



Patio Cover Installation Instructions





Congratulations on your new patio cover. Patio covers from Patio Covers DIY are among the easiest on the market to install. With the help of a friend or spouse and a few basic tools, you can install your new patio cover in only a few hours. Be sure to follow these step by step instructions carefully.

IMPORTANT:

Before you begin, examine all of the contents of each box to make sure you have everything you ordered. (See packing list on bottom side of box.) If boxes are damaged, check contents and note on bill of lading. Give box(es) back to courier.

Check the Number of Boxes You Received:

When your patio cover is delivered, be sure to check the packing slip located on a plastic sleeve on the outside of the small box.

When checking the packing slip, first make sure you have all of the boxes that make up your patio cover kit. **DO THIS BEFORE THE TRUCK DRIVER LEAVES YOUR HOUSE.** Each box is marked with the number it represents within the total. As an example: "Box 1 of 6", "Box 2 of 6", etc.

If you did not receive all of the boxes you ordered, make a note on the paperwork (bill of lading) that the truck driver will give you to sign, and then call our customer service hotline at **800-975-4211**. **DO NOT SIGN ANY PAPERWORK UNLESS YOU HAVE NOTED ANY SHORTAGES OR DAMAGES. DO NOT OPEN ANY OF THE BOXES THAT YOU HAVE RECEIVED UNTIL YOU CALL OUR CUSTOMER SERVICE DEPARTMENT.**

Check the Contents of Each Box:

Starting with #1 and continuing through to the last box, check to see that each box contains all of the components listed on the outside of the box.

Once you have made sure that you received all of the contents listed for each box, you are ready to begin the installation process. If you intend on installing your patio cover at another time, be sure to store the boxes in a dry area.

NOTE:

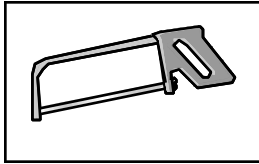
These instructions are meant as a guide only. Before beginning the installation process, we advise that you consult your local building code department to determine the code for erecting a patio cover in your area.

It should be noted that this guide is solely for the purpose of providing basic information on some of the easiest and most economical methods of assembling your patio cover. We assume no liability during the installation process or for the finished product.

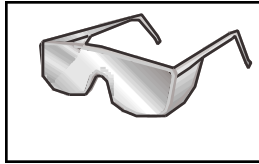
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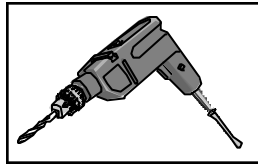
The Tools You Will Need:



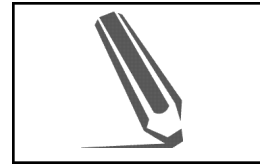
Hacksaw



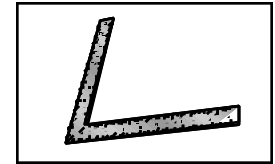
Safety goggles



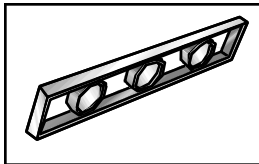
Variable speed drill and drill bits (1/8" and 5/16") and drivers (1/4")



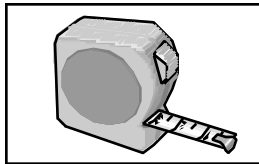
Pencil



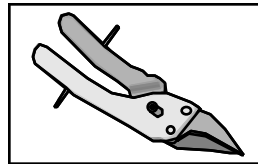
Square



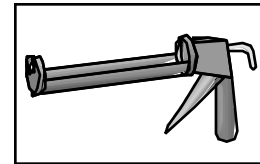
Level



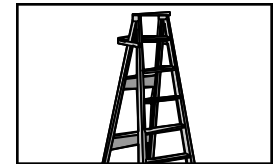
Tape Measure



Tin snips



Caulking gun



Step ladder

Depending on your house, you may also need concrete bits (not provided). The size of bits should correspond to the type of fasteners you use. You may also need an adjustable wrench or a set of sockets.

Safety Concerns:

There are a number of steps you can do to protect yourself during the installation process. Some of them include:

- Wear safety goggles to prevent eye injury
- Wear work gloves to prevent cuts
- Wear long pants and a long sleeve shirt to prevent cuts and scratches
- Keep your work area clean to avoid falling or tripping
- Use a secure step ladder
- Never use power tools around water

Be sure to follow all safety precautions when installing your new patio cover.

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Installing The Patio Cover

Step 1:

The roof of your new patio cover is designed to fasten to your house. This can be done in either of two ways:

1) directly to the wall of your house immediately under the overhang . (see *illustration 1*) or...

