EQUINOX LOUVERED ROOF

Take Control...

of Your Outdoor Living Space

INTRODUCTION

The Equinox Louvered Roof System is designed to be installed in an aluminum frame. All these sections are one-eighth-inch thick extruded aluminum. All engineering for this system is based on using these sections. Roll-formed thin-wall aluminum sections are not interchangeable with extruded aluminum sections.

Our standard louver lengths are eight feet, ten feet and twelve feet. They fit an inside frame dimension of ninety-one inches for the eight foot louver, one-hundred fifteen inches for the ten foot louver and one-hundred thirty-nine inches for a twelve foot louver. The reason for these sizes is that our standard beam lengths are sixteen feet, twenty feet and twenty-four feet.

If building a ten-foot by twenty-foot louvered roof, our outside frame dimension will be one-hundred nineteen inches. This allows us to get two side beams out of a twenty-foot length, thereby using our materials efficiently.

The outside dimension is one-inch under ten feet. The same is true for the eight-foot and twelve-foot louvers.

The outside of the frame should be one inch under eight feet or twelve feet.

If your application doesn't suit the louver size, just frame to the site requirements, cut and cap the louvers to fit. Or, you can order a custom size to fit your job.

presented by

Amerimax ALUMAWOOD

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Measuring

The louvers are approximately eight inches wide. This should be taken into account when calculating the width of the frame.

If possible, you want the first and last louver to end within an inch of the inside of the frame. If the job calls for a certain width to match the concrete or the house, that's okay. Just center the louvers in the space between the beams, and place a flashing from the frame to the louver to fill the gap.

You will never have more than a four inch gap on each side, because at that point you can fit another louver in. Use the measuring chart for calculating the optimum width. Or, layout the pivot strips end to end on the ground, to determine how many louvers will fit within the framework.

Measuring Chart

Louvers	Center	Louvers	Center	Louvers	Center	Louvers	Center
5	41"	13	104"	21	167"	29	230"
6	49"	14	112"	22	175"	30	238"
7	57"	15	120"	23	183"	31	246"
8	65"	16	128"	24	191"	32	254"
9	73"	17	136"	25	199"	33	262"
10	81"	18	144"	26	207"	34	269"
11	89"	19	152"	27	214"	35	277"
12	96"	20	159"	28	222"	36	285"

Framing

After you've determined the frame size, cut your beams to length.

Your side beams should be notched so that they cover the open ends of the front and back beams.

Framing cont'd

After you've determined the frame size, cut your beams to length.

Your side beams should be notched so that they cover the open ends of the front and back beams.

Clips should be approximately seven-and-a-half inches long, with four holes in the center for attaching to the beam.

Attach the clip flush with end of the beam.

Slide the clip inside the notched beam.

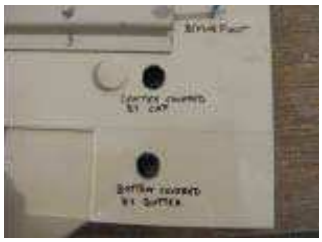
This will make for a nice finish.

Framing cont'd

If you are mounting on the fascia, remove the gutter if there is one.

Now pre-drill the back beam with quarter-inch holes. If you want, you can hide them behind the pivot strip if you put your holes one inch down from the top of the beam. You will need 4 inch or 5 inch screws to mount it in this manner.

You can also pre-drill the center of the beam with a quarter-inch hole and open it up to seven-eighths inches with a multi bit, and fasten through the back wall of the beam using a three inch screw. You can then cap that hole with a plug. With a wall mount situation, you can pre-drill the bottom three inches of the beam and cover the hole with the gutter.



Cut your internal corner brackets seven-and-a-half inches long. Pre-drill them and mount them flush with the end of the beam.

Now mount the back beam.

Mount additional beams if needed, then assemble the rest of the framework.

Gutters

To install the gutters, cut the back gutter to the inside measurements between the side beams and notch out the face of the gutter five and five-eighths inches.

Mount the gutter by screwing it onto the back beam. Repeat the procedure for the front beam.

