# INSTALLATION INSTRUCTIONS FOR ULTRA LATTICE AND ALUMAWOOD ARBORS

GENERAL INFORMATION: Lattice arbors are designed to be freestanding or attached. They are designed to resist a 10 lb. to 30 lb. per square foot live load.

NOTE: Install all components with the "lock seam" facing up, as this will make for a much cleaner looking installation (no visible seams except on posts). MAKE SURE AND READ EACH STEP ALL THE WAY THROUGH BEFORE TAKING ACTION.

Fasten all plastic end caps with a ¼" self taping tek screw except for lattice tube end caps. Lattice tube end caps snap in tightly and do not require a fastening screw.

If attaching arbor to a brick wall, use 1" concrete drive anchors to attach 2x6 rafters to wall. Hammer drill and attach drive anchors to the BRICK, not the mortar joint.

Maximum spans for 3x8 beams: 17'
Maximum spans for 2x6 rafters: 14'

BEFORE BEGINNING INSTALLATION, SEE ITEM NO. 18 ON TOOL LIST PAGE.

#### **STEP 1 - LAYOUT**

In order for the patio cover to look right and be built square, you must build the arbor square with whatever part of the house you will be attaching to. If you have a one story house and are attaching the arbor to the fascia of the eave, then you must square off of the eave. If you are attaching to a two story wall, then square off of the wall.

Eave attachment: Plumb down from eave at each end of patio and transpose pencil mark onto patio. Use something long enough to lay on the two transposed marks on the patio and lightly draw a pencil mark all the way across the patio. This mark represents the fascia of the eave and all measurements should be taken from this mark. Overhangs of 3x8 beam and solid roof panels are typically 16" to 18".

Attaching to wall of 2-story house: Use the wall as the point to take all measurements from.

### STEP 2 – ATTACHING 2X6 BRACKETS TO PATIO FOR POSTS

NOTE: If you are setting posts in concrete, skip Step 2 and see "Posts in Concrete" installation page at back of instruction manual.

Once you have determined where the posts will be located (keeping in mind that overhangs are typically 16" to 18"), attach the post brackets to the concrete (see Fig. 1 and 2). Each post has 2 – 2x6 brackets and they should be installed with a 3-1/4" space between them so that post will seat correctly on brackets.





Fig. 1

Fig. 2

## STEP 3 - LEVELING OVER FROM 2X6 RAFTER ATTACHMENT POINT TO 1ST POST

Once you have determined the point of attachment to the house, you are ready to determine height of 1<sup>st</sup> post. Hold one of the 2x6 rafters up where it will attach to the house. Level over to 3x3 post and draw a level mark on the bottom side of the 2x6 rafter on the 3x3 post (see Fig. 3). This mark represents the "bottom of rafter height". The 2x6 rafters sit on top of the 3x8 beam and the 3x8 beam sits on top of the 3x3 component of the post. Therefore, from the pencil mark that was drawn on the 3x3, subtract 8" and draw a new pencil mark. Cut the 3x3 on this new pencil mark.



Fig. 3

## **STEP 4 – ASSEMBLING 1<sup>ST</sup> POST**

Now measure the length of the 3x3 you just cut size. Whatever the measurement is, add 6" to that measurement. This will be the size that you cut the 2x6 post side plates. Once cut to size, the 2x6 post side plates should be 6" longer than the 3x3 post. Miter both corners of one end of each 2x6 post side plate to receive the 2x6 post end caps. Lay both of the 2x6 side plates on your saw horses with the seams on each 2x6 facing out. Now you can lay out your marks for the 5/8" holes that will be drilled into ea. 2x6 side plate (see Fig. 4). Measuring from the top or "mitered" ends of the 2x6 side plates, draw marks at 3" and 5" and every 24" after that on centers down face of 2x6 side plate. Drill

5/8" holes at each mark. Layout of 5/8" holes should look like Fig. 7. Insert 2x6 styrofoam inserts into 2x6 post side plates (Fig. 8). Next, attach 2x6 side plates to 3x3 post. Lay 2x6 side plate on 3x3 flush at bottom. From 3x3 to edge of 2x6 side plate should be 1-3/4" on either side. Install 2x6 side plate using 1" Climaseal screws (2 screws per 5/8" hole – see Fig. 5). Once 2x6 side plate is attached, insert 5/8" plastic plugs into holes except the top 4 holes. Turn post over and repeat 2x6 side plate installation for other side. Install the 2x6 miter end caps into top of 2x6 side plate and install post on brackets attached to concrete patio. Post should slide over 2x6 brackets and bracket should not be seen. Now install ½" self taping screws at bottom of each side plate into post brackets (3 screws per side plate). Post must be held close to plumb in each direction while post is being attached to post brackets (see Fig. 6).





Fig. 4

Fig. 5



Fig. 6





Fig. 7

Fig. 8

## STEP 5 – LEVELING OVER FROM 1<sup>ST</sup> POST TO 2<sup>ND</sup> POST

Using a 3x3 post and the 3x8 beam, level over from 1<sup>st</sup> post to location of 2<sup>nd</sup> post. Draw a pencil mark on 3x3 post at bottom of 3x8 beam (see Fig. 10).