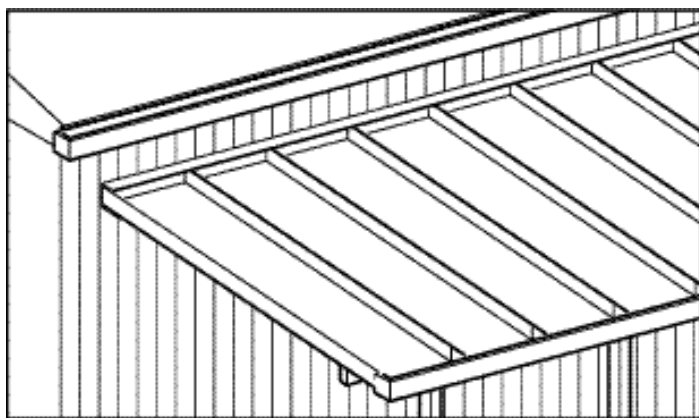


illustration 1

2)... directly to the fascia board of your house (see *illustration 2*). For fascia board installation, be sure the fascia board is free of rot and is strong enough to handle the weight load.

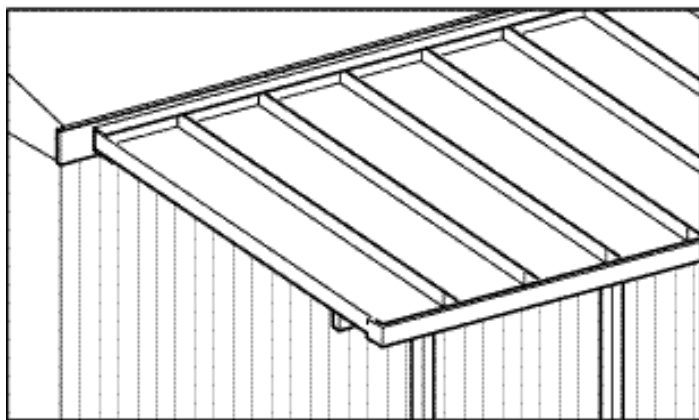


illustration 2

3) When determining the location of your patio cover, be sure there is enough height to slope the roof of the cover. The patio roof should slope one (1) inch for every 12 inches of roof - or a 1:12 pitch. This helps assure proper drainage. EXAMPLE: If your patio cover projects away from your home 12 feet, the house-mounted end of the patio cover's roof must be 12 inches higher than the end of the patio cover that is farthest from the house overhang. (see *illustration 3*).

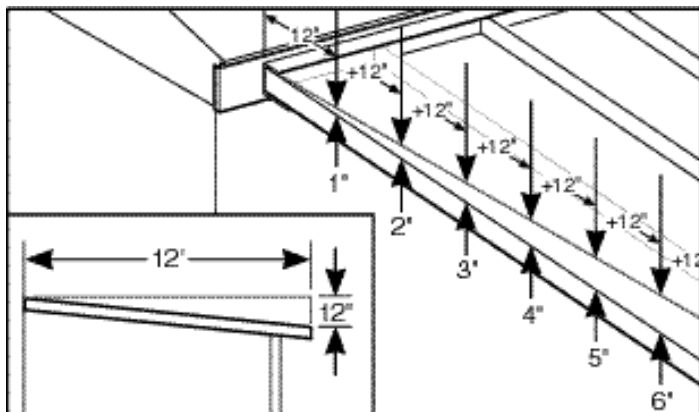


illustration 3

continued

PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 2:

Once you've determined the location, hold the header channel in place making sure it is level. Now mark the area using your level to create a straight line.

Next, pre-drill the header. Drill 5/16" holes 8" on center or where the wood structural supports are located so as to assure structural strength (*see illustration 4*). In the event that your home is concrete, block or brick, hold the header in place and mark the concrete, block or brick where the fasteners will go. Remove the header and pre-drill each hole that you've marked on the wall. The concrete drill bit is determined by the concrete fastener (not included in kit) you choose to use. You can ask your local hardware store for assistance on the proper drill bit.

Now that all holes are drilled, caulk the back side of the header channel (*see illustration 5*) with three (3) beads of caulk. Fasten the header to the wall or fascia board of the house using either the #10 x 2 or 3 x 1/4 hex head screws if wood, or the drive anchors if cement block (*see illustration 6*). Extra fasteners are provided in the kit.

NOTE: MAKE SURE THE HEADER CHANNEL IS LEVEL BEFORE COMPLETING THIS STEP.