Measure between the front and rear beams to get the side gutter measurement. Deduct three-eighths of an inch from that measurement to ensure that the gutter clears the flanges of the front and rear gutters.

Measure five-and-one-quarter inches along the face of the side gutters and mark. Follow the picture instructions to make a flap that will bend around the corner when you put the gutters together.

Put silicone sealant in the bottom of the front and rear gutters before putting the side gutters in place.

Put side gutters in place and silicone behind the flap before screwing it in place.

Gutters cont'd

Place screws or rivets in the bottom of the gutters to hold them together.

Seal everything with silicone including the corners where the beams join, and the top where the beams join.

Now seal the top edge of the gutter to the beam. Use your finger for best results.

Pivot Striips

Installing the pivot strip is the next step. Put a mark two-and-a-half inches down from the top of the beam and snap a chalk line. The bottom of the pivot strip will be in line with the chalk line.

The factory end must be at least three-quarters of an inch away from the side beam to allow clearance for the louvers. Center the pivot strip between the inside opening so that the louvers will have the same gap on both sides.

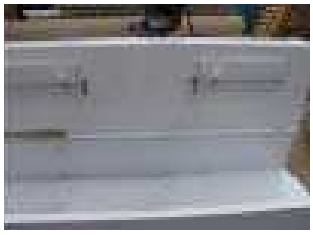
The pivot strip must have factory ends butted together to ensure proper spacing of the louvers. Screw pivot strip in place with five-sixteenth inch screws.

Motor

Determine motor placement near the center of the job and cut out a gap in the pivot strip five-and-five-eighths inches wide.

This gap must be centered between the louver pockets in the pivot strip. Do this with an angle grinder.

Mount the motor in the center of this gap with the bottom of the motor resting on the bottom of the gutter. Once the pivot strip is mounted on the two opposing beams and the gutters are all sealed, wire up the motors.



Determine which way you want the louvers to open. We recommend opening them to the south if they are running in the east/west direction, or opening them to the WEST if they are running in the north/south direction. There really is no right orientation.

If the customer is happy, everyone is happy.

Assembly

Put in at least three louvers before installing the link bar. Make sure they are all oriented the same way and link the leading edge of the louvers.

Assembly cont'd

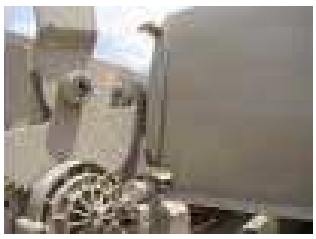
Roll the louver blades into the pivot strip pockets by rotating them in one direction until they drop on one side. Then, rotate them the opposite direction until they drop on the other side.

Press the stainless steel clips on, using a box-end wrench or a nut driver.

The two louvers next to the motor have to be notched so that they will clear the motor and electrical connections.

Cut off the trailing-edge up-stand, and cut a one-inch notch out of the louver with the angle grinder as shown.

When installing the two louvers next to the motor, roll in the far end first, ensuring that it is in its pocket. Then roll in the side next to the motor. You may have to operate the motor to get the louver to move past the motor arm and sit correctly in the pocket.



Link Bar

The link bar that will be attached to the motor arm needs to have a hole drilled out for the bolt which connects it to the motor arm.

Link Bar cont'd

It should be a three-eighths inch hole, and centered between the punched-out holes that connect to the louvers. Drill the hole at the same height as the punched out holes.

The link bar needs to be positioned so that the holes are on the bottom.

When you connect the link bar to the motor arm, the link bar must go in front of the motor arm. If placed in back, it will hinder the motor's movement and prevent the roof from opening and closing fully.

If you have to remove the motor arm, undo the stainless steel hex-bolt in the center. When you replace it, be sure to put 'Lock-Tight' on it so it doesn't loosen during operation.

When everything is complete, open and close the roof several times to verify that everything is operating properly.