Fig. 10

## STEP 6 - ASSEMBLING 2<sup>ND</sup> POST

Repeat Step 5.

### **STEP 7 – INSTALLING 3X8 BEAM**

However wide the arbor is going to be is how long you 3x8 beam will be. For example, if your arbor is going to be 20' wide, then you should have received a 20' long 3x8 beam. Using a jig saw and the included 3x8 pattern, cut each end of the 3x8 beam to receive the style of end cap that you selected (miter, bevel, scallop or corbel). Once this is done and the plastic end caps are installed, measure the length of the beam and write this measurement down on a piece of paper. Now measure from the outside of the first post to the outside of the second post and write this measurement down. Now subtract the 2<sup>nd</sup> measurement from the 1<sup>st</sup> measurement and divide that number by 2. This is your overhang measurement. For example, if the 3x8 beam measures 240" and the measurement from outside of 1<sup>st</sup> post to outside of 2<sup>nd</sup> post is 208", then subtract 208" from 240" and you get 32. Now divide that number by 2 and you get 16". Measure each end of the 3x8 beam and put a mark at 16". Hoist the 3x8 beam up and set it into the "saddle" on the top of each post. Now line up the OUTSIDE of your post with each pencil mark on the 3x8 beam and install 1" Climaseal screws into 3x8 beam through the 5/8" holes on the 2x6 post side plate. Install 2 screws per hole on each side plate (see Fig. 11 and 12).





Fig. 11 Fig. 12

#### STEP 8 – INSTALLING 2X6 RAFTERS

Using a jigsaw and the included 2x6 pattern, cut one end of each 2x6 to receive the style of end cap you selected (miter, bevel, scallop or corbel). While holding the post plumb, measure from where the 2x6 rafter is going to attach to the house to the CENTER of the 3x8 beam. This measurement is for the 5/8" hole that you will drill in the top of each 2x6 rafter. Measuring from the square end of the rafter that will attach to the house, put a pencil mark at this measurement (NOTE: The top of the rafter should be the side with the "lock seam"). Drill a 5/8" hole in the top of each 2x6 rafter at this measurement. DO NOT drill through the "lock seam". Drill the hole to the side of the "lock seam" that has the most room.

The two outer most 2x6 rafters will be centered over the posts. Draw two pencil marks 2" apart over the center of each post. Now hold the 2x6 rafter up in place between these two pencil marks. Using a framing square, square the other end of the 2x6 rafter up with where it will attach to the house. For example, if the 2x6 rafter is attaching to the fascia, square the 2x6 rafter up with the fascia and draw a pencil mark on each side of it. Also make sure the 2x6 rafter is level and put a mark at the top of it. Now install a 2x6 bracket at that location. The 2x6 rafter is now ready to be installed. Slip the end of the rafter over the 2x6 bracket that you just installed (Fig. 13). The other end of the rafter will sit on top of the 3x8 between the two pencil marks over the post. Using ½" self taping screws, install 2 screws on each side of the rafter into the bracket that you installed on the house (one screw at the top and bottom of each side of the 2x6 rafter). Now, with someone holding the post plumb, install 1" Climaseal screws through the 5/8" hole that you drilled in the top of the 2x6 rafter with a 10" extension. You will be screwing through the rafter and into the top of the 3x8 beam. Install about 3-4 screws per rafter and plug the hole with a 5/8" plastic plug.



Fig. 13

Now measure from the inside of the 2x6 rafter that you just installed, across the top of the 3x8 beam to the two pencil marks that are on top of the beam over the other post that represent the other outer 2x6 rafter. Transpose that measurement at the house where the rafters are attaching. Now install the 2x6 rafter. Make sure the rafter is level and the post is plumb before attaching.

With the rafters that are left, space them equally between the 2x6 rafters that are installed and attach (Fig. 14).



Fig. 14

## **STEP 9 - INSTALLING LATTICE TUBES**

Cap the lattice on both ends with the 1-1/2"x1-1/2" lattice caps. The key is to install the lattice tubes so that the ends line up with the end of the 3x8 beam on each end. Starting 1-1/2" away from attachment point of house, install the lattice tubes with 1-1/2" spacing between each lattice tube. Orient the lattice tubes with the "lock seam" facing up. Secure lattice tubes using 2" Climaseal screws. Run screws through top of lattice and into top of 2x6 rafter. Do not screw through the "lock seam" of the lattice tube (See Fig. 15, 16, 17, 18).



## STEP 15 - TOUCH-UP AND CLEAN UP

Clean any scuff marks or blemishes with warm soapy water. Minor scratches can be touched up with touch-up paint that you received with your patio cover (see Fig. 26).



Fig. 26

## **FINISHED PRODUCT**

Congratulations! You are now ready to enjoy your new patio cover. Your cover should give you many years of maintenance free enjoyment. Your patio covers paint finish carries a manufacturers lifetime warranty and should never need painting. When cleaning, use a non-abrasive cleaner with a soft sponge and rinse with water. Enjoy your new patio cover and thank you for doing business with B + R Installations!

