutter (to fill countersinks)
- 2 scratch awls or screwdrivers with 3/16" shafts.
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw



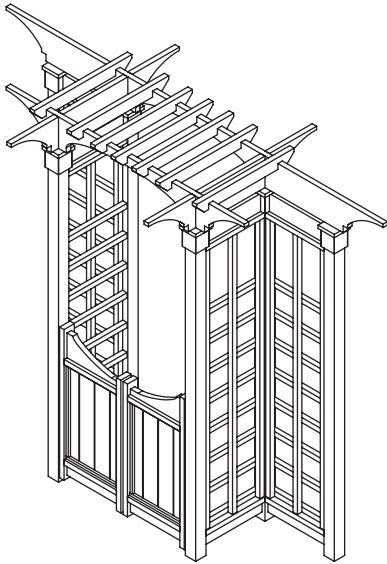
Garden Arbor

MATERIAL LIST

6	4"x4" x 12'	2lb	1 ¼" spiral galvanized finish nails
3	2"x10" x 12'	2lb	3" deck screws (rated for Western Red Cedar)
1	2"x6" x 8'	2lb	2 ¼" deck screws (rated for Western Red Cedar)
2	2"x4" x 12'		(or 15 guage finishing brads or 2 ½" spiral galvanized finish nails)
2	2"x6" x 10'	2	pairs of heavy duty strap hinges.
21	2"x2" x 8'	10	1 ¼" galvanized roofing nails
2	2"x4" x 12'		
4	2"x4" x 8'		
4	1"x6" x 5'		
4	1"x6" x 6'		
4	3/4"x3/4" x 8'		
1	5/4"x6" x 8'		
8	Galvanized fence clips		

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

***Consider pre-finishing your Western Red Cedar prior to assembly.*



INSTRUCTIONS

1. Shop for, gather and organize your materials.
2. Prefabricate from the material list and stack like parts together. It may be prudent to leave parts slightly long and trim to fit once measurements are confirmed.
3. Layout and dig the 42" deep x 10" holes using a lever augur or power augur—or better still, hire someone that specializes in digging post holes. Consider laying out the hole locations on a 3/8" sheet of plywood to assure accurate setting of the posts. Double check the locations after the posts are set and adjust part sizes upward if necessary.
4. Set the outermost posts first, then by attaching a string line offset 1/2", level and align your posts to maintain them in a straight line. You don't have to brace the posts if you pack the soil or fine gravel tightly with your foot.
5. After allowing the posts to set for 24-48 hours, cut and fit the base rails and cap rails. Fasten base rails and cap rails using the pocket hole jig and 3" #12 screws. The base rails should be 3" off the ground and level to one another.
6. Trim the posts to height illustrated. Install the post caps and assemble the rafters as illustrated and secure to the post caps using 3" deck screws. Everything should be centered. Countersink all screws. Install the rafters with 3" deck screws.
7. Install fence clips with 1 ¼" galvanized roofing nails as illustrated and level to one another. Fit and install the support rails using roofing nails and secure with 1 countersunk 3" deck screw from the top of the rail.

8. Assemble the Side Panel Lattice as illustrated. Cut blocks to help you space the parts quickly and accurately while you fasten the lattice. Verticals are secured to the horizontals using the 2 ¼" deck screws.
9. Assemble the gates as illustrated. The frame and brace screws together with 3" deck screws. The Trim then gets installed flush to the brace inner face—and the boards are then toe-nailed into the frame with finish nails or 2 ¼" deck screws. Hang the gates so that they clear the ground.
10. Give your project a coat of stain, then fill any voids or holes with exterior putty. Give it a second coat after putty.

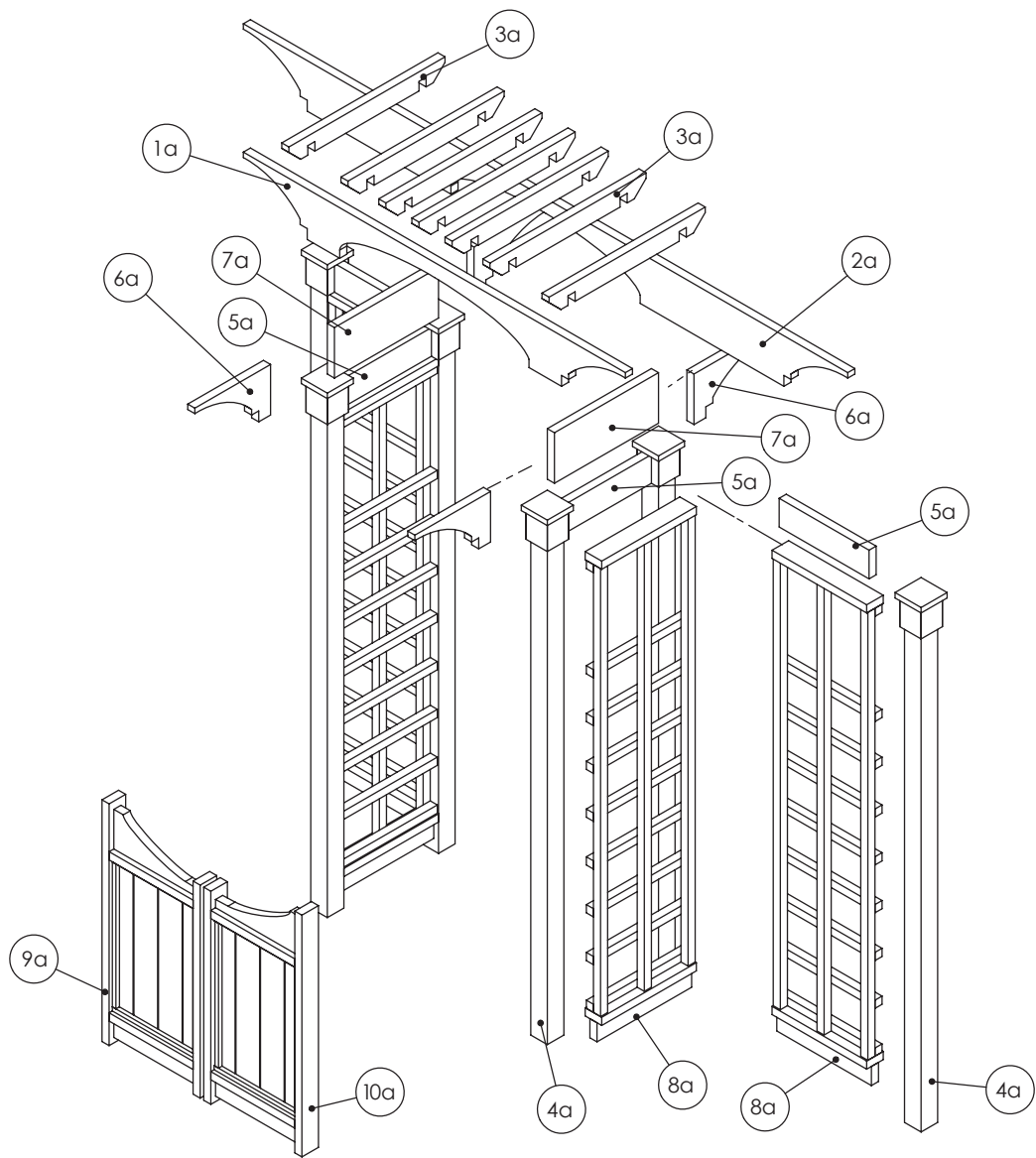
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RECOMMENDED TOOLS

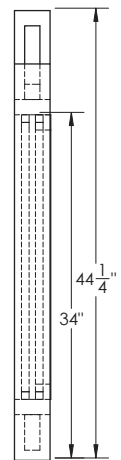
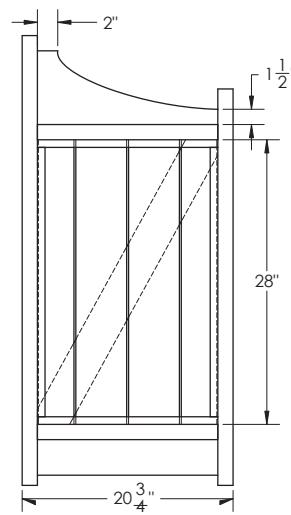
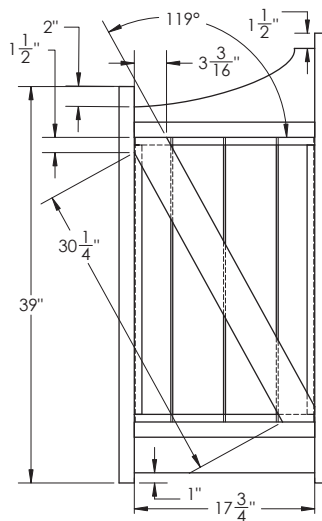
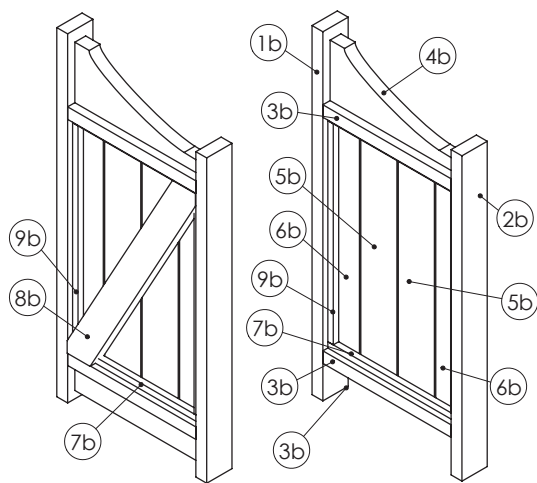
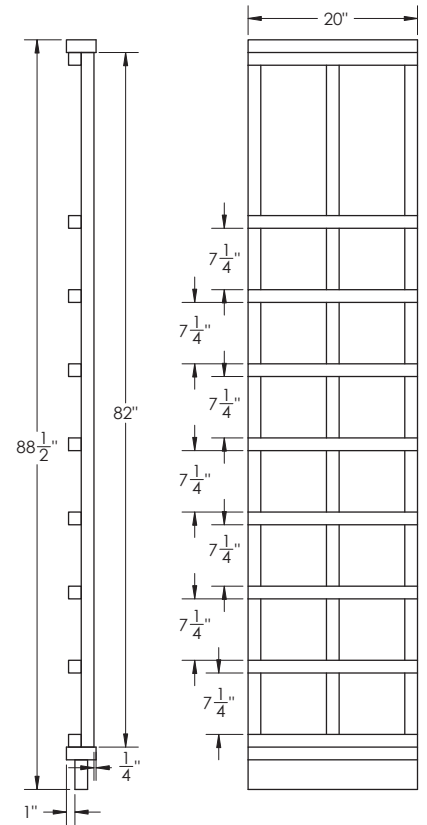
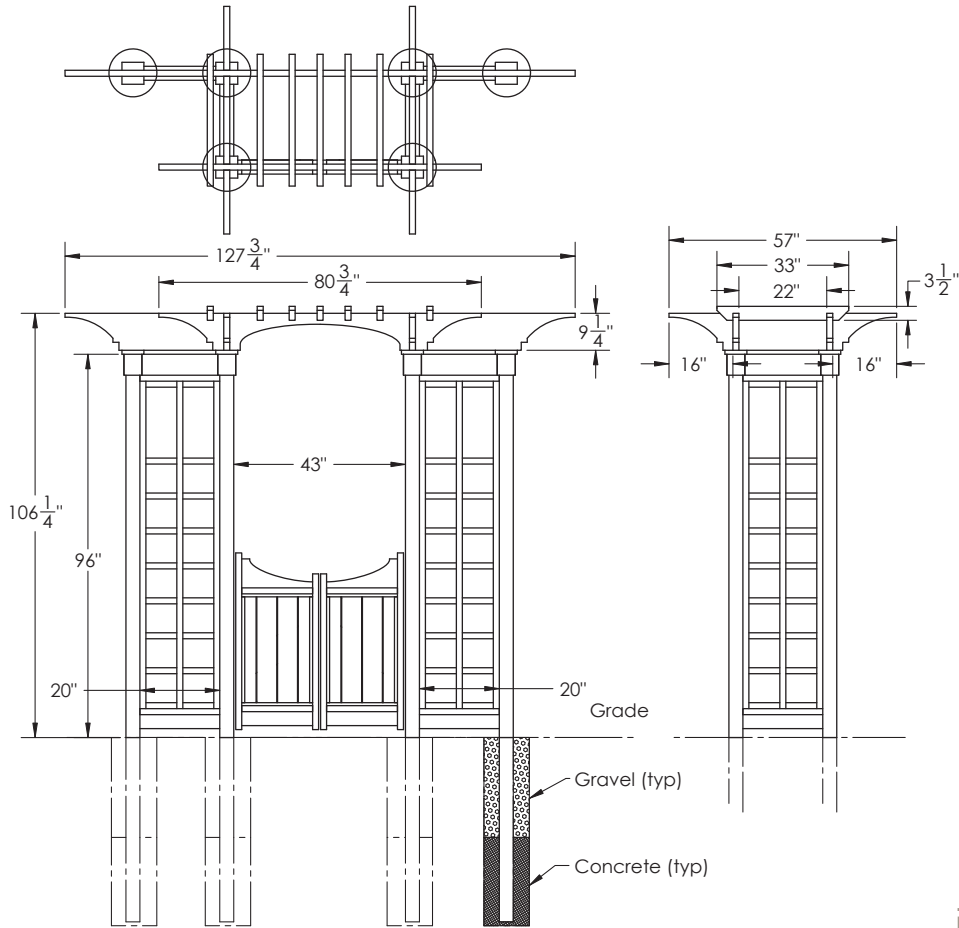
- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing Square
- Adjustable wrench or socket set
- 3/8" Countersink and Pilot bit and Tapered Plug Cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small Drill Press (optional)
- Flush Cut Saw
- Table Saw
- Wheelbarrow, Shovel, Rake, Lever Augur
- An accurate level

Item No.	Description	Material	Cut From	Qty.
1a	Beam - Short	2"x10"	A*	1
2a	Beam - Long	2"x10"	A*	1
3a	2"x4" x 33" Rafters	2"x4"	C*	7
4a	Post Sub Assy	Diagram vi & vii	n/a	6
5a	2"x6" x 19" Post Connection Block	2" x 6"	D*	4
6a	2"x10" Beam Tail	2"x10"	B*	4
7a	2"x10" x 22" Beam Block	2"x10"	B*	2
8a	Side Panel Sub Assy	Diagram ii & iv	n/a	4
9a	RHS Gate Sub Assy	Diagram iii	n/a	1
10a	LHS Gate Sub Assy	Diagram iii	n/a	1

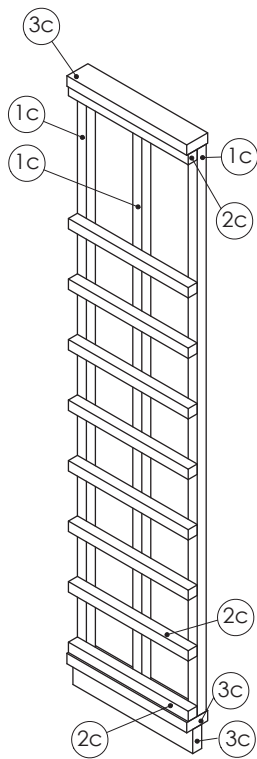
Lumber ID	Material	Qty.
*A	2"x10"x 12'	2
*B	2"x10"x 12'	1
*C	2"x4"x 12'	2
*D	2"x6"x 8'	1



Garden Arbor

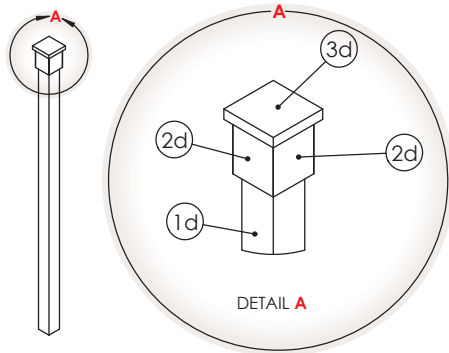
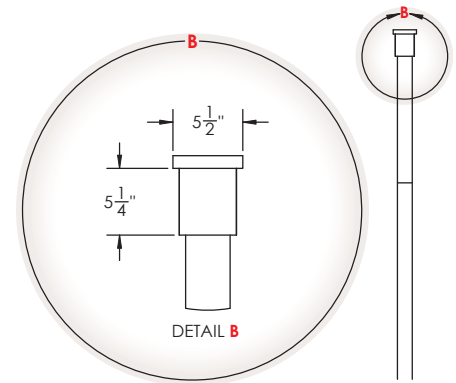
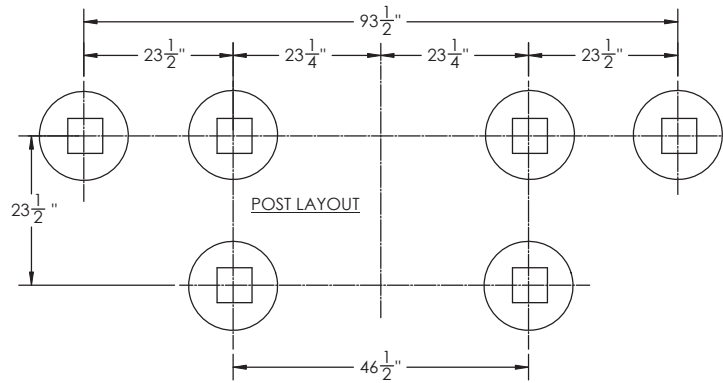


Item No.	Description	Material	Cut From	Qty.	Lumber Id	Material	Qty
1b	Side Rail (Long Side)	2" x 4"	F*	1	*F	2" x 4" x 12'	2
2b	Side Rail (Short side)	2" x 4"	F*	1	*G	1" x 6" x 5'	4
3b	Horizontal Rail	2" x 4"	F*	3	*H	Lattice Retainer Trim	32'
4b	Curved Block	2" x 10" (Offcut)	B*	1	*J	2" x 4" x 8'	1
5b	Vertical Fenceboard	5/8" x 5" Fenceboard	G*	2			
6b	Vertical Fenceboard Ripped	5/8" x 5" Fenceboard	G*	2			
7b	3/4" Horizontal Trim	3/4" x 3/4"	H*	4			
8b	2x4 Brace	2" x 4"	J*	1			
9b	3/4" Vertical Trim	3/4" x 3/4"	H*	4			



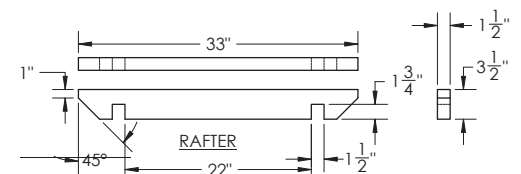
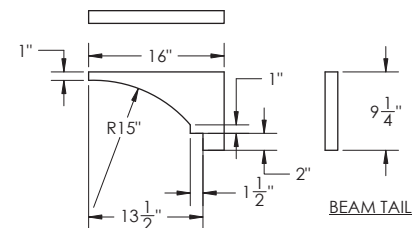
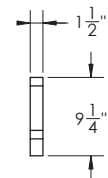
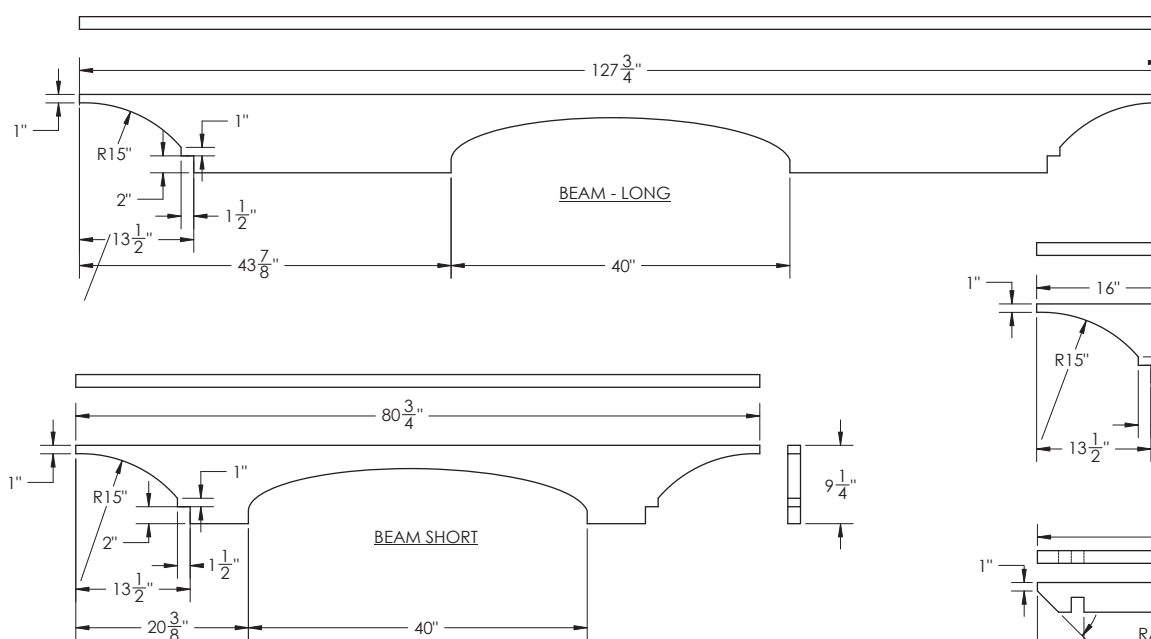
Item No.	Description	Material	Cut From	Qty.
1c	82" Verticals	2"x2"	D*	3
2c	20" Horizontals	2"x2"	D*	9
3c	Rails	2"x2"	E*	3

Lumber Id	Material	Qty
*D	2"x2" x 8'	21
*E	2"x4" x 8'	3



Item No.	Description	Material	Cut From	Qty.
1	Post	4"x4"	K*	1
2	Post Trim	1"x6"	L*	4
3	Post Cap	Fence Board (Mitred) 5/4"x6"	M*	1

Lumber Id	Material	Qty
*K	4"x4" x 12'	6
*L	1"x6" x 6'	4
*M	5/4"x6" x 8'	1 (6" Board Trimmed to 5")



iv

v

vi

vii

viii

Garden Arch

MATERIAL LIST

- 4

4"x4" x 12' (for footings mount)
or four 4"x4" x 8'+ carport
bracket for concrete mount.
- 1

2"x10" x 12'
- 13

2"x2" x 8'
- 1

2"x4" x 10'
- 2

2"x6" x 8'
- 3

3/4"x3/4" x 8'
- 1

Plywood cover Sheet (ask for the
sheet of plywood that covers
sheet goods during transport—
they are often quite inexpensive
— this will be used to place your
posts)
- ½ lb

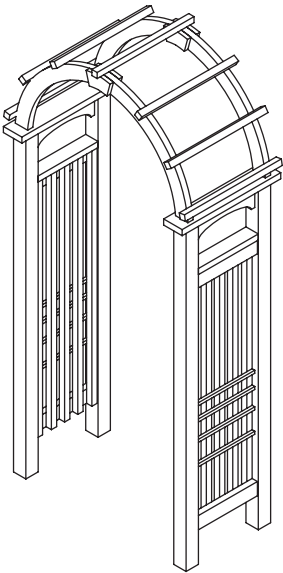
1½" spiral galvanized finish nails
- 2 lb

3" Deck Screws
(rated for Western Red Cedar)
- 1 lb

2¼" Deck Screws
(rated for Western Red Cedar)

**Consider using a 3/8" pilot with a countersink,
then filling the screw holes with solid wood cut
using a drill press and a tapered plug cutter.*

***Consider pre-finishing your Western Red
Cedar prior to assembly.*



INSTRUCTIONS

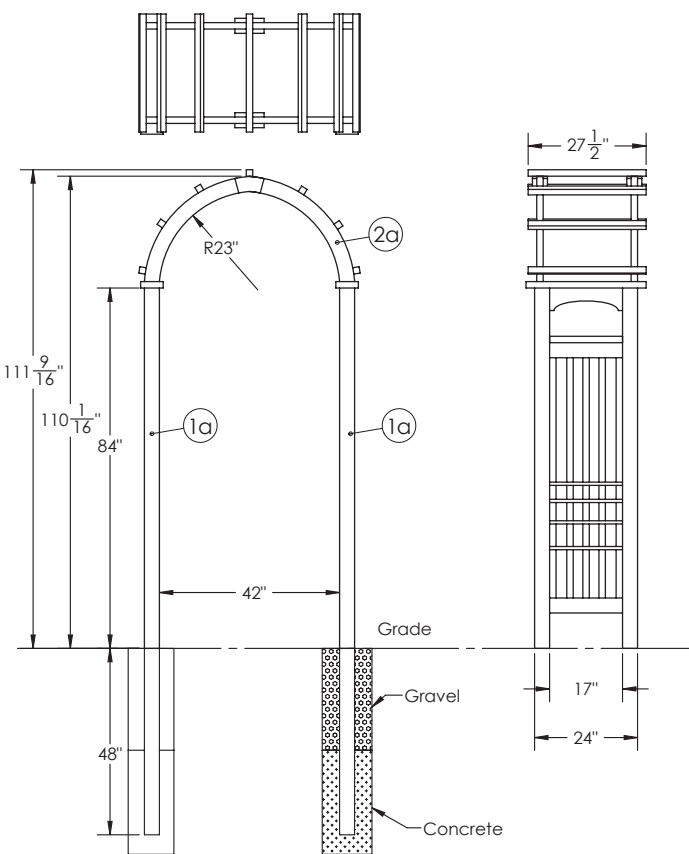
1. Shop for, gather and organize your materials.
2. Prefabricate from the material list and stack like parts together. It may be prudent to leave parts slightly long and trim to fit once measurements are confirmed.
3. Layout and dig the 42" deep x 10" holes using a lever augur or power augur—or better still, hire someone that specializes in digging post holes. Layout the post locations on a 3/8" sheet of plywood to assure accurate setting of the posts and cut out the posts and the space around the outer 2 faces of posts. Double check the locations after the posts are set and adjust part sizes upward if necessary.
4. Level and align the 4 posts to the plywood post placement pattern while standing on it. Have a helper add the concrete and backfill the dirt or gravel into the holes. Maintain the post level in both directions while your helper works. You don't have to brace the posts if you pack the soil or fine gravel tightly with your foot.
5. After allowing the posts to set for 24-48 hours, cut and fit the rails. Fasten using a pocket hole jig and 3" deck screws. The lower rails should be 3" off the ground and level to one another.
6. Trim the posts to height illustrated. Install the shaped rails using 3" deck screws.
7. Fasten the semi-circular rafters together using the elliptical key block. Opposing the grains will add strength. Fasten the 2x2 rafters as illustrated using 2¼" screws.
8. Fasten the top plate to the assembled arch, then fasten to the posts and curved rails using the 3" deck screws.

9. Trim the 2x2 verticals to length and fasten to the rails using 2¼" deck screws spaced equally.
10. Fasten the 3/4x3/4" lattice horizontals to the horizontals with 1½" finishing nails.

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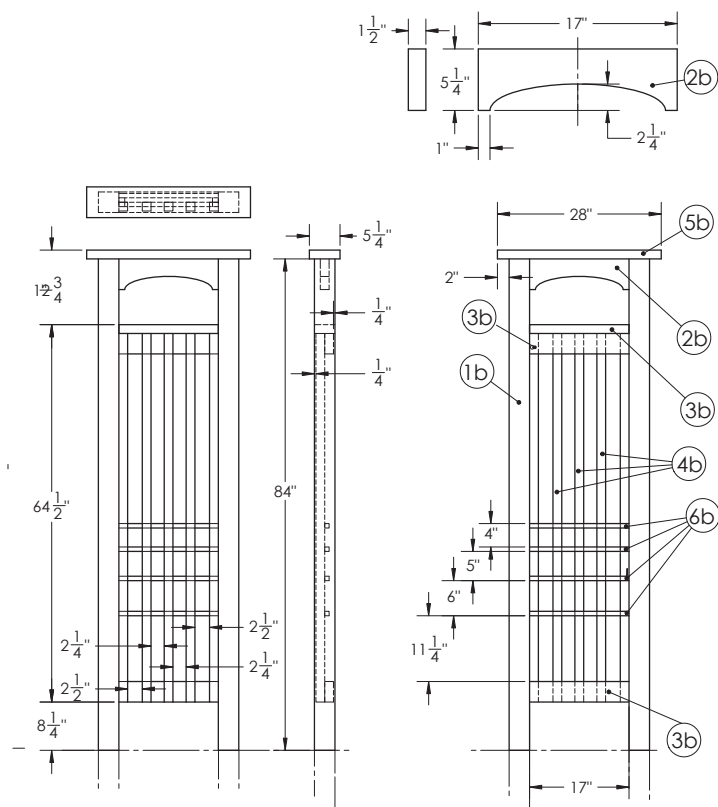
RECOMMENDED TOOLS

- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing square
- Adjustable wrench or socket set
- 3/8" Countersink and pilot bit
and tapered plug cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw
- Table saw
- Wheelbarrow, shovel, rake, lever augur
- Pocket hole jig and #12 pan head stainless wood screws (optional)
- An accurate level



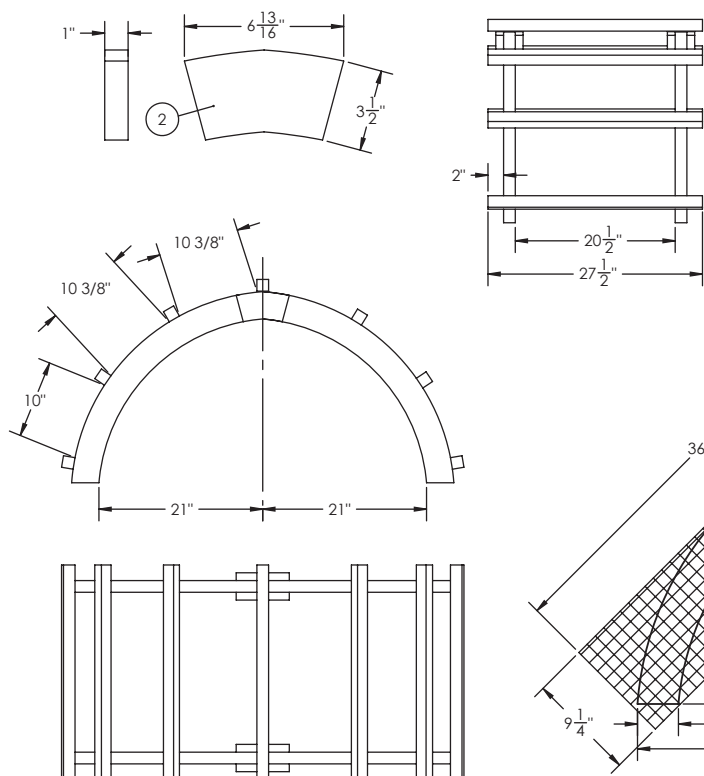
Item No.	Description	Material	Qty.
1a	Side Panel Assy	Diagram ii	2
2a	Rafter Sub Assy	Diagram iii	1

i

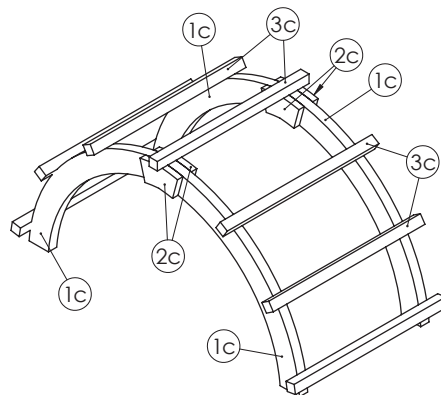


Item No.	Description	Material	Qty.
1b	Post x 12'	4"x4"	2
2b	Shaped Rail x 17"	2"x6"	1
3b	Horizontal Rails x 17"	2"x4"	3
4b	Verticals x 63"	2"x2"	5
5b	Top Plate x 33"	2"x6"	1
6b	Lattice Horizontals x 17"	3/4"x3/4"	4

ii



Item No.	Description	Material	Qty.
1c	Semi-Circ Rafter	2"x10"	4
2c	Elliptical Rafter Key Block	5/4"x6"	4
3c	Rafter x 27 1/2"	2"x2"	7



iii

Gazebo

MATERIAL LIST

- 1 6"x6" x 12" (for cupola roof peak)
- 4 2"x6" x 8' (fascia, inner rails)
- 10 2"x6" x 10' (floor framing-can be 2"x8" x 10' for heavy weight version)
- 10 2"x6" x 12' or 5/4"x6" x 12' (decking)
- 58 2"x4" x 8' (roof rafters, posts, top plate, handrail caps, transom mounting plate, cupola frame)
- 8 1"x4" x 8' (post trim)
- 18 2"x2" x 8' (balusters)
- 3 5/4"x6" x 8' (transom)
- 5 1"x3" x 8' (rail mounting plate)
- 8 1"x10" x 12' barn board or 3 sheets 5/8" exterior plywood (roof sheathing)
- 1 2"x6" x 12' (braces)
- 2 5/4"x6" x 8' (brace mounting plates)
- 1 2"x8" x 10' (ridge beam)
- 1Sht 3/4" (exterior plywood for laminated posts)
- 1 quart waterproof adhesive

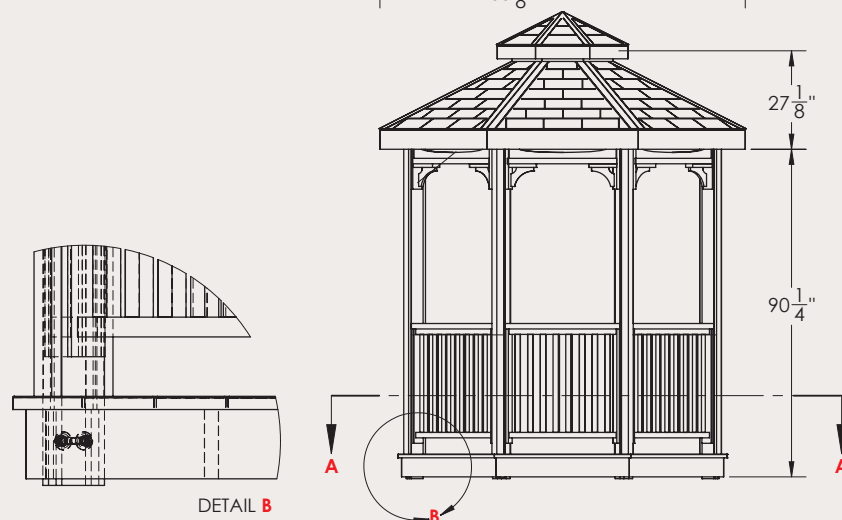
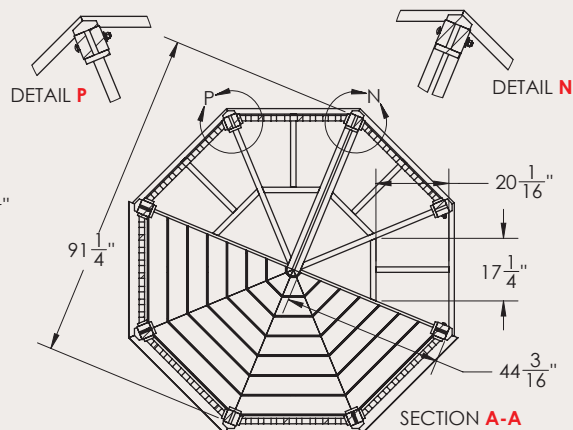
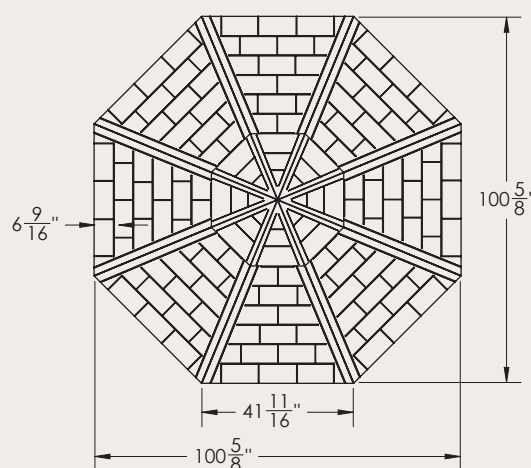
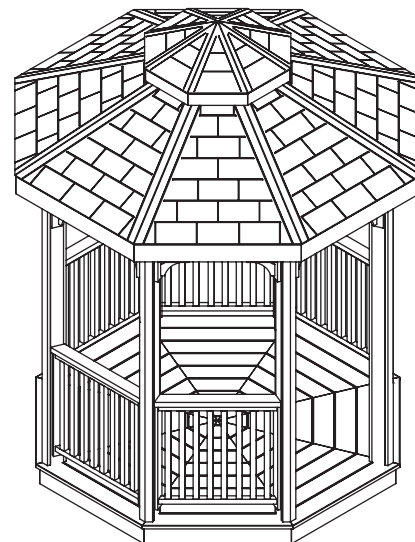
Fasteners:

- 16 galvanized hurricane clips, (if applicable)
- 7lb 1 1/4" galvanized roofing nails
- 7lb 3" deck screws (rated for Western Red Cedar)
- 5lb 3 1/2" spiral galvanized nails
- 2lb 3" spiral galvanized finish nails
- 8 5"x1/2" galvanized carriage bolts with nuts and washers
- 24 3 1/2"x 3/8" galvanized carriage bolts with nuts and washers

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

***Consider pre-finishing your Western Red Cedar prior to assembly.*

**** Full size templates with step-by-step solid wood lamination instructions version is available for purchase through www.GardenStructure.com*



INSTRUCTIONS

A. Shop for, gather and organize the materials.

B. Prefabricate the parts as required and stack like parts together. It is prudent to leave parts slightly long and trim to fit once measurements have been confirmed.

C. This gazebo is suitable to be placed on 9 sono-tube footings, on a slab, or even set up on concrete blocks, though it is always better to put the blocks on patio stones so that they stay more level.

D. If choosing permanent sono-tube footings use a strap type anchor or a carport bracket so that you may bolt through the joist to make a wind resistant connection. Consider using an adjustable type of post mount. Layout and dig the minimum 42" deep x 10" holes using a lever auger or power auger—or better still, hire someone that specializes in digging post holes. Carefully locate the supports using the dimensions provided in the footing layout.

E. Frame the floor structure as illustrated from 2x6 or 2x8 materials. Use care to leave a 3/4" slot between the 2 main beams to accommodate the hardwood spline that connects the post to the deck. Use blocks of plywood spaced about every 16" apart to maintain the space.

F. Assemble the post verticals with plywood spacers as illustrated and put in place against the rim joist. The posts should be assembled using a 3 1/4" strip of exterior plywood and laminating the posts to using waterproof glue. Secure to the joist with a carpentry clamp. As the first row of decking is installed, (overhanging the frame by 1.5"), you will need to notch around the posts—however you don't need to worry too much about a perfect cut. There will be a 5/8" trim covering the joint towards the interior of the gazebo. The posts are secured in location just prior to installing the decking that will cover the connection. Install the galvanized carriage bolts, nuts and washers as you work your way around the deck.

G. Decking is typically laid on slightly long and then trimmed with a straight edge and a circular saw. Each section is laid carefully to maintain a 3/16" space and tight joints. The decking is left slightly long and then trimmed off. The final section will obviously have to be fit carefully.

H. Cut the posts off level to one another as illustrated and install the top plates and transom assemblies.

I. Cut all the rafter parts and assemble all 8 sections then move them aside as they are fastened together. Now is the time to install the exterior and interior cladding. If installing the interior cladding you may want to leave a few pieces off to enable easy installation of bolts connecting the rafters. The octo-ridge beam is the top plate for each pie shaped section of roof. Full 1" barn board will enable the roofing to be installed without nails protruding into the interior of the gazebo. If you will be installing a tongue and groove interior roofing system

you can use plywood instead. Shingles can also be installed before installing the roof panels, however it will take more helpers to lift the panels into place and they tend to be more difficult to work with the more weight you add on the ground.

J. Put the first section in place and fasten a 2x4x12 to support the first section while you lift the second section. Bolt the second section to the first—using clamps to hold the sections temporarily. Do not fasten to the top plate until after all the sections are bolted together and the whole assembly is centered upon the top plate. In areas where hurricanes or high wind events are possible you should also use hurricane clips to connect the roof to the top plates.

K. The cupola can be assembled on the ground and set in place. Fasten the cupola from the inside using screws. You may even want to install the roofing and corner caps as well before mounting the cupola.

L. Confirm each post for level and brace temporarily—then add the knee braces and the interior post trim and exterior caps.

M. Assemble the handrail sections and fasten with the same reveal (space between face of exterior face of post and rail mounting brackets).

N. Skirting is different in every site condition. Block, footing and slab installations will require different skirting to be applied. Normally the decking overhangs roughly 1.5" and the skirting butts up to the decking.

O. Choose a roofing material and install. Pay attention to corner caps. As a precaution, please don't expect cedar shingles to be a DIY project—it is a complex roofing to apply properly. Consider using ice and water shield barrier over the entire roof if you are not confident in your roofing ability.

P. Give your gazebo a coat of stain, and then fill any voids or holes with exterior putty. Give it a second coat after putty.

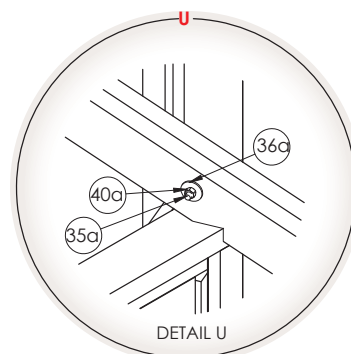
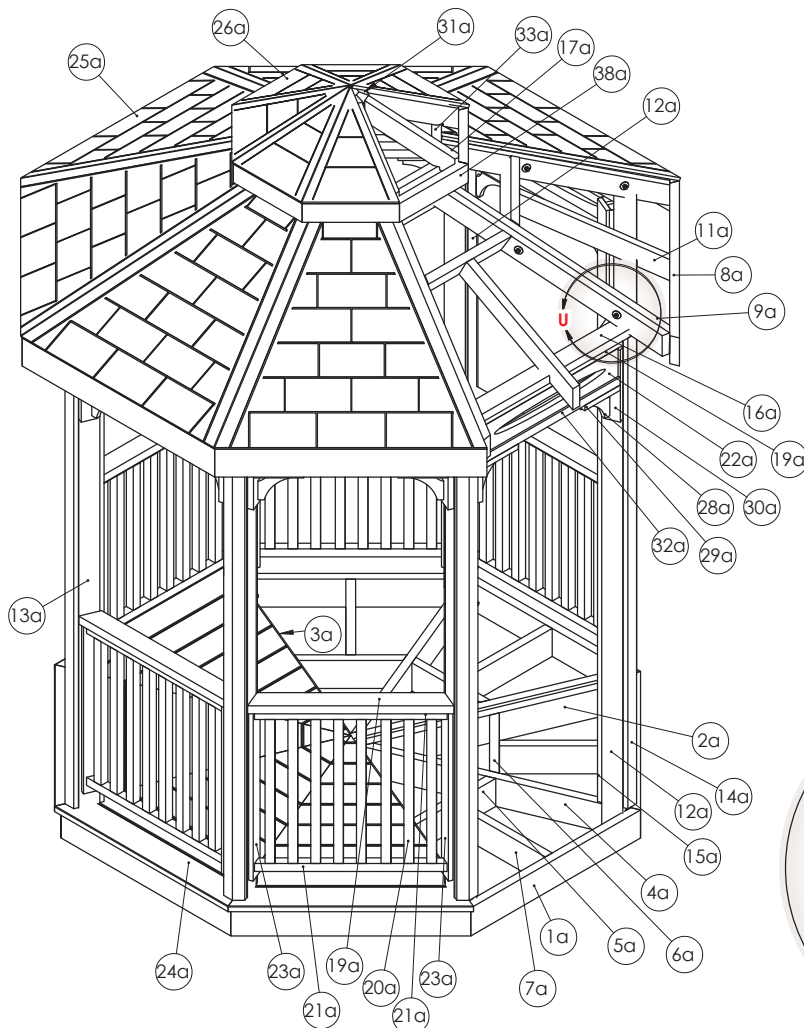
**Plan designed by Garden Structure (www.gardenstructure.com). It is an artist's conception and is intended as general reference only. The Western Red Cedar Lumber Association does not warrant the accuracy of the information herein. Always follow local and national building codes.*

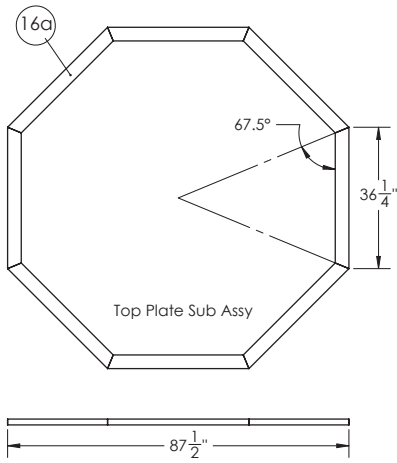
Gazebo

RECOMMENDED TOOLS

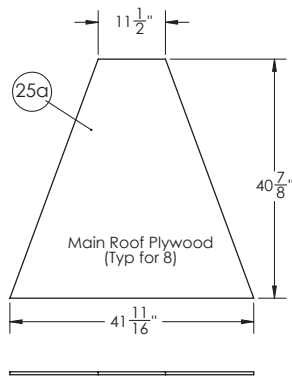
- Three 2"x4" x 12" to be used for temporary bracing
- 6 carpentry clamps
- Drill, 1/2" and 3/8" spade bit or augur bits
- Screw driver bits and magnetic tip and drill
- Circular saw and bevel miter saw capable of cutting 2x6
- Framing square
- Pocket hole jig and #12 pan head stainless wood screws
- 3/8" countersink and pilot bit and tapered plug cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw
- Table saw
- Wheelbarrow, shovel, rake, lever augur (only if you are doing sonotube footings)
- 4' Level
- Belt Sander with 40 and 60 grit paper
- Random orbital sander with 60 and 80 grit paper
- Wrenches and socket set
- An accurate level

Item No.	Description	MATERIAL	Qty.
1a	Deck Rim Joists	2"x6"	8
2a	Deck Main Joists - Long	2"x6"	2
3a	Deck Joist Type A	2"x6"	2
4a	Deck Joist Type B	2"x6"	4
5a	Deck Purlin	2"x6"	4
6a	Deck Purlin (Short)	2"x6"	4
7a	Deck Short Joist	2"x6"	8
8a	Main Roof Facia	2"x6"	8
9a	Roof Rafter	2"x4"	16
10a	Roof Purlin	2"x4"	8
11a	Roof Middle Rafter	2"x4"	8
12a	Post Verticals (Long)	2"x4"	12
13a	Post Verticals (Short)	2"x4"	4
14a	Post Vertical Corner Cap	2"x4"	8
15a	Inner Post Trim	1"x4"	8
16a	Top Plate	2"x4"	8
17a	Cupola Rafter	2"x4"	8
19a	HandRail Cap	2"x4"	16
20a	Ballisters	2"x2"	64
21a	Inner Rails	2"x3"	16
22a	Transom Panel	5/4"x6"	8
23a	Rail Mounting Plate	1"x3"	16
24a	Decking	5/4"x6"	8
25a	Pine Barn Board or 5/8" Exterior Plywood & Shingles See Description		8
26a	Pine Barn Board or 5/8" Exterior Plywood & Shingles See Description		8
27a	LHS Brace 2"x6" Offcuts		8
28a	RHS Brace 2"x6" Offcuts		8
29a	Brace Mounting Plate Type B	5/4"x3"	16
30a	Brace Mounting Plate Type A	5/4"x3"	16
31a	Cupola Peak	6"x6"	1
32a	Transom Lower Plate	2"x4"	8
33a	Octo-Ridge Beam	2"x8"	8
34a	3/4"x3 1/2" Plywood Filler	3/4" Plywood	2
35a	1/2" Galvanized Hex Nut	Steel	24
36a	1/2" Galvanized Flat Washer	Steel	24
37a	1/2"x5" Galvanized Carriage Bolt	Steel	8
38a	Cupola Facia	2"x4"	8
39a	1/2"x4" Galvanized Carriage Bolt	Steel	16

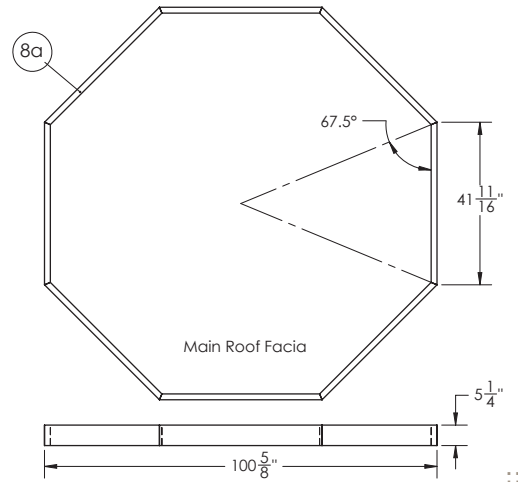




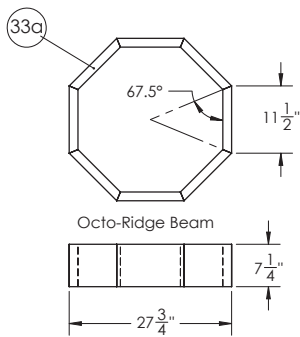
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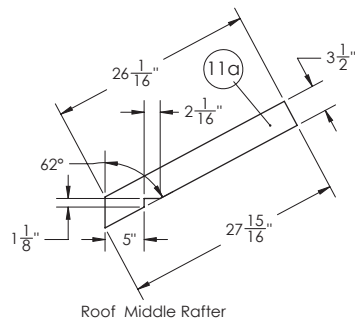
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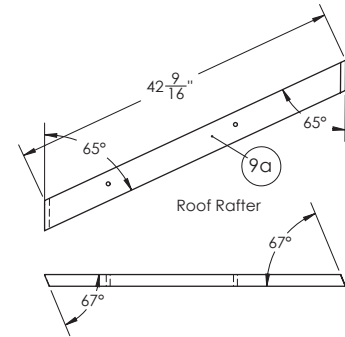
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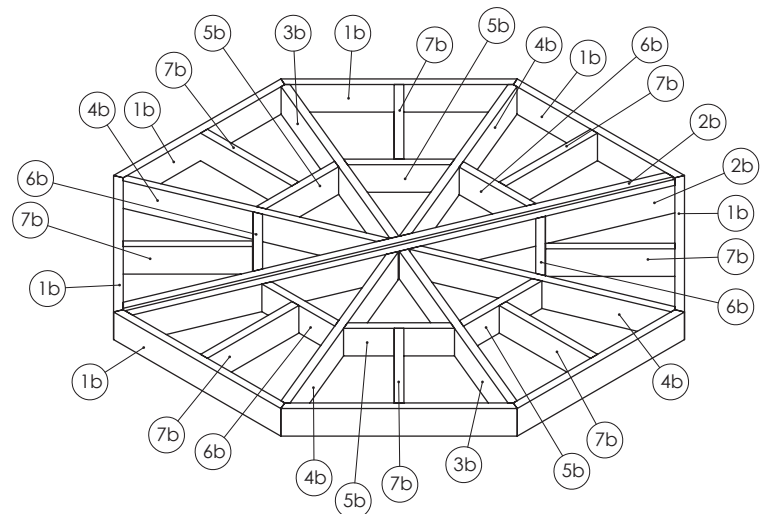
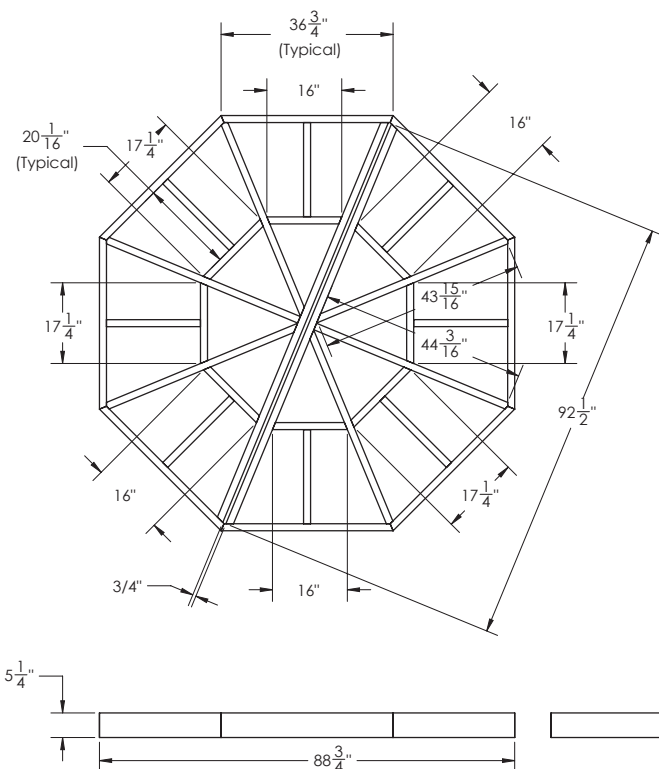
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v



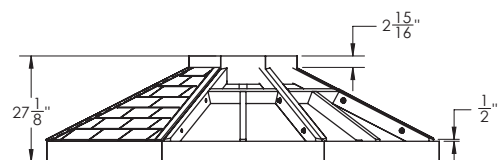
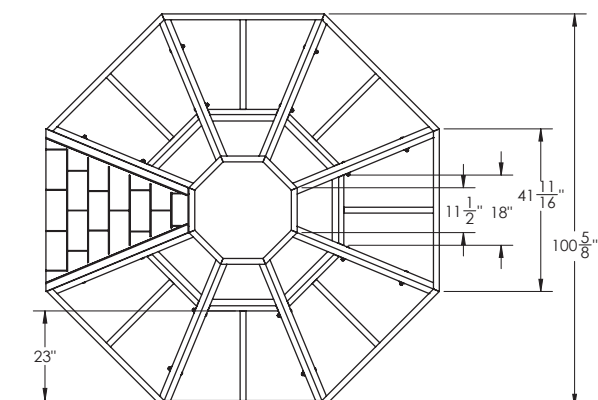
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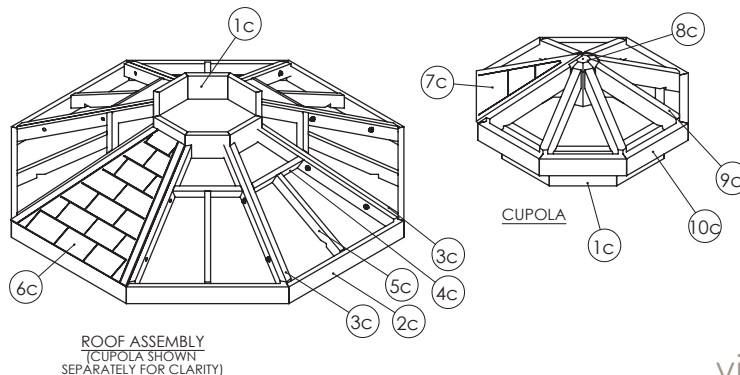
Item No.	Description	Material	Qty.
1b	Deck Rim Joists	2"x6"	8
2b	Deck Main Joists - Long	2"x6"	2
3b	Deck Joists Type A	2"x6"	2
4b	Deck Joists Type B	2"x6"	4
5b	Deck Purlin	2"x6"	4
6b	Deck Purlin (Short)	2"x6"	4
7b	Deck Short Joist	2"x6"	8

vii

Gazebo

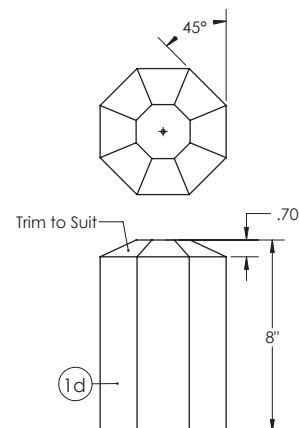
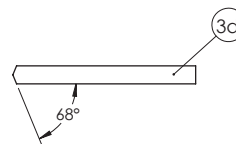
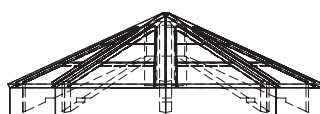
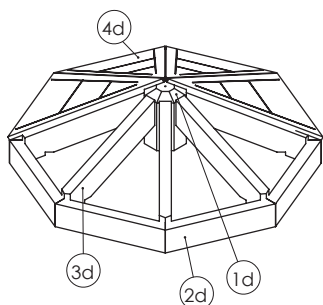
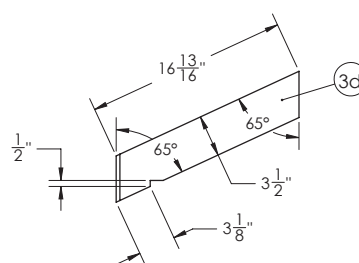
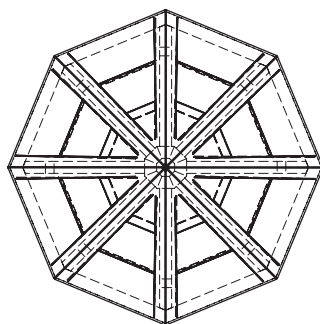
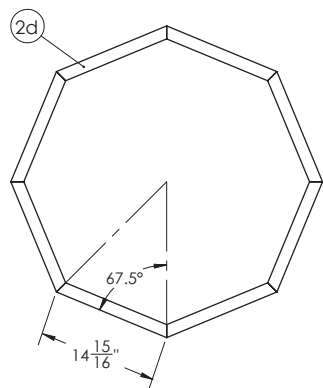


Item No.	Description	Material	Qty.
1c	Octo-Ridge Beam	2"x8"	8
2c	Main Roof Facia	2"x6"	8
3c	Roof Rafter	2"x4"	16
4c	Roof Purlin	2"x4"	8
5c	Roof Middle Rafter	2"x4"	8
6c	Pine Barn Board or 5/8" Exterior Plywood	See Description	8
7c	Pine Barn Board or 5/8" Exterior Plywood	See Description	8
8c	Cupola Peak	6"x6"	1
9c	Cupola Rafter	2"x4"	8
10c	Cupola Facia	2"x4"	8

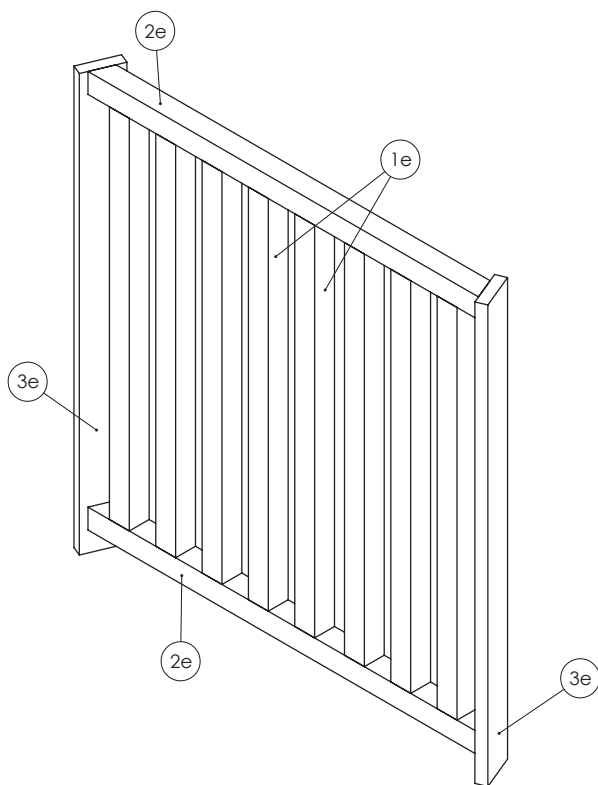


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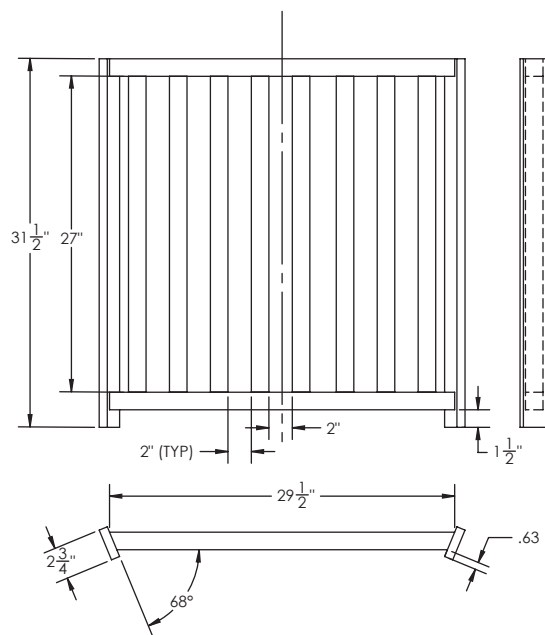
Item No.	Description	Material	Qty.
1d	Cupola Peak	6"x6"	1
2d	Cupola Facia	2"x4"	8
3d	Cupola Rafter	2"x4"	8
4d	Pine Barn Board or 5/8" Ext. Plywood	See Description	8



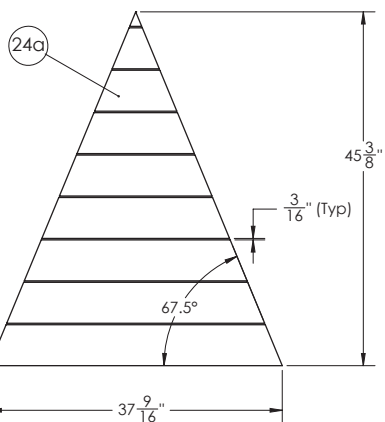
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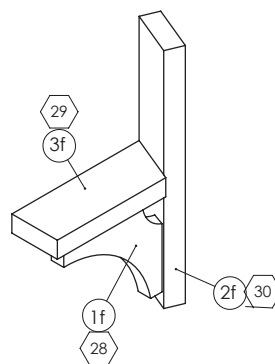
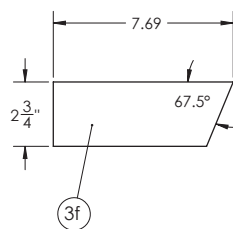
Item No.	Description	Material	Qty.
1e	Vertical Handrails	2"x2"	8
2e	Horizontal Handrails	2"x3"	2
3e	Rail Mounting Plate	1"x3"	2 D



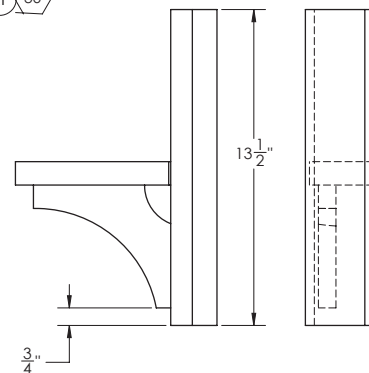
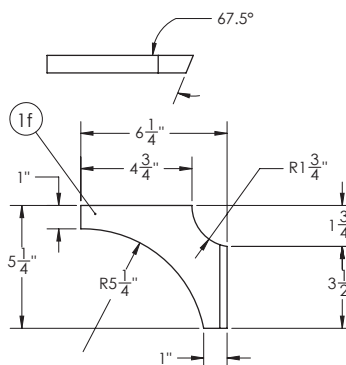
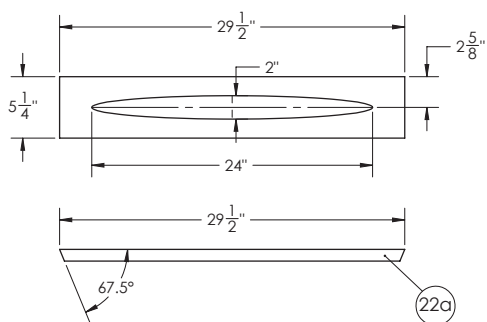
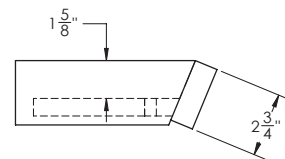
X



Item No.	Description	Material	Qty.
1f	LHS Cut Brace	2"x 6 Offcuts	1
2f	Brace Plate 1	5/4"x3"	1
3f	Brace Plate 2	5/4"x3"	1



LHS Arrangement Shown
RHS - opposite hand

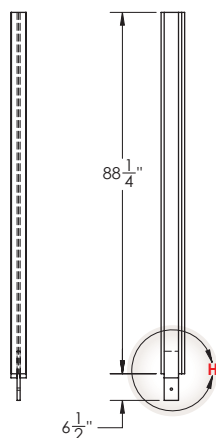


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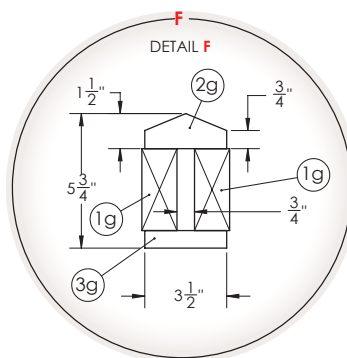
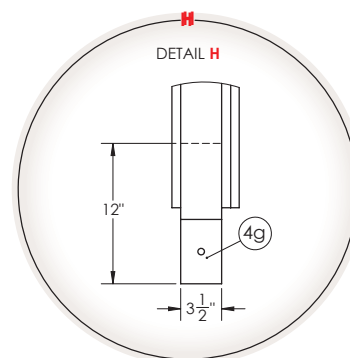
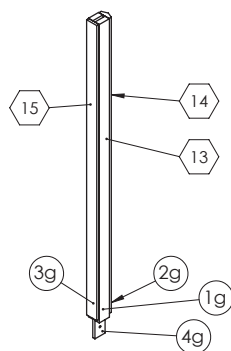
xii

Gazebo

Item No.	Description	Material	Qty.
1g	Post Verticals (Short)	2"x4"	2
2g	Post Vertical Corner Cap	2"x4"	1
3g	Inner Post Trim	1"x4"	1
4g	3/4"x3 1/2" Plywood Filler	3/4" Plywood	1
5g	1/2"x5" Galvanized Carriage Bolt	Not Shown	2



NOTES:
1) POST LAYOUT - DOUBLE JOIST
(TYPICAL FOR 2)

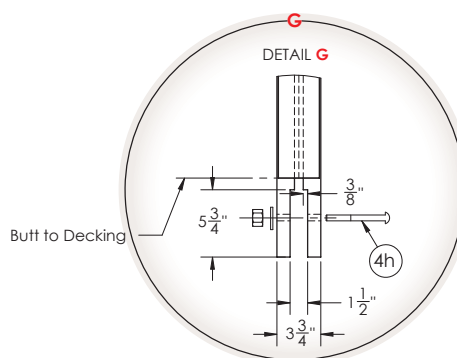
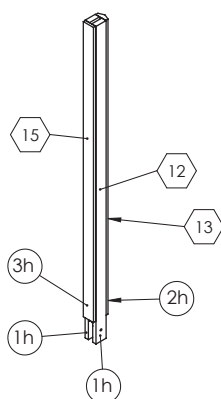
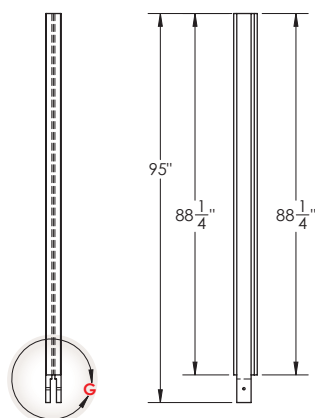


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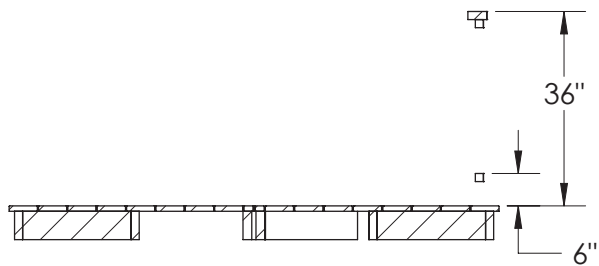
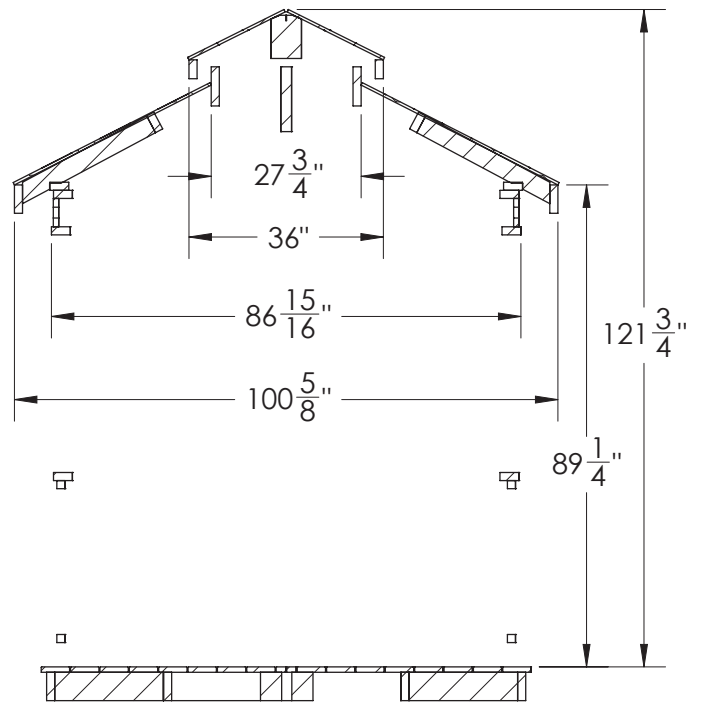
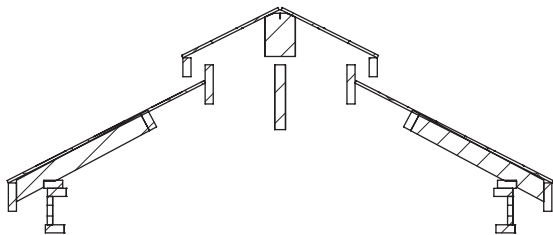
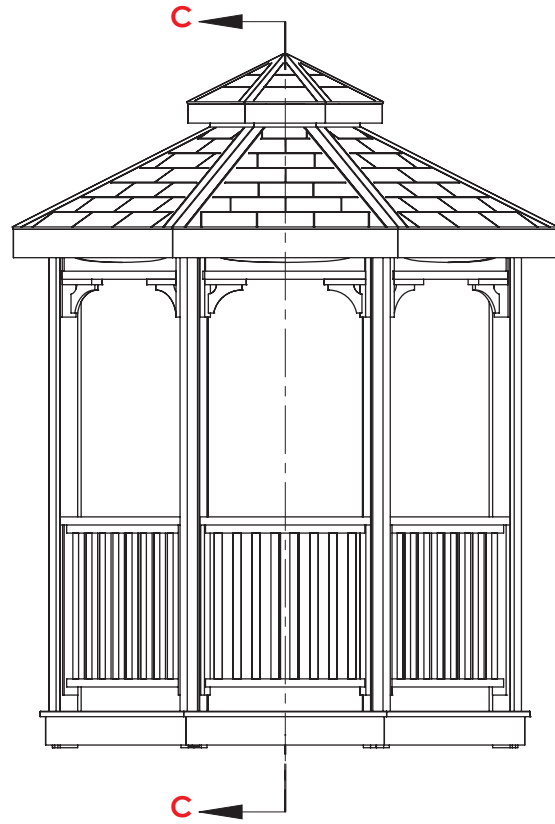
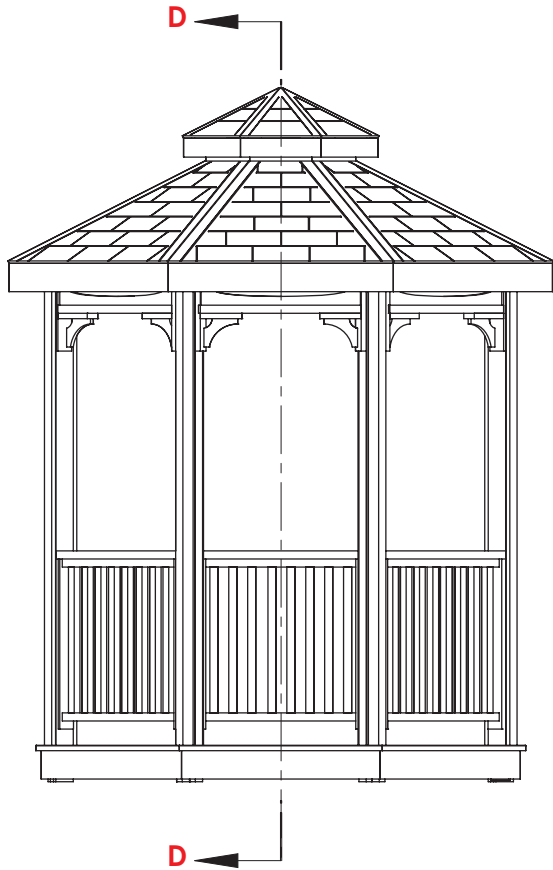
Item No.	Description	Material	Qty.
1h	Post Verticals (Long)	2"x4"	2
2h	Post Vertical Corner Cap	2"x4"	1
3h	Inner Post Trim	1"x4"	1
4h	1/2" x 5" Galvanized Carriage Bolt See Description		6

SEE DETAIL F

NOTES:
1) POST LAYOUT - ALL LOCATIONS
EXCEPT DOUBLE JOIST (TYPICAL FOR 6)



xiv



SECTION **D-D**

SECTION **C-C**

Gothic Arbor

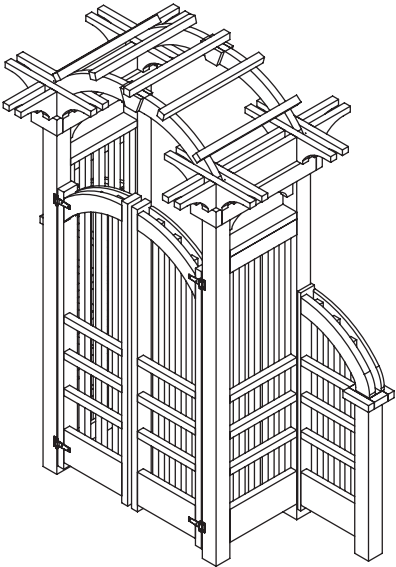
MATERIAL LIST

4	4"x4" x 12'	2lb	1 ¼" spiral galvanized finish nails
2	4"x4" x 8'	2lb	3" deck screws (rated for western red cedar)
2	2"x8" x 14'	2lb	2 ¼" deck screws (rated for Western Red Cedar) (or 15 gauge finishing brads or 2 ½" spiral galvanized finish nails)
5	2"x4" x 48"		
2	2"x6" x 10'		
3	2"x4" x 8'	2	pairs of heavy duty strap hinges.
2	2"x4" x 12'		
1	2"x6" x 3'		
20	2"x2" x 8'		
3	1"x4" x 8'		
1	1"x8" x 8'		

Pocket hole jig and #12 pan head stainless wood screws

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

****Consider pre-finishing your Western Red Cedar prior to assembly.*



INSTRUCTIONS

1. Shop for, gather and organize your materials.
2. Prefabricate from the material list and stack like parts together. It may be prudent to leave parts slightly long and trim to fit once measurements are confirmed.
3. Layout and dig the 42" deep x 10" holes using a lever augur or power augur—or better still, hire someone that specializes in digging post holes. Consider laying out the hole locations on a 3/8" sheet of plywood to assure accurate setting of the posts. Double check the locations after the posts are set and adjust part sizes upward if necessary.
4. Set the outermost posts first, then by attaching a string line offset 1/2", level and align your posts to maintain them in a straight line. You don't have to brace the posts if you pack the soil or fine gravel tightly with your foot.
5. After allowing the posts to set for 24-48 hours, cut and fit the base rails and cap rails. Fasten base rails and cap rails using the pocket hole jig and 3" #12 screws. The base rails should be 3" off the ground and level to one another.
6. Trim the posts to height illustrated. Assemble the post top/rafters and the arch as illustrated and secure to the top of the posts using 3" deck screws. Everything should be centered—and when another part slides between other parts, the space must be the same as the part sliding in. Normally 2x material is 1.5", however it is always good practice to measure. Countersink all screws.
7. Cut and Install the post trim to lock the rafters in place. The side panel lattice can now be assembled as illustrated. Cut blocks to help

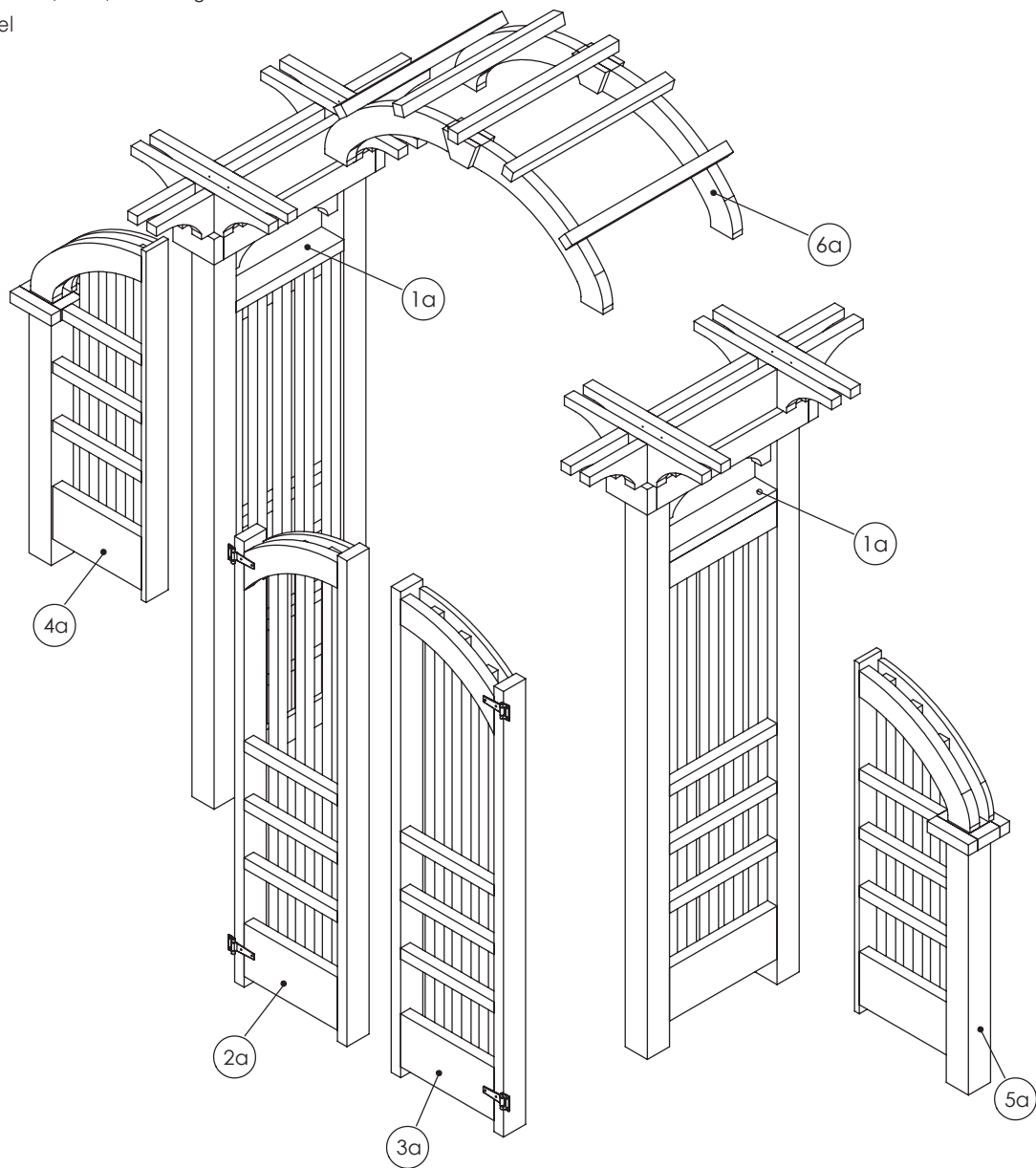
- you space the parts quickly and accurately while you fasten the lattice.
8. Check the location of the short posts, measuring at the top and base of the posts then assemble the wings as illustrated.
 9. Confirm the space between the gate supporting posts—measuring at the top and base of the posts. The total size of the gates should be 1.5" less than the opening for double gates. 1" space should be maintained between the two gates for swing—and 1/4" between the gates and the support posts. Adjust the gates smaller or larger as required. If joints are not tight and gates have movement, invest in gate wires to maintain square.
 10. Give your project a coat of stain, then fill any voids or holes with exterior putty. Give it a second coat after putty.

**Plan designed by Garden Structure (www.gardenstructure.com). It is an artist's conception and is intended as general reference only. The Western Red Cedar Lumber Association does not warrant the accuracy of the information herein. Always follow local and national building codes.*

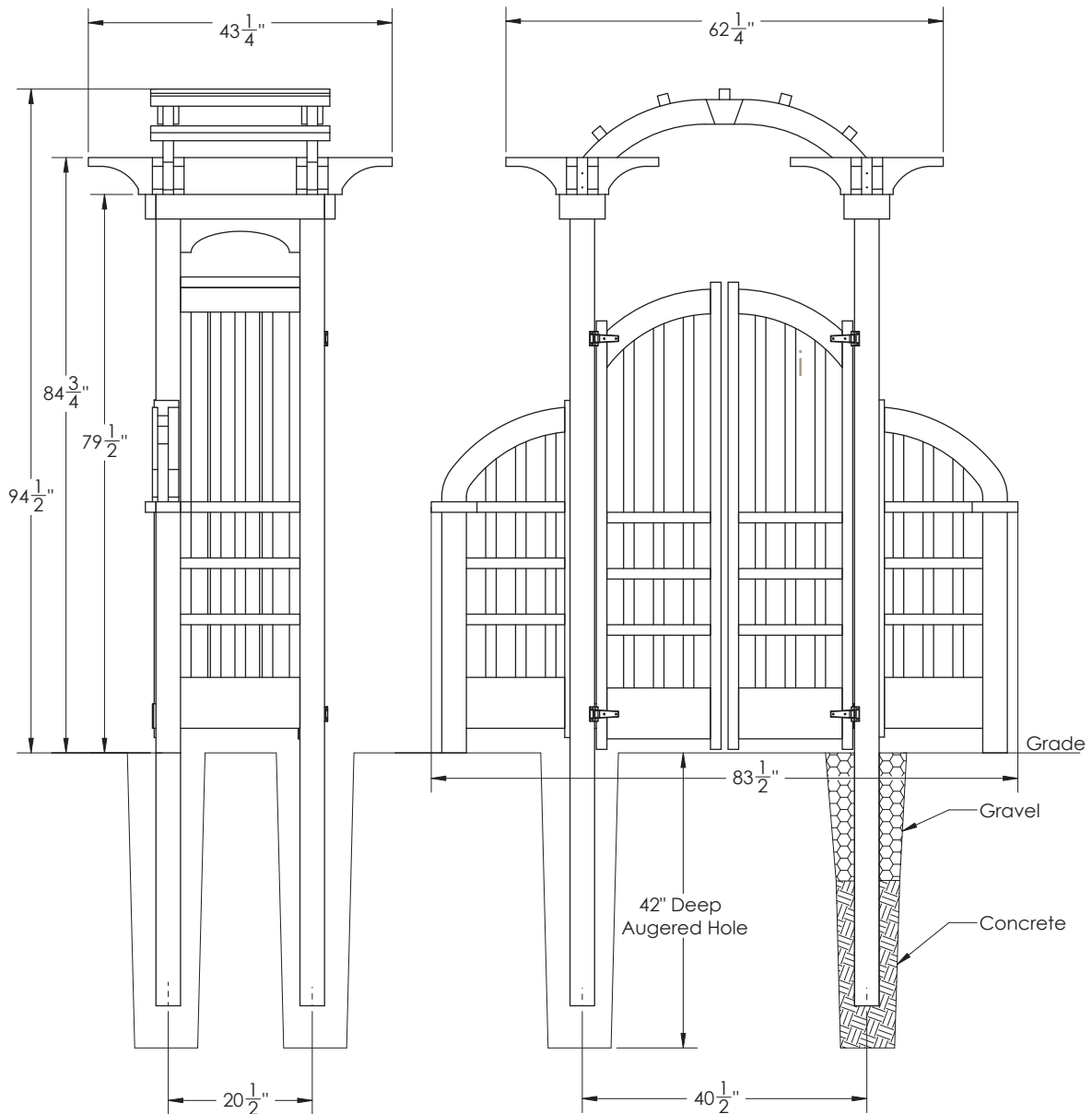
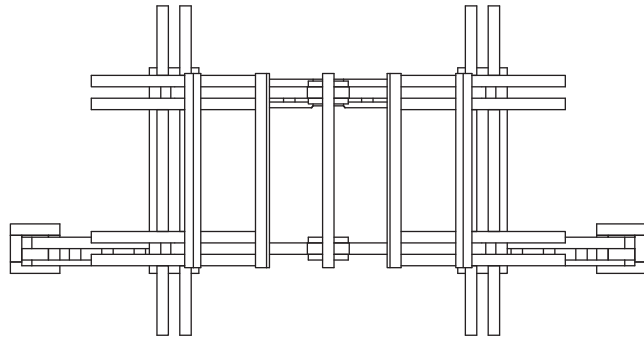
RECOMMENDED TOOLS

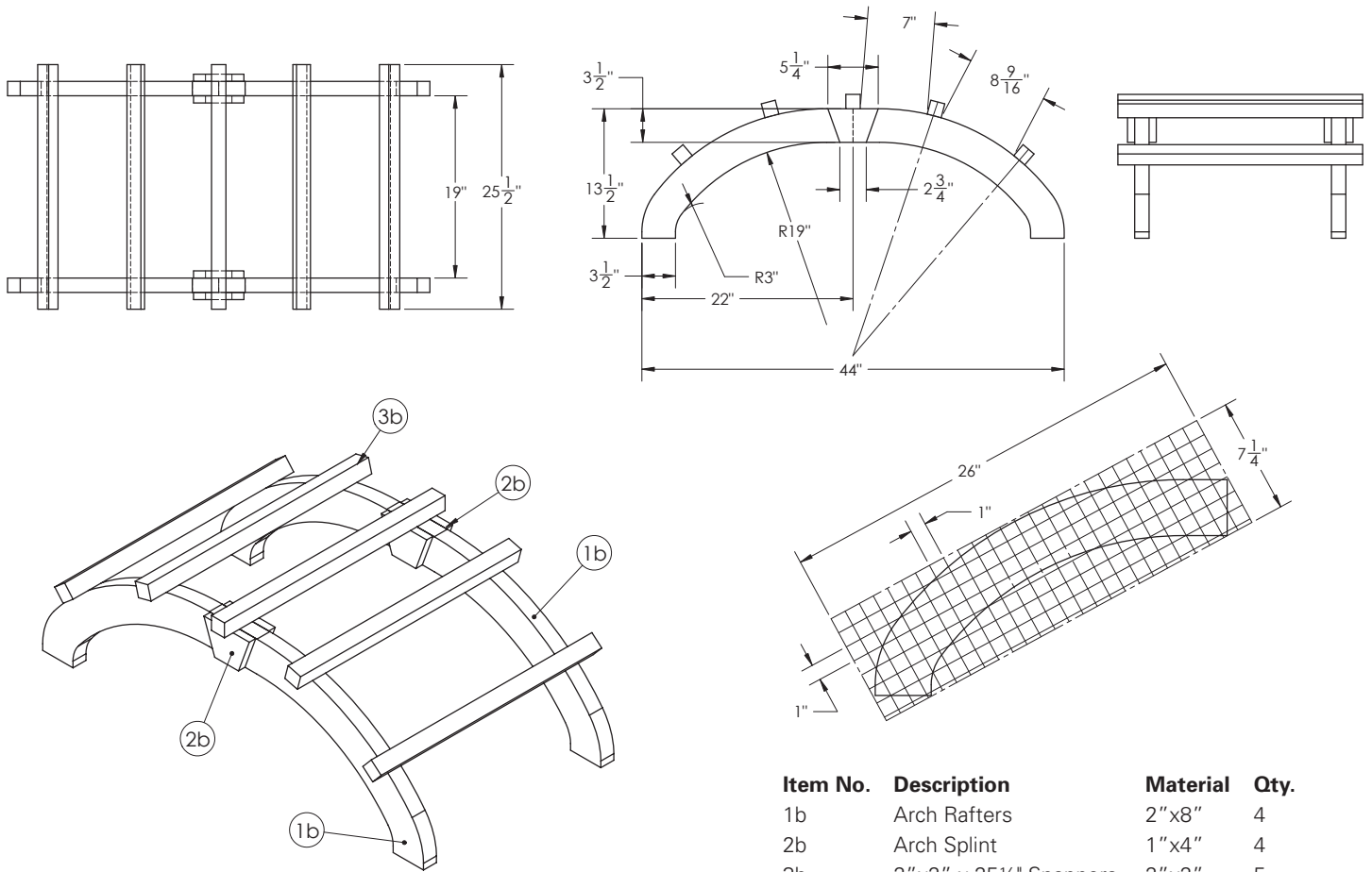
- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing square
- Pocket hole jig and #12 pan head stainless wood screws
- Adjustable wrench or socket set
- 3/8" Countersink and pilot bit and tapered plug cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw
- Table saw
- Wheelbarrow, shovel, rake, lever augur
- An accurate level

Item No.	Description	Material	Qty.
1a	Side Panel Sub Assy	Diagram iv	2
2a	Gate - LHS	Diagram v	1
3a	Gate - RHS	Diagram v	1
4a	Wing - LHS	Diagram vi	1
5a	Wing - RHS	Diagram vi	1
6a	Arch Sub Assy	Diagram ii	1

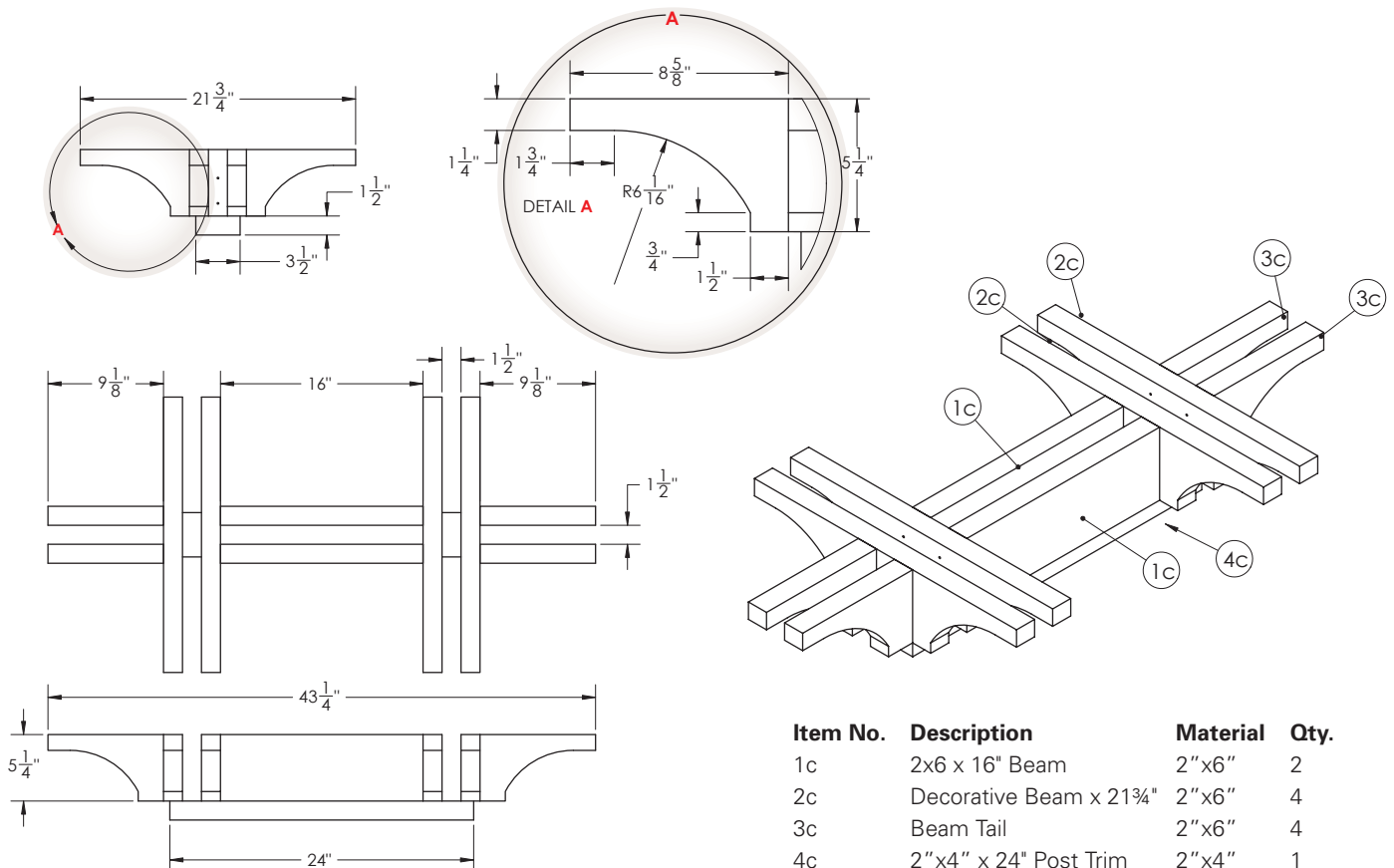


Gothic Arbor



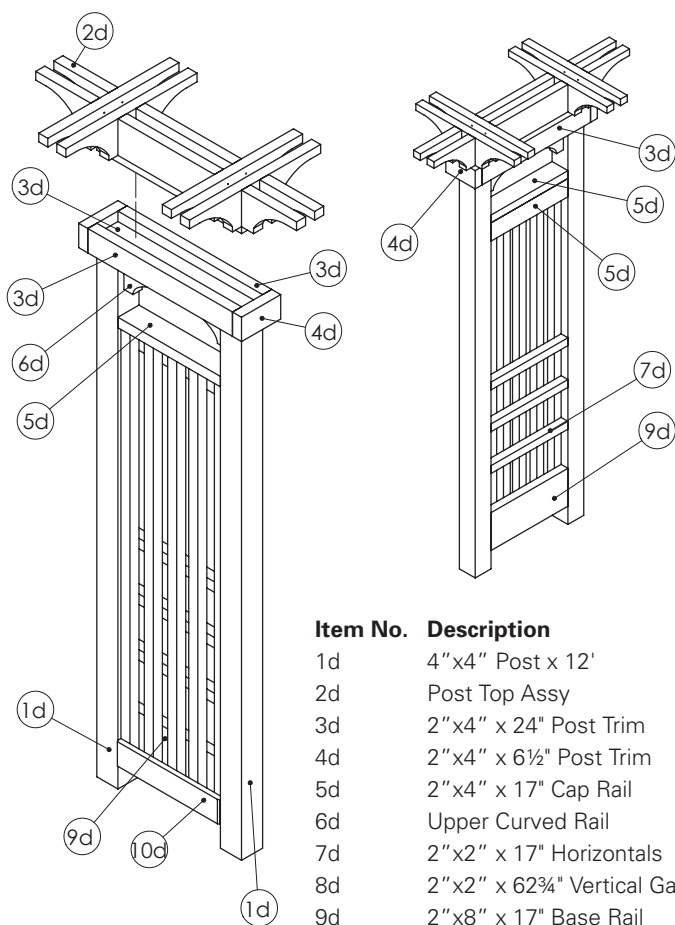
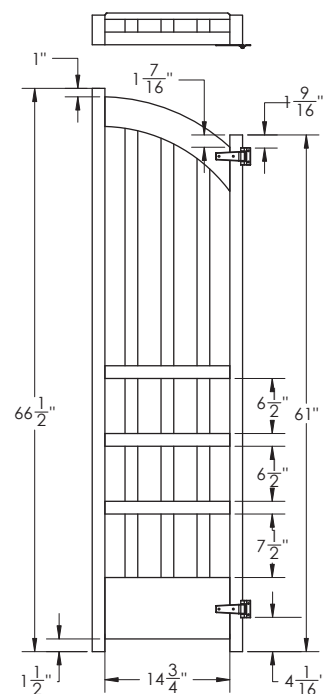
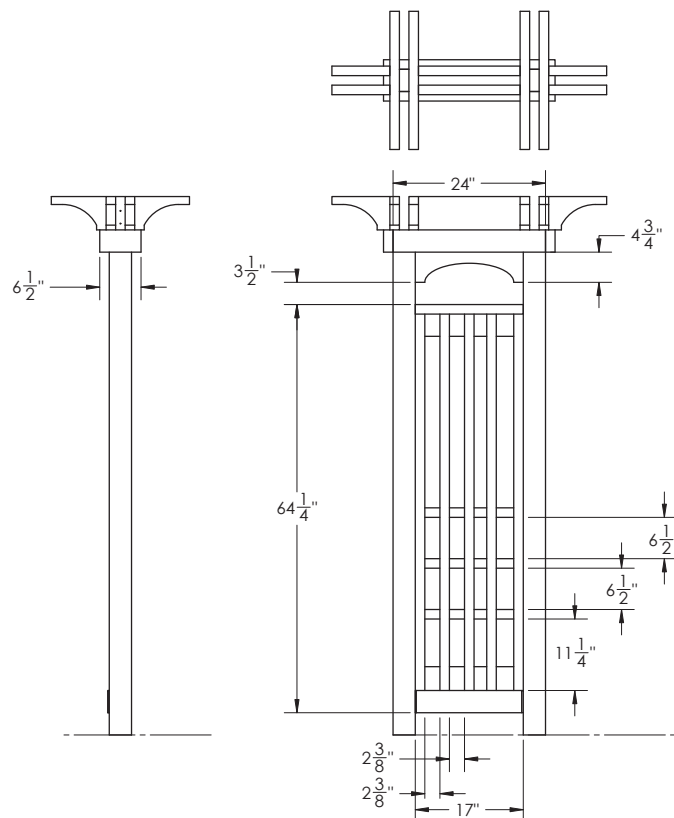


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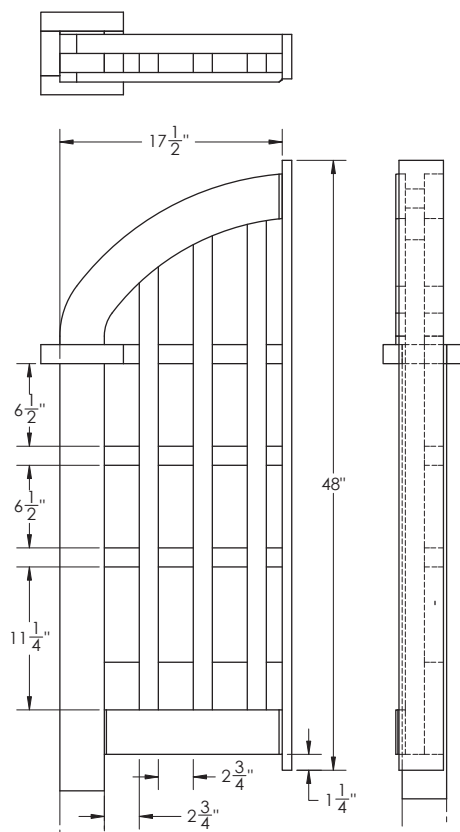


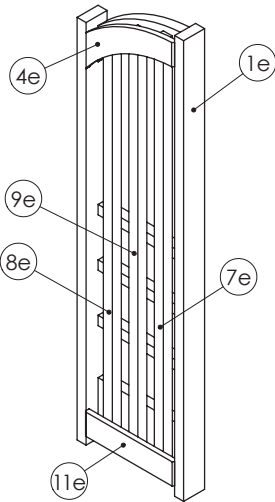
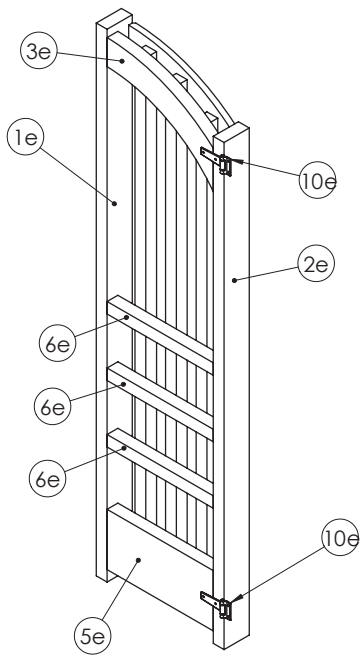
iii

Gothic Arbor



Item No.	Description	Material	Qty.
1d	4"x4" Post x 12'	4"x4"	2
2d	Post Top Assy	Diagram iii	1
3d	2"x4" x 24" Post Trim	2"x4"	3
4d	2"x4" x 6 1/2" Post Trim	2"x4"	2
5d	2"x4" x 17" Cap Rail	2"x4"	2
6d	Upper Curved Rail	2"x6"	1
7d	2"x2" x 17" Horizontals	2"x2"	3
8d	2"x2" x 62 3/4" Vertical Gate Lattice	2"x2"	5
9d	2"x8" x 17" Base Rail	2"x8"	1
10d	1"x4" x 17" Base Trim	1"x4"	1



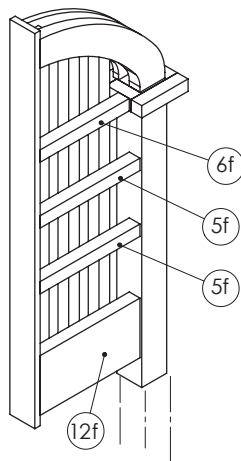
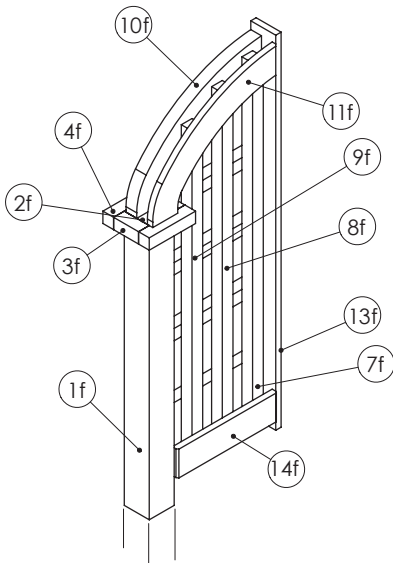


Item No.	Description	Material	Qty.
1e	2"x4" x 66½" Inner Rail	2"x4"	1
2e	2"x4" x 61" Outer Rail	2"x4"	1
3e	Gate Arch (Wide)	2"x8"	1
4e	Gate Arch (Narrow)	1"x8"	1
5e	2x8 x 14 3/4" Base Block	2"x8"	1
6e	2x3 x 14 3/4" Gate Horizontal Lattice	2"x3"	3
7e	2x2 x 62 3/4" Gate Vertical Lattice	2"x2"	1
8e	2x2 x 59" Vertical Gate Lattice	2"x2"	1
9e	2x2 x 61 1/2" Vertical Gate Lattice	2"x2"	1
10e	Gate Hinge		2
11e	1x4 x 14 3/4" Gate Base Trim	1"x4"	1

NOTES:

- 1) LHS gate shown, for RHS flip components other direction
- 2) Bill of materials reflects the amount of materials for each gate sub assy. (Half the gate for this project 2 gate halves are required.)

V



Item No.	Description	Material	Qty.
1f	4x4 x 8' Post	4"x4"	1
2f	2"x4" x 3½" Cap	2"x4"	1
3f	2"x2" x 3½" Wing Post Trim	2"x2"	2
4f	2"x2" x 6½" Wing Post Trim	2"x2"	2
5f	2"x2" x 14" Wing Horizontals	2"x2"	2
6f	2"x2" x 12½" Wing Horizontals	2"x2"	1
7f	2"x2" x 44½" Wing Verticals	2"x2"	1
8f	2"x2" x 43" Wing Verticals	2"x2"	1
9f	2"x2" x 40½" Wing Verticals	2"x2"	1
10f	2"x8" x Wing Arch	2"x8"	1
11f	1"x8" x Wing Arch	1"x8"	1
12f	2"x8" x 14" Wing Base Rail	2"x8"	1
13f	1"x4" x 48" Wing Mount Plate	1"x4"	1
14f	1"x4" x 14" Wing Base Trim	1"x4"	1

NOTES:

- 1) Right wing assy shown, for left hand flip arch other direction
- 2) Bill of materials reflects the amount of materials for each wing sub assy. For this project 2 wings are required.

vi

This Gothic Flavored Arbor makes a handsome entrance to any yard, garden or surround it with hedges to make an entrance to your "Secret Garden Room". With the need of nothing more than a decent quality jigsaw you can build this arbor in your garage in a weekend or two.

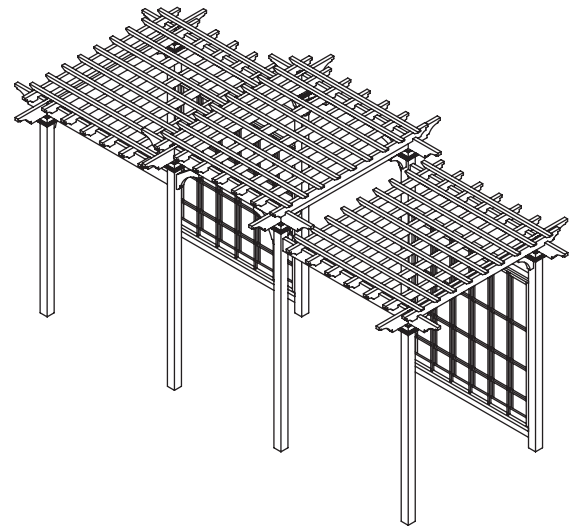
Vineyard Pergola

MATERIAL LIST

10	2"x6" x 8'	1lb	3" spiral galvanized finish nails
8	4"x4" x 12'	2lb	1 1/4" spiral galvanized finish nails
27	2"x4" x 8'	5lb	3" Deck Screws (rated for Western Red Cedar)
9	1"x6" x 6'	5lb	2 1/2" Deck Screws (rated for Western Red Cedar) (or 15 gauge finishing brads or 2 1/2" Spiral Galvanized Finish Nails)
1	5/4"x6"x 12'		
1	2"x8" x 8'		
1	5/4"x6" x 8'		
3'	1/2" Mahogany Dowel		
27	2"x2" x 8'		
12	bags of concrete mix		

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

***Consider pre-finishing your Western Red Cedar prior to assembly.*



INSTRUCTIONS

1. Shop for, gather and organize the materials.
2. Prefabricate the parts as required and stack like parts together. It may be prudent to leave parts slightly long and trim to fit once measurements are confirmed.
3. Layout and dig the minimum 42" deep x 10" holes using a lever augur or power augur—or better still, hire someone that specializes in digging post holes. Double check the locations after the posts are set and adjust part sizes upward if necessary.
4. Always place posts on 2-shovels of concrete. Set the outermost posts first and confirm square by measuring diagonally with solid blocks between the end posts. Conversely you could put up batter boards that are offset 1/2" from the final post locations. Once the 4 corner posts are set as near to square as possible, attach a string line offset 1/2" to the corner posts on the long sides. Level and align your posts to maintain them in a straight line as you set in concrete. Backfill with dirt or gravel immediately. You don't have to brace the posts if you pack the soil or fine gravel tightly with your foot.
5. After allowing the posts to set for 24-48 hours, cut and fit the support rails and fasten to the posts using fence clips and roofing nails. The support rails should be 3" off the ground and level to one another. Add a 3/4" galvanized finish nail on the diagonal to secure the support rails securely. Fit the base rails and top rails between the posts but do not fasten.
6. Assemble the screens as illustrated. Cut blocks to help you space the parts quickly and accurately while you secure the lattice. Fasten the top and base rails to the top and bottom of the lattice screen using the 3" galvanized finish nails into the 1x lower rail and

upper rail. Fasten the rails to the posts using pocket hole jig and #12 stainless screws. Fasten to the support rail using 3" deck screws.

7. Trim the posts to height illustrated or slightly shorter if posts are too short due to grade. The top of posts should be level to one another in each of the 3 roof sections. Assemble the post caps as illustrated and install with 3/4" spiral galvanized nails. Fasten the rafters to the caps using a 3" deck screw at each connection. (you may use exterior suitable waterproof adhesive on the dowel to reinforce).

8. Space rafters on beams to spacing illustrated and secure with 3" deck screws or 3/4" spiral galvanized spikes. Countersink all screws and nails.

9. Cut and install the spanners to lock the rafters in place. Again, use a solid block to place them quickly.

10. Cut out braces from off-cut 2x6 beam and 2x4 rafter materials. Fasten between posts and beams with 3" deck screws or #12 stainless screws.

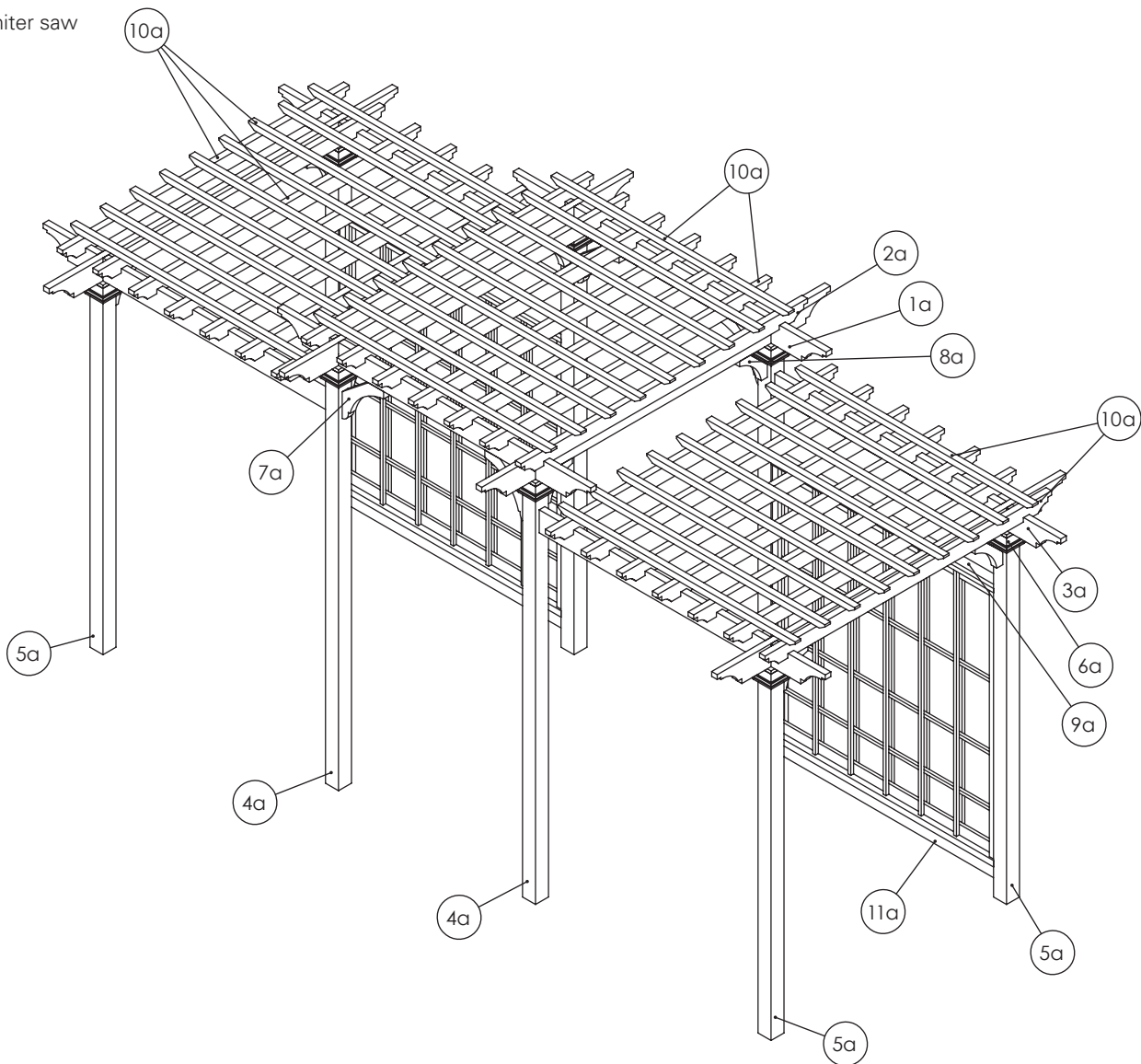
11. Give your project a coat of stain, then fill any voids or holes with exterior putty. Give it a second coat after putty.

**Plan designed by Garden Structure (www.gardenstructure.com). It is an artist's conception and is intended as general reference only. The Western Red Cedar Lumber Association does not warrant the accuracy of the information herein. Always follow local and national building codes.*

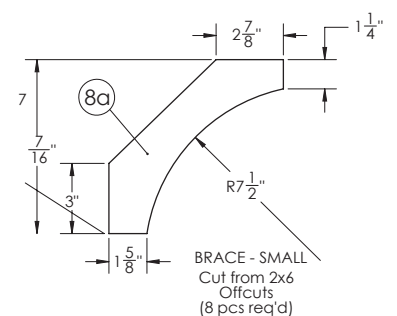
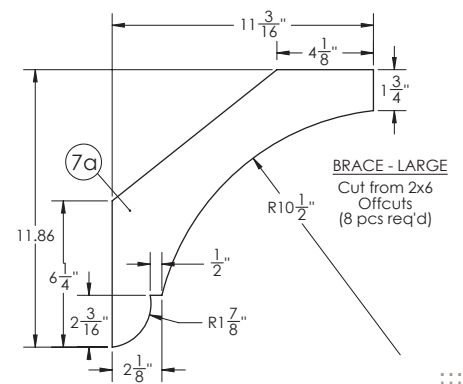
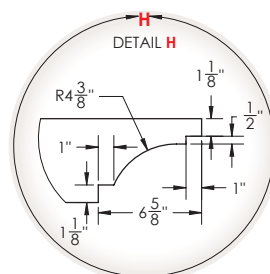
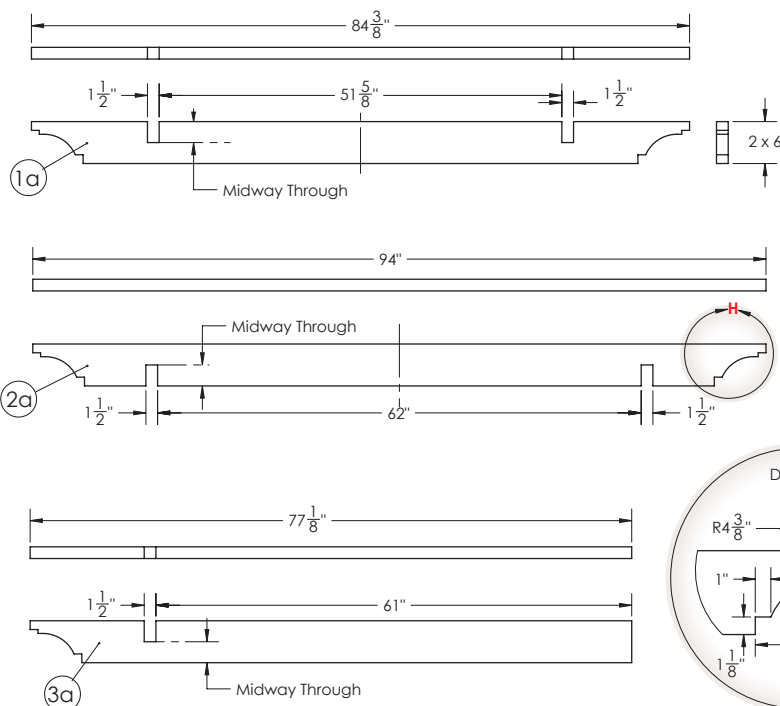
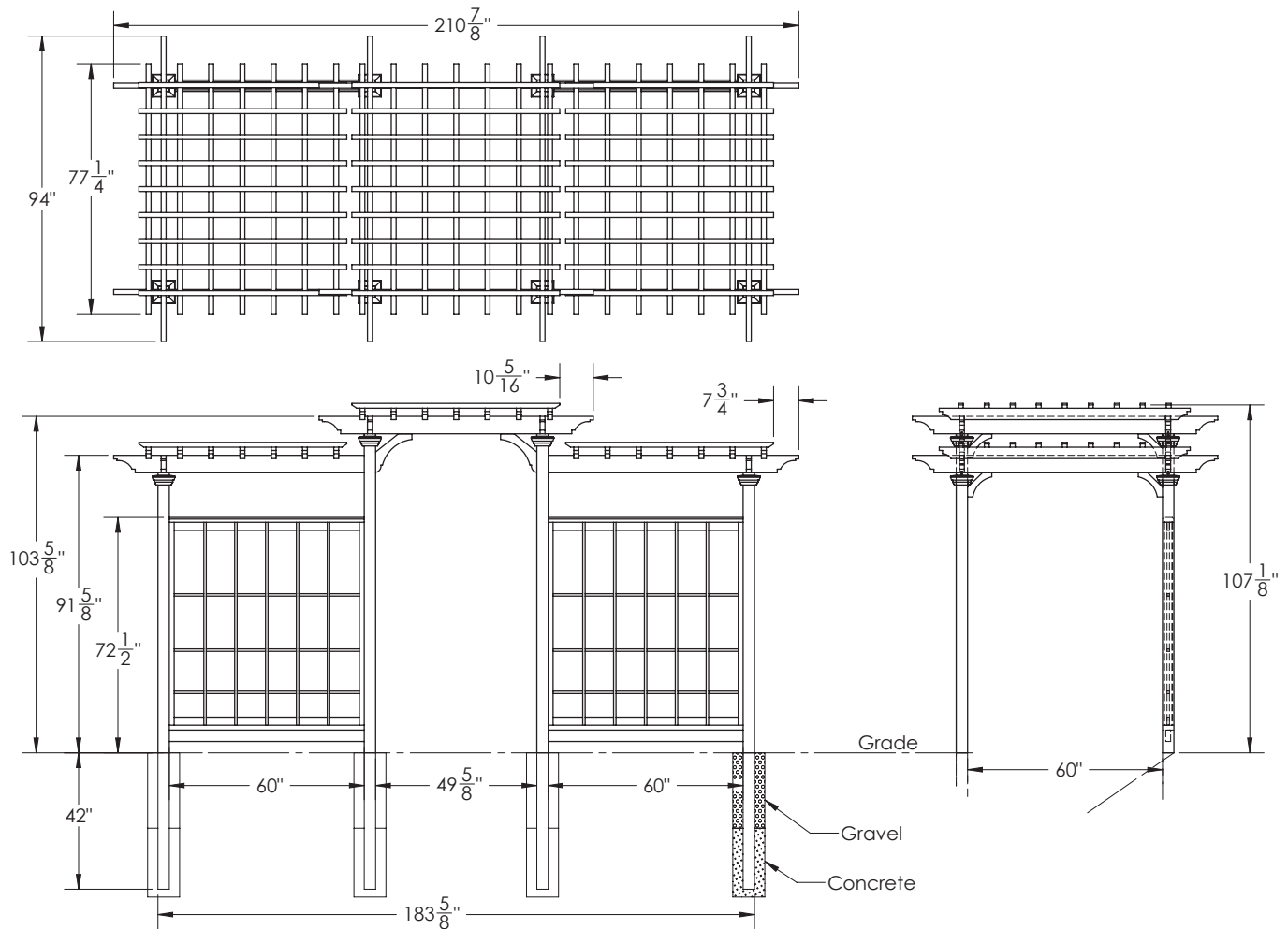
RECOMMENDED TOOLS

- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing square
- Pocket hole jig and #12 pan head stainless wood screws
- Adjustable wrench or socket set
- 3/8" countersink and pilot bit
- And tapered plug cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw
- Table saw
- Wheelbarrow, shovel, rake, lever augur
- An accurate level
- Power miter saw

Item No.	Description	Material	Qty.
1a	Centre Beam (84 3/8")	2"x6"	2
2a	Centre Crossbeam(94")	2"x6"	4
3a	Centre Half Beams (53 1/8")	2"x6"	4
4a	4"x4" Posts (Long)	4"x4"	4
5a	4"x4" posts (Short)	4"x4"	4
6a	Post Cap	Diagram vi	8
7a	Brace - Large	Offcuts	4
8a	Brace - Small	Offcuts	8
9a	Top Rail	2"x4"	2
10a	Upper Rafter Assy	Diagram vii	3
11a	Side Panel Assy	Diagram v	2



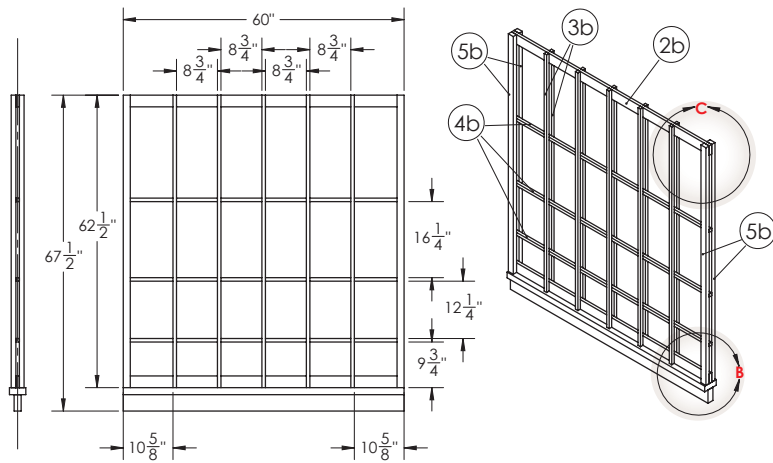
Vineyard Pergola



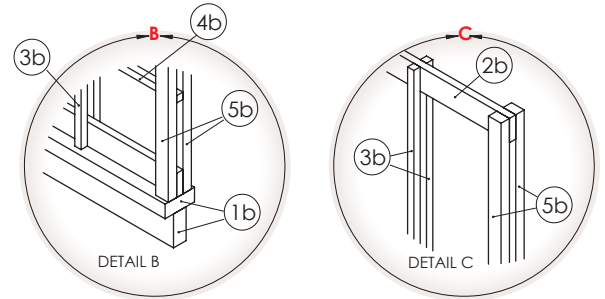
i

iii

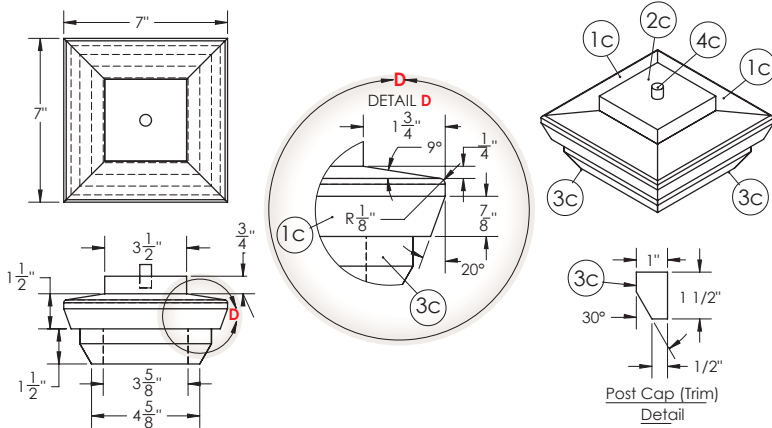
iv



Item No.	Description	Material	Qty.
1b	Support Rail	2"x4"	2
2b	Upper & Lower Rails	3/4"x2 1/4"	2
3b	Vertical Lattice	3/4"x3/4" (cut from 1x6)	10
4b	Horizontal Lattice	3/4"x3/4" (cut from 1x6)	3
5b	Split Rails	5/4"x6"	4
6b	3" Spiral Nails Galvanized		



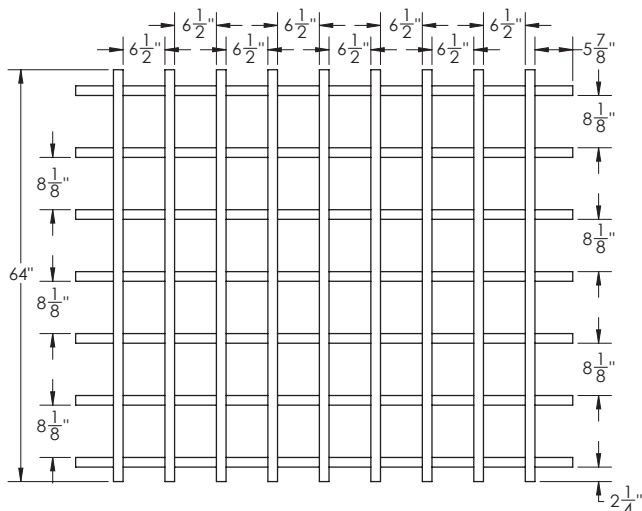
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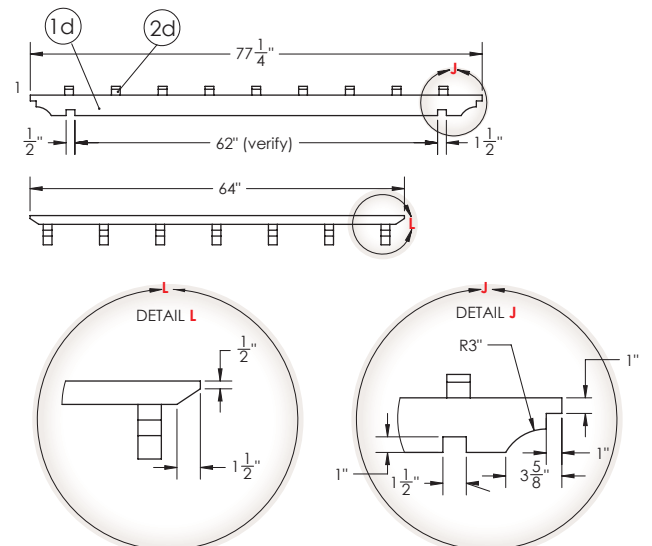
Item No.	Description	Material	Qty.
1c	Post Cap (Cap)	7"x7"x 1 1/2" (cut from 2"x8")	1
2c	Post Cap (Top Piece)	3 1/2" x 3 1/2" x 3/4" (cut from 1x6)	1
3c	Post Cap (Trim)	1 1/2" x 1" (cut from offcuts)	4
4c	1/2" Hardwood Dowel	Purchased	1

Notes:
 1) Typical for 8
 2) Drill 1/2" hole centrally in top piece, for dowel
 3) Mitre post cap (trim)

vi



Item No.	Description	Material	Qty.
1d	Rafter	2 x 4	7
2d	Spanner	2 x 2	9



vii

viii

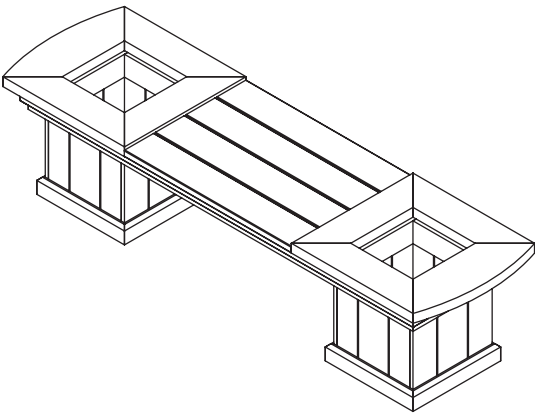
Herb Garden Planter

MATERIAL LIST

5	2"x4" x 8'	1lb	1¾" spiral galvanized finish nails.
8	1"x6" x 5'	2lb	3" Deck Screws (rated for red cedar) or spiral galvanized nails.
2	1"x6" x 6'		
1	5/4"x6" x 12'	2lb	2¼" Deck Screws (rated for red cedar)
1	2"x6" x 12'		(or 15 guage finishing brads or 2½" Spiral Galvanized Nails)
1	2"x8" x 4'		
1	2"x4" x 12'		
1	1"x6" x 8'		

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

**Consider pre-finishing your Red Cedar prior to assembly.*

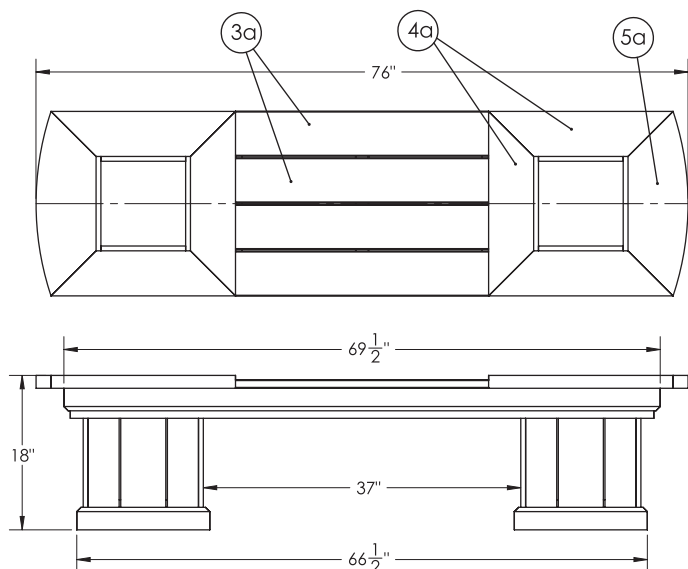


INSTRUCTIONS

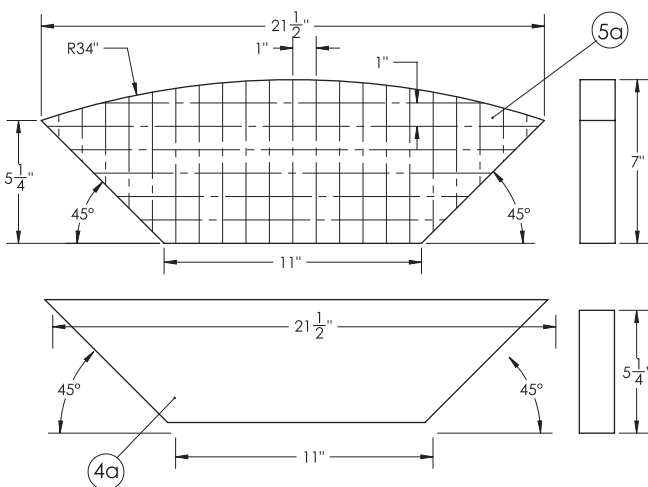
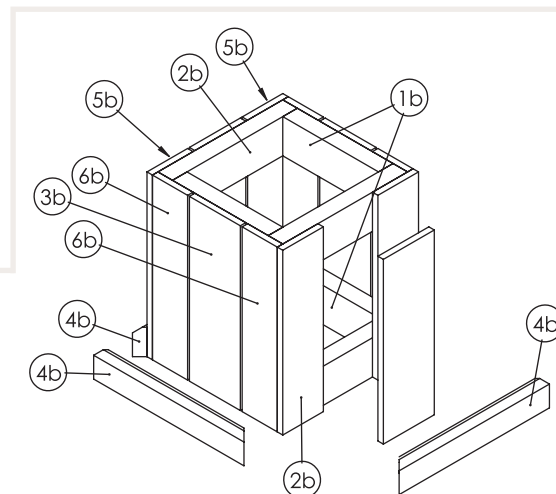
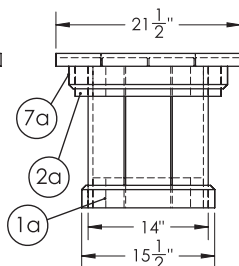
- A. Shop for, gather and organize your materials.
- B. Prefabricate parts and stack like pieces together. It may be prudent to leave parts slightly long and trim to fit once measurements are confirmed.
- C. Assemble the planter boxes and clad with 5' fence boards. Install baseboard trim.
- D. Assemble bench frame. Confirm sizing of frame by measuring the assembled planter box. (lumber varies in nominal size due to milling processes)
- E. Install bench frame trim. Assemble mitered planter top trim (Picture Frame 2x6-2x8) and install centered upon the planter boxes.
- F. Trim bench boards to fit and install upon bench frame between mitered planter top trim.
- G. Sand off all the sharp corners and apply a high quality exterior finish.

RECOMMENDED TOOLS

- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Framing Square
- Pocket Hole Jig and #12 Pan Head Stainless Wood Screws
- 3/8" Countersink and Pilot bit and Tapered Plug Cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Small Drill Press (optional)
- Flush Cut Saw
- Table Saw

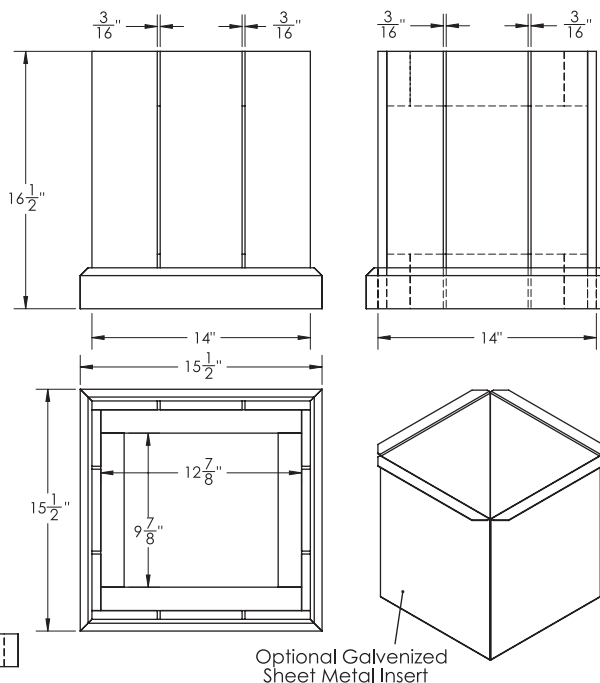
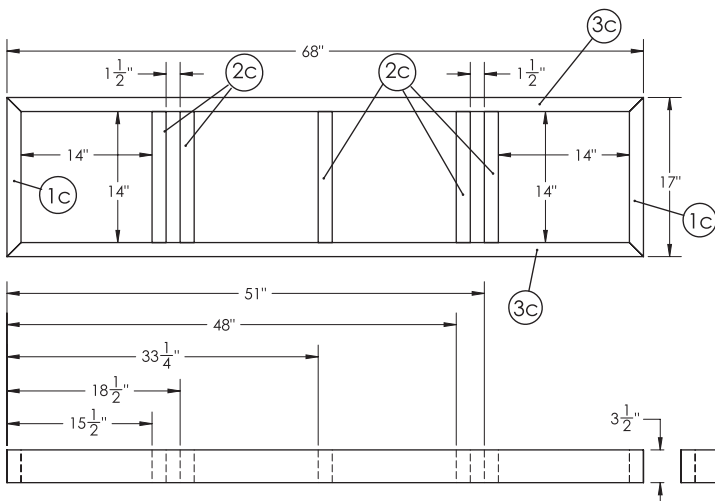


Item No.	Description	Material	Qty.
1a	Leg Sub Assy	Diagram iii & iv	2
2a	Bench Support Sub Assy	Diagram iv	1
3a	Bench Boards	5/4" x 6" Decking	4
4a	Planter Trim Board (Side)	2 x 6"	6
5a	End Cap	2"x8"	2
6a	Bench Frame Trim (Long Side)	1"x3" Trim (from 1"x6" x 8' Rip in Two)	2
7a	Bench Frame Trim (Short Side)	1"x3" Trim (from 1"x6" x 8' Rip in Two)	2



Item No.	Description	Material	Qty.
1b	Leg Support Frame (Short side)	2"x4"	4
2b	Leg Support Frame	2"x4"	4
3b	Leg Cladding Boards	1"x6" Fence Boards	4
4b	1x3 Trim	1"x3" (Mitred)	4
5b	Leg Cladding Boards (Ripped @ 4 3/16")	1"x6" Fence Boards	4
6b	Leg Cladding Boards (Ripped @ 3 5/8")	1"x6" Fence Boards	4

Item No.	Description	Material	Qty.
1c	Bench Support Frame (Short Side)	2"x4"	2
2c	Bench Support Frame Intermediate	2"x4"	5
3c	Bench Support Frame (Long Side)	2"x4"	2



Optional Galvanized Sheet Metal Insert

Privacy Screen

MATERIAL LIST

- 3

4"x4" x 8' (or longer if practical to support deck skirting or 4"x4" x 12' for free standing in ground)
- 1

2'x8" x 8'
- 4

1"x4" x 6'
- 9

1"x6" x 6'
- 1

5/4"x4" x 8'
- 26

1"x6" x 6'
- 1

5/4"x6" x 8'

OR

10

1"x6" x 8' Western Red Cedar and hardwood Biscuits+waterproof glue ***

8

Galvanized fence clips

.5lb

1 1/2" galvanized roofing nails

1lb

3" deck screws (rated for Western Red Cedar)

3lb

2 1/2" deck screws (rated for Western Red Cedar) (or 15 guage finishing nails or 2 1/2" spiral galvanized Pneumatic nails)

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

***Consider pre-finishing your Western Red Cedar prior to assembly.*

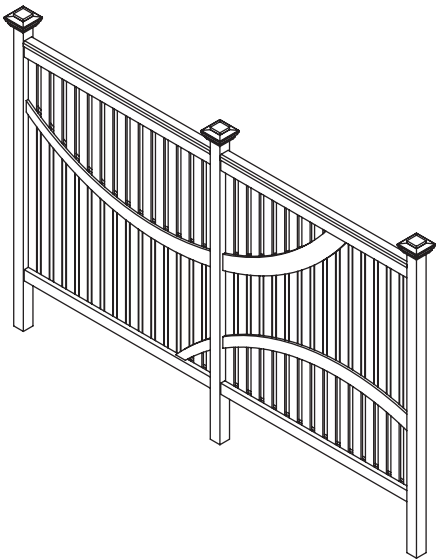
**** Full size templates with step by step solid wood lamination instructions version is available through www.GardenStructure.com*

OPTIONAL:

- 1

4"x8" sheet 3/16 masonite
- 1

4"x8" sheet marine ply



INSTRUCTIONS

1. Shop for, gather and organize the materials.
2. Prefabricate the parts as required and stack like parts together. It is prudent to leave parts slightly long and trim to fit once measurements are confirmed.
3. Layout and dig the minimum 42" deep x 10" holes using a lever augur or power augur—or better still, hire someone that specializes in digging post holes. Double check the locations after the posts are set and adjust part sizes upward if necessary. Or layout and block in existing deck framing and mount posts level and aligned to deck. Add in blocking and carriage bolts for a secure sturdy connection.
4. After allowing the posts to set for 24-48 hours, cut and fit the support rails and fasten to the posts using fence clips and roofing nails in roughly 3/8" from the face of the post. The support rails should be 3" off the ground or deck and level to one another. Add a 3/4" galvanized finish nail or framing nail on the diagonal to secure the support rails securely.
5. Install the wide vertical boards with the width of the narrow verticals +3/8", or vice versa if you want a more open screen—(narrow boards get fastened first and wide verticals are cut short later) cut a pair of blocks to help you do this quickly. Later when you install the narrow verticals you can balance the spacing with a small flat bar or scratch awl with a 3/16" shank.
6. Layout 2 curves in masonite, one with 82" radius, one with 78.25" radius. Make them about 80" long using a piece of plywood with a screw in one end and a hole for a pencil at the other at both distances from the screw. Smooth out the template and use it to layout full size curve templates on the rest of the masonite left. Use

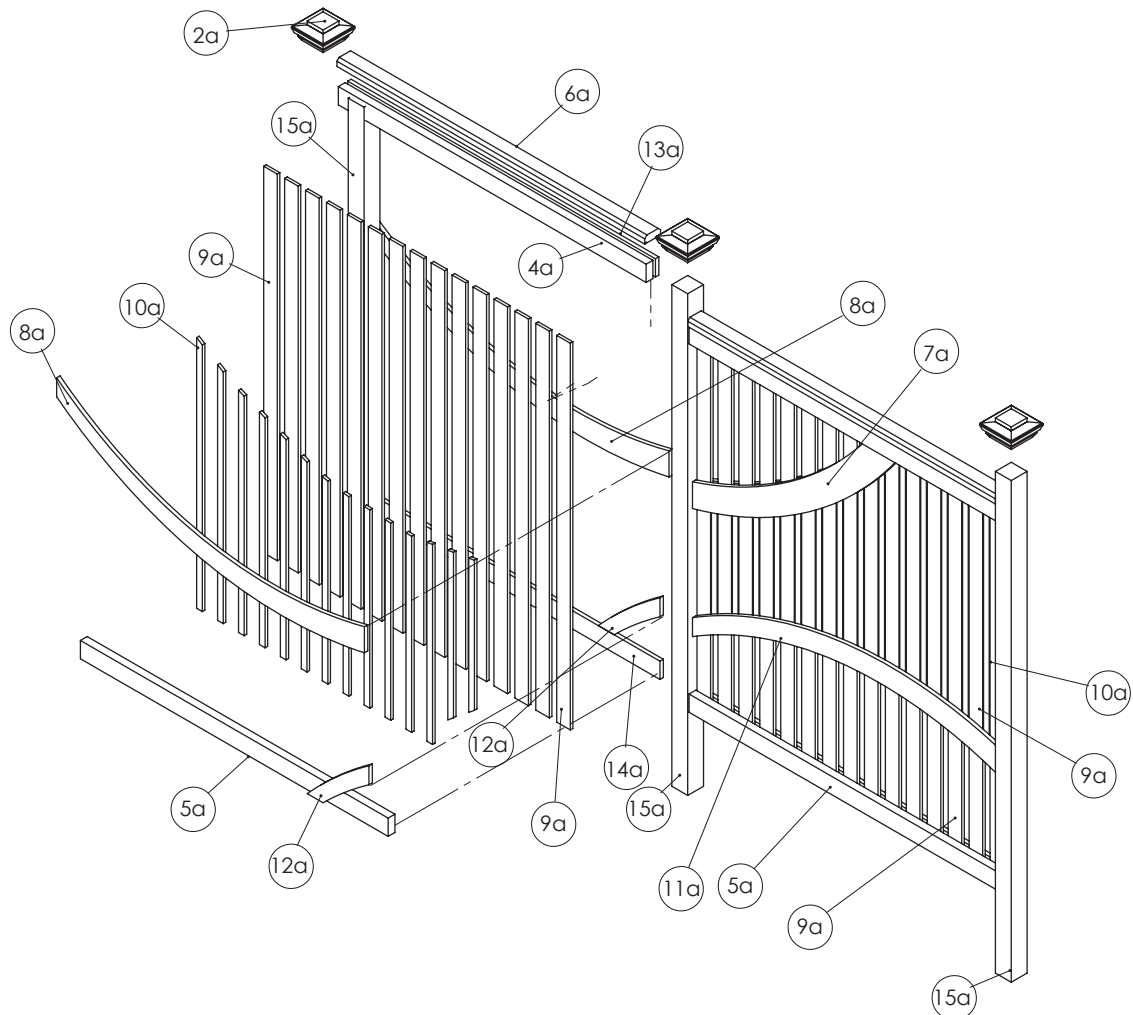
- the full size templates to layout the sweep panels required on either the plywood or glued up cedar.
7. Cut out and fit the sweep panels as required, 2 each size. Sand and trim both sets to size. Mount one set on one side of the screen to the verticals already installed in the locations shown using 1 1/4" wood screws. (trim head screws may be a nice touch).
8. Holding the narrow verticals in place temporarily, mark with a pencil and cut to shape with a jigsaw. Fasten to the sweep panels with 1 1/4" screws or nails. Repeat for all the narrow verticals.
9. Install the top and bottom 1"x4" trim rails, then install the other sweep panels to fit.
10. Trim the posts to height illustrated or slightly shorter if posts are too short due to grade. The top of posts should be level to one another. Assemble the post caps as illustrated and install with 3/4" spiral galvanized nails.
11. Give your project a coat of stain, then fill any voids or holes with exterior putty. Give it a second coat after putty.

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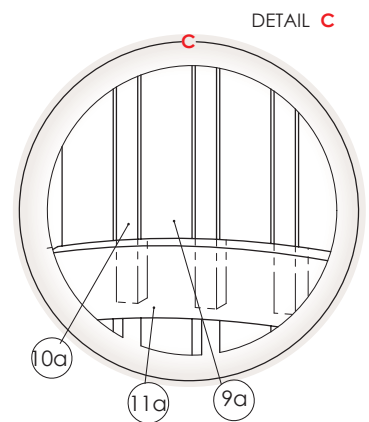
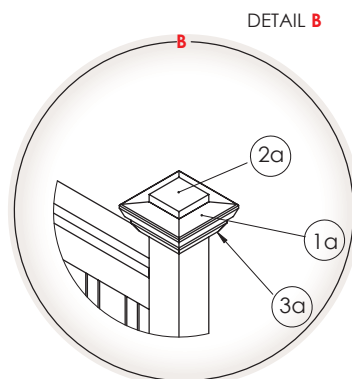
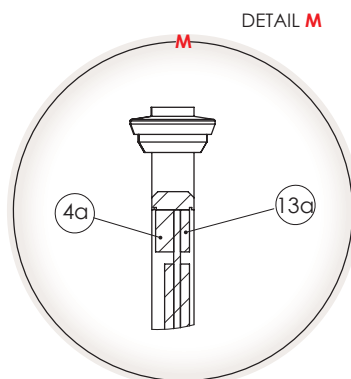
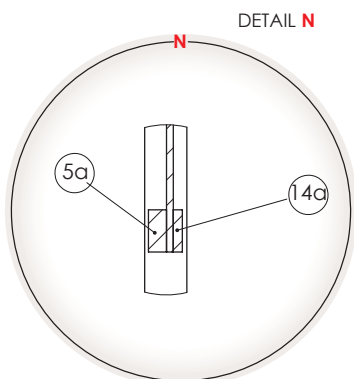
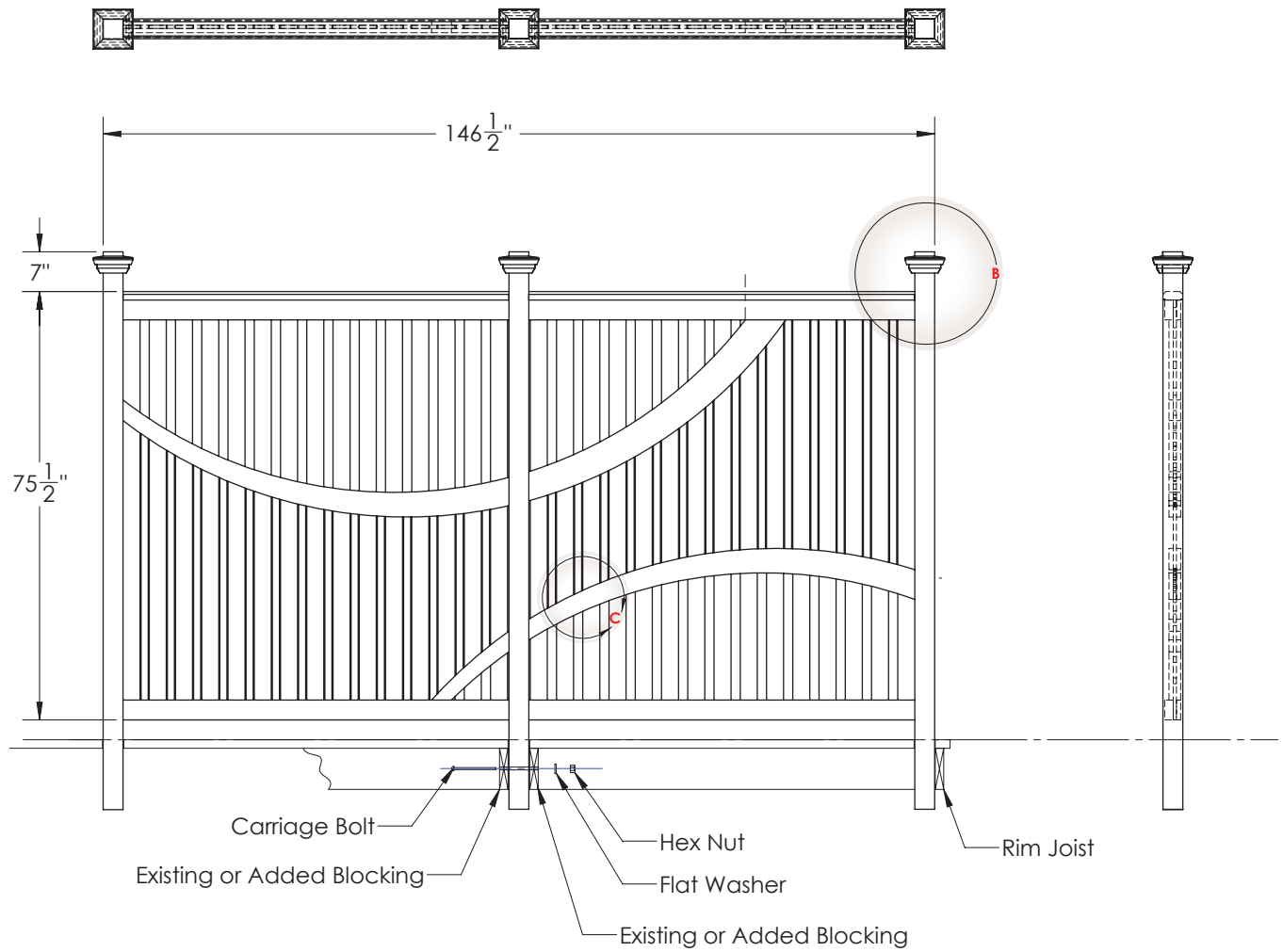
RECOMMENDED TOOLS

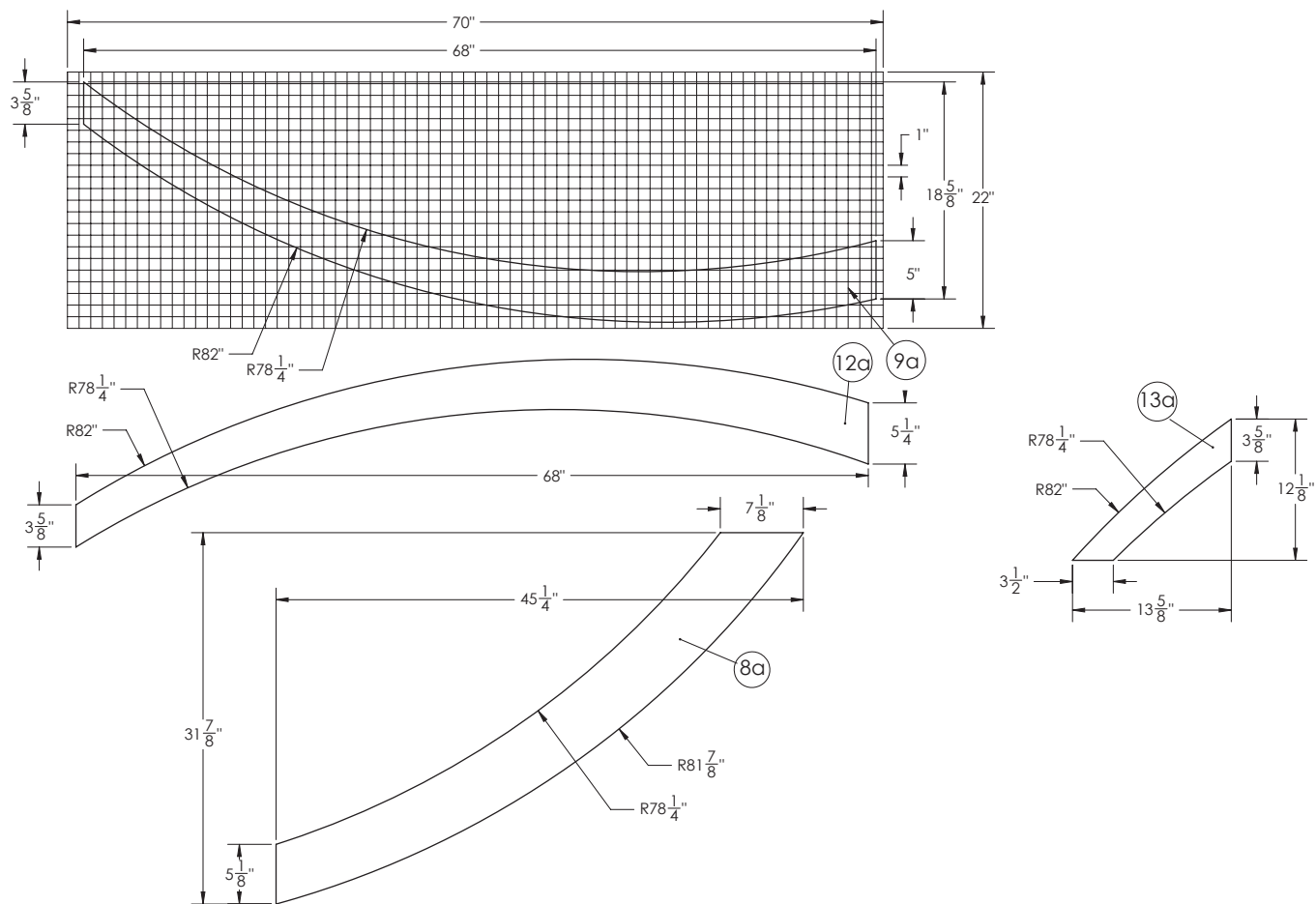
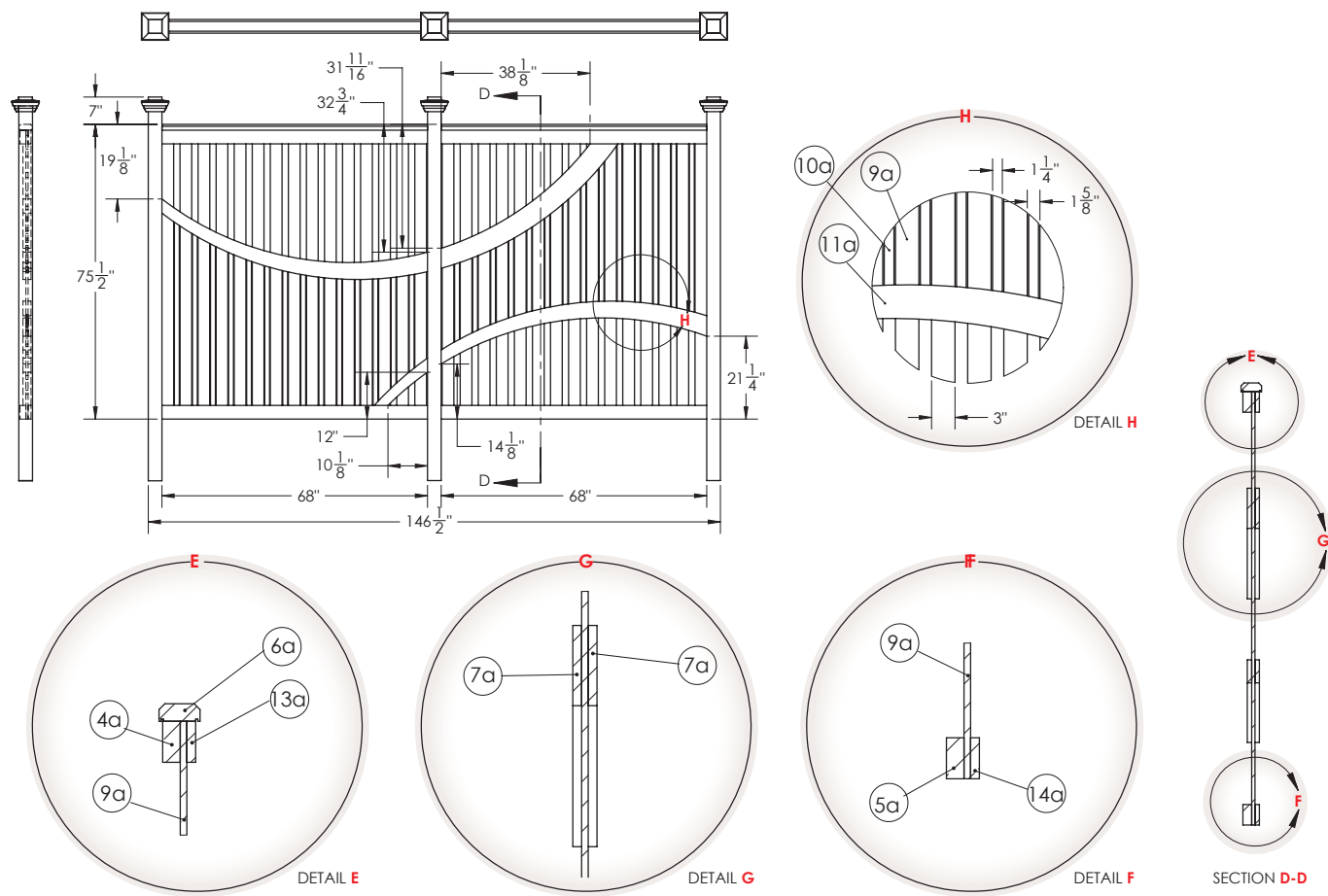
- 2 small off-cuts of 1x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip and screw gun
- Carpentry clamps (4) optional
- Framing square
- Pocket hole jig and #12 pan head stainless wood screws
- 3/8" countersink and pilot bit and tapered plug cutter (to fill countersinks)
- Circular or power miter saw
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw
- Table saw
- Wheelbarrow, shovel, rake, lever augur (only if you are burying posts)
- 4' Level
- Biscuit joiner
- Belt sander
- Random orbital sander with 60 and 80 grit paper

Item No.	Description	Material	Qty.
1a	Post Cap (Cap)	7"x7"x 1 1/2" (cut from 2x8)	3
2a	Post Cap (Top Piece)	3 1/2"x3 1/2" x 3/4" (cut from 1x6)	3
3a	Post Cap (Trim)	1 1/2" x 1" (cut from offcuts)	12
4a	Top Rail	2"x4"	2
5a	Bottom Rail	2"x4"	2
6a	Top Cap	2"x4" (see cut/trim detail)	2
7a	Sweep Panel 2 (1x4)	3/4" Marine Plywood	2
8a	Sweep Panel 1x4	3/4" Marine Plywood	2
9a	Vertical (Wide)	Fenceboard (cut @ 2 5/8" wide) x 74"	30
10a	Vertical (Narrow)	Fenceboard (cut @ 1 1/4" wide) - trimmed to suit	28
11a	Sweep Panel 3 (1x4)	3/4" Marine Plywood	2
12a	Sweep Panel 4 (1x4)	3/4" Marine Plywood	2
13a	Top Rail 1x4"	1"x4"	2
14a	Bottom Rail 1"x4"	1"x4"	2
15a	Fence Post	4"x4"	3



Privacy Screen

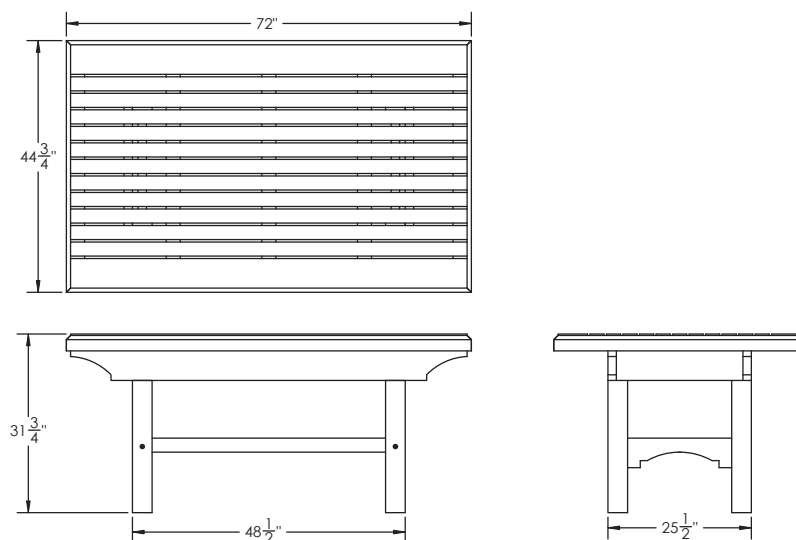




Dining Table

MATERIAL LIST

- 1 4"x4" x 10'
- 5 2"x6" x 8'
- 4 2"x6" x 12'
- 1 5/4"x6" x 12' select decking
- 200 3" deck screws (suitable for Western Red Cedar).
- 1lb 2 1/2" galvanized finish nails
- 1 Quart marine adhesive or waterproof glue.



INSTRUCTIONS

1. Gather tools and layout materials.
2. Prefabricate parts from the cut list and stack like-parts together.
3. The table legs require a 3/4" deep notch, the height and width of the lower leg blocks. This is simple to achieve using the spade bit and chisels. Apply masking tape (leaving the tape long at the 3/4" depth of the bit. This way, when you are 3/4" deep your tape will sweep away the sawdust. This gives you a smooth surface to run your chisel along to create a uniform depth to your notch.
4. Layout & fasten the upper frame together with 3" #8 deck screws. Pilot and countersink all.
5. Fasten the legs to the frame as illustrated using 4 - #8 x 3" deck screws per face of connection.
6. Install each lower leg block by fitting and clamping (or strapping), then piloting a 3/8" hole into the lower leg block through the leg and then installing a countersunk 3/8" lag bolt with washer. Install the lower brace using 2 - 3" deck screws per connection.
7. Install the sleepers with 2 - 3" deck screws per connection. Start with the ends, then the center, then center the final two.
8. Pre-drill and countersink 3/8" the table planks with 2 holes per connection. Choose the straightest small table plank and mount in the center of the sleepers. Use a chalk line to ensure straight marking. Install the other 10 small table planks using 3/16" spacers or scratch awls with 3/16" shafts to space the small table planks. Install the large table planks using the same method.

9. Trim the table planks using a circular saw and a straight edge and then apply the edge trims. Corners should be mitered — better to make slightly long rather than short.

10. Using off-cuts and the tapered plug cutter in a drill press cut enough tapered plugs to fill all the surface visible holes in the table top. Try to match the grain and tone of wood with the plugs and secure using a small dab of marine adhesive. Allow glue to set, trim off excess with flush cut saw and sand with 80 grit sandpaper.

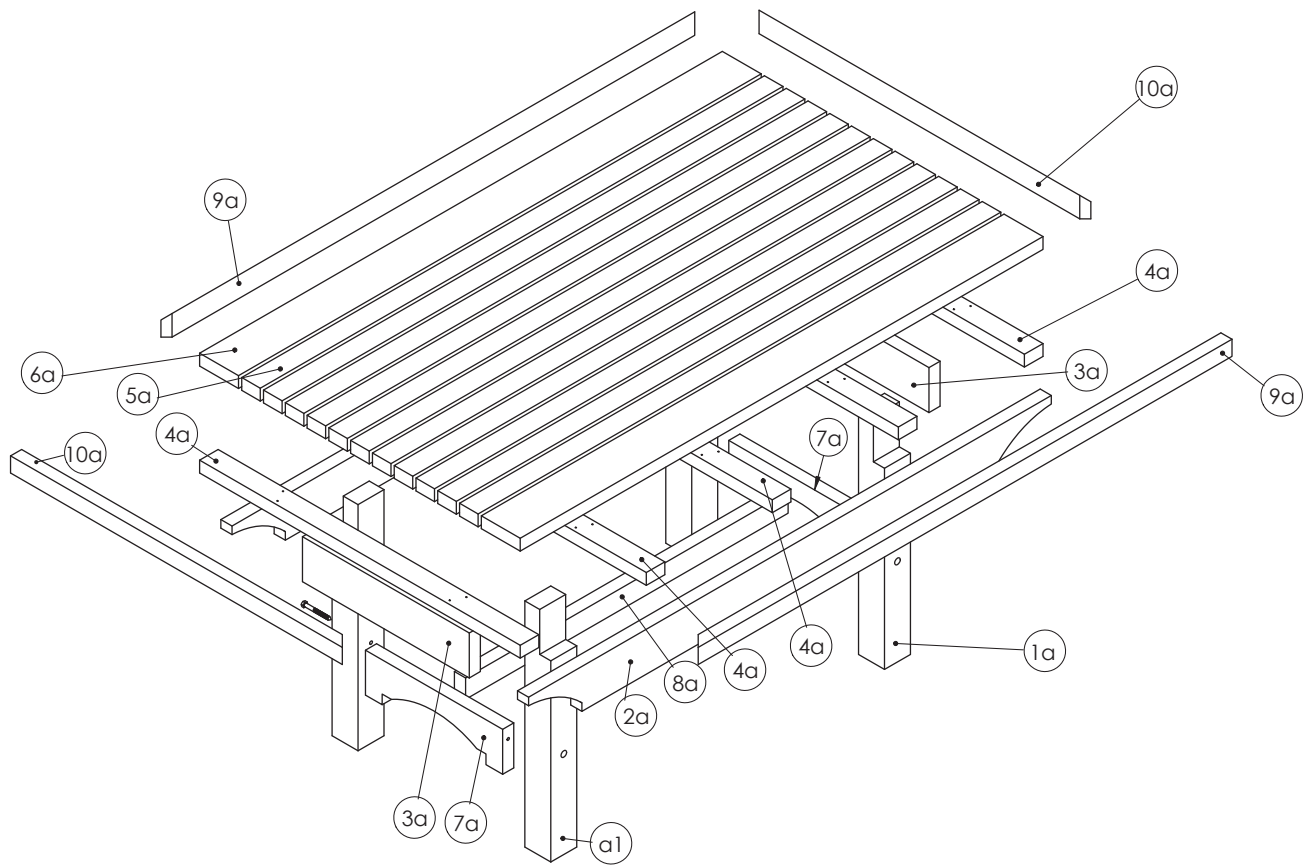
11. Remove all sharp edges with sandpaper, remove dust and apply finish.

HINT: For tight miter joints glue end grains together using marine adhesive. Wood absorbs moisture primarily through the end grains—sealing makes the wood more dimensionally stable.

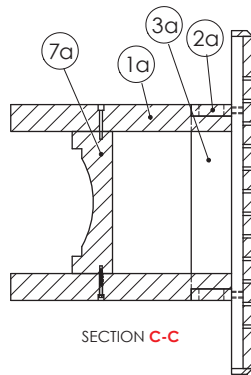
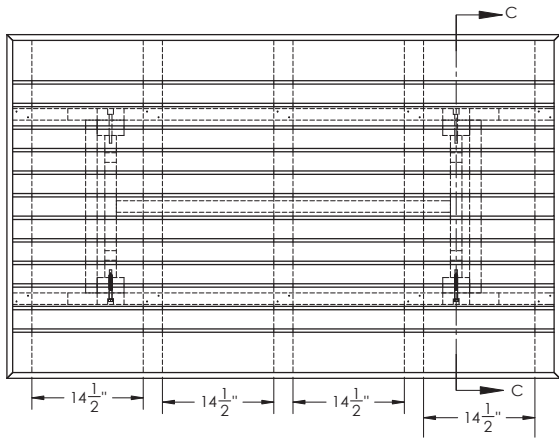
**Plan designed by Garden Structure (www.gardenstructure.com). It is an artist's conception and is intended as general reference only. The Western Red Cedar Lumber Association does not warrant the accuracy of the information herein. Always follow local and national building codes.*

RECOMMENDED TOOLS

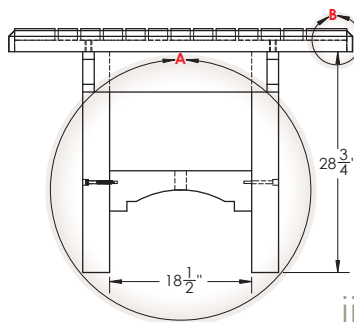
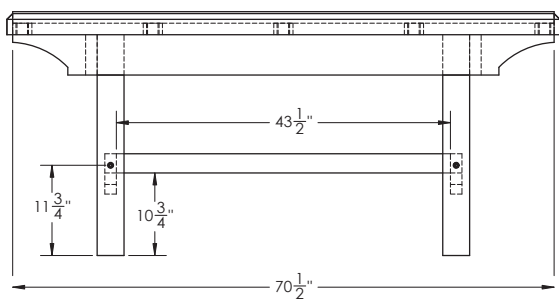
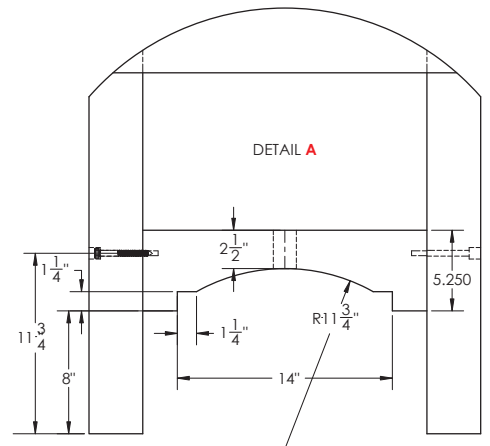
- Masking tape
- Table saw
- Circular saw
- Drill and 1 1/2" spade bit, 3/8" spade bit or augur bits
- Wood chisels
- Hand saw or Japanese pull saw
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing square
- Adjustable wrench or socket set
- 3/8" countersink
- 2 scratch awls or screw drivers with 3/16" shafts
- Random orbital sander with 80 grit sandpaper
- Bar clamp or 12" nylon tie down strap
- Chalk line
- Straight edge



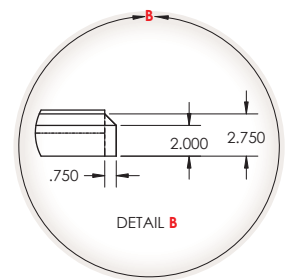
Item No.	Description	Material (cut from)	Qty.	Item No.	Description	Material (cut from)	Qty.
1a	Table Leg	4"x4" x 10' (1)	4	7a	Lower Leg Blocks	2"x6" x 8' (1)	2
2a	Frame Side Beams	2"x6" x 8' (2)	2	8a	Lower Brace	Off-cut Table Plank (small)	1
3a	Frame Inners	Sleeper Off-cuts	2	9a	Edge Trim (short side)	5/4"x6" x 12' (1)	2
4a	Sleepers	2"x6" x 8' (2)	5	10a	Edge Trim (long side)	5/4"x6" x 12' (1)	2
5a	Table Planks (small)	2"x6" x 12' (3)	11	11a	Lag Screw 3/8" x 3 1/2"		2
6a	Table Planks (large)	2"x6" x 12' (1)	2				



ii



iii



iv

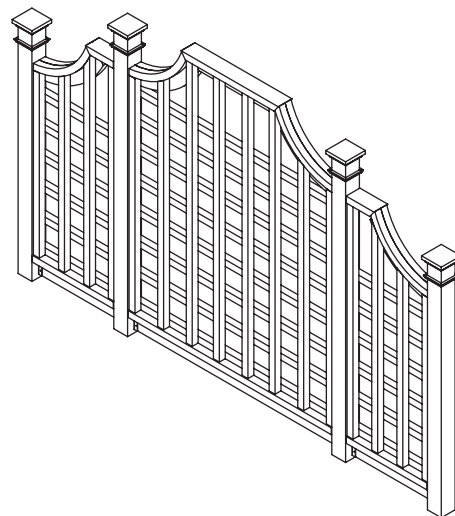
Classic Trellis

MATERIAL LIST

- | | | | |
|-----|--|-----|---|
| 4 | 4x4x10' (for Free Standing Version) or 2-4x4x12 (for wall mount version) | 2lb | 2 1/4" deck screws (rated for red cedar) (or 15 gauge finishing brads or 2 1/2" spiral galvanized finish nails) |
| 24' | 3/4" shingle moulding (Western Red Cedar or Mahogany) | 30 | 1 1/4" galvanized roofing nails |
| 1 | 1-5/4 x 6 x 6' | 8 | 1/2" sleeve anchors or 3/8" lag screws, (1" countersink). ~for wall mount installation only. |
| 24 | 2x2x8' | 8 | bags of fast setting concrete ~ for free standing version |
| 3 | 2x4x8' | | |
| 2 | 2x8x8' | | |
| 6 | Fence clips | | |
| 1lb | 1 1/4" spiral galvanized finish nails | | |
| 1lb | 3" deck screws (rated for Western Red Cedar) | | |

**Consider using a 3/8" pilot with a countersink, then filling the screw holes with solid wood cut using a drill press and a tapered plug cutter.*

***Consider pre-finishing your Western Red Cedar prior to assembly.*



INSTRUCTIONS

1. Shop for, gather and organize your materials.
2. Prefabricate from the material list and stack like parts together.
3. Your first decision is whether this will be mounted to a wall or if it will be free standing. If free standing layout and dig the 4' x 10" holes using a lever augur or power augur—or better still, hire someone that specializes in digging post holes.
4. Mount the posts to the wall using lag screws countersunk beneath the surface of the post 1/2" or set the posts in the footings using concrete in the bottom half of the whole and soil or fine gravel in the top half. Set the outermost posts first, then by attaching a string line offset 1/2", level and align your posts to maintain them in a straight line. You don't have to brace the posts if you pack the soil or fine gravel tightly with your foot.
5. After allowing the posts to set for 24-48 hours fasten the fence clips using the 1 1/4" galvanized roofing nails. The clips should be 3" off the ground and level to one another.
6. Cut and fit the base rails and rail caps. Fasten with 3" screws.
7. Assemble the curved rail assembly as shown in detail b. Leave the rail cap and stub rail roughly 3" long and trim to fit. Mount the curved rail assembly at heights illustrated and secure using 3" deck screws. Countersink all screws.
8. Trim a pencil to 1 1/4" length and mark the lengths of the verticals in place. Trim to size and fasten in place using a spacer block for speed and accuracy. Fasten with 2 1/2" finishing nails or 2 1/4" deck screws.

9. Measure horizontal pieces and trim to fit. Using a spacer block place and fasten to the vertical trellis members with finish nails or screws. Use the verticals spacer block also to ensure proper alignment.

10. Trim the posts to illustrated heights then prefabricate and install the post caps and trims. Secure with 1 1/4" galvanized finish nails.

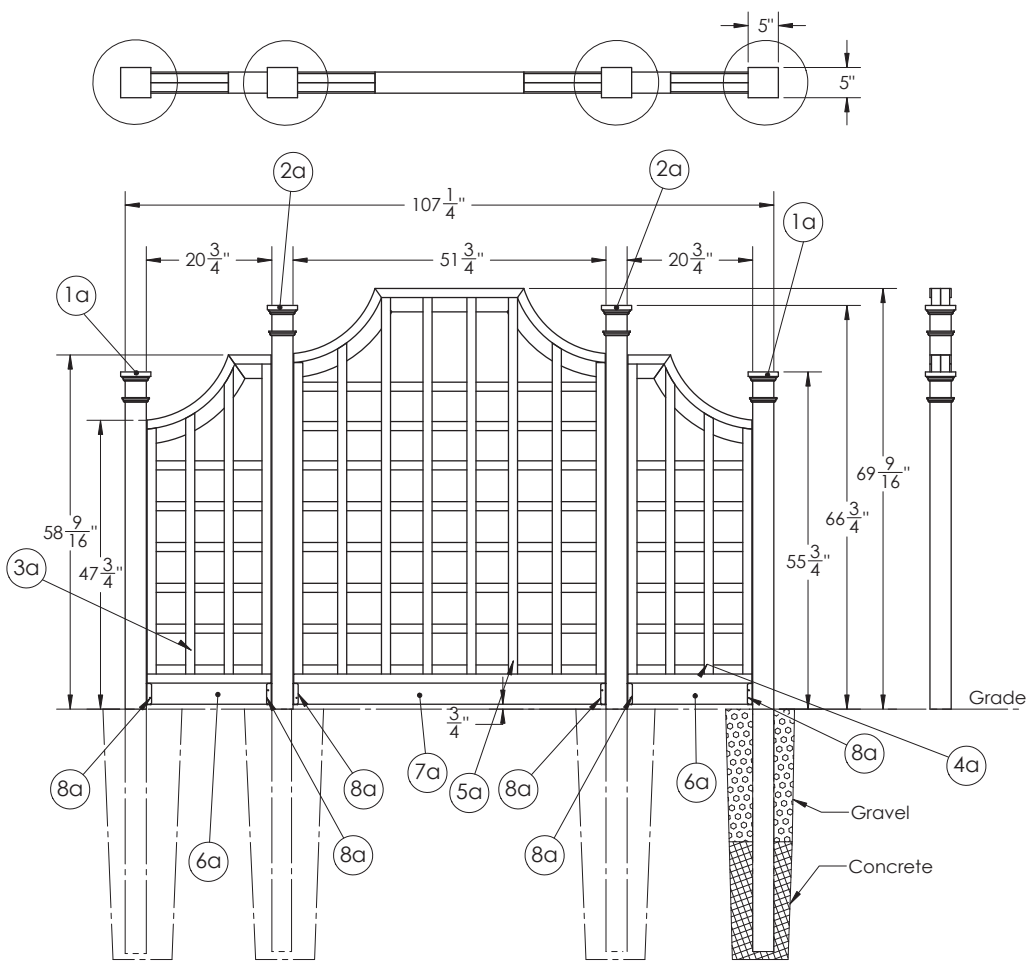
11. Give your project a coat of stain, fill any voids or holes with exterior putty then give it a second coat after putty.

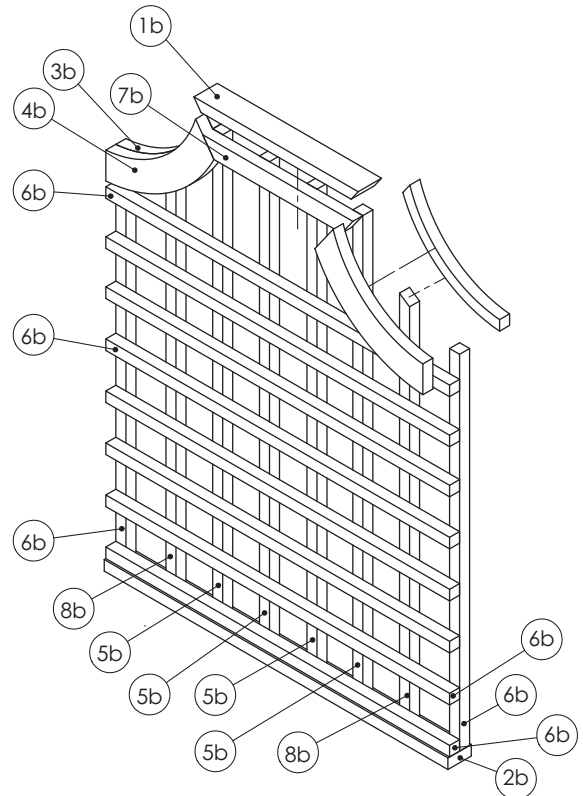
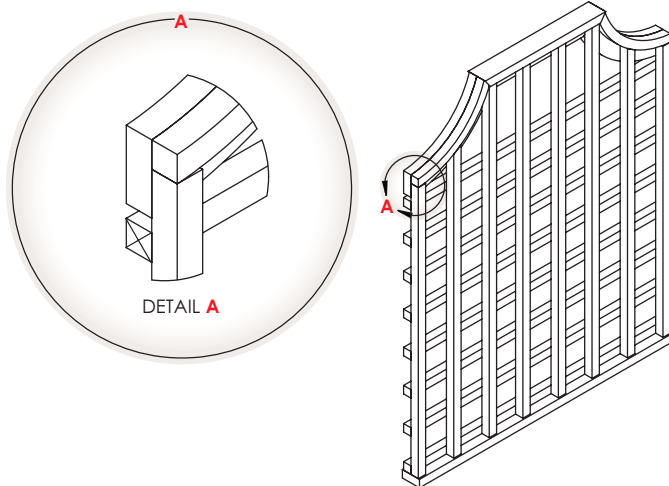
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RECOMMENDED TOOLS

- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing square
- Adjustable wrench or socket set
- 3/8" countersink and pilot bit and tapered plug cutter (to fill countersinks)
- Random orbital sander with 80 grit sandpaper.
- Jigsaw with heavy duty blades
- Small drill press (optional)
- Flush cut saw
- Table saw
- Wheelbarrow, shovel, rake, lever augur

Item No.	Description	Material	Qty.	Item No.	Description	Material	Qty.
1a	Short Fence Post	Sub Assy	2	4a	RHS Side Frame Assy	Diagram iv	1
	10' Fence Post	4" x 4"	1		53" Verticals	2" x 2"	2
	Post Cap	1" x 6"	1		2" x 2" x 60"	2" x 2"	2
	Shingle Mold	3/4" x 1/2"	8		20 1/2" Horizontals	2" x 2"	6
2a	Long Fence Post	See Sheet 4	2		Base Rail	2" x 4"	1
	10' Fence Post	4" x 4"	1		Side Rail Top Plate	2" x 4"	1
	Post Cap	1" x 6"	1		Curved Rail Base Cut from	2" x 8"	1
	Shingle Mold	3/4" x 1/2"	8		Curved Rail Trim Cut from	2" x 8"	1
3a	LHS Side Frame Assy	Diagram iv	1		Top Rail Filler	2" x 3" from 2" x 8"	1
	53" Verticals	2" x 2"	4		Offcuts		
	20 1/2" Horizontals	2" x 2"	6	5a	Centre Frame Assy	Diagram i & ii	1
	Base Rail	2" x 2"	1		Bottom Rail x 51 1/2"	2" x 4"	1
	Side Rail Top Plate	2" x 2"	1		63" Verticals	2" x 2"	4
	Curved Rail Base	Cut from 2" x 8"	1		51 1/2" Horizontals	2" x 2"	10
	Curved Rail Trim	Cut from 2" x 8"	1		60" Verticals	2" x 2"	2
	Top Rail Filler	2" x 3" from 2" x 8"	1		Curved Rail Trim	Cut from 2" x 8"	2
		Offcuts			Curved Rail Base	Cut from 2" x 8"	2
					Stub Rail	2" x 3" cut from 2" x 8"	1
					Rail Cap	2" x 4"	1
				6a	Base Rail	2" x 4"	2
				7a	Bottom Rail x 51 1/2"	2" x 4"	1
				8a	Fence Clip	Galvanized Steel	6

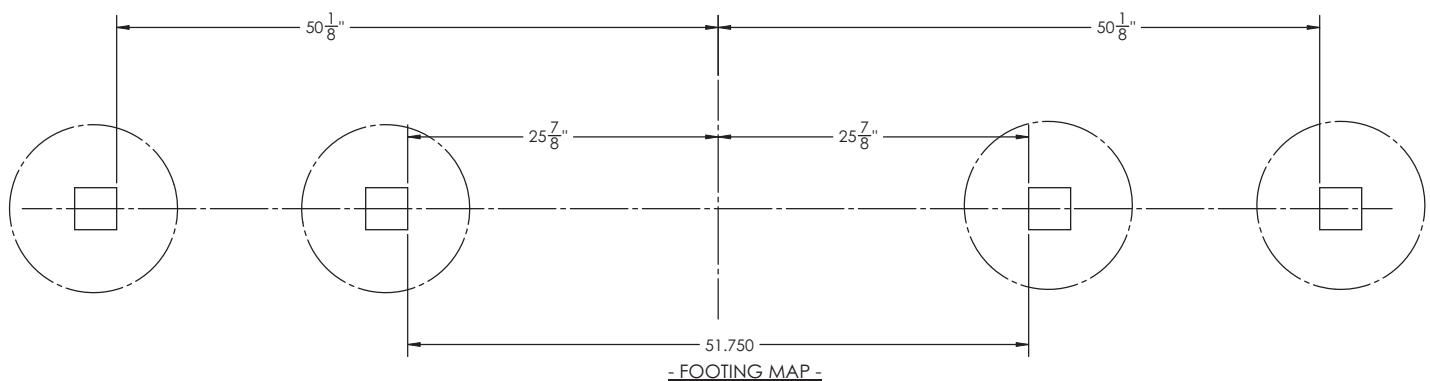


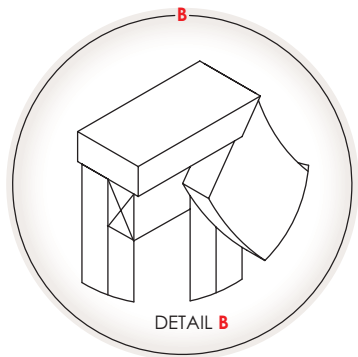
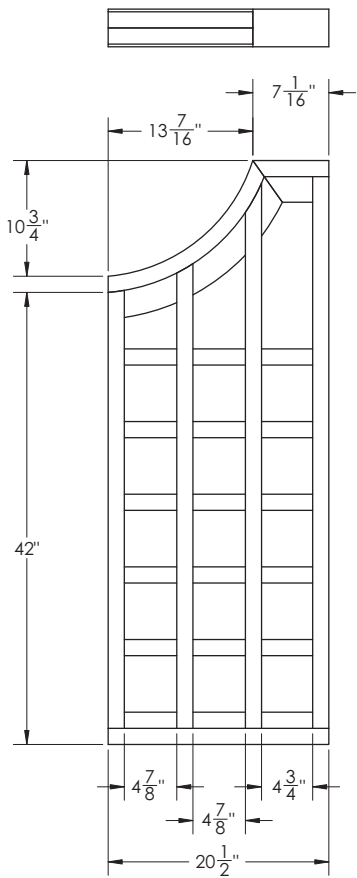


Item No.	Description	Material	Qty.
1b	Rail Cap	2"x4"	1
2b	Base Rail	2"x4"	1
3b	Curved Rail	Cut from 2"x8"	2
4b	Curved Rail Base	Cut from 2"x8"	2
5b	63" Verticals	2"x2"	4
6b	51½" Horizontals	2"x2"	10
7b	Stub Rail 2"x3"	cut from 2"x8"	1
8b	60" Verticals	2"x2"	2

1) All verticals trim to fit

1) For Assy's using Pressure Treated Lumber, typically nails would be used. For Cedar, screws would work best

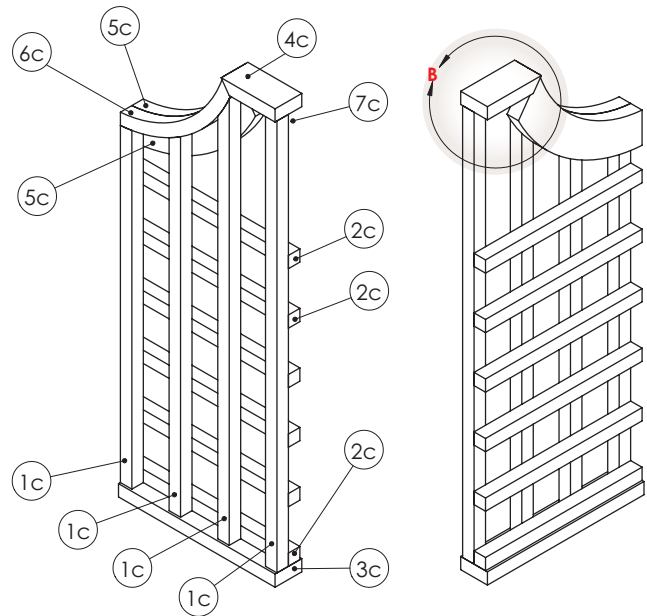
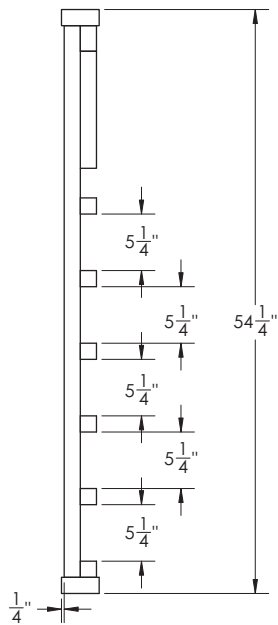




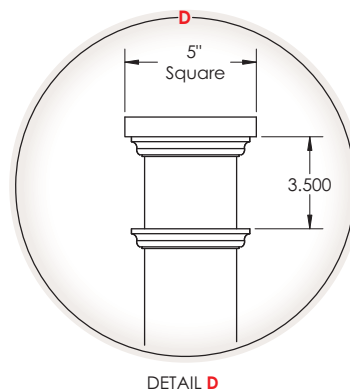
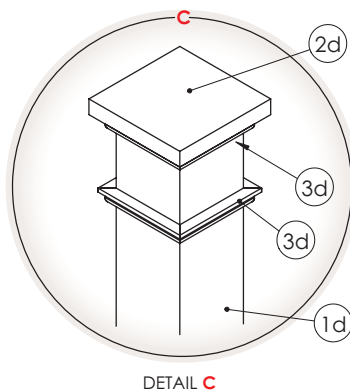
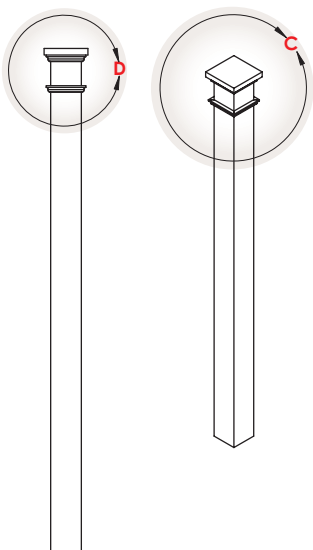
Item No.	Description	Material	Qty.
1c	53" Verticals	2" x 2"	4
2c	20 1/2" Horizontals	2" x 2"	6
3c	Base Rail	2" x 4"	1
4c	Rail Cap	2" x 4"	1
5c	Curved Rail Base	Cut from 2" x 8"	1
6c	Curved Rail Trim	Cut from 2" x 8"	1
7c	Stub Rail 2" x 3"	from 2" x 8" Offcuts	1

OPTIONS:

1) For Assy's using Pressure Treated Lumber, typically nails would be used. For Cedar, screws would work best



iv



Item No.	Description	Material	4x4 Post x 55/Qty.
1d	10' Fence Post	4" x 4"	1
2d	Post Cap	1" x 6"	1
3d	Shingle Mold	3/4" x 1/2"	8

v