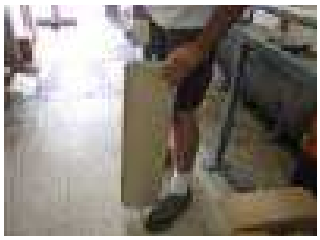
Cutting Down Louver Blades

The louvers are made of twenty-eight gauge steel and will cut cleanly with a standard De-Walt fine cross-cut contractor's blade.

Cutting Down Louver Blades cont'd

One blade will cut a lot of louvers, but once you use it on the steel louvers, it will not cut the aluminum beams. So use one blade for cutting the louvers and one blade for cutting the beams.

After cutting the louver, use a rubber mallet to pound the end cap on.



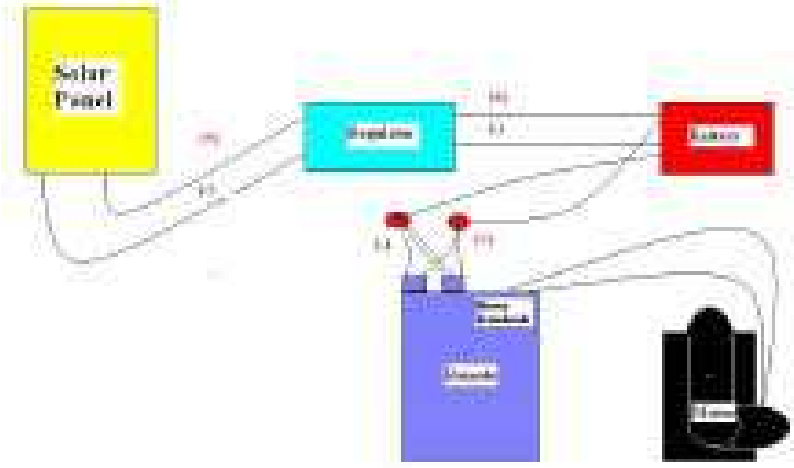
Cleaning and Re-clipping End-Caps

Use side cutters to cut and pull off the old retention clips.

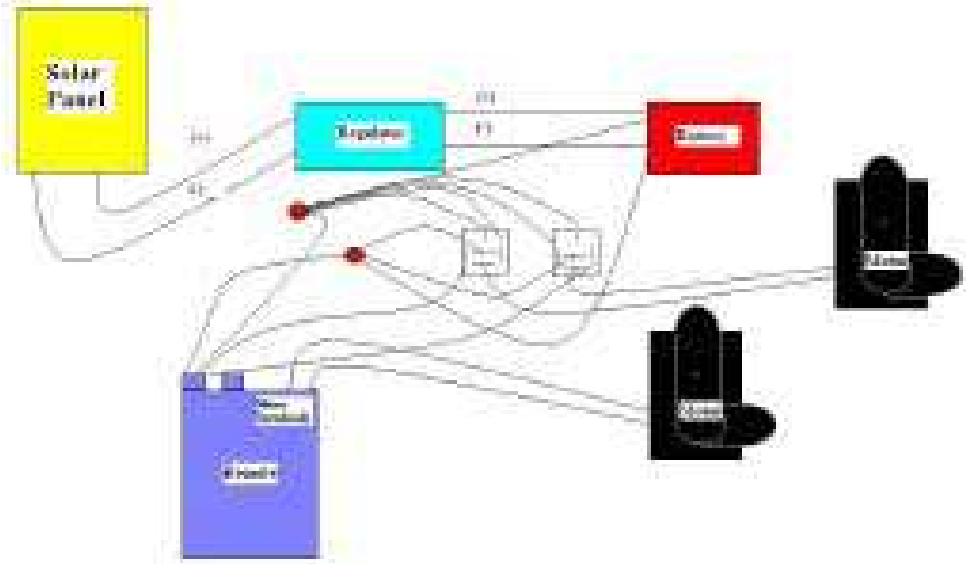
It works best to drill out three holes in a two-by-four so that the end-cap sits flush before you try to knock the retention clips on.

Use the special field tool to hammer on the new retention clip.

Remote Assembly



Single Motor



Double Motor