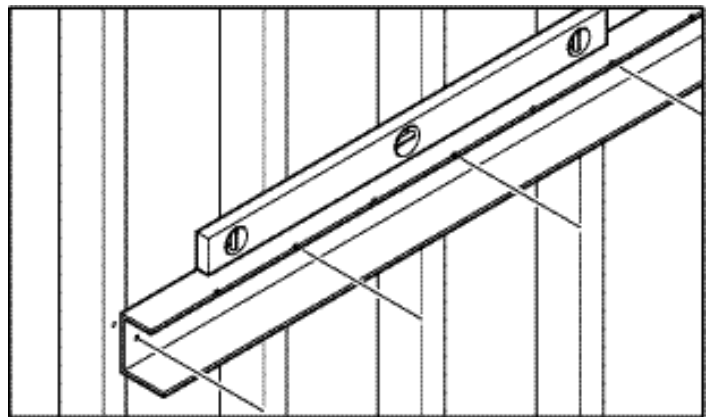


illustration 4

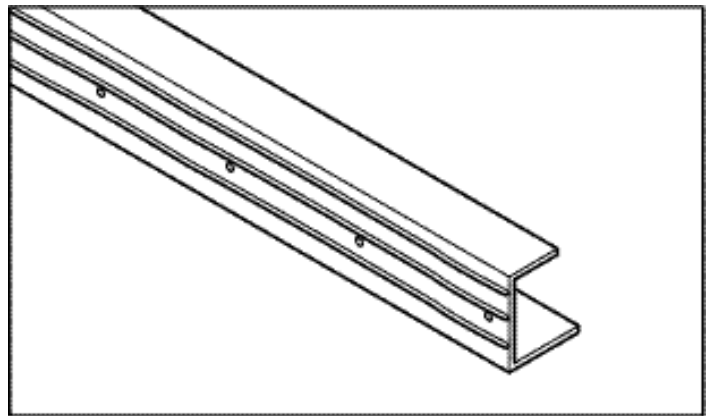


illustration 5

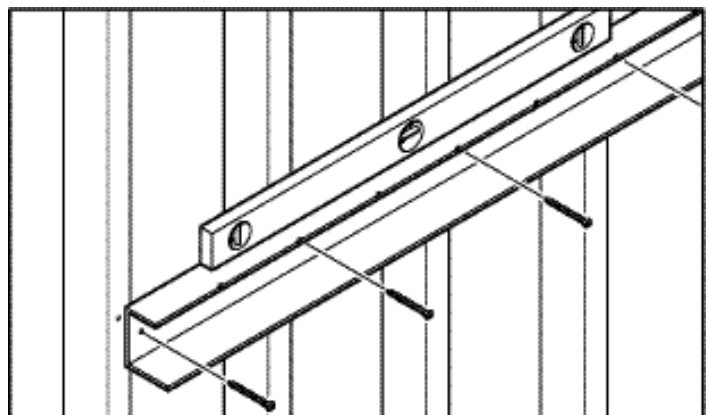


illustration 6

continued

PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 3:

Now you must determine the height of the posts and tilt beam, keeping in mind the one (1) inch drop per foot.

Example

If your header is eight (8) feet up from the concrete slab or deck, and your carry beam (tilt beam) is ten (10) feet out from the house, the carry beam should be 7 feet 2 inches high - or 10 inches lower than the header. This allows for a one (1) inch drop per foot.

(see *illustration 7*)

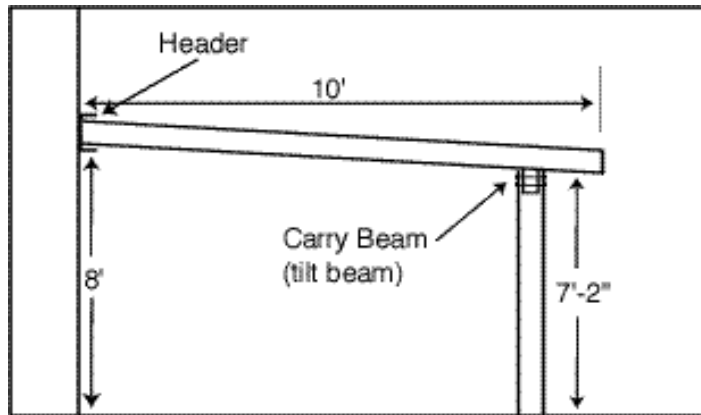


illustration 7

For in ground installation (posts in concrete):
If you are not using a slab or deck and are installing your patio cover posts directly into the ground, be sure to add two (2) feet to your post length. (see *illustration 8*). As an example, when compared to the slab mounted example above, the ground mounted posts would be 9 feet 2 inches high. Cut the posts to the determined length. Use dry bags of cement around base of posts. **DO NOT ADD WATER UNTIL PATIO IS COMPLETE.**

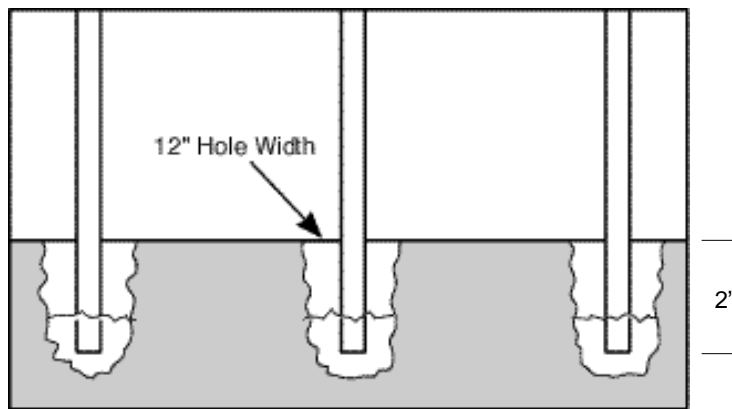


illustration 8

PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 4:

Next, depending on which size of patio cover you ordered, you will need to measure from the header channel to the end of where the patio cover projects out. For example, a 10x20 patio cover would measure out ten (10) feet from the house. Once you determine where the roof will end, measure in a minimum of one foot and a maximum of two feet. This area is the patio overhang and where the tilt beam will be located.

Example

If you ordered a 10 x 20 patio cover and want a two foot overhang, the tilt beam would be placed two (2) feet back from where the patio projection ends, or eight (8) feet from where the patio cover attaches to the house. The posts would then be placed on this line (see **illustration 9**).

NOTE: Because the gutter system takes up six (6) inches of roof pan, the tilt beam **MUST** not be closer than six (6) inches to the end of the pan. (see **illustration 22**).

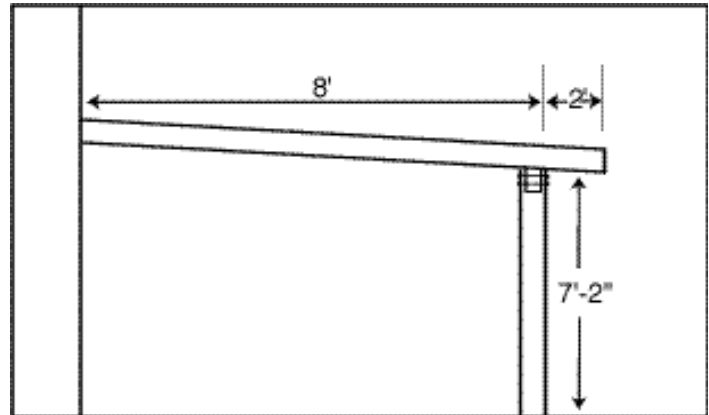


illustration 9

PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 5:

Lay the notched posts on the ground a maximum of eight (8) feet apart. Posts can be held back from the sides a maximum of twenty four (24) inches and a minimum of six (6) inches. Place the tilt beam into the notch of each post and square up the beam and posts. Make sure the tilt beam is secure in each notch. Next, using a 1/2 inch drill bit, drill two (2) holes through each area of the tilt beam and post. Using the 3/8 inch bolts and nuts provided in the kit, bolt the beam to the post. Proceed to the next post and continue the process until complete (see *illustration 10*).

Splicing Two Beams Together

In patios over 20 feet, it may be necessary for you to splice two tilt beams together. To do this, place the end of each beam into the notched post. The end of each beam should be centered inside the notch and touching each other. Drill two holes into each beam and fasten with the bolts and nuts provided. (see *illustration 10A*).

Step 6:

Once you've completed bolting the tilt beam to the posts, carefully tilt the assembly up and position it on the slab or deck. Using a level, make sure the posts are plum and parallel. Then mark around the base of the first post with a pencil. Move to the next post and mark around it. Continue until all post areas are marked. Next, remove the post and tilt beam assembly and place a three (3) inch square flange at each location you've just marked. (see *illustration 11*) Using the fasteners provided, secure the flanges in place. If you are mounting the flange to a wooden deck, be sure all wood is screwed securely to the floor joists.

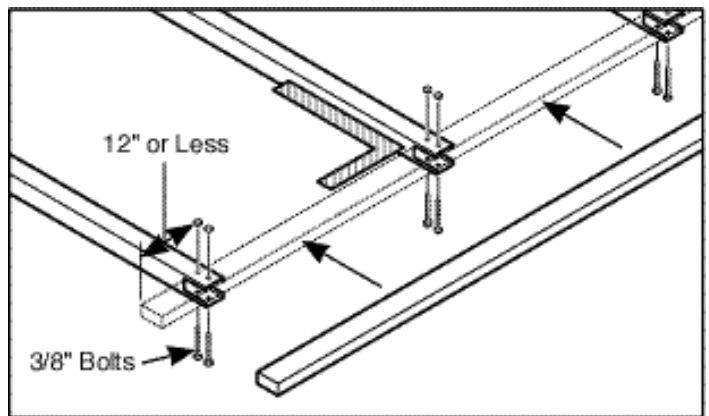


illustration 10

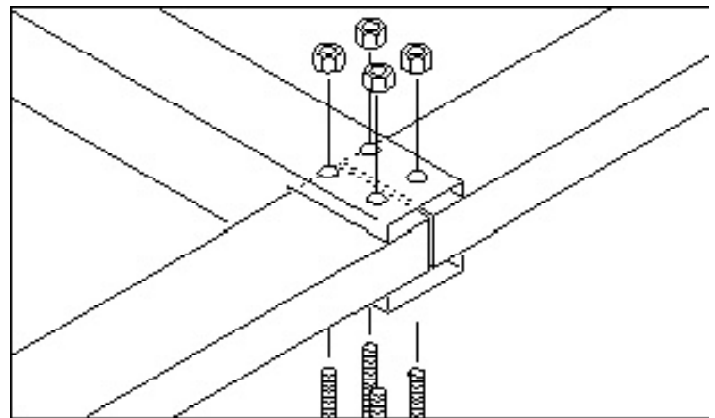


illustration 10A

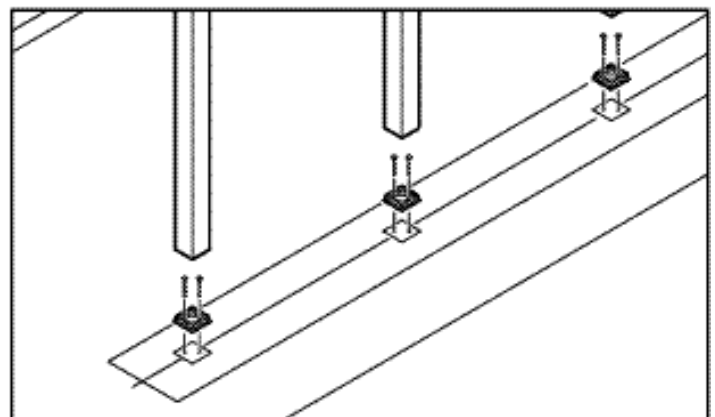


illustration 11

continued

PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 6: *continued*

NOTE:

If the surface onto which you are mounting the flanges is not flat, the result may be posts that are uneven in height. To determine this, place a long straight edge (or use a fishing line drawn tight) over the surface of the concrete slab or deck and check for gaps (*see illustration 12*). If a gap higher than 1/2 inch is located where one of the posts will be, you may have to trim the bottom of one or more of the posts to compensate for the height differential. No trimming is necessary if the gap is one-half (1/2) inch or less.

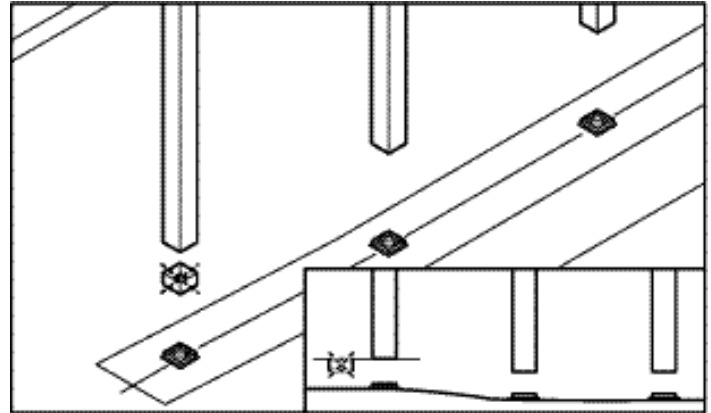
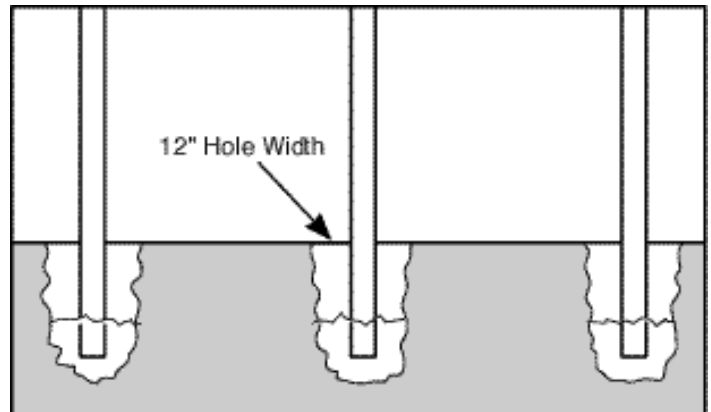


illustration 12

For Ground-Mounted Posts ONLY (others should skip to step 8)

If you are mounting the posts into the ground, you will need to dig holes for each post. The holes should be two (2) feet deep and 12 inches square. Place the posts and tilt beam assembly you just completed into the holes making sure you have the proper drop on the tilt beam of one (1) inch per foot of projection. With the posts in the holes and the proper elevation determined, place two bags of dry cement in each of the holes. **DO NOT** add water at this time. After the patio cover has been completed, you may have to “true up” the posts. Mixing water with the concrete will be the very last task you will do.



PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 7:

With the flanges securely installed, set the post and beam assembly into place. Drill a 3/8 inch hole completely through the post and the flange. Anchor them to the flanges using the 4 inch bolts provided.

(see *illustration 13*).

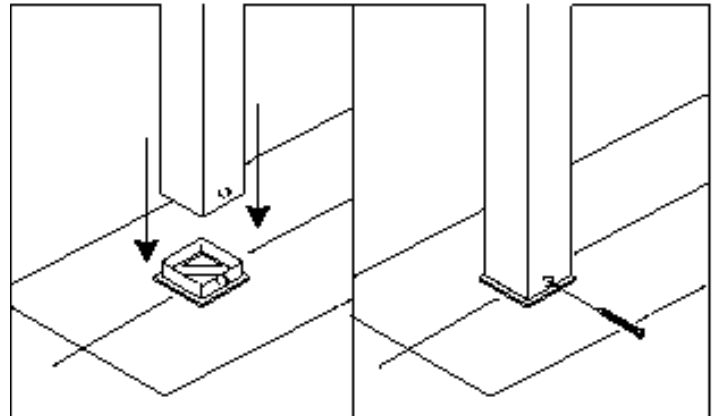


illustration 13

Step 8:

Once the tilt beam/post assembly has been securely fastened to the flanges (or in the ground for ground mounted application), it's time to fasten the first roofing panel into place. With one person holding the posts, position the boxed end of the first panel into the header channel making sure it is flush to both the edge of the header and the tilt beam (see *illustration 14*).

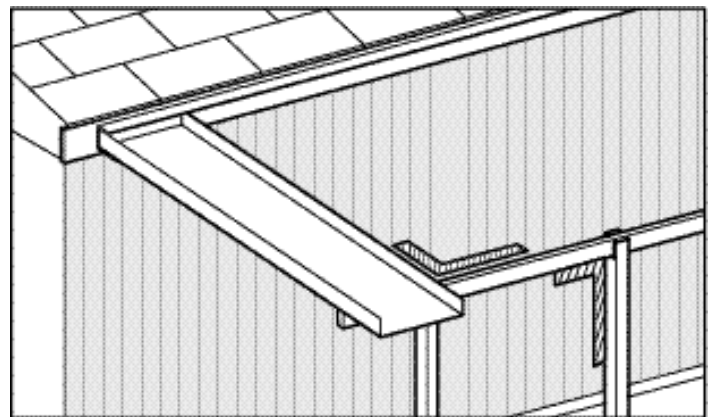


illustration 14

Make sure the post and beam are square. Now put a sheet metal fastener (#8 x 1/2 x 1/4) through the header and into the top of the standing seam that is at the edge of the header (see *illustration 15*). Check the overhang and make sure it is even. Also check that the post and beam are level and square. Once this is done, place another sheet metal fastener through the pan and into the top of the beam.

Be sure to read step 9 now before continuing.

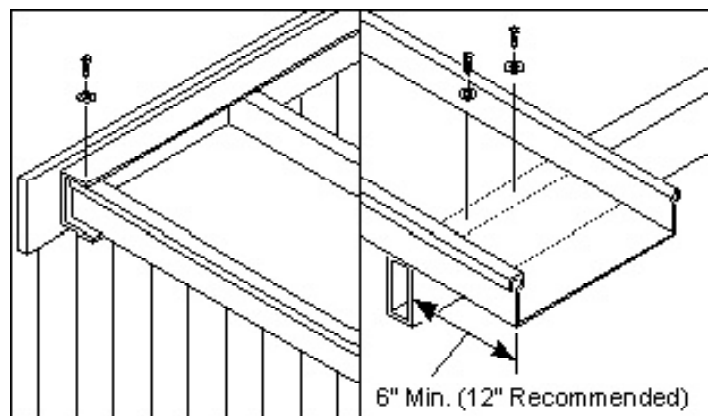


illustration 15

continued

PATIO COVERS **DIY**



Installing The Patio Cover *continued*

Step 9:

Repeat Step 8 for the other end of the patio placing the boxed panel flush with the edge of the header. Then place the fastener through the header into the standing seam. Check the post for trueness and put a fastener through the pan and into the beam. Once you have completed installing this step, stand back and inspect your work. If necessary, make adjustments. At this time you have a panel at both ends of the patio cover. The posts should be straight up and down. Should your patio be longer than 12 feet, it may be necessary to repeat Steps 8 and 9 placing a panel in the middle.

Step 10:

Now place the next panel over the first standing seam panel you installed. Be sure to keep the panel at an angle. The angle will help you “roll” the seam together (*see illustration 16*). Now begin laying the panel flat and push the panel into the header. Push the second panel tight to the first panel so as to not have any gaps on the bottom side and place a fastener through the header and into the standing seam panel. Use three (3) pan fasteners (fasteners with rubber washers) for each panel when fastening to the beam.

DO NOT over-tighten fasteners. This could cause the threads to strip. If you do strip a fastener, place another fastener next to the stripped hole. Once the panel is secure, place foam blocks in the panel spaces (*see illustration 17*). Do this for all panels as you install them. The foam will prevent driving rain from being blown over the boxed end of the panels. Once the last panel is in place, you might have to trim the header back flush to the edge of the panel. Be sure all panels are pushed tightly together before fastening.

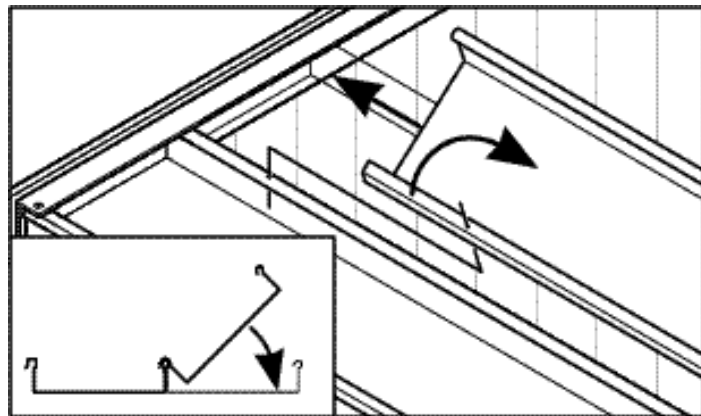


illustration 16

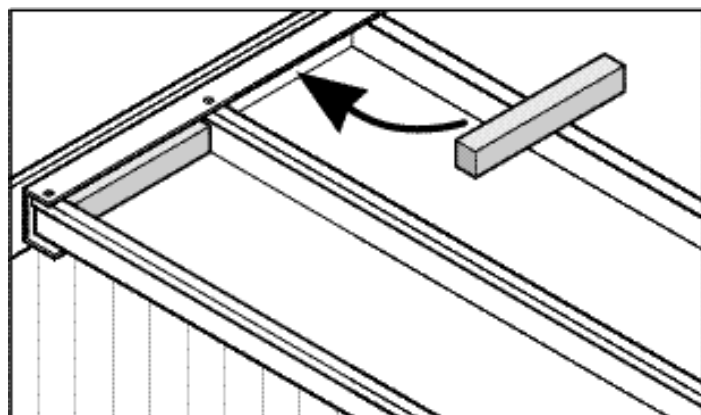


illustration 17

PATIO COVERS **DIY**



Installing The Gutter and Side Valance

NOTE: Please read all 3 steps before trimming or cutting.

Your patio cover kit includes a front gutter/valance and two (2) side valances. Follow the directions below to install them.

Step 1: (Preparing the gutter)

Using metal snips, cut into the flat of the panel two (2) inches. This cut should be one (1) inch from the standing seam. After you have cut both sides of the panel, bend down the panel. Do this for each panel. This process strengthens the panel, directs the water and allows for proper cleanout. (see *illustration 18*).

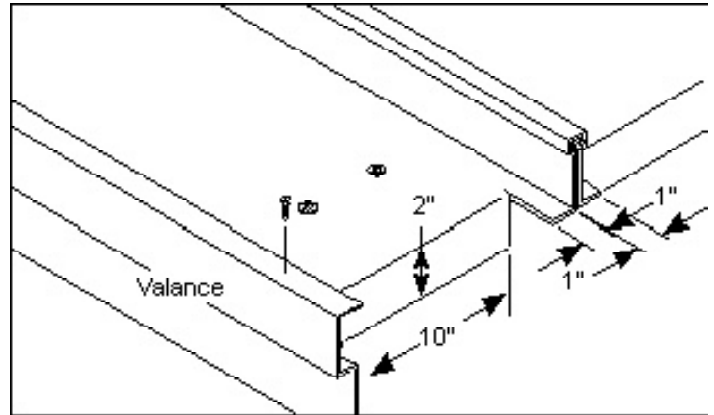


illustration 18

Step 2: (Gutter and valance)

Hold a valance on the side of the patio cover along with a section of gutter and trace the gutter profile onto the valance. be sure the gutter tabs are bent in (see *illustration 20*) Trim the valance to the proper angle where it meets with the house (see *illustration 19*).

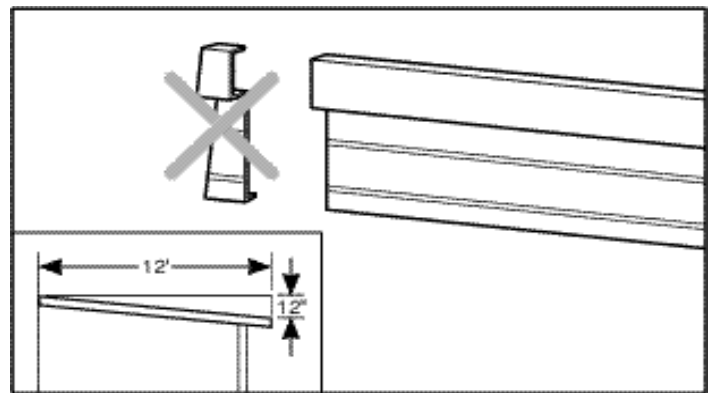


illustration 19

Once the valance has been trimmed to the angle of the house, have another person hold a section of the gutter in place at the front of the patio cover. Make sure the gutter tabs (tabs must be folded) are against the valance. Also make sure the face of the gutter is against the face of the panels. (see *illustration 20*).

Step 3:

Locate the post where you would like to place the downspout. Place the drain outlet in the area you choose on the bottom side of the gutter. Use a series of drill holes or a tin snips to cut out the gutter area around the inside of the drain outlet. Do not install the gutter yet.

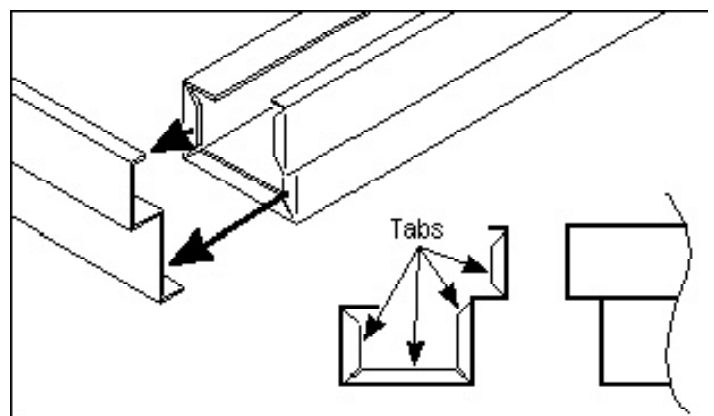


illustration 20

continued

PATIO COVERS **DIY**



Installing The Gutter And Side Valance *continued*

Step 4:

Now install both valances using #8x1/2 metal sheet screws. Use 8 to 10 fasteners per valance. The fasteners are painted so that you can use them on the face of the valance.

Step 5:

Once the valances are in place, install one side of the gutter with the tabs folded up. Fasten through the valance into these tabs. The valance should have already been trimmed to match the face of the gutter. Be sure to caulk the valance or the gutter tabs to make a good seal. Make sure the gutter and side valance line up correctly. Also be sure the top of the gutter lip (3/4") sits on top of the standing seam. Now place one temporary fastener through the top gutter lip (B) into the standing seam. Once it is held in place, continue to fasten the valance to the gutter using the sheet metal screws provided. These fasteners should go through the valance and into the tabs. