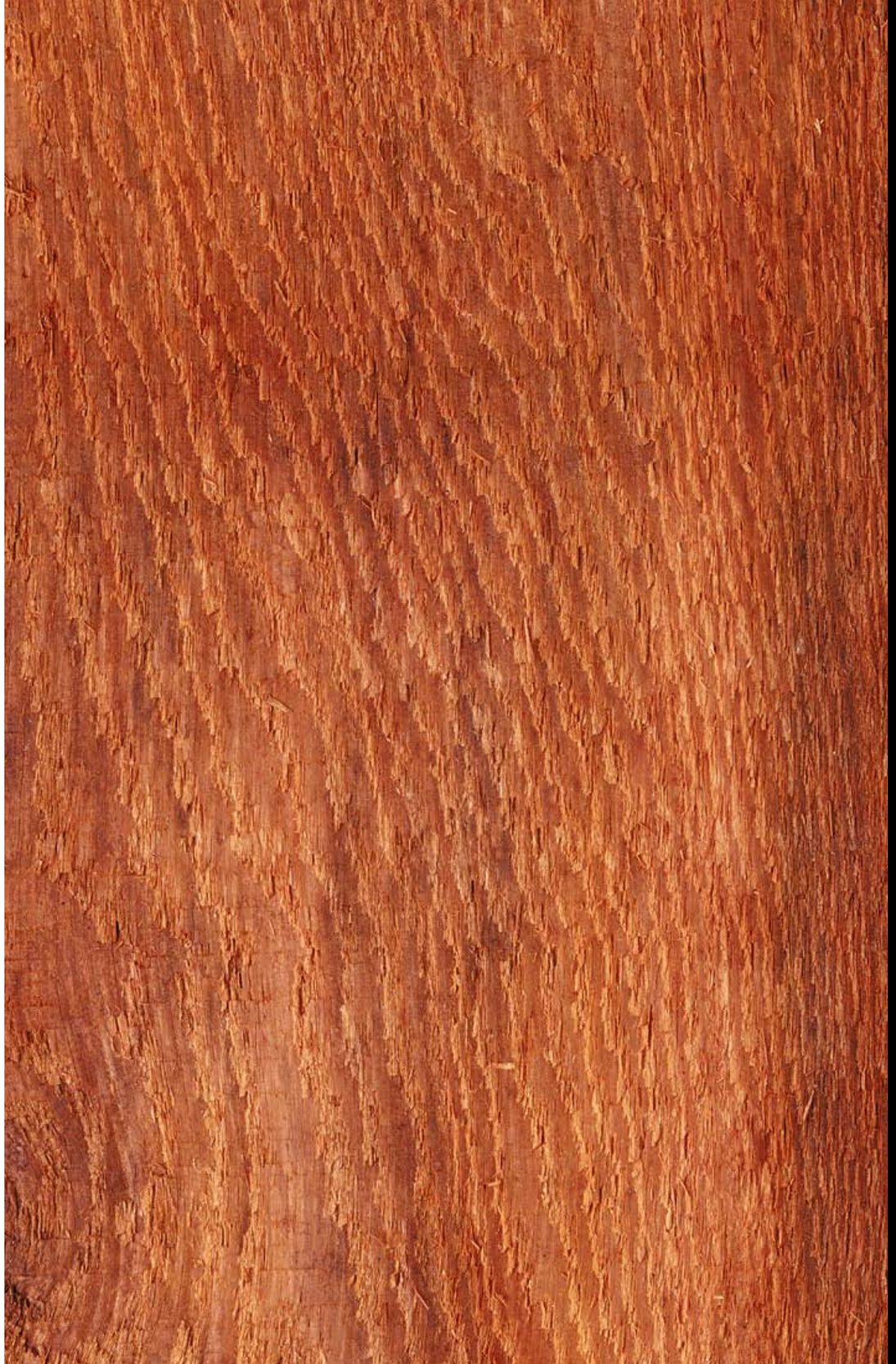
REAL CEDAR PROJECTS for

AROUND YOUR HOME

Enhance your outdoor living space with the beauty and performance of natural, durable and sustainable Western Red Cedar

REAL CEDAR

WRCLA



WHY CHOOSE WESTERN RED CEDAR

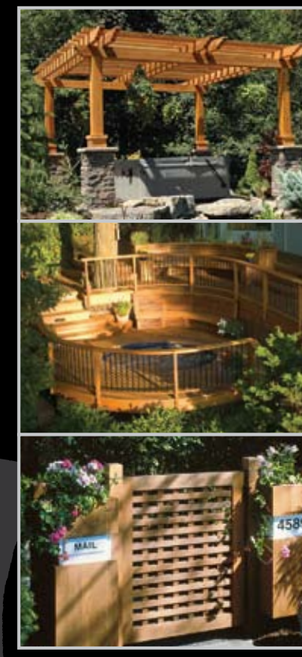
Western Red Cedar is one of nature's truly remarkable building materials. In addition to its stunning beauty, distinct aroma, limitless versatility and light environmental footprint, Western Red Cedar has a set of natural characteristics that make it the ideal material for outdoor living projects.

Dimensional Stability
Western Red Cedar has twice the stability of most commonly available softwoods. The stability is a result of its low density and shrinkage factors. It lies flat, stays straight, and holds fastenings tightly.

Workability
Western Red Cedar produces long, lightweight lengths of timber with a fine, straight grain and uniform texture that make it easy to cut, saw and nail with common tools. These features also contribute to its ability to be planed to a smooth surface or machined to any pattern. The lack of pitch and resin allows Western Red Cedar to hold glue bonds from a wide range of adhesives and provide a firm base for many types of paints and stains.

Natural Preservative
Western Red Cedar is one of the world's most durable woods. Natural resistance to moisture, decay and insect damage has long made Western Red Cedar the premier choice for either interior or exterior home use. Cedar fibers in the heartwood contain natural preservatives that are toxic to decay-causing fungi. The two principal extractives that are responsible for the decay resistance are Thujaplicans and water-soluble phenolics. The tree's ability to produce these extractives increases with age, making the outer regions of heartwood the most durable.

All-Weather
Western Red Cedar is one of the few wood species that are naturally at home in the outdoors. Properly finished, Western Red Cedar will last for decades, even in harsh environments. Its natural resistance to moisture, decay and insect damage make it the ideal choice for a surface that is exposed to sun, rain, heat and cold all year round. Properly finished, installed and cared for, outdoor living projects made of Western Red Cedar to last longer than 30 years.



HERITAGE

Western Red Cedar's popularity dates back thousands of years to the Native Americans who first settled the Pacific Coast region of North America. Its versatility made the trees essential to Native peoples prompting them to revere it as a central part of their life. Western Red Cedar became known to them as the "Tree of Life".

Native craftsmen and artists found uses for each part of the Cedar tree. Craftsmen carved canoes, totem poles, storage boxes and ceremonial masks from the heartwood. Others wove the inner bark into mats, baskets and water repellent clothing, shaped the branches into ropes and fashioned the roots into baskets and cords. This heritage continues today and is a testament to the quality and longevity of Western Red Cedar, a heritage that is unmatched by other building materials. As a buyer of Western Red Cedar, this is your assurance that Western Red Cedar will stand the test of time.

ENVIRONMENT

Western Red Cedar is the ultimate green building material. Not only does it have distinctive beauty, natural durability and centuries of proven performance, Western Red Cedar is the ultimate green product. It produces fewer greenhouse gases, generates less water and air pollution, requires less energy to produce than alternatives and comes from a renewable and sustainable resource. Equally important, Western Red Cedar is carbon neutral.

It is responsibly and sustainably harvested in the publicly managed forests of British Columbia, Canada. The province has exceeded United Nations guidelines by setting aside more than 12% of its land base as parkland. Less than 1/3 of 1% of BC's Cedar growing stock volume is harvested each year. For each tree harvested, three are replanted. The fact is, there are more forests in North America today than there were 100 years ago. These young forests are excellent carbon sinks. They also release oxygen back into the atmosphere contributing to a healthier environment.

All Western Red Cedar Lumber Association members are in the process or have achieved certification under one or more independent third party certification systems (CSA, SFI or FSC).

Wood, and Western Red Cedar specifically, has the least impact on the environment throughout its life cycle. Western Red Cedar requires significantly less energy to produce than other materials and unlike man-made alternatives, Western Red Cedar is biodegradeable. Wood has 400 times better insulation (R) value than steel, 2000 times that of aluminum, 8 times that of concrete.

Make the right choice for your environment, build green with Western Red Cedar.

REAL CEDAR PROJECTS for

OUTDOOR LIVING

REAL CEDAR

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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.


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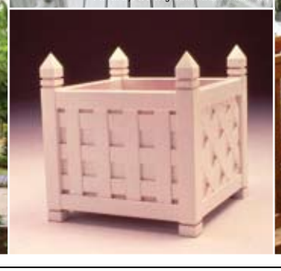
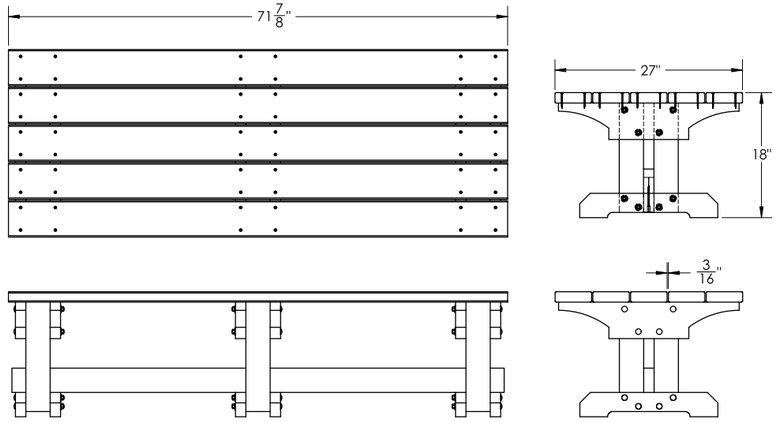


WESTERN RED CEDAR - **OUTDOOR LIVING**

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

A. Just like cooking a fine meal, the first step should be to gather everything you will need and organize your materials to streamline the building process. Time spent looking for parts or tools will slow you down!

B. Prefabricate from the list, sand smooth and stack like-parts together.

C. In this project we will fasten with temporary screws or clamps.

D. Using a square mark the center of the supports and foot planks.

E. 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.

F. 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.

G. Square the parts using a framing square, then drill the 3/8” holes for the carriage bolts through all 3 pieces as illustrated.

H. Insert the carriage bolts and tighten until snug. (Tighten again after first use). Repeat to construct all frame assemblies.

I. 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.

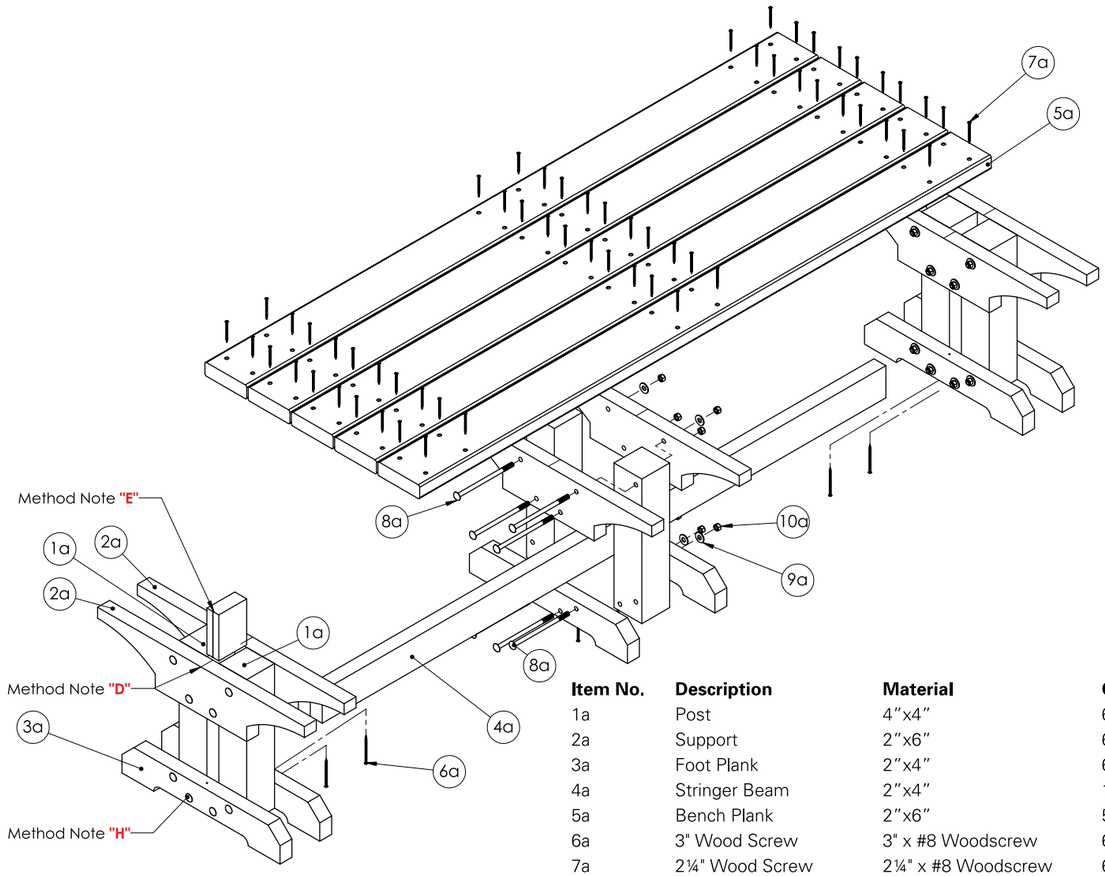
J. Install bench planks starting with the straightest one in the center first. Countersink screws slightly and fasten with 3” screws into the supports. Use 3/16” spacers or 2 screwdrivers with 3/16” diameter shafts to space the rest of the boards while you fasten the bench planks.

K. 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.

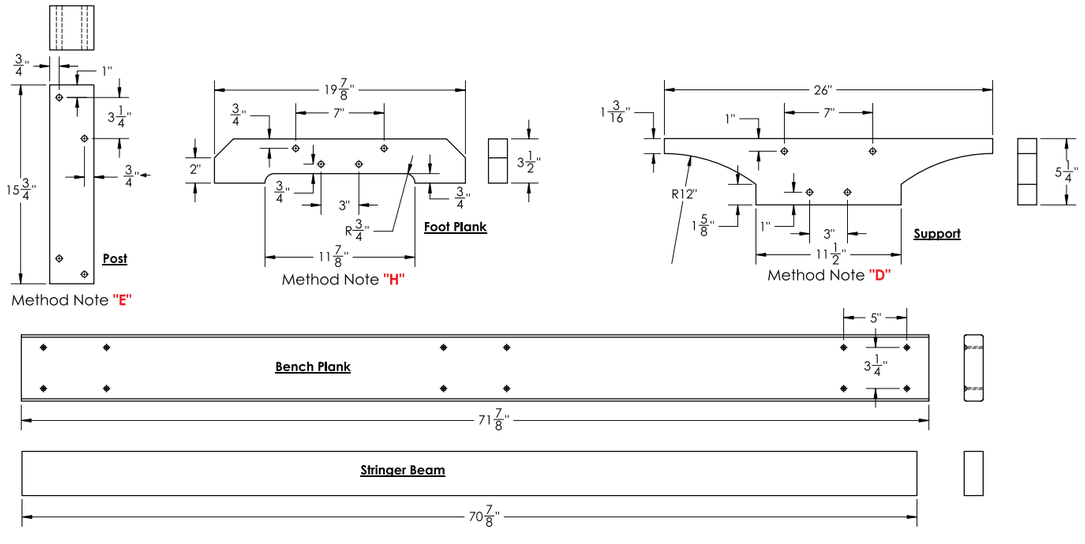
L. Remove all sharp edges with sandpaper, remove dust and apply finish.

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



Item No.	Description	Material	Qty.
1a	Post	4”x4”	6
2a	Support	2”x6”	6
3a	Foot Plank	2”x4”	6
4a	Stringer Beam	2”x4”	1
5a	Bench Plank	2”x6”	5
6a	3" Wood Screw	3" x #8 Woodscrew	6
7a	2¼" Wood Screw	2¼" x #8 Woodscrew	60
8a	3/8" x 7" Carriage Bolt	3/8" x 7" Carriage Bolt	24
9a	3/8" Flat Washer		24
10a	3/8" Hex Nut	3/8" Hex Nut	24



WESTERN RED CEDAR - **OUTDOOR LIVING**

Garden Arbor

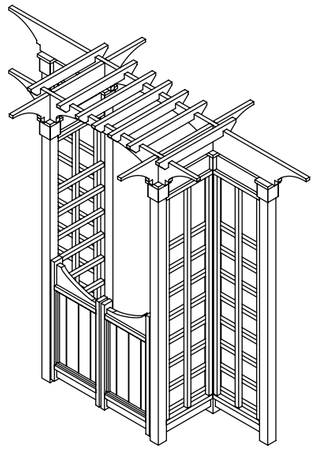
MATERIAL LIST

6	4”x4” x 12’
3	2”x10” x 12’
1	2”x6” x 8’
2	2”x4” x 12’
2	2”x6” x 10’
21	2”x2” x 8’
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

2lb	1¼” spiral galvanized finish nails
2lb	3” Deck Screws (rated for red cedar)
2lb	2¼” Deck Screws (rated for red cedar) (or 15 guage finishing brads or 2½” Spiral Galvanized Finish Nails)
2	pairs of heavy duty strap hinges.
10	1¼” Galvanized Roofing 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 Red Cedar Prior to assembly.*



INSTRUCTIONS

A. Shop for, gather and organize your materials.

B. 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.

C. 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.

D. 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.

E. 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.

F. 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.

G. Install fence clips with 1¼” 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.

H. 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 2¼” deck screws.

I. 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 2¼” deck screws. Hang the gates so that they clear the ground.

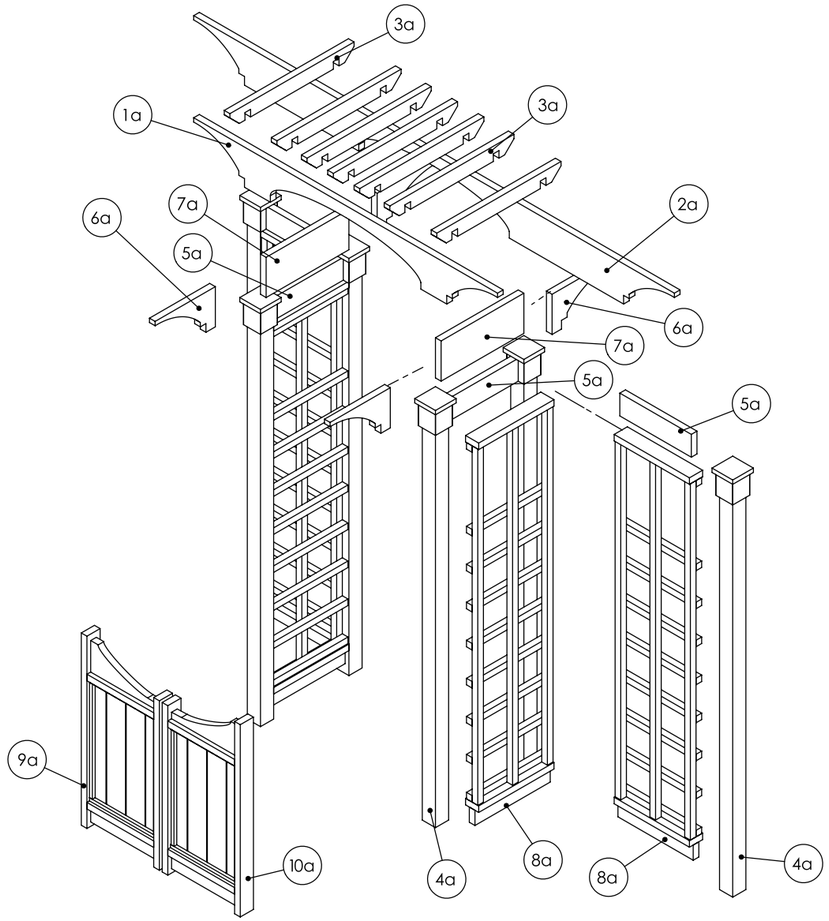
J. Give your project a coat of stain, then fill any voids or holes with exterior putty. Give it a second coat after putty.

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

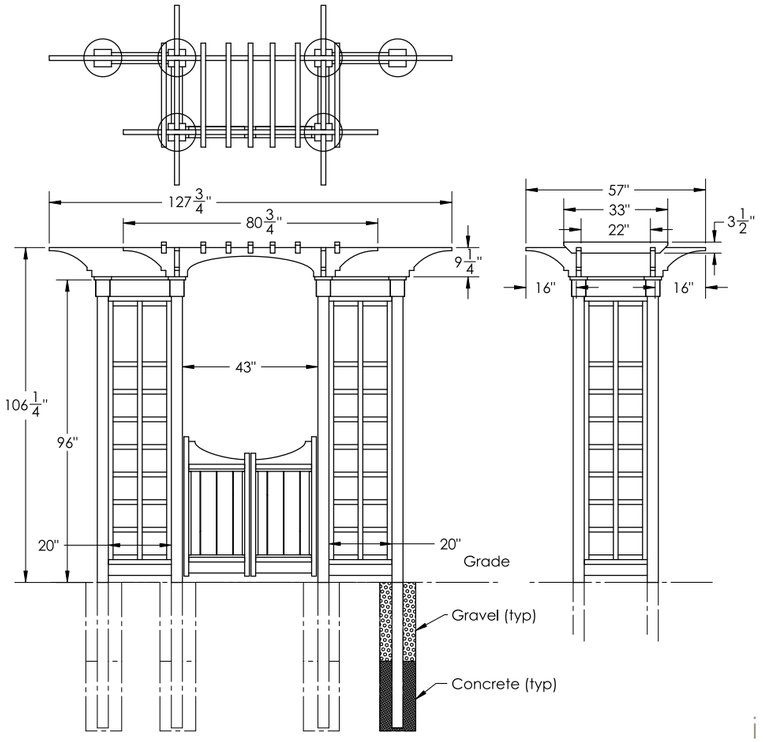
Item No.	Description	Material	Cut From	Qty.
1a	Beam - Short	2”x10”	A*	1
2a	Beam - Long	2”x10”	A*	1
3a	2”x4” x 33” Rafters	2”x4”	C*	7
4a	Post Sub Assy	Diagram vi & vii	n/a	6
5a	2”x6” x 19” Post Connection Block	2”x 6”	D*	4
6a	2”x10” Beam Tail	2”x10”	B*	4
7a	2”x10” x 22” Beam Block	2”x10”	B*	2
8a	Side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



WESTERN RED CEDAR - **OUTDOOR LIVING**

Garden Arbor



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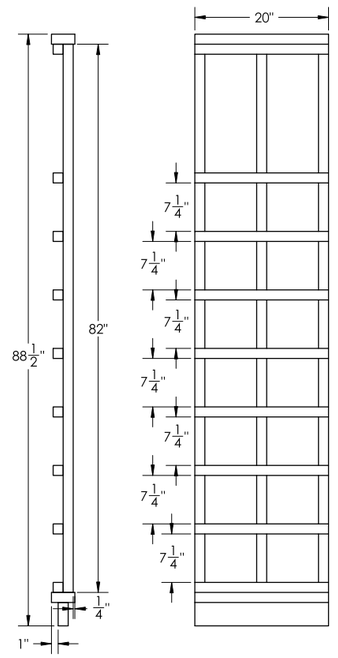

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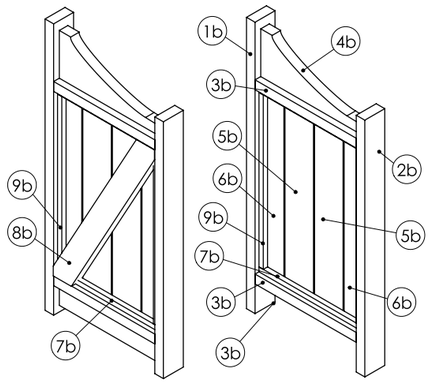
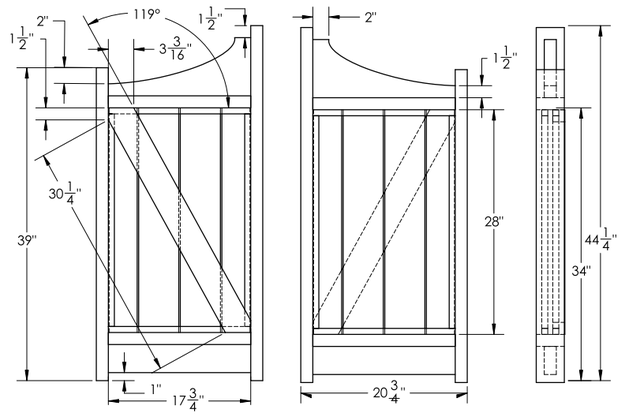
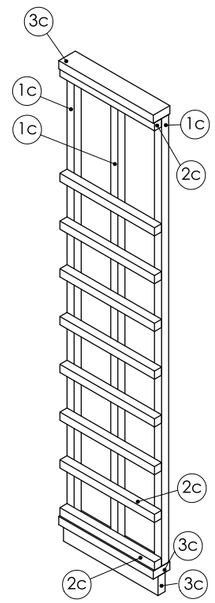




Item No.	Description	Material	Cut From	Qty.
1b	Side Rail (Long Side)	2"x 4"	F*	1
2b	Side Rail (Short side)	2"x 4"	F*	1
3b	Horizontal Rail	2"x 4"	F*	3
4b	Curved Block	2"x10" (Offcut)	B*	1
5b	Vertical Fenceboard	5/8"x 5" Fenceboard	G*	2
6b	Vertical Fenceboard Ripped	5/8"x5" Fenceboard	G*	2
7b	3/4" Horizontal Trim	3/4"x3/4"	H*	4
8b	2x4 Brace	2"x4"	J*	1
9b	3/4" Vertical Trim	3/4"x3/4"	H*	4

Lumber Id	*Material*	*Qty*
*F	2"x4" x 12'	2
*G	1"x6" x 5'	4
*H	Lattice Retainer Trim	32'
*J	2"x4" x 8'	1

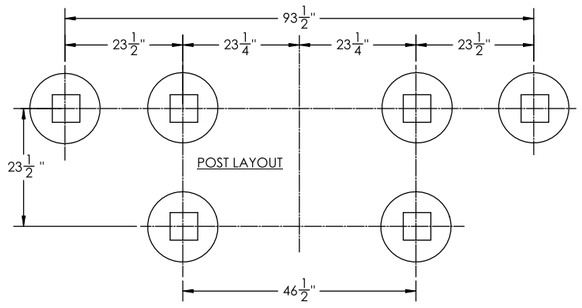
iii



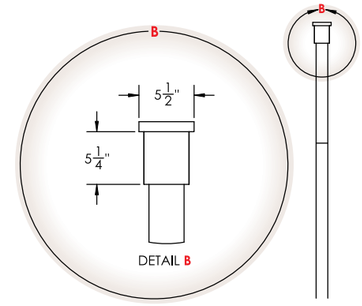
Item No.	Description	Material	Cut From	Qty.
1c	82" Verticals	2"x2"	D*	3
2c	20" Horizontals	2"x2"	D*	9
3c	Rails	2"x2"	E*	3

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

iv



v



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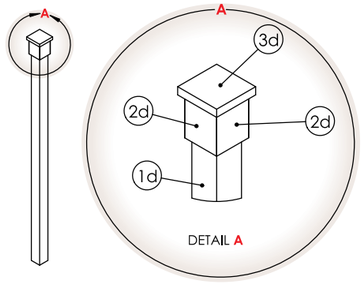
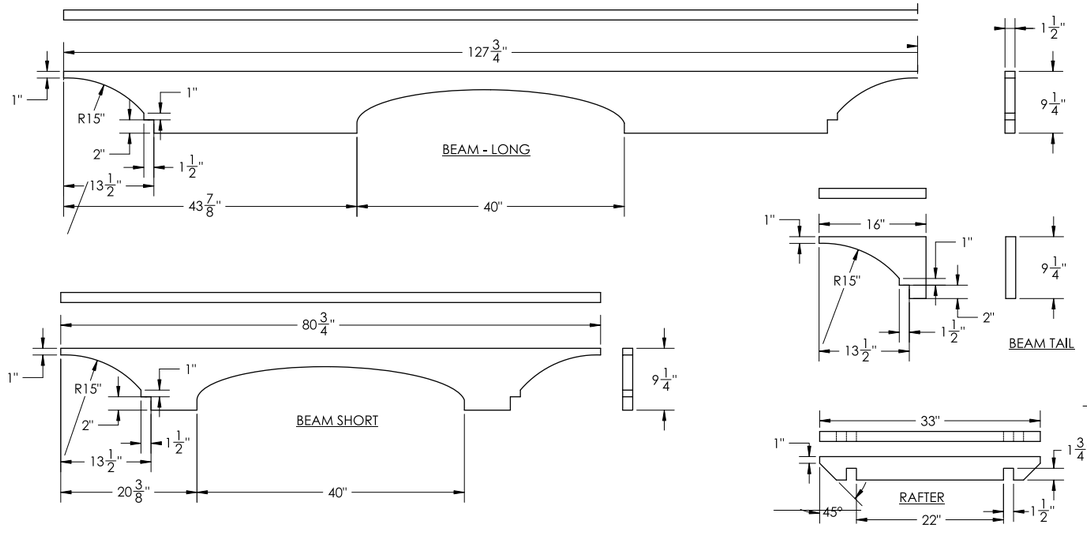


Item No.	Description	Material	Cut From	Qty.
1	Post	4"x4"	K*	1
2	Post Trim	1"x6" Fence Board (Mitred)	L*	4
3	Post Cap	5/4"x6"	M*	1

Lumber Id	*Material*	*Qty*
*K	4"x4" x 12'	6
*L	1"x6" x 6'	4
*M	5/4"x6" x8'	1 (6" Board Trimmed to 5")

vii



viii

WESTERN RED CEDAR - **OUTDOOR LIVING**

Garden Arch

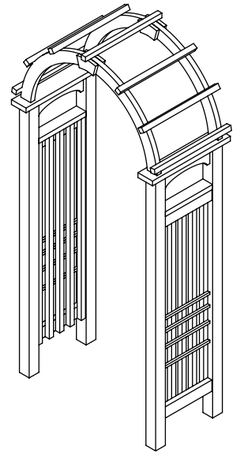
MATERIAL LIST

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 red cedar)
1 lb	2¼" Deck Screws (rated for 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 Red Cedar Prior to assembly.*



INSTRUCTIONS

A. Shop for, gather and organize your materials.

B. 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.

C. 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.

D. 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.

E. 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.

F. Trim the posts to height illustrated. Install the Shaped Rails using 3" Deck screws.

G. 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.

H. Fasten the top plate to the assembled arch, then fasten to the posts and curved rails using the 3" deck screws.

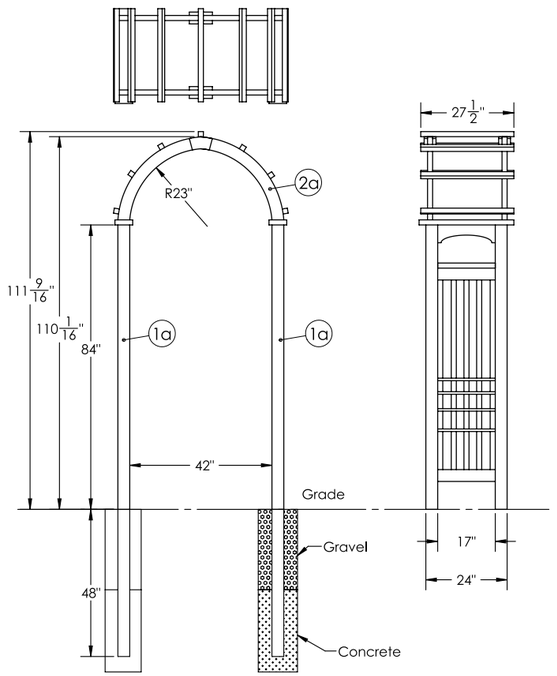
I. Trim the 2x2 Verticals to length and Fasten to the rails using 2¼" Deck Screws spaced equally.

J. Fasten the 3/4x3/4" Lattice Horizontals to the horizontals with 1½" finishing nails.

Pocket Hole Jig and #12 Pan Head Stainless Wood Screws.

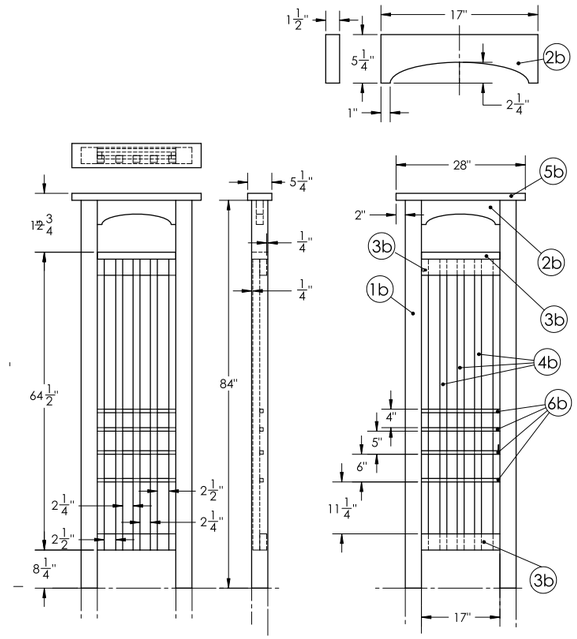
RECOMMENDED TOOLS

- 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



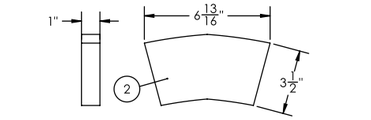
Item No.	Description	Material	Qty.
1a	Side Panel Assy	Diagram ii	2
2a	Rafter Sub Assy	Diagram iii	1

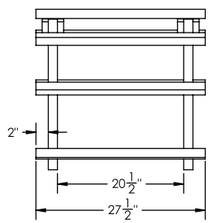
i

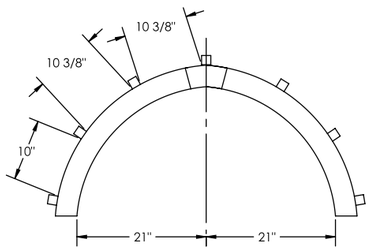


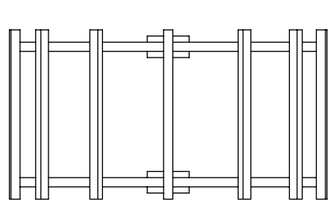
Item No.	Description	Material	Qty.
1b	Post x 12'	4"x4"	2
2b	Shaped Rail x 17"	2"x6"	1
3b	Horizontal Rails x 17"	2"x4"	3
4b	Verticals x 63"	2"x2"	5
5b	Top Plate x 33"	2"x6"	1
6b	Lattice Horizontals x 17"	3/4"x3/4"	4

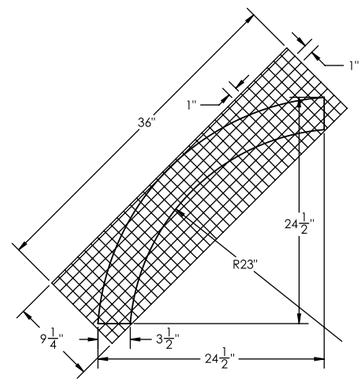
ii



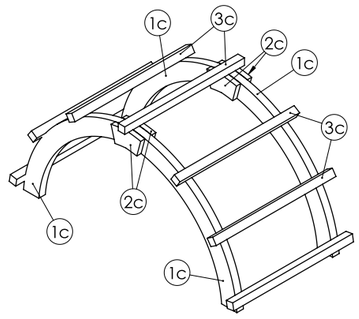








Item No.	Description	Material	Qty.
1c	Semi-Circ Rafter	2"x10"	4
2c	Elliptical Rafter Key Block	5/4"x6"	4
3c	Rafter x 27½"	2"x2"	7



iii

WESTERN RED CEDAR - **OUTDOOR LIVING**

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

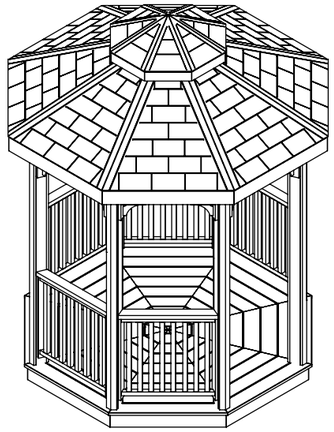
Fasteners:

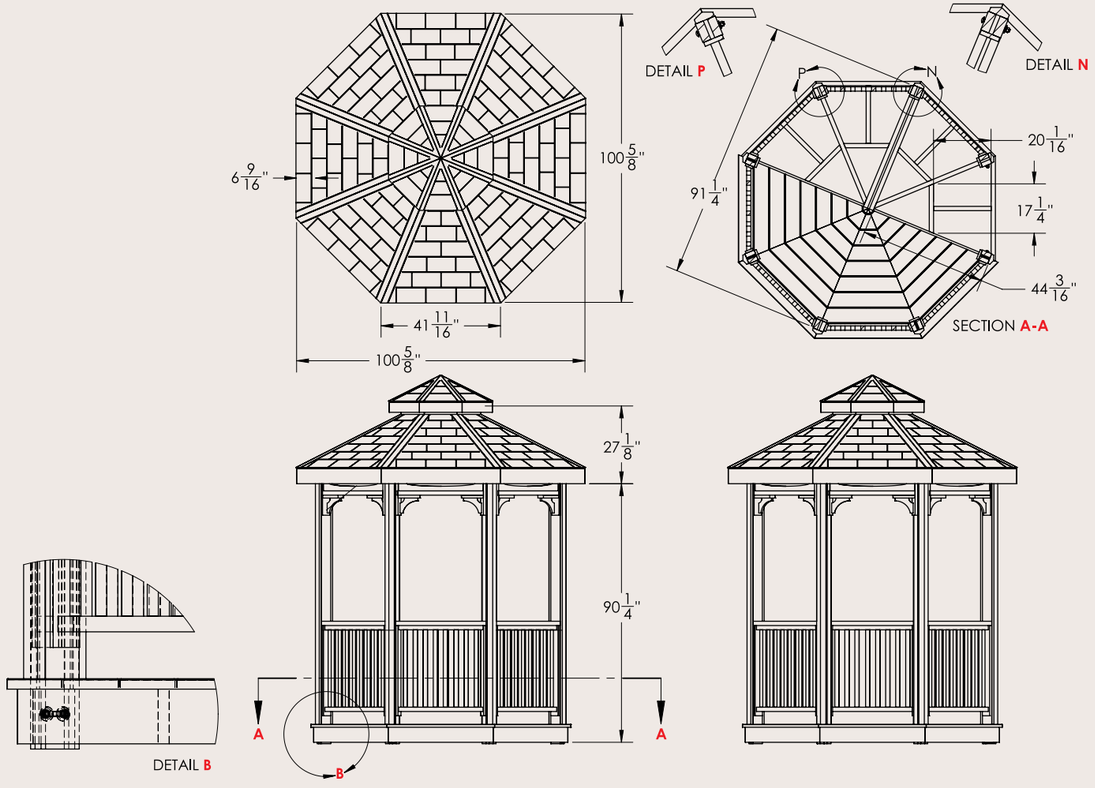
16	Galvanized Hurricane Clips, (if applicable)
7lb	1¼” galvanized roofing nails
7lb	3” Deck Screws (rated for red cedar)
5lb	3½” Spiral Galvanized Nails
2lb	3” Spiral Galvanized Finish Nails
8	5”x1/2” Galvanized Carriage Bolts with nuts and washers
24	3½”x 3/8” Galvanized Carriage Bolts with nuts and 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 Red Cedar Prior to assembly.*

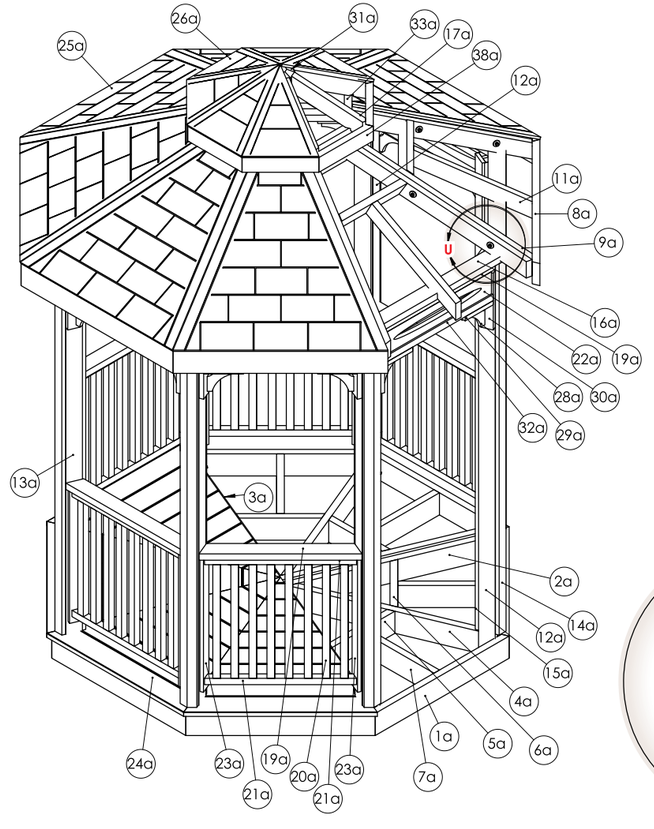
**** Full size templates with step-by-step solid wood lamination instructions version is available for purchase through ww.GardenStructure.com*



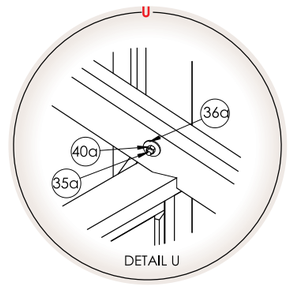


RECOMMENDED TOOLS

- 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”x3½” 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
40a	1/2”x4” Galvanized Carriage Bolt	Steel	16



Gazebo

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 augur or power augur—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 3¼" 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.

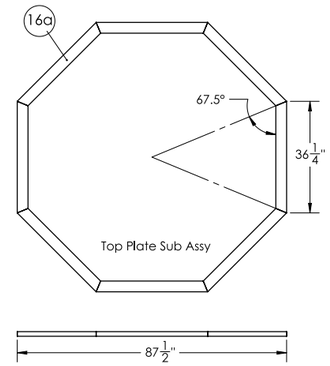
L. Confirm each post for level and brace temporarily—then add the knee braces and the interior post trim and exterior caps.

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

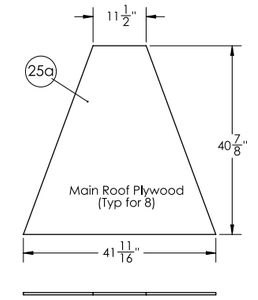
N. Skirting is different in every site condition. Block, footing and slab installations will require different skirting to be applied. Normally the decking overhangs roughly 1.5" and the skirting butts up to the decking.

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.



i



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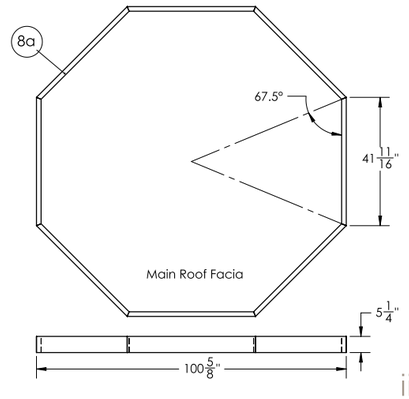

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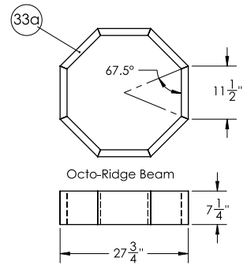

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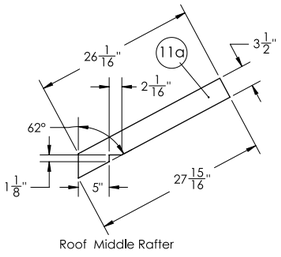

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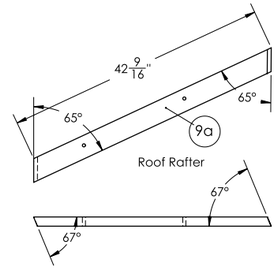
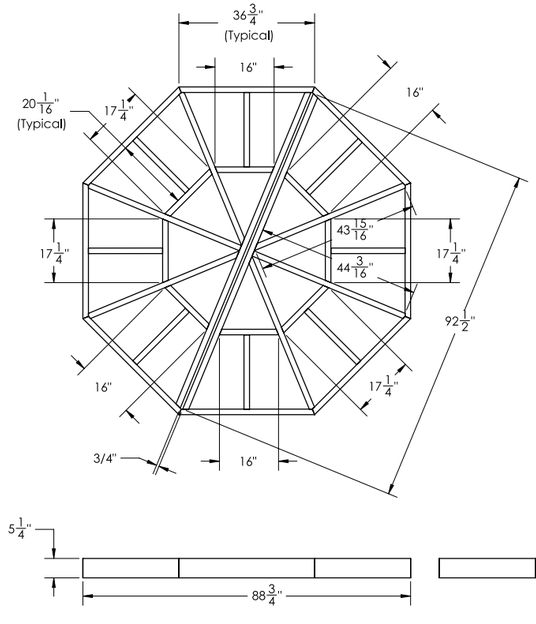
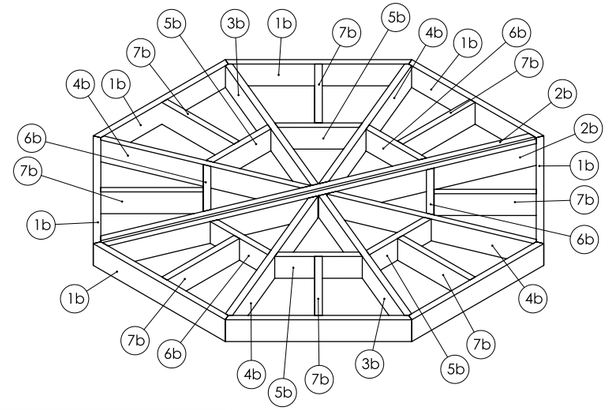


vi

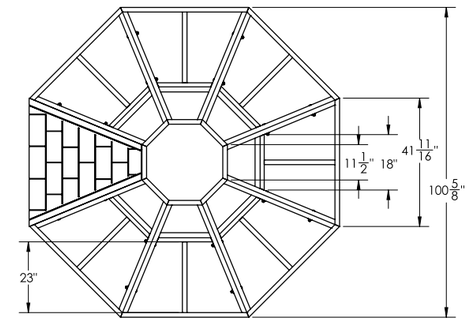
Item No.	Description	Material	Qty.
1b	Deck Rim Joists	2"x6"	8
2b	Deck Main Joists - Long	2"x6"	2
3b	Deck Joists Type A	2"x6"	2
4b	Deck Joists Type B	2"x6"	4
5b	Deck Purlin	2"x6"	4
6b	Deck Purlin (Short)	2"x6"	8
7b	Deck Short Joist	2"x6"	8

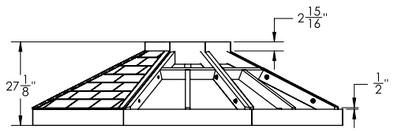




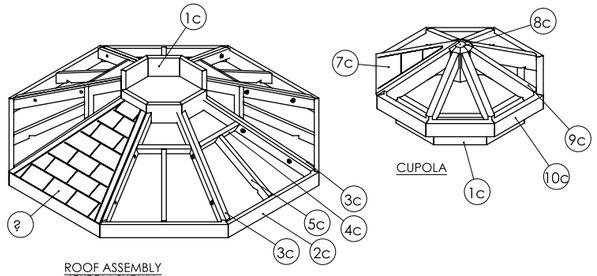
vii

Gazebo

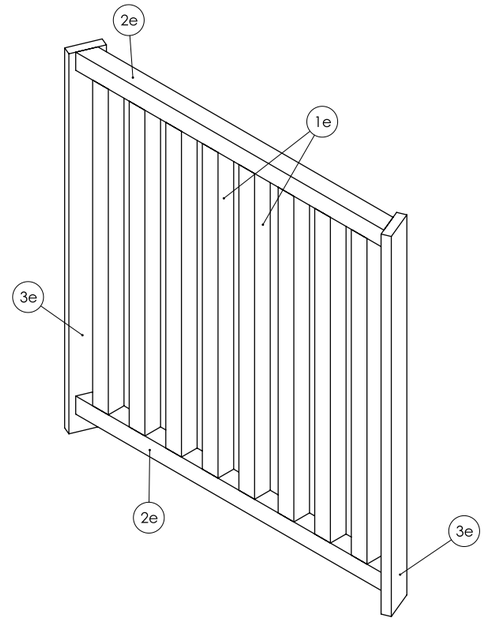




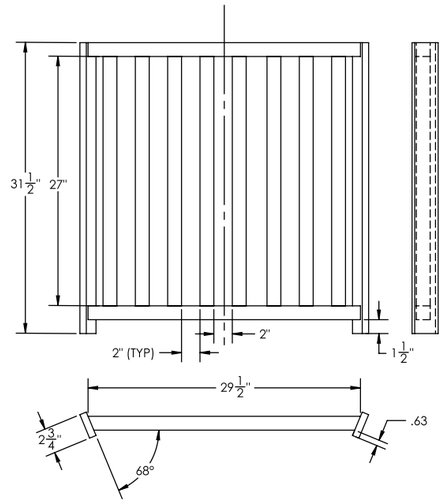
Item No.	Description	Material	Qty.
1c	Octo-Ridge Beam	2"x8"	8
2c	Main Roof Facia	2"x6"	8
3c	Roof Rafter	2"x4"	16
4c	Roof Purlin	2"x4"	8
5c	Roof Middle Rafter	2"x4"	8
6c	Pine Barn Board or 5/8" Exterior Plywood	See Description	8
7c	Pine Barn Board or 5/8" Exterior Plywood	See Description	8
8c	Cupola Peak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

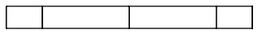


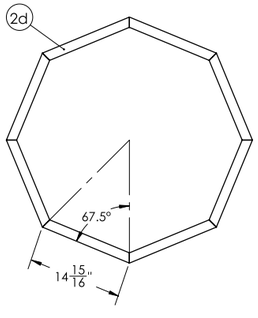
ROOF ASSEMBLY
(CUPOLA SHOWN SEPARATELY FOR CLARITY)

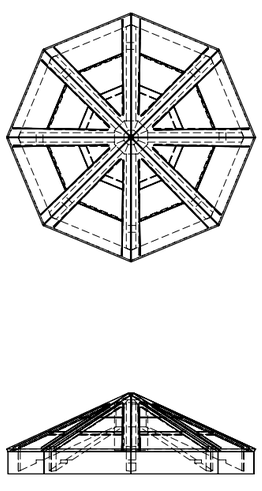


Item No.	Description	Material	Qty.
1e	Vertical Handrails	2"x2"	8
2e	Horizontal HandRails	2"x3"	2
3e	Rail Mounting Plate	1"x3"	2 D

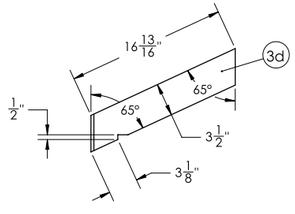


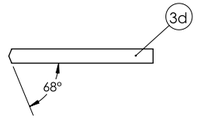


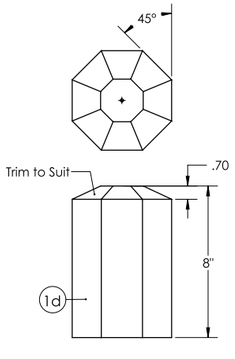


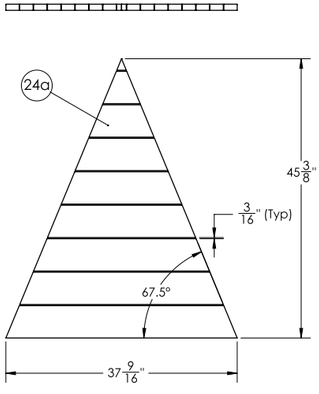


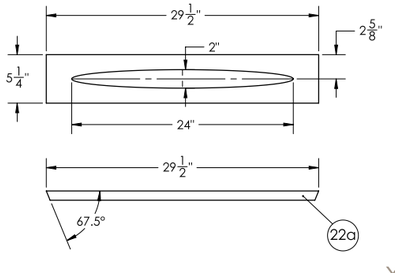
Item No.	Description	Material	Qty.
1d	Cupola Peak	6"x6"	1
2d	Cupola Facia	2"x4"	8
3d	Cupola Rafter	2"x4"	8
4d	Pine Barn Board or 5/8" Ext. Plywood See Description		8



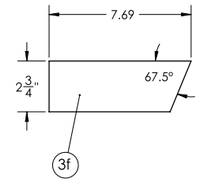


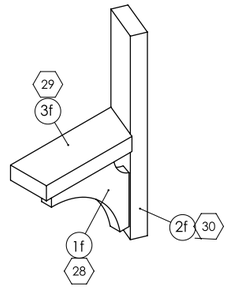


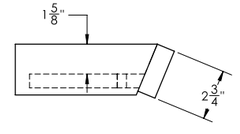


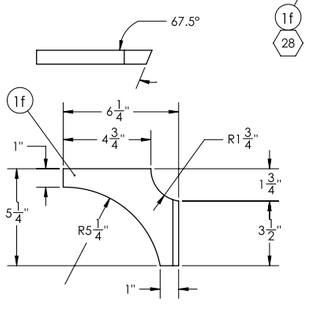


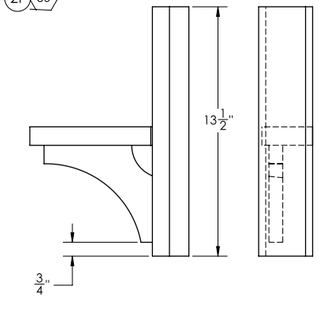
Item No.	Description	Material	Qty.
1f	LHS Cut Brace	2"x 6 Offcuts	1
2f	Brace Plate 1	5/4"x3"	1
3f	Brace Plate 2	5/4"x3"	1





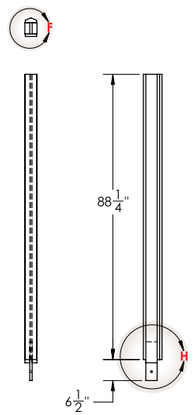




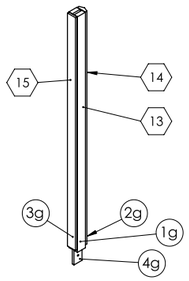


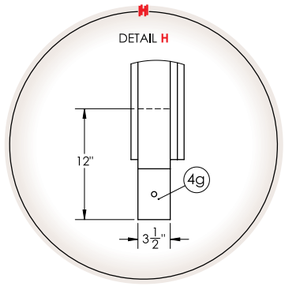
Gazebo

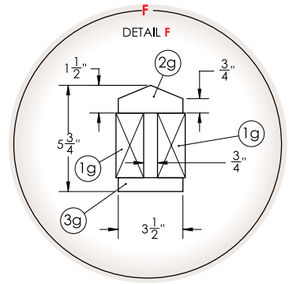
Item No.	Description	Material	Qty.
1g	Post Verticals (Short)	2"x4"	2
2g	Post Vertical Corner Cap	2"x4"	1
3g	Inner Post Trim	1"x4"	1
4g	3/4"x3½" Plywood Filler	3/4" Plywood	1
5g	1/2"x5" Galvanized Carriage Bolt	Not Shown	2



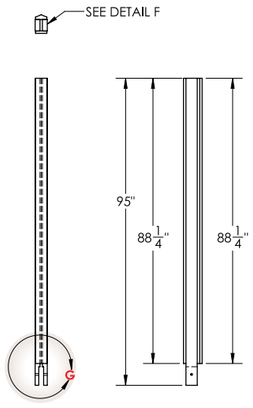
NOTES:
1) POST LAYOUT - DOUBLE JOIST (TYPICAL FOR 2)



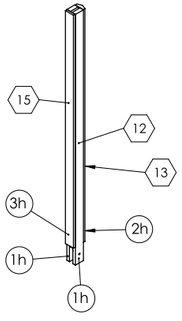


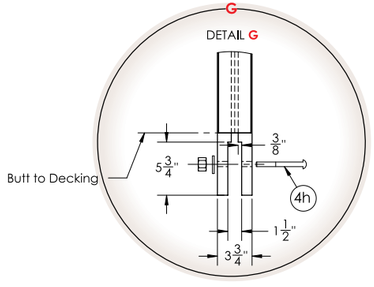


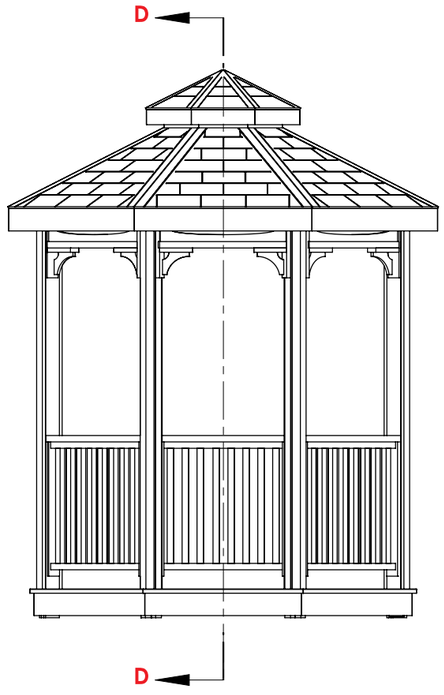
Item No.	Description	Material	Qty.
1h	Post Verticals (Long)	2"x4"	2
2h	Post Vertical Corner Cap	2"x4"	1
3h	Inner Post Trim	1"x4"	1
4h	1/2" x 5" Galvanized Carriage Bolt See Description		6

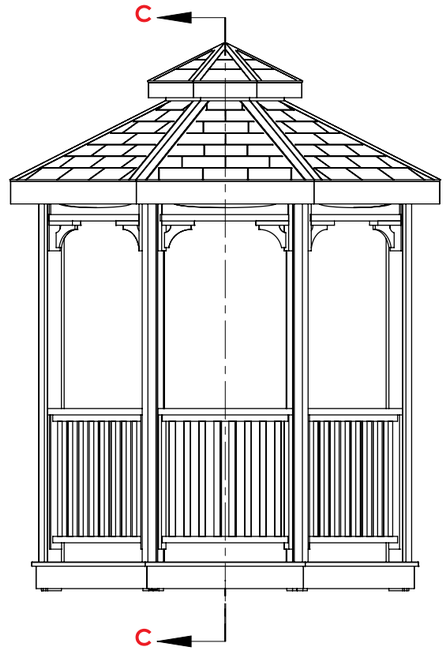


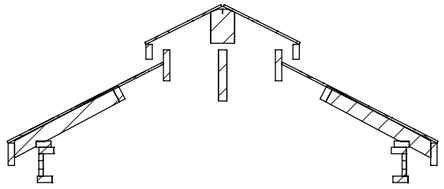
NOTES:
1) POST LAYOUT - ALL LOCATIONS EXCEPT DOUBLE JOIST (TYPICAL FOR 6)

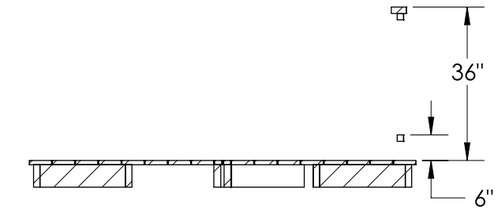




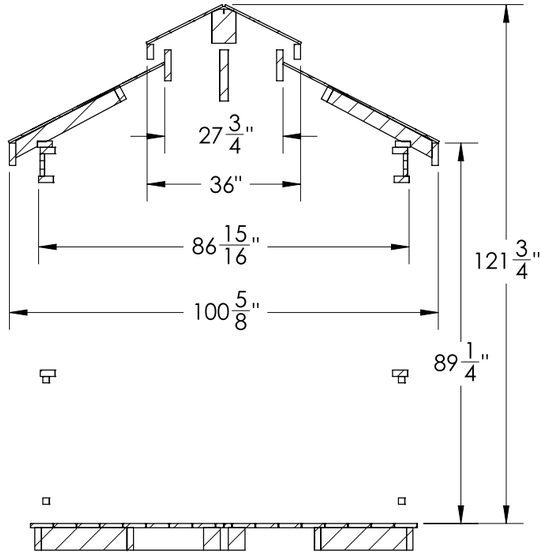








SECTION **D-D**



SECTION **C-C**

Gothic Arbor

MATERIAL LIST

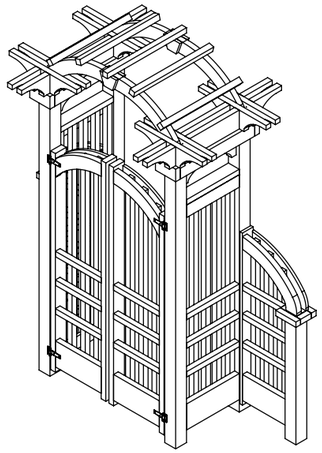
4	4"x4" x 12'
2	4"x4" x 8'
2	2"x8" x 14'
5	2"x4" x 48"
2	2"x6" x 10'
3	2"x4" x 8'
2	2"x4" x 12'
1	2"x6" x 3'
20	2"x2" x 8'
3	1"x4" x 8'
1	1"x8" x 8'

Pocket Hole Jig and #12 Pan Head Stainless Wood Screws

2lb	1¼" spiral galvanized finish nails
2lb	3" Deck Screws (rated for red cedar)
2lb	2¼" Deck Screws (rated for red cedar) (or 15 guage finishing brads or 2½" Spiral Galvanized Finish Nails)
2	pairs of heavy duty strap hinges.

**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 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.

C. 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.

D. 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.

E. 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.

F. 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.

G. 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.

H. Check the location of the short posts, measuring at the top and base of the posts then assemble the wings as illustrated.

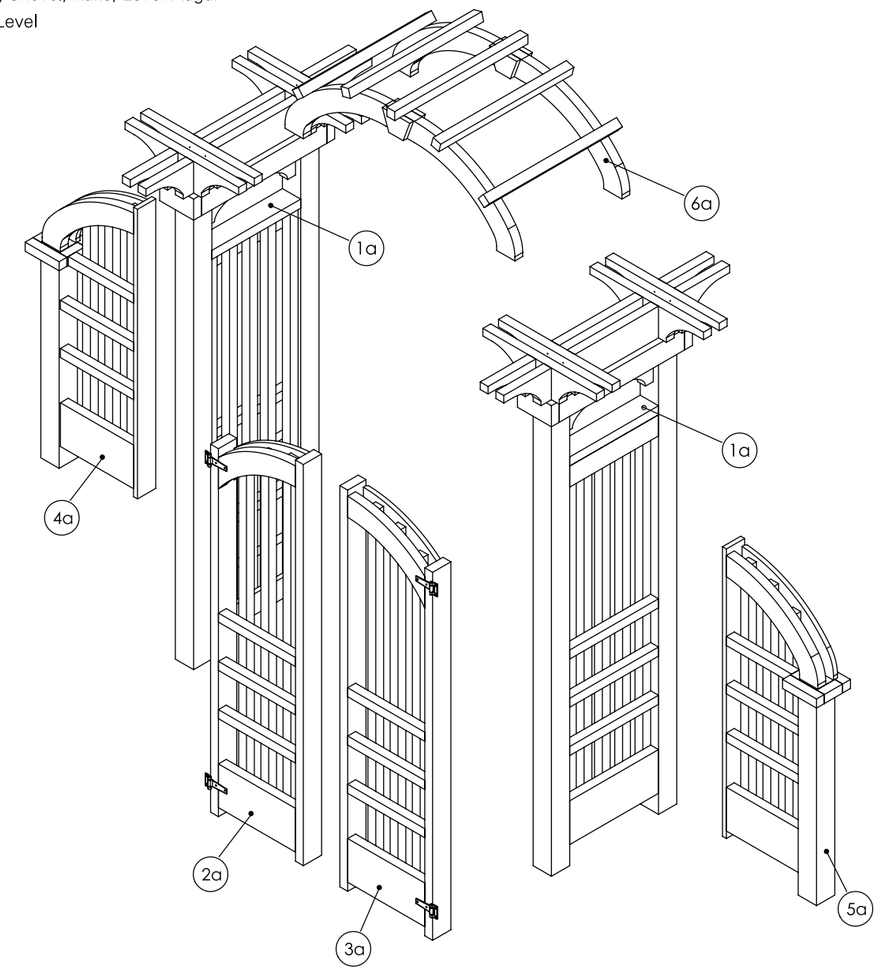
I. Confirm the space between the gate supporting posts- measuring at the top and base of the posts. The total size of the gates should be 1.5" less than the opening for double gates. 1" space should be maintained between the two gates for swing—and 1/4" between the gates and the support posts. Adjust the gates smaller or larger as required. If joints are not tight and gates have movement, invest in gate wires to maintain square.

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

RECOMMENDED TOOLS

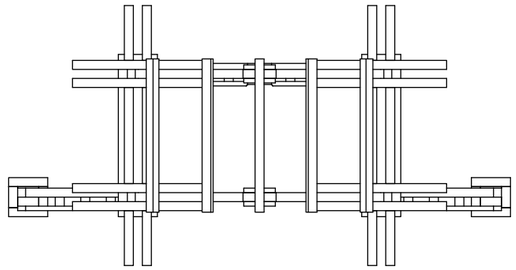
- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing Square
- Pocket Hole Jig and #12 Pan Head Stainless Wood Screws
- Adjustable wrench or socket set
- 3/8" Countersink and Pilot 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

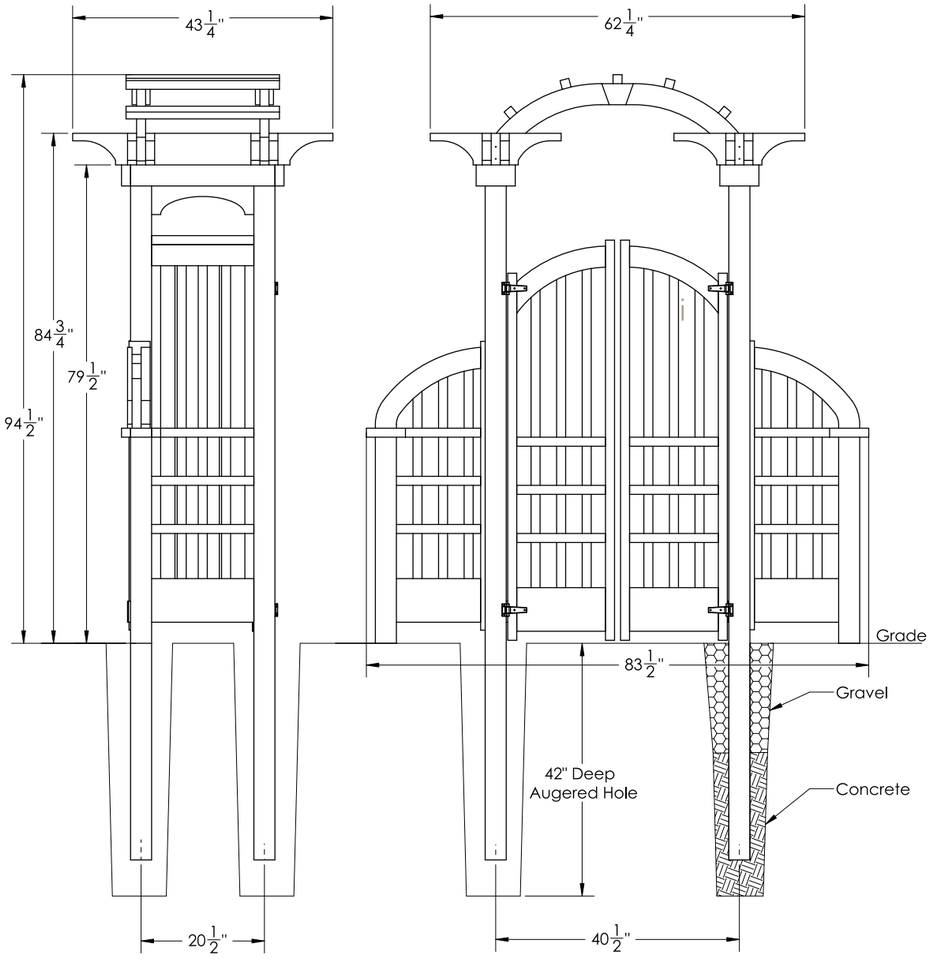
Item No.	Description	Material	Qty.
1a	SIDE PANEL SUB ASSY	Diagram iv	2
2a	GATE - LHS	Diagram v	1
3a	GATE - RHS	Diagram v	1
4a	WING - LHS	Diagram vi	1
5a	WING - RHS	Diagram vi	1
6a	ARCH SUB ASSY	Diagram ii	1

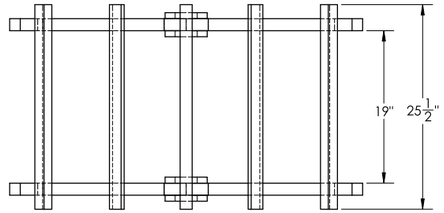


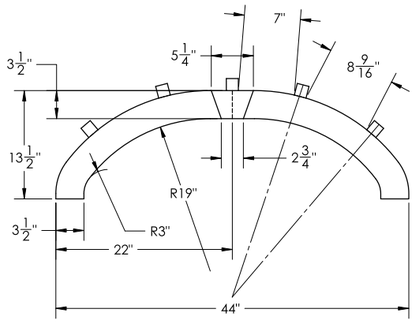
WESTERN RED CEDAR - **OUTDOOR LIVING**

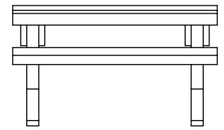
Gothic Arbor

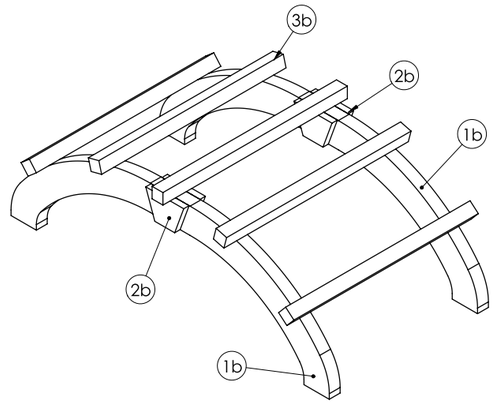


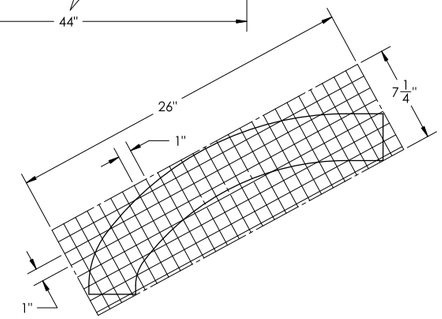




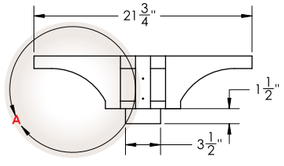


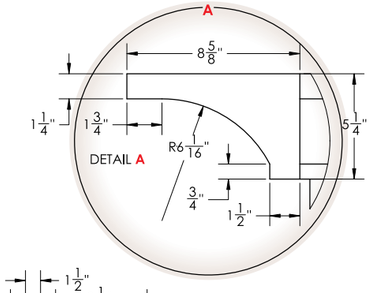


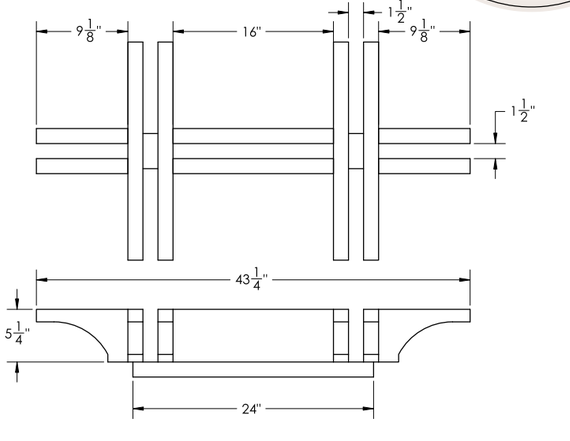


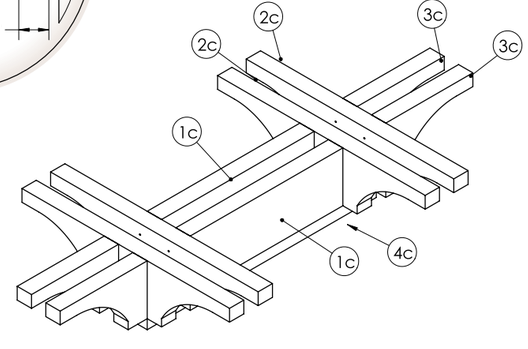


Item No.	Description	Material	Qty.
1b	Arch Rafters	2"x8"	4
2b	Arch Splint	1"x4"	4
3b	2"x2" x 25½" Spanners	2"x2"	5



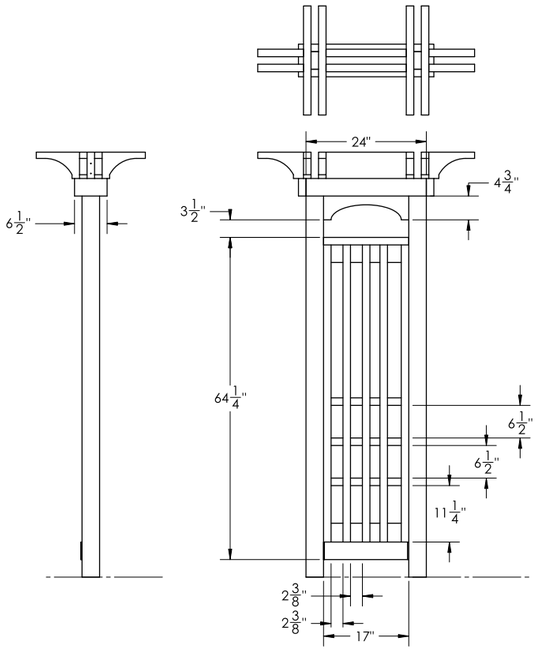


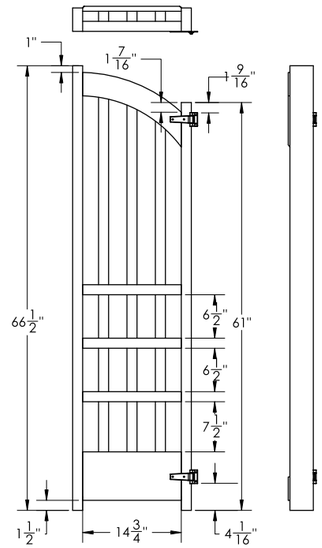


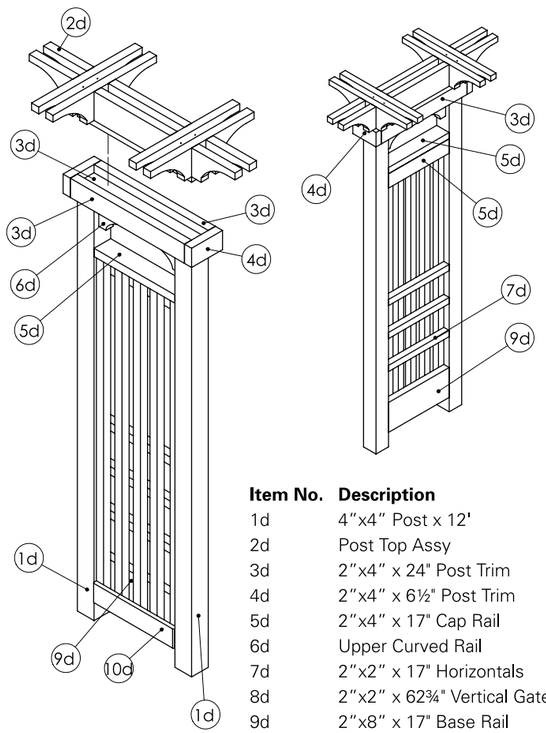


Item No.	Description	Material	Qty.
1c	2x6 x 16" Beam	2"x6"	2
2c	Decorative Beam x 21¾"	2"x6"	4
3c	Beam Tail	2"x6"	4
4c	2"x4" x 24" Post Trim	2"x4"	1

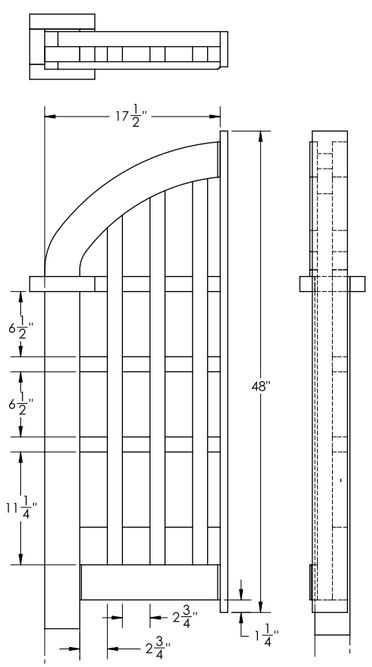
Gothic Arbor

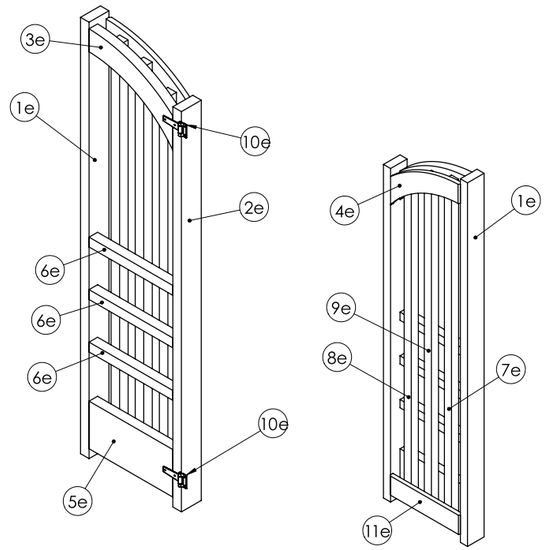






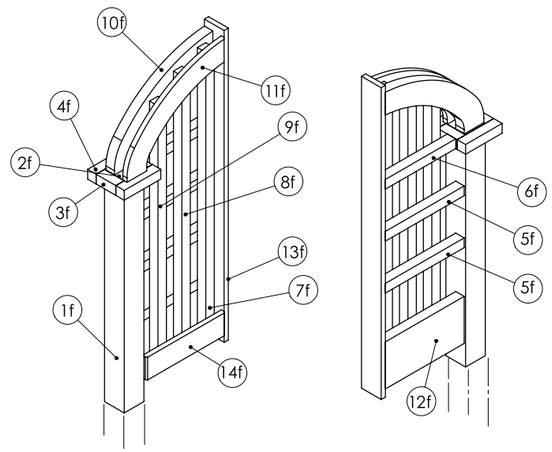
Item No.	Description	Material	Qty.
1d	4"x4" Post x 12'	4"x4"	2
2d	Post Top Assy	Diagram iii	1
3d	2"x4" x 24" Post Trim	2"x4"	3
4d	2"x4" x 6½" Post Trim	2"x4"	2
5d	2"x4" x 17" Cap Rail	2"x4"	2
6d	Upper Curved Rail	2"x6"	1
7d	2"x2" x 17" Horizontals	2"x2"	3
8d	2"x2" x 62¾" Vertical Gate Lattice	2"x2"	5
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.)



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.

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.

WESTERN RED CEDAR - **OUTDOOR LIVING**

Vineyard Pergola

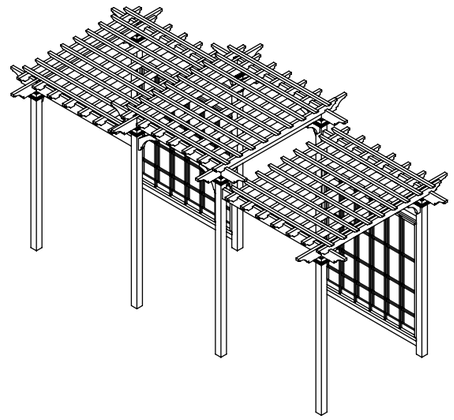
MATERIAL LIST

10	2”x6” x 8’
8	4”x4” x 12’
27	2”x4” x 8’
9	1”x6” x 6’
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.

1lb	3” spiral galvanized finish nails
2lb	1¼” spiral galvanized finish nails
5lb	3” Deck Screws (rated for red cedar)
5lb	2½” Deck Screws (rated for red cedar) (or 15 guage finishing brads or 2½” Spiral Galvanized Finish 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 Red Cedar Prior to assembly.*



INSTRUCTIONS

A. Shop for, gather and organize the materials.

B. 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.

C. 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.

D. 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.

E. 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 3¼” 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.

F. 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.

G. 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 ¼” 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).

H. Space Rafters on Beams to spacing illustrated and secure with 3” deck screws or 3¼” Spiral Galvanized Spikes. Countersink all screws and nails.

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

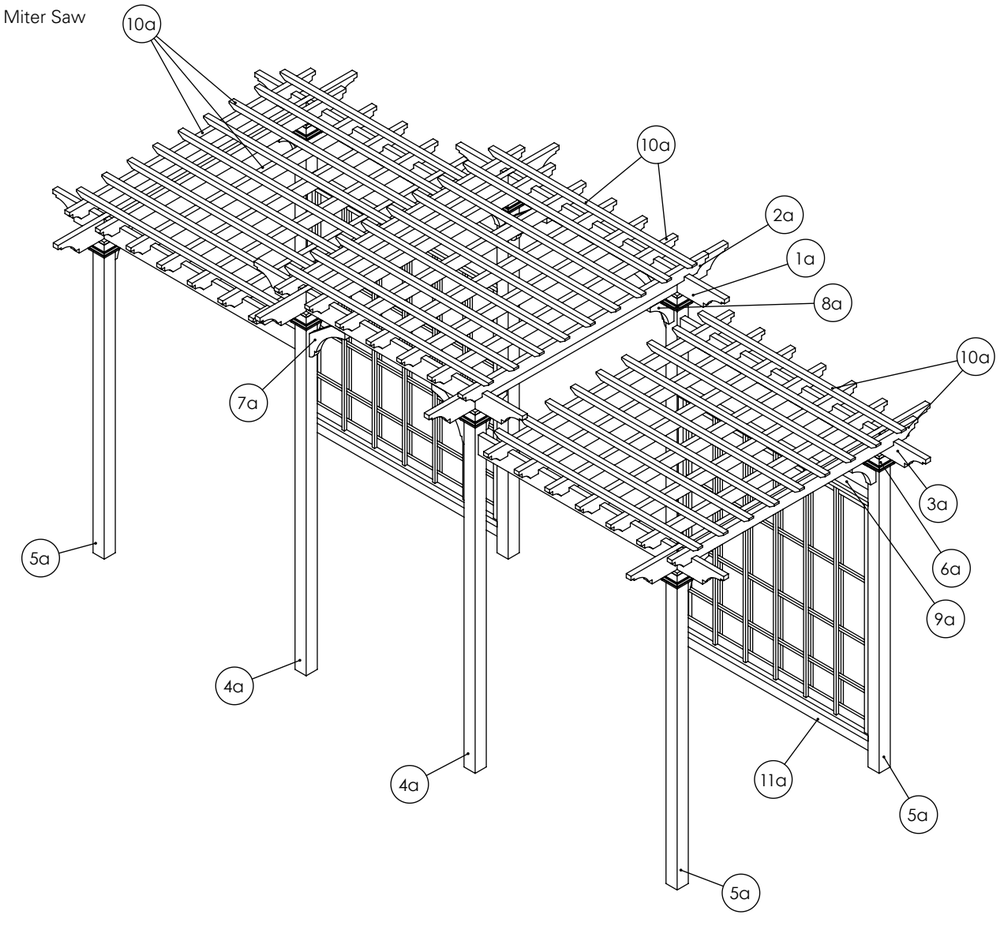
J. Cut out Braces from off-cut 2x6 beam and 2x4 rafter materials. Fasten between posts and beams with 3” deck screws or #12 Stainless Screws.

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

RECOMMENDED TOOLS

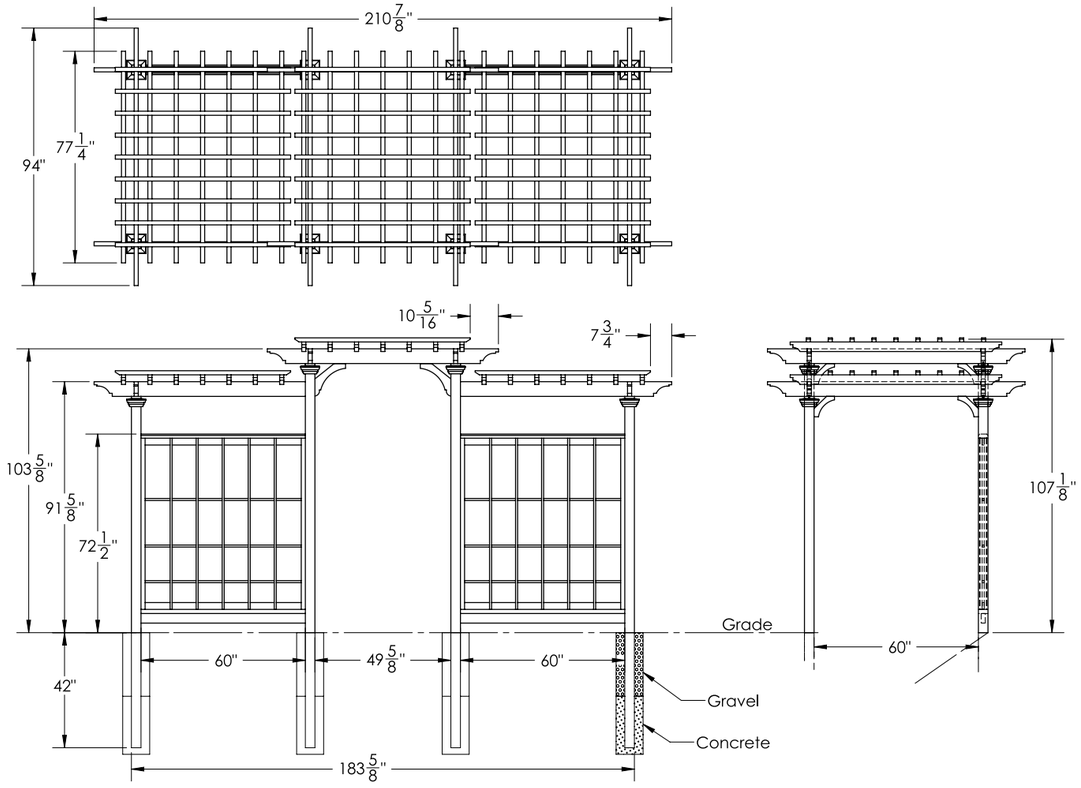
- 4 small off-cuts of 2x2 (spacer blocks)
- Drill and 3/8” spade bit or augur bit
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing Square
- Pocket Hole Jig and #12 Pan Head Stainless Wood Screws
- Adjustable wrench or socket set
- 3/8” Countersink and Pilot 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

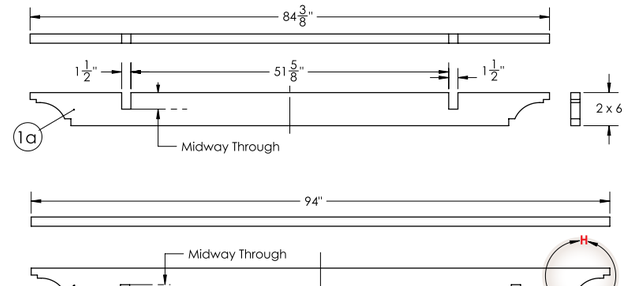


WESTERN RED CEDAR - **OUTDOOR LIVING**

Vineyard Pergola



i



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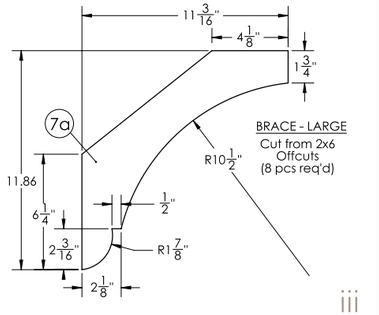
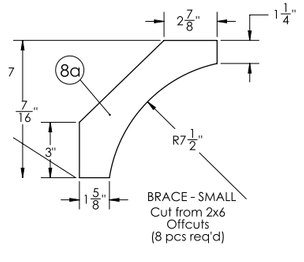
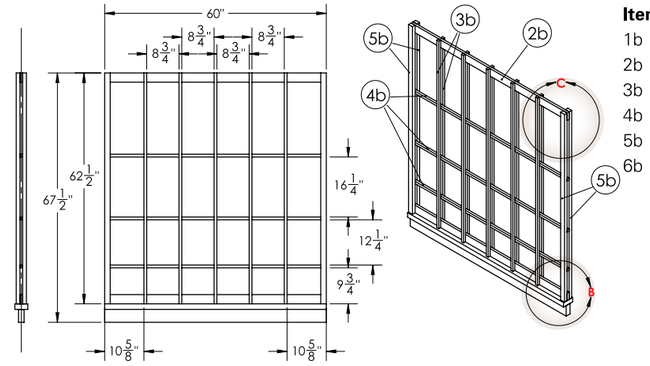


iii

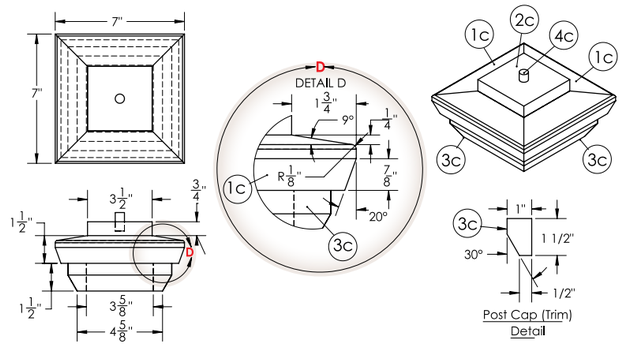


iv



Item No.	Description	Material	Qty.
1b	Support Rail	2"x4"	2
2b	Upper & Lower Rails	3/4"x2¼"	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		

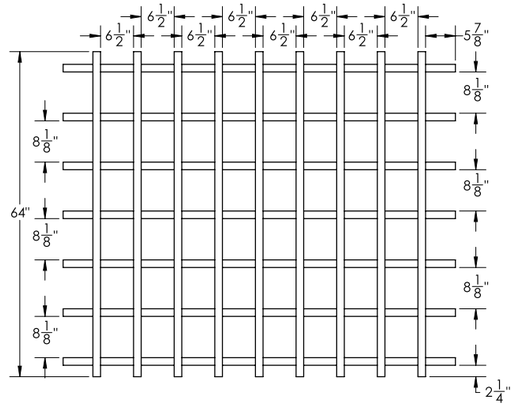
V



Item No.	Description	Material	Qty.
1c	Post Cap (Cap)	7"x7"x 1½" (cut from 2"x"8)	1
2c	Post Cap (Top Piece)	3½" x 3½" x 3/4" (cut from 1x6)	1
3c	Post Cap (Trim)	1½" x 1" (cut from offcuts)	4
4c	1/2" Hardwood Dowel	Purchased	1

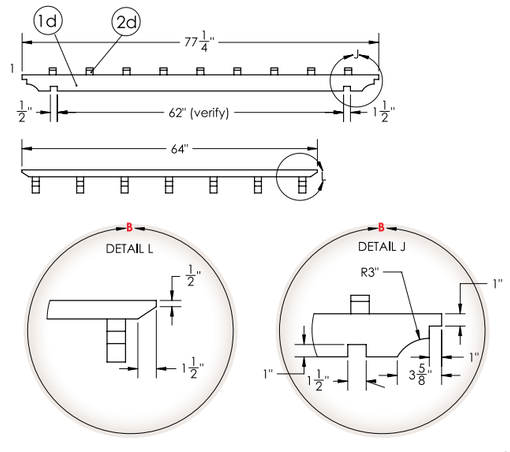
NOTES:
1) TYPICAL FOR 8
2) DRILL 1/2" HOLE CENTRLLY IN TOP PIEC, FOR DOWEL
3) MITRE POST CAP (TRIM)-

vi



vii

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



viii

WESTERN RED CEDAR - **OUTDOOR LIVING**

Herb Garden Planter

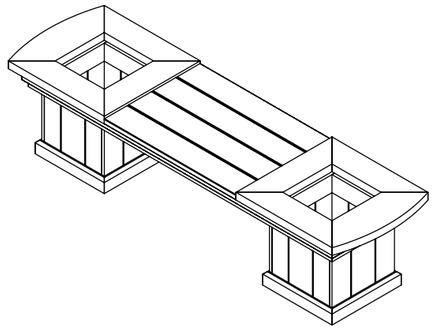
MATERIAL LIST

5	2"x4" x 8'
8	1"x6" x 5'
2	1"x6" x 6'
1	5/4"x6" x 12'
1	2"x6" x 12'
1	2"x8" x 4'
1	2"x4" x 12'
1	1"x6" x 8'

1lb	1¾" spiral galvanized finish nails.
2lb	3" Deck Screws (rated for red cedar) or spiral galvanized nails.
2lb	2¼" Deck Screws (rated for red cedar) (or 15 guage finishing brads or 2½" Spiral Galvanized 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 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)

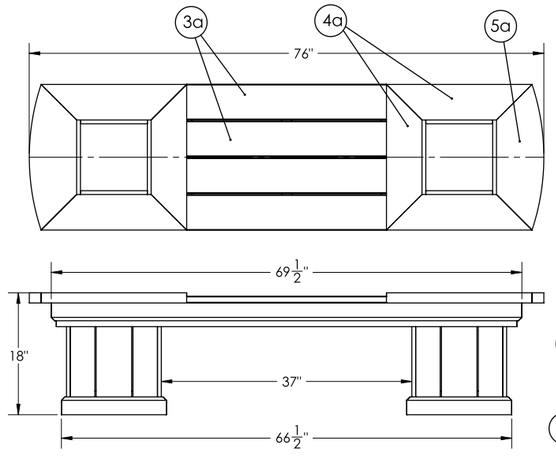
E. Install bench frame trim. Assemble mitered planter top trim (Picture Frame 2x6-2x8) and install centered upon the planter boxes.

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.

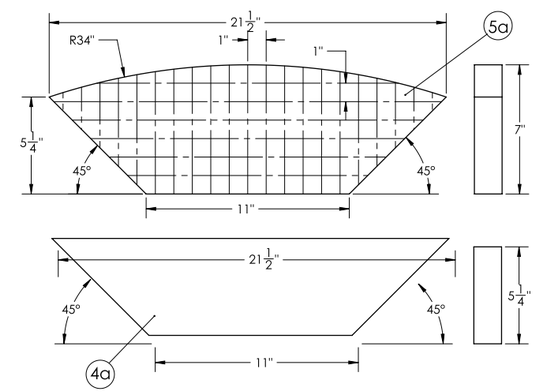
RECOMMENDED TOOLS

- 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



i

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 x6"	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



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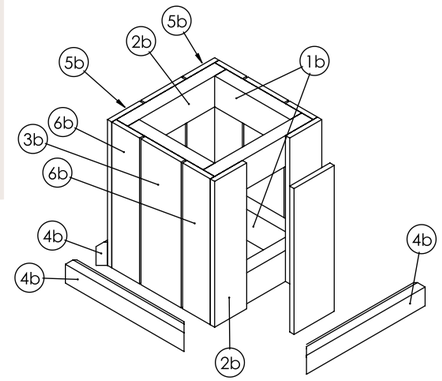
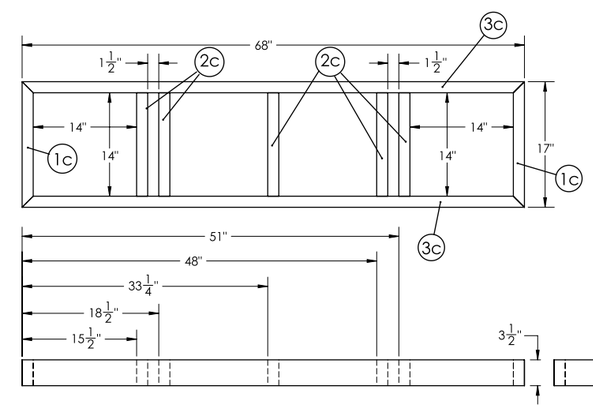
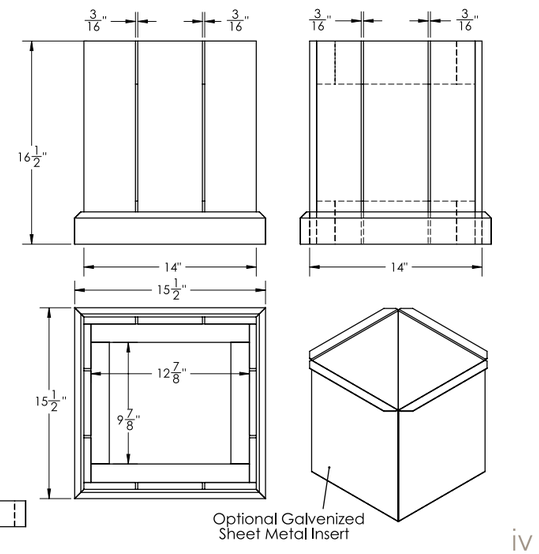


Item No.	Description	Material	Qty.
1b	Leg Support Frame (Short side)	2"x4"	4
2b	Leg Support Frame	2"x4"	4
3b	Leg Cladding Boards	1"x6" Fence Boards	4
4b	1x3 Trim	1"x3" (Mitred)	4
5b	Leg Cladding Boards (Ripped @ 4 3/16")	1"x6" Fence Boards	4
6b	Leg Cladding Boards (Ripped @ 3 5/8")	1"x6" Fence Boards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

iii

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





iv

WESTERN RED CEDAR - **OUTDOOR LIVING**

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'

OPTIONAL:

1	4"x8" Sheet 3/16 Masonite
1	4"x8" Sheet Marine Ply

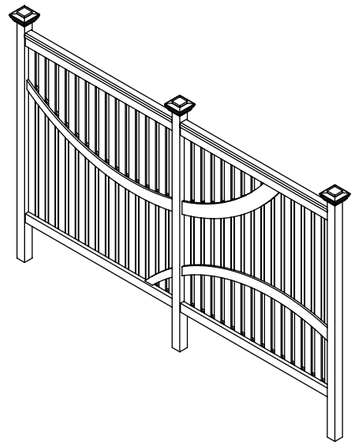
OR

10	1"x6" x 8' Red Cedar and Hardwood Biscuits+ Waterproof Glue ***
8	Galvanized Fence Clips
.5lb	1½" galvanized roofing nails
1lb	3" Deck Screws (rated for red cedar)
3lb	2½" Deck Screws (rated for red cedar) (or 15 Guage Finishing Nails or 2½" 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 Red Cedar Prior to assembly.*

**** Full size templates with step by step solid wood lamination instructions version is available through ww.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 are confirmed.

C. 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.

D. 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 3¼" Galvanized finish nail or framing nail on the diagonal to secure the support rails securely.

E. 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.

F. 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.

G. 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 sccreen to the verticals already installed in the locations shown using 1¼" wood screws. (trim head screws may be a nice touch).

H. Holding the narrow verticals in place temporarily, mark with a pencil and cut to shape with a jigsaw. Fasten to the sweep panels with 1¼" screws or nails. Repeat for all the narrow verticals.

I. Install the top and bottom 1"x4" trim rails, then install the other sweep panels to fit.

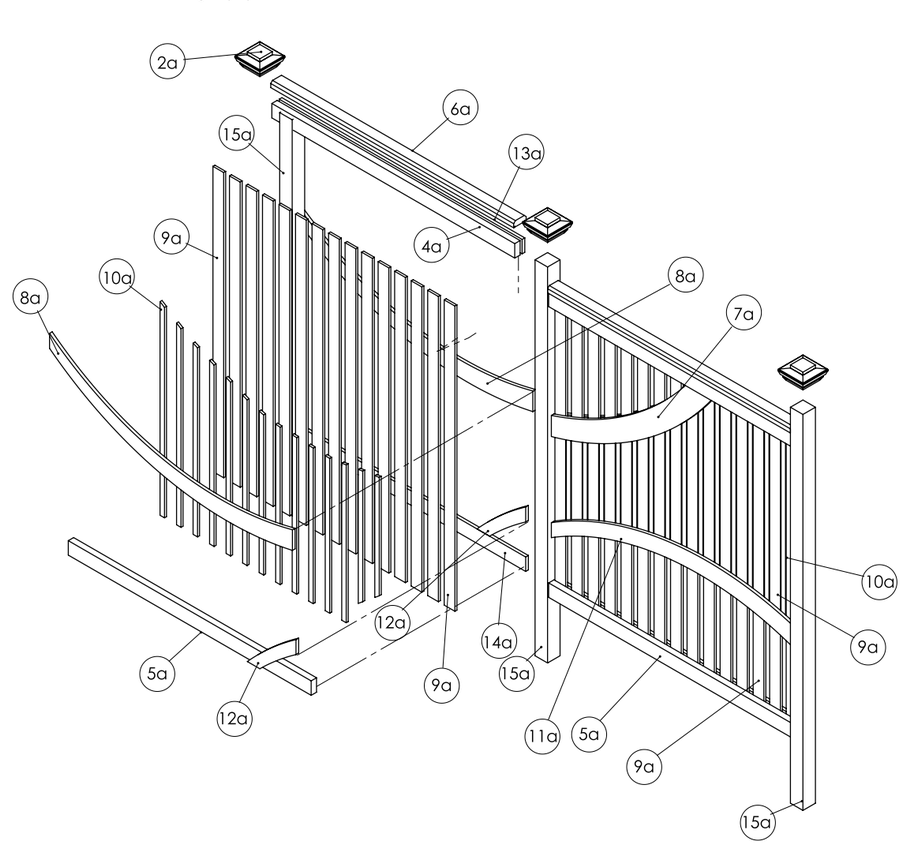
J. Trim the posts to height illustrated or slightly shorter if posts are too short due to grade. The top of posts should be level to one another. Assemble the Post Caps as illustrated and install with 3¼" Spiral Galvanized Nails.

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

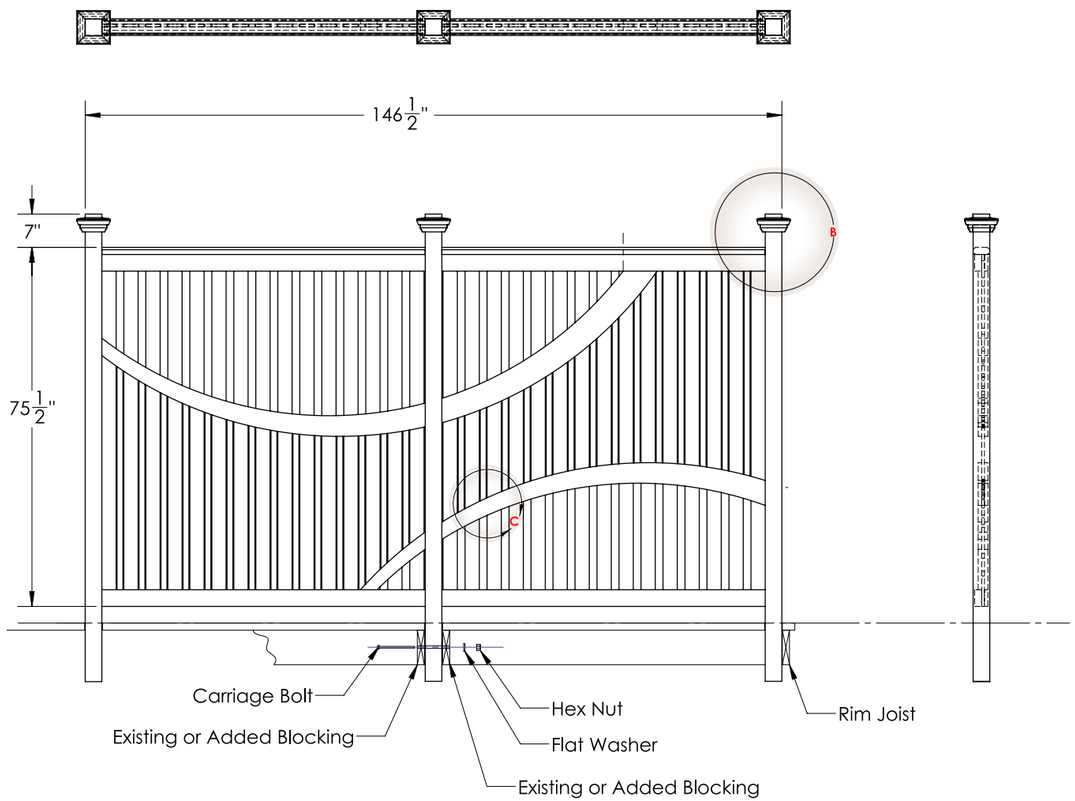
RECOMMENDED TOOLS

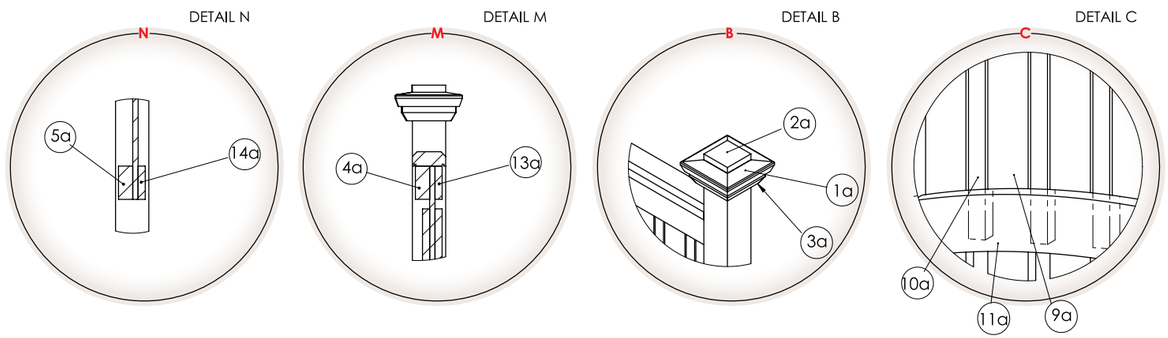
- 2 small off-cuts of 1x2 (spacer blocks)
- Drill and 3/8" spade bit or augur bit
- Screw driver bits and magnetic tip and screw gun
- Carpentry clamps (4) optional
- Framing Square
- Pocket Hole Jig and #12 Pan Head Stainless Wood Screws
- 3/8" Countersink and Pilot bit and Tapered Plug Cutter (to fill 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

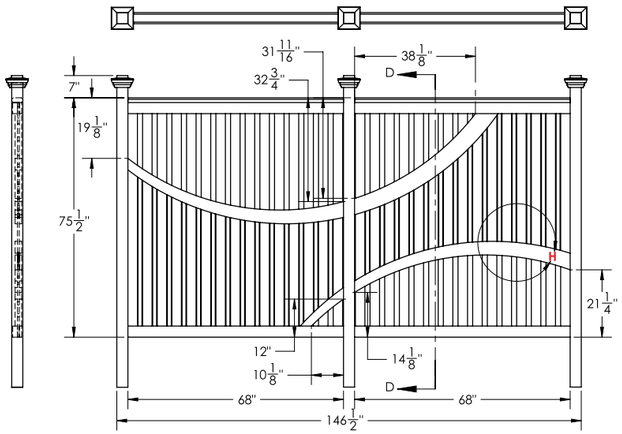
Item No.	Description	Material	Qty.
1a	Post Cap (Cap)	7"x7"x 1½" (cut from 2x8)	3
2a	Post Cap (Top Piece)	3½"x3½" x 3/4" (cut from 1x6)	3
3a	Post Cap (Trim)	1½" x 1" (cut from offcuts)	12
4a	Top Rail	2"x4"	2
5a	Bottom Rail	2"x4"	2
6a	Top Cap	2"x4" (see cut/trim detail)	2
7a	Sweep Panel 2 (1x4)	3/4" Marine 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

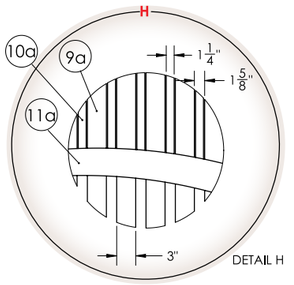


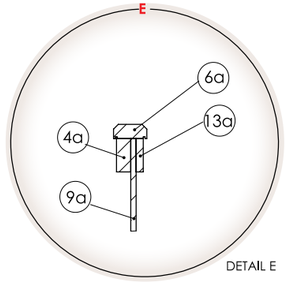
Privacy Screen

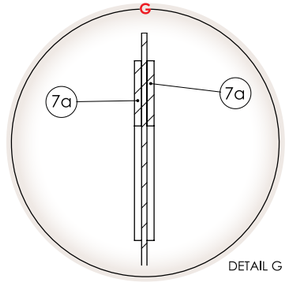


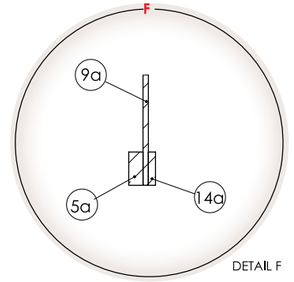


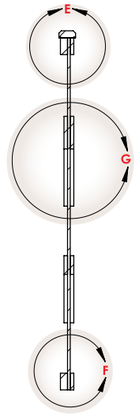


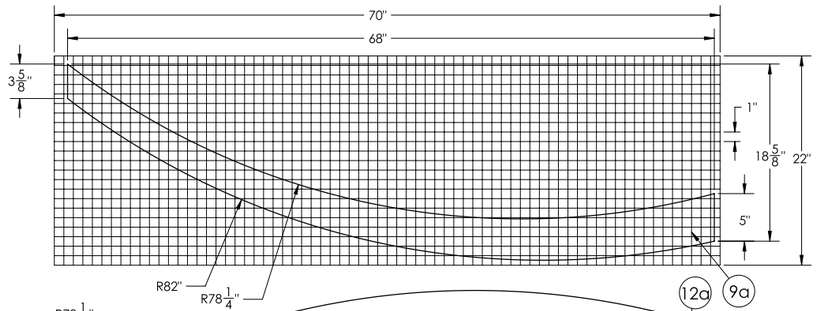


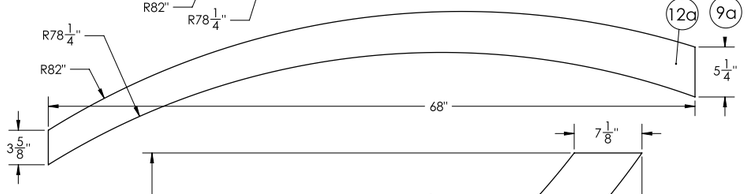


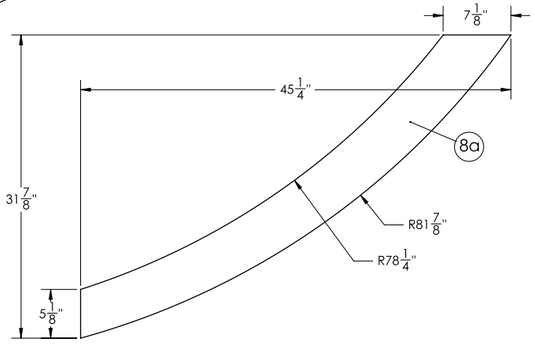


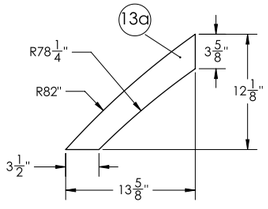










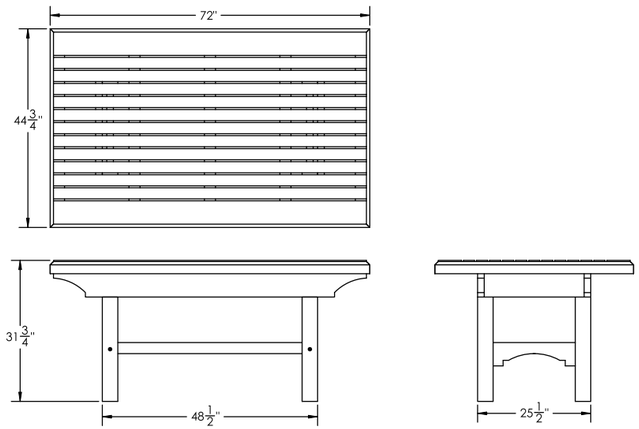


WESTERN RED CEDAR - **OUTDOOR LIVING**

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 red cedar).
1lb	2½” Galvanized finish nails
1	Quart Marine Adhesive or Waterproof Glue.



INSTRUCTIONS

A. Gather Tools and layout Materials.

B. Prefabricate parts from the cut list and stack like-parts together.

C. 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.

D. Layout & fasten the upper frame together with 3” #8 Deck Screws. Pilot and countersink all.

E. Fasten the legs to the frame as Illustrated using 4 - #8 x 3” Deck screws per face of connection.

F. 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.

G. Install the sleepers with 2 - 3” deck screws per connection. Start with the ends, then the center, then center the final two.

H. 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.

I. 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.

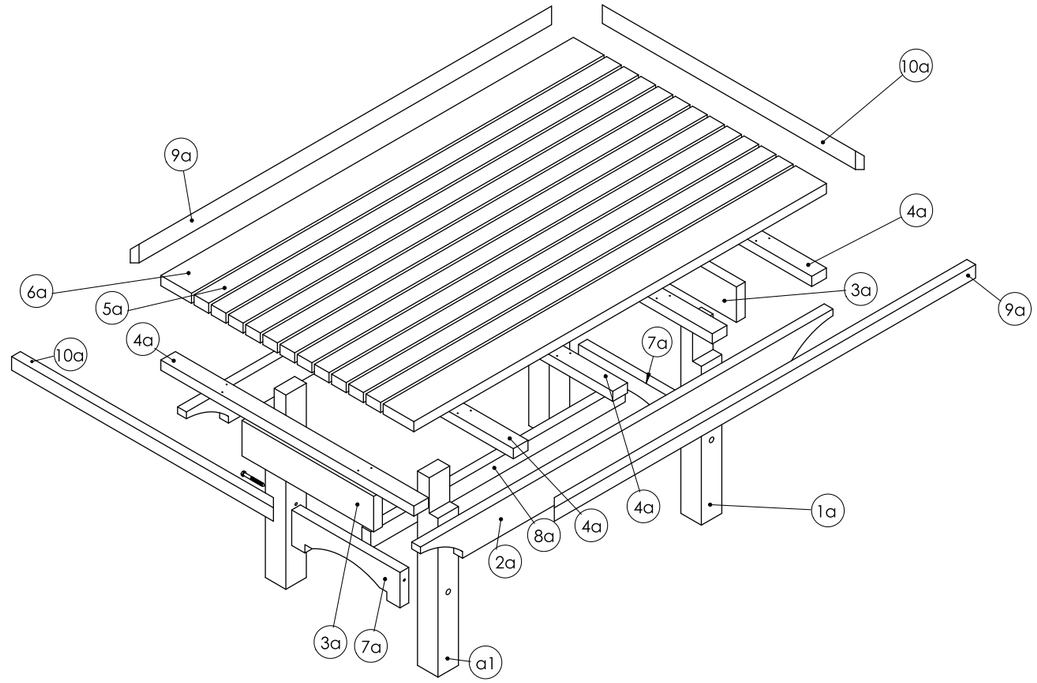
J. Using off-cuts and the tapered plug cutter in a drill press cut enough tapered plugs to fill all the surface visible holes in the table top. Try to match the grain and tone of wood with the plugs and secure using a small dab of marine adhesive. Allow glue to set, trim off excess with flush cut saw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

K. 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.

RECOMMENDED TOOLS

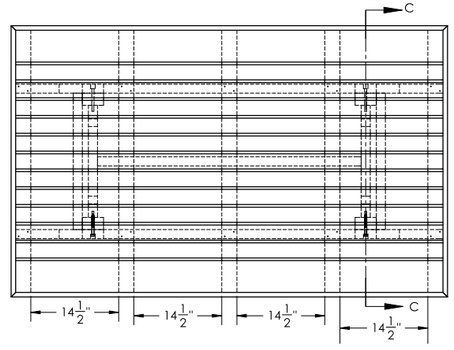
- Masking Tape
- Table Saw
- Circular Saw
- Drill and 1½” Spade bit, 3/8” spade bit or augur bits
- Wood Chisels
- Hand Saw or Japanese Pull Saw
- Screw driver bits and magnetic tip for screw gun
- Carpentry clamps (4) optional
- Framing Square
- Adjustable wrench or socket set
- 3/8” Countersink
- 2 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

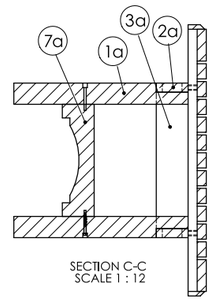


Item No.	Description	Material (cut from)	Qty.
1a	Table Leg	4”x4” x 10' (1)	4
2a	Frame Side Beams	2”x6” x 8' (2)	2
3a	Frame Inners	Sleeper Off-cuts	2
4a	Sleepers	2”x6” x 8' (2)	5
5a	Table Planks (small)	2”x6” x 12' (3)	11
6a	Table Planks (large)	2”x6” x 12' (1)	2

Item No.	Description	Material (cut from)	Qty.
7a	Lower Leg Blocks	2”x6” x 8' (1)	2
8a	Lower Brace	Off-cut Table Plank (small)	1
9a	Edge Trim (short side)	5/4”x6” x 12' (1)	2
10a	Edge Trim (long side)	5/4”x6” x 12' (1)	2
11a	Lag Screw 3/8" x 3 1/2"		2

i





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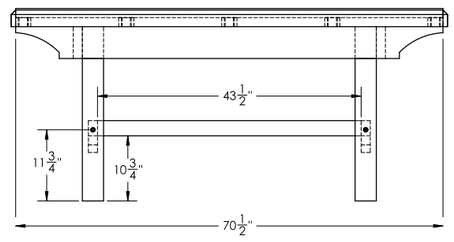

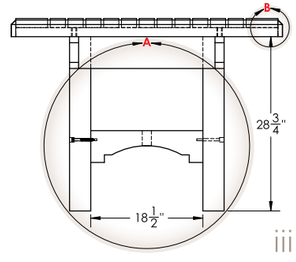

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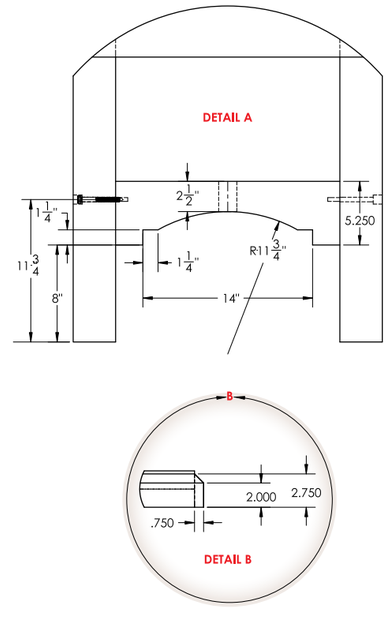


iv

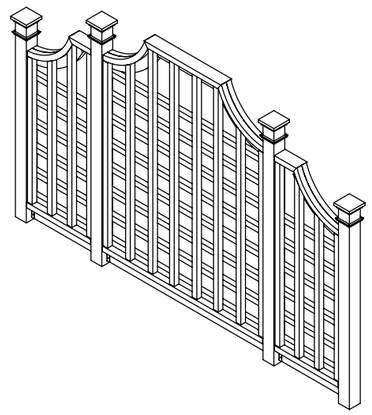
Classic Trellis

MATERIAL LIST

4	4x4x10′ (for Free Standing Version) or 2-4x4x12 (for wall mount version)
24′	¾″ Shingle Moulding (Red Cedar or Mahogany)
1	1-5/4 x 6 x 6′
24	2x2x8′
3	2x4x8′
2	2x8x8′
6	Fence Clips
1lb	1¼″ spiral galvanized finish nails
1lb	3″ Deck Screws (rated for red cedar)
2lb	2¼″ Deck Screws (rated for red cedar) (or 15 guage finishing brads or 2½″ Spiral Galvanized Finish Nails)
30	1¼″ Galvanized roofing nails
8	1/2″ Sleeve Anchors or 3/8″ Lag Screws, (1″ Countersink). ~for wall mount installation only.
8	bags of fast setting concrete ~ for free standing version

**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 from the material list and stack like parts together.

C. 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.

D. 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 ½″, 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.

E. After allowing the posts to set for 24-48 hours fasten the fence clips using the 1¼″ galvanized roofing nails. The clips should be 3″ off the ground and level to one another.

F. Cut and fit the base rails and rail caps. Fasten with 3″ screws.

G. 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.

H. Trim a pencil to 1¼″ 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 2½″ finishing nails or 2¼″ deck screws.

I. 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.

J. Trim the posts to illustrated heights then prefabricate and install the post caps and trims. Secure with 1¼″ Galvanized Finish Nails.

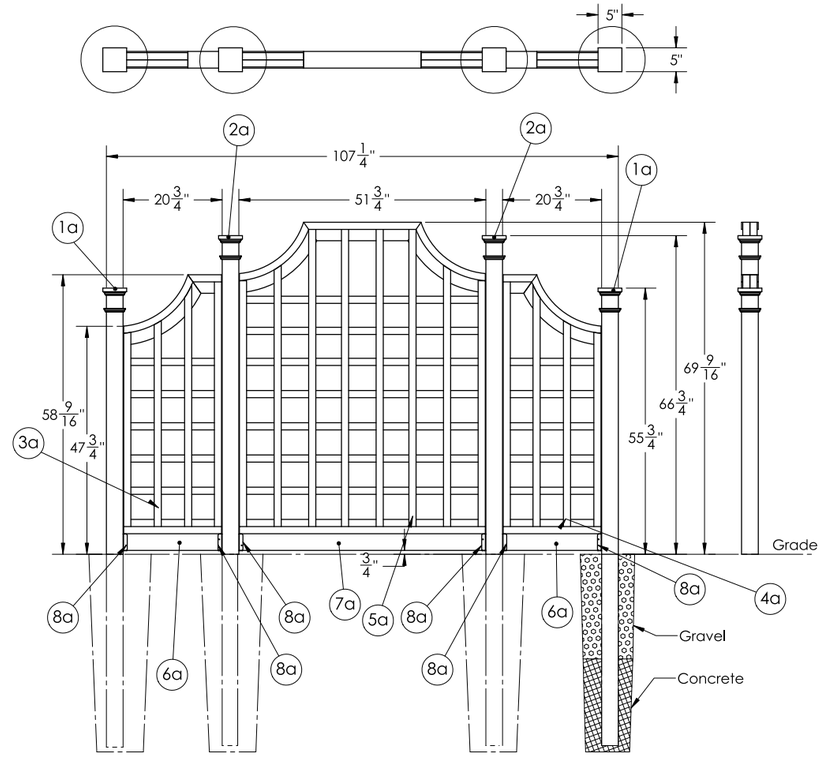
K. Give your project a coat of stain, fill any voids or holes with exterior putty then give it a second coat after putty.

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

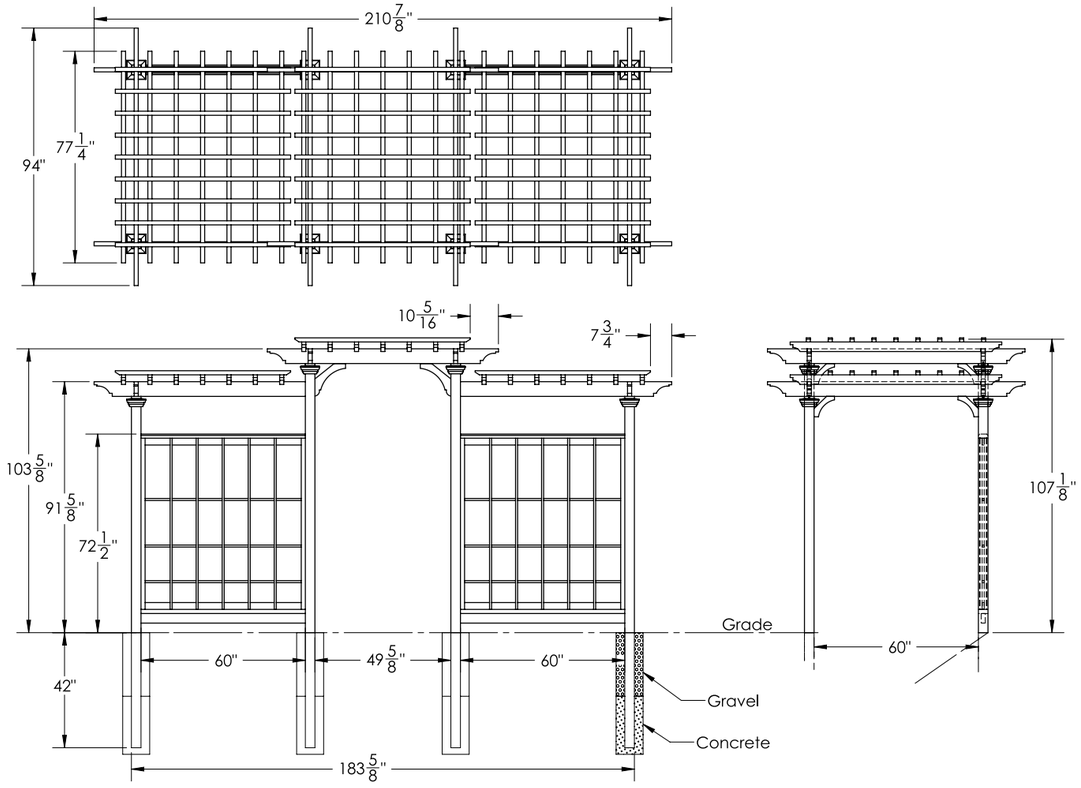
Item No.	Description	Material	Qty.
1a	Short Fence Post	Sub Assy	2
	10' Fence Post	4″x4″	1
	Post Cap	1″x6″	1
	Shingle Mold	3/4″x1/2″	8
2a	Long Fence Post	See Sheet 4	2
	10' Fence Post	4″x4″	1
	Post Cap	1″x6″	1
	Shingle Mold	3/4″x1/2″	8
3a	LHS Side Frame Assy	Diagram iv	1
	53" Verticals	2″x2″	4
	20½" Horizontals	2″x2″	6
	Base Rail	2″x2″	1
	Side Rail Top Plate	2″x2″	1
	Curved Rail Base	Cut from 2″x8″	1
	Curved Rail Trim	Cut from 2″x8″	1
	Top Rail Filler	2″x3″ from 2″x8″ Offcuts	1

Item No.	Description	Material	Qty.
4a	RHS Side Frame Assy	Diagram iv	1
	53" Verticals	2″x2″	2
	2″x2″ x 60″	2″x2″	2
	20½" Horizontals	2″x2″	6
	Base Rail	2″x4″	1
	Side Rail Top Plate	2″x4″	1
	Curved Rail Base Cut from	2″x8″	1
	Curved Rail Trim Cut from	2″x8″	1
	Top Rail Filler	2″x3″ from 2″x8″ Offcuts	1
5a	Centre Frame Assy	Diagram i & ii	1
	Bottom Rail x 51 1/2"	2″x4″	1
	63" Verticals	2″x2″	4
	51½" Horizontals	2″x2″	10
	60" Verticals	2″x2″	2
	Curved Rail Trim	Cut from 2″x8″	2
	Curved Rail Base	Cut from 2″x 8″	2
	Stub Rail	2″x3″ cut from 2″x8″	1
	Rail Cap	2″x4″	1
6a	Base Rail	2″x4″	2
7a	Bottom Rail x 51½"	2″x4″	1
8a	Fence Clip	Galvanized Steel	6



WESTERN RED CEDAR - **OUTDOOR LIVING**

Vineyard Pergola



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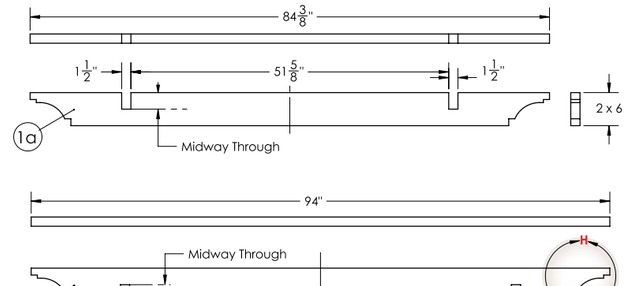

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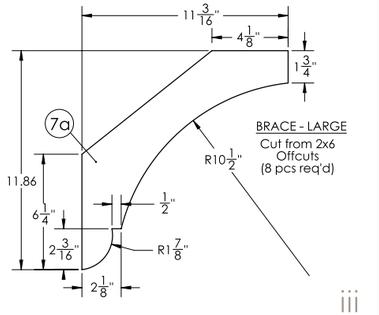

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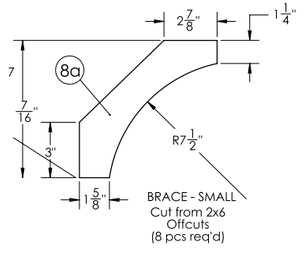

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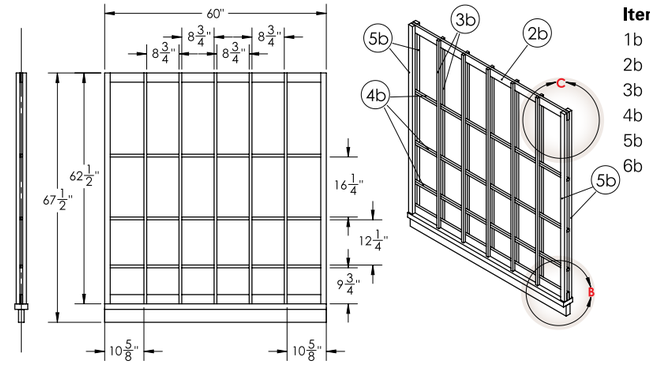
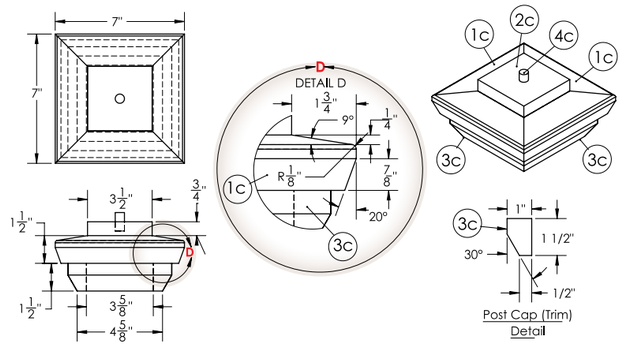


Item No.	Description	Material	Qty.
1b	Support Rail	2"x4"	2
2b	Upper & Lower Rails	3/4"x2¼"	2
3b	Vertical Lattice	3/4"x3/4" (cut from 1x6)	10
4b	Horizontal Lattice	3/4"x3/4" (cut from 1x6)	3
5b	Split Rails	5/4"x6"	4
6b	3" Spiral Nails Galvanized		

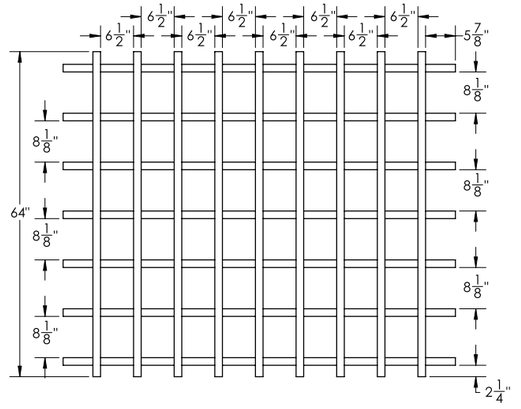
V



Item No.	Description	Material	Qty.
1c	Post Cap (Cap)	7"x7"x 1½" (cut from 2"x"8)	1
2c	Post Cap (Top Piece)	3½" x 3½" x 3/4" (cut from 1x6)	1
3c	Post Cap (Trim)	1½" x 1" (cut from offcuts)	4
4c	1/2" Hardwood Dowel	Purchased	1

NOTES:
1) TYPICAL FOR 8
2) DRILL 1/2" HOLE CENTRLLY IN TOP PIEC, FOR DOWEL
3) MITRE POST CAP (TRIM)-

vi



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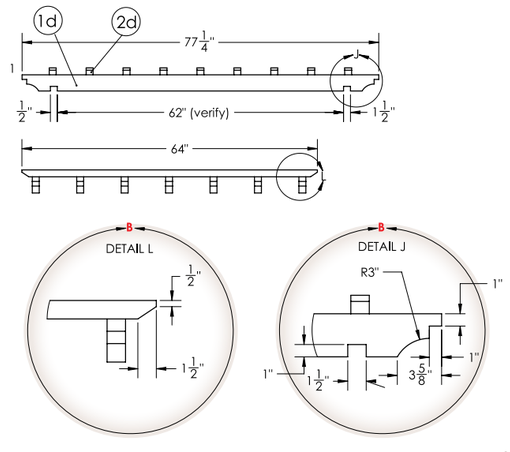
Item No.	Description	Material	Qty.
1d	Rafter	2 x 4	7
2d	Spanner	2 x 2	9



viii

REAL CEDAR

FENCES & GATES

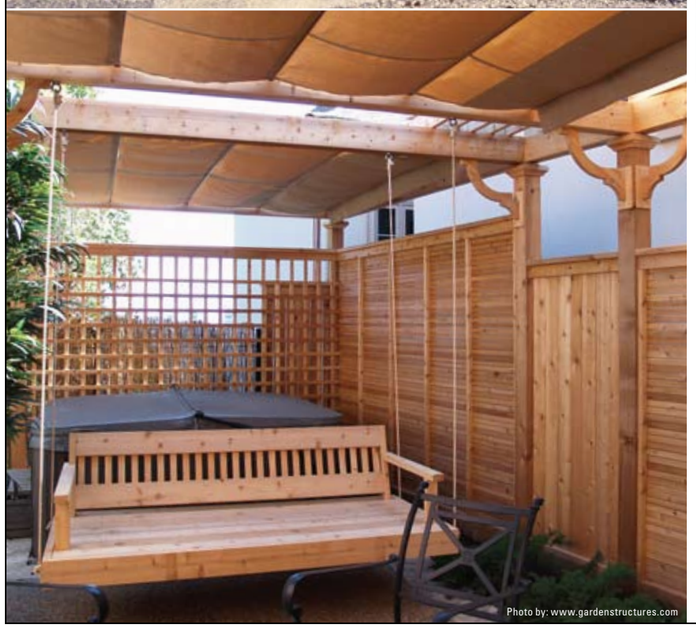
REAL CEDAR

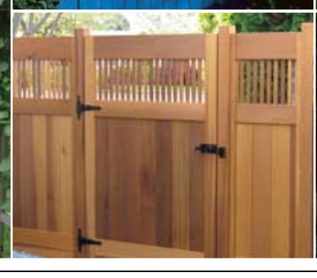
WRCLA

WESTERN RED CEDAR

Fences & Gates

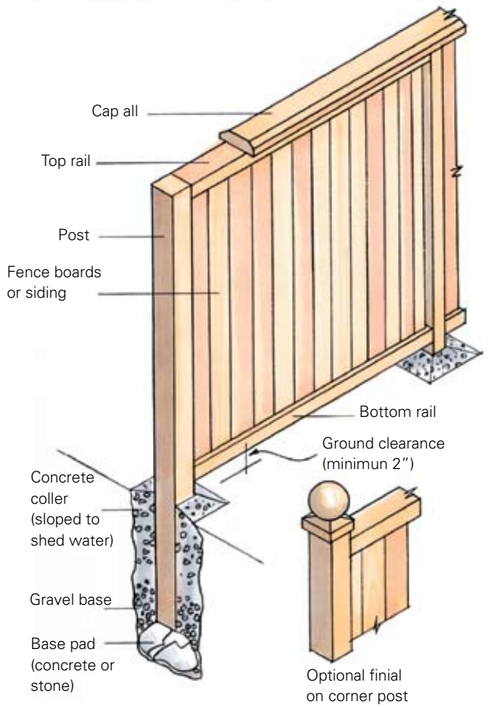
Western Red Cedar fences are not only beautiful, they are also offer outstanding performance. Whether you choose custom built or pre-built panels, Western Red Cedar fences will outperform other materials without the need for chemical treatments. Western Red Cedar is naturally durable and has a low percentage of sapwood which means it will stand up to the elements longer than other woods. The beauty of Western Red Cedar is often imitated but nothing can match the warmth and character of the real thing. When designing and choosing fencing materials, don't settle for anything but Real Cedar, Western Red Cedar.





Fences & Gates

BASIC ELEMENTS OF FENCE CONSTRUCTION



Most fences are constructed with three basic elements: post, rails and infill material. Posts are vertical uprights. Rails run horizontally between, and are supported by the posts. Infill material, most commonly boards, are attached to the rails. For each of these elements there is a size and grade of Western Red Cedar to build just about any style of fence on any budget. Remember, it doesn't necessarily cost more to have a stylish fence.

Here's a checklist of points you should consider when planning a fence:

• Choose a style that suits both the purpose of the fence and the landscape, then maintain consistency of style throughout.

• Decide whether you'll build the fence from scratch or from ready-made fencing sections.

• Select from rough or surfaced material for posts, rails and boards.

• Select solid boards with flat tops or choose from a variety of patterned-top boards such as pointed, dogeared, gothic, spearhead, roundtop and others.

• Decide whether short length pattern siding such as channel or tongue and groove V-joint will achieve the look you want.

• Consider using lattice panels alone or in combination with solid boards where a lighter, more open fence is desired.

• Decide on the type of finish. Transparent or semitransparent stains are suggested if a natural look is desired. Solid color stains are recommended if an opaque finish is desired.

FENCE HARDWARE

Many different types of hardware are now available to help you build your fence. Popular among these are metal post supports in the form of a 4x4 in. box atop long fins two feet or more in length which are driven into the ground. Posts are set directly into the box and fastened with bolts or lag screws. By using these post supports you can eliminate post-hole digging and concreting. Another popular form of post base is a 4x4 in. metal saddle which can be set on a concrete pad and to which the post can be nailed or lag screwed. You can also use metal saddles to connect railing posts to a wood deck. One easy way to secure fence rails to posts and to simplify corner attachments, is to use aluminium or galvanized metal brackets similar to joist hangers.

PRE-BUILT FENCE PANELS

Western Red Cedar fences of many styles are available in pre-built panels from 3 ft. to 6 ft. high. The boards may be plain, V-jointed tongue and groove, or channel patterns. Construction is usually 2x4 in. rails and 1x6 in. boards.

Boards are usually butted tightly together but panels with spaced boards are also available. These time-saving fence sections are sold by the panel. You are advised to carefully examine fence panels to ensure that they are built from suitable quality Western Red Cedar boards and are sturdily assembled with corrosion-resistant fasteners. When using pre-built fence panels it is important that you check the dimensions before installation. Good practice is to set posts and panels one at a time rather than pre-setting all posts.

PRE-BUILT LATTICE PANELS

Western Red Cedar lattice panels are an alternative or an addition to a solid Western Red Cedar board fence. Rough or smooth-sawn lattice is available pre-built in a choice of square or diagonal patterns in modular sizes to match the most common pre-built fence panels and post spacing. A lattice fence offers less wind resistance than a solid fence and allows sunlight into shady garden areas. The degree of privacy is governed by the obscurity ratio of the latticework.

Clear Western Red Cedar lattice is one popular option but lattice manufactured from Western Red Cedar with sound tight knots is both economical and good quality. When purchasing lattice, you should make sure that it is well-manufactured from good quality Western Red Cedar of adequate thickness and that it has been correctly assembled. Heavier lattice panels are usually assembled with staples only and require no perimeter framing. Thinner lath lattice may be assembled with exterior-type glue and/or with staples. Lath lattice should be framed around its perimeter. The better quality lath lattice is stapled such that the crown of the staple is flush or countersunk in the wood and the points of the staple do not penetrate the face of the panel.

WESTERN RED CEDAR GATES

Western Red Cedar gates make great first impressions. They convey a sense of welcome to visitors yet add an extra measure of privacy and security to the property without being oppressive in appearance. The type of fence you have decided to build will have a bearing on your choice of gates. Like fences, gates can take many shapes and sizes but they should meet two main requirements: they should be in harmony with the fence and they must function effectively. By using materials of the same quality and texture, you can maintain design continuity and bring fence and gate into harmonious balance.

Here's a short checklist of points to consider when planning a gate:

• Choose a style that complements the fence and maintains design and material continuity.

• Locate the gate for convenient entry as it relates to paths, driveways and the general landscaping plan.

• Decide upon the width of the gate. It should be wide enough for two people to pass through side by side and allow clear passage for garden equipment such as lawnmowers and wheelbarrows. Note that gates wider than 4 feet are hard to support and tend to sag. Consider a two section gate for wide openings.

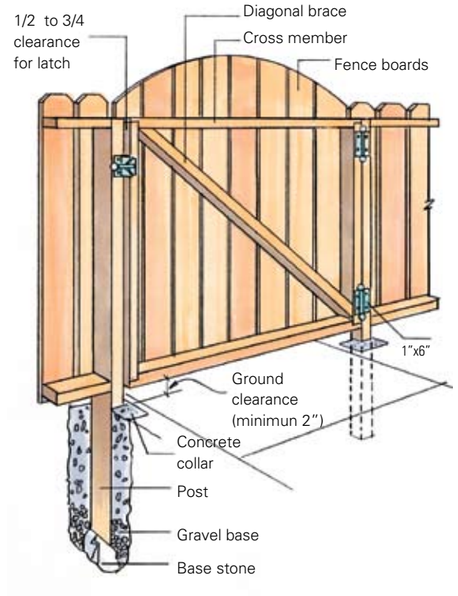
• Determine whether the gate should slide or swing. If a swing gate, establish an unhindered direction of swing. A gate usually swings in towards the property except on sloping ground where it should swing downhill to avoid having to cut the bottom of the gate at an angle.

• Locate the gate at the top of steps rather than at the bottom and make it swing away from the steps for safety's sake.

• Build the gate solidly and attach it with good quality hardware.

GATE HARDWARE

Gate hardware usually consists of hinges, latches, barrel bolts, and tension supports or sag rods. Whatever hardware you select from among the wide range available, make sure that it is sturdy enough to withstand constant use and that it is rust and corrosion-resistant.



REAL CEDAR

DECKING

REAL CEDAR

WRCLA

WESTERN RED CEDAR -

Decking

A deck made with Western Red Cedar, one of the world's most beautiful woods, is apt to be one of the best looking decks in the neighborhood. But Western Red Cedar decks have much more going for them than good looks alone. Extending living space to the outdoors, integrating home and landscape, making use of damp or uneven terrain and giving a contemporary look to a traditionally-styled home are just a few of the ways that decks make life a little better.


Photo by: www.gardenstructures.com

Decking

Once the decision is made to build a deck, the choice of decking material is just as important as good design and quality construction. In today's environmentally conscious society, the natural choice is Western Red Cedar.

Not only is Western Red Cedar one of the few woods with its own preservative oils, its freedom from pitch and resin makes it an excellent base for protective coatings. And cedar has other natural qualities that make it the best choice for decking. It is the most stable of British Columbia's softwoods, so Western Red Cedar decks stay flat and straight and resist checking.

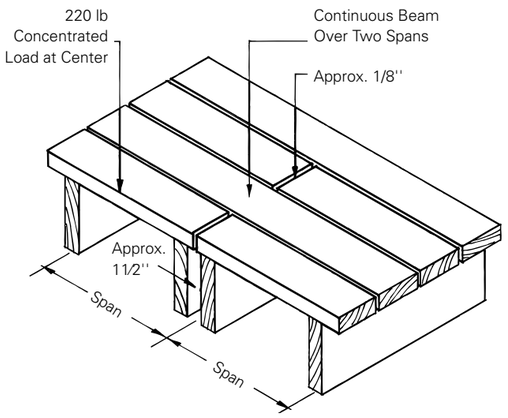
Western Red Cedar decks are firm but resilient underfoot, not hard and unyielding. The wood is light weight, easily worked and ideal for almost all types of finishes. It has an elegance that complements any architectural style and a beauty that blends into all landscapes.

Whatever the reasons for building a deck, there is just one natural choice of decking material. Available in a wide range of grades and sizes, and price-competitive with lesser materials, Western Red Cedar decks are the beautiful, practical, long-lasting complement to any home.

GRADES

To simplify specification, decking is now available in four grade categories offered exclusively by members of the Western Red Cedar Lumber Association. These few easily understood categories of decking provide a choice of quality clear grades or rustic knotty grades for outdoor decks of any style and budget.

SIZES AND SPANS OF WESTERN RED CEDAR DECKING



WRCLA Western Red Cedar decking is available in a selection of thicknesses, widths and lengths as shown in the table. Maximum spans for decking shown in the table are based on a continuous beam with two equal spans and a concentrated load of 220-lb at the center of one span. The true span of the decking board is used, taking into account the thickness of the supporting joist beneath it. Wet end-use conditions and unseasoned (green) lumber sizes are assumed.

Thickness (in.)	Width (in.)	Grade Category (in.)	Span
1-1/4	4	All clear grade categories	16
1-1/4	4	All knotty grade categories	12
1-1/4	6	All clear and knotty grade categories	16
2	4	All clear and knotty grade categories	24
2	6	All clear and knotty grade categories	24

To help figure the amount of decking needed for a project, use the following linear footage calculator:

To Cover 100 Square Feet of Deck	
Nominal Size (in.)	**Linear Feet**
1-1/4 x 4	325
2 x 4	325
1-1/4 x 6	211
2 x 6	211

Space deck boards apart to allow proper water drainage. A deck that dries after wetting will last longer than one that stays damp.

Moisture and debris can collect where butt joints occur over-joists. To create drainage, butt decking boards between double joists as shown, leaving a 1/8-in. space between the ends of the boards.

FINISHING YOUR DECK

Protect the surface of the deck from weather exposure prior to stain application. Never allow a Western Red Cedar to "weather" if you intend to stain your deck.

Allow a Western Red Cedar deck to dry thoroughly prior to the application of a penetrating stain so that the wood will absorb the stain readily.

Use high quality, penetrating deck stains. Remember when it comes to coatings, it is important to focus on quality not price.

Never apply film forming finishes like paints and solid stains to decks that are exposure to the weather. These coatings will flake or peel which will require stripping or sanding prior to re-finishing. Paints and stains may work on covered or three season porches.

CARING FOR YOUR DECK

Most people think of regular landscaping maintenance, but deck maintenance is equally as important. All decks regardless of the material they are made from require some degree of maintenance. Even decks made of Western Red Cedar, one of the best performing wood species for outdoor applications, need occasional maintenance to keep them in top shape. Regular deck upkeep enables a cedar deck to last for years, even decades.

- Keep the deck surface and spaces between the boards free from debris.
- Move furniture and planter boxes from time to time.
- Keep the deck surface clean as dirt can feed mold growth.
- Wash the deck surface periodically with a non-phosphate detergent.
- Keep mold and mildew growth under control by applying a mild bleach solution. Oxygen bleach or cleaners containing oxygen bleach should be used for this task. These will need to be left on the deck for 30 minutes to be effective.
- Avoid the use of chlorine bleach as it can damage the wood.
- Rinse the deck thoroughly after using cleaners.
- Always clean the deck prior to application or re-application of deck stains.

*Design Your Deck - Online at **www.wrcla.org***

Tips And Resources

AVAILABLE SIZES

Sizes of Western Red Cedar timbers and dimensional products are typically available in a wide selection of thicknesses from 1" to 12" and widths from 2" to 12". Consult with your local supplier to determine which sizes are available in your area before you begin your project. Standard lengths are multiples of one foot, typically up to 20'. Longer lengths and sizes may be available on a special order basis.

SURFACE TEXTURES

Western Red Cedar products may be specified in different surface finishes

Surfacing	Description	Available			
		Board	Dimension	Decking	Timbers
Rough	Rough sawn texture from either circular or band saws is present on all four sides.	Yes	Yes	No	Yes
Rougher Headed	The lumber receives its texture from a milling process which uses roughened planer knives. The rough texture is clearly visible on all four sides.	No	Yes	No	Yes
S1S2E	Surfaced One Side, Two Edges. This versatile product is the most popular choice for trim boards. The surfacing process resulting in a rough sawn face and a smooth back provides uniform width and thickness tolerances. Typically graded from the rough face.	No	Yes	No	No
S4S	Surfaced Four Sides. The smooth surface on all four sides presents a uniformly sized product with a quality appearance. This surface finish is most commonly found on Clear grades.	No	Yes	Yes	Yes

GRADES OF WESTERN RED CEDAR

Clear grades of Western Red Cedar have a limited number of natural characteristics and is specified when appearance of the highest quality is desired. Clear grades are normally supplied green (unseasoned). When required, seasoning is achieved by air-drying. Kiln dried products are available on a custom order basis.

Knotty cedar presents a more rustic appearance and is typically supplied green (unseasoned) in the appearance and structural grades. When required, seasoning is achieved by air-drying. Kiln dried knotty Western Red Cedar products are also available upon request.

Assure yourself of quality Western Red Cedar, purchase products from suppliers associated with the Western Red Cedar Lumber Association. A listing of these suppliers is available on the website www.wrcla.org.

FASTENERS

Hot-dipped galvanized, aluminium and stainless steel fasteners are all corrosion-resistant and can be used to fasten Western Red Cedar. Other types of nails are not recommended. They can rust and disintegrate and react adversely with the natural preservative oils present in cedar resulting in unsightly stains and streaks. Copper nails also react with cedar and should not be used. Stainless steel nails are the best choice, especially if trim boards are to be finished with transparent or semi-transparent stain. Use No. 304 stainless for general applications and No. 316 for seacoast exposures.

Large members require timber connectors other than nails. Bolts, lag screws, split rings and shear plates, and custom made hardware are commonly used in heavy timber structures where the joint's strength must be greater than that which could be achieved with nails. These types of connectors should be corrosion-resistant or suitably coated to prevent corrosion and staining. Generally, the design of mechanically fastened joints must take into consideration a variety of factors such as end- and edge-spacing distances, moisture content, service conditions, and the effect of the number of connectors used. Because the cost of fabricating and installing connections may amount to a large percentage of the cost of a heavy timber structure, it is important to engineer the details of a structure before designing the timber members.

Screws can be used to fasten decks. Double hot-dipped galvanized screws can be used, however, stainless steel screws are recommended. For most applications a 304 (18-8) grade provides adequate corrosion resistance. For decks exposed to salt air, use 316 grade. Screws must be long enough to penetrate 1" (25mm) into support members. Penetration of minimum 1¼" (32mm) is required for structural components.

Blind fastening systems create an attractive, fastener-free deck surface. They employ metal clips and/or joist top brackets that fasten the sides or bottom of the deck board to the joists so that no fasteners are visible. Blind fastening systems are the ideal complement to the beauty of Western Red Cedar decking.

FINISHING

Although Western Red Cedar is naturally durable, a surface coat is recommended to protect the wood and extend its service life. Western Red Cedar accepts a wide range of stains and other coatings and-whichever is selected should be a good quality product recommended by a paint or building supply dealer. When selecting a finish coat, make sure it contains the following: Water repellent; Fungicide/mildewcide; Protection against ultra violet (UV) light. Penetrating oil-based products, particularly those containing pigments, are recommended for Western Red Cedar. Pigments provide increased UV protection.

Semi-transparent stains can be used for decks, landscape structures, fences, siding and trim. Solid stains and paint can be used for siding, trim, landscape structures and fences but never decks. Use an Alkyd Oil base and Stain Blocking Primer, not shellac based. Top Coats should always be 100% Acrylic stain or paint.

Note that decks require products specifically formulated to withstand the abrasive effects of foot traffic. Use of varnishes or other types of film forming coatings are not recommended for cedar decks. These coatings can crack and peel and once applied are difficult to remove.

Before You Start:

• Never let Western Red Cedar weather for more than 2 weeks before staining or painting.

• Never use steel or any 'ferrous' metal tool or brush! Iron or steel will react with Western Red Cedar and cause staining.

• Never use a pressure washer on your Western Red Cedar.

TIP - New Cedar is best when purchased 'Machine Stained or Factory Primed' on all 6 sides of every piece.

TIP - Best surfaces to hold finish in order of preference: sanded with 50 to 80 grit; rough sawn; planed smooth.

TIP - Use a bush or a 'pad painter with bristles' If you must spray on a coating, brush it in.

For more detailed information on finishing, order the WRCLA's "Guide to Finishing" or visit the website **www.wrcla.org**

PRECUT AND PREBUILT OUTDOOR LIVING PROJECTS

Western Red Cedar fences of many styles are available in pre-built panels. These time-saving fence sections are sold in a variety of sizes and configurations. Similarly, pre-cut kits for a wide selection of outdoor living projects are available from Western Red Cedar Lumber Association members. These include gazebos, pergolas, gardensheds, playhouses and playground sets. For more information on these, please visit the "Cedar Outdoor" section of the Western Red Cedar Lumber Association website.

WESTERN RED CEDAR

NOTE:

WESTERN RED CEDAR LUMBER ASSOCIATION

The Western Red Cedar Lumber Association is an organization of Western Red Cedar producers, distributors and retailers throughout North America. Founded in 1954, the association is known worldwide as "the voice of the cedar industry." Its members account for more than 65 percent of the world's production of cedar and have an annual volume of nearly 1 billion board feet.

The mission of the WRCLA is to promote quality Western Red Cedar products and support them with a comprehensive marketing and PR program, technical services, education and training. The WRCLA works closely with architects, designers and builders to ensure the right product is specified and utilized. The association offers extensive resources for builders and installers including installation guides and DVDs available in English, Spanish and Russian.

For more information about the WRCLA and Western Red Cedar products, visit our website **www.realcedar.com** *or call 1 866 778 9096.*

Assure yourself of quality Western Red Cedar products, always ask for materials originating from these WRCLA members:

MEMBERS

- DOWNIE TIMBER
- ENYEART CEDAR
- GILBERT SMITH FOREST PRODUCTS
- HAIDA FOREST PRODUCTS
- INTERFOR
- NORTHWEST FOREST PRODUCTS
- NORTH ENDERBY TIMBER
- OREPAC BUILDING PRODUCTS
- POWER WOOD CORP
- QUADRA WOOD PRODUCTS
- SAWARNE LUMBER
- SHAKERTOWN
- SKANA FOREST PRODUCTS
- TYEE TIMBER PRODUCTS
- TWIN RIVERS CEDAR PRODUCTS
- WESTERN FOREST PRODUCTS

AFFILIATE MANUFACTURERS

- B.W. CREATIVE WOOD
- CEDARSHED INDUSTRIES
- OUTDOOR LIVING TODAY
- RAINBOW PLAY SYSTEMS
- SYNERGY PACIFIC ENGINEERED TIMBER

AFFILIATE PARTNERS

- CABOT (PAINTS & STAINS)
- MAZE NAILS (FASTENERS)
- PPG MACHINE APPLIED COATINGS (PAINTS & STAINS)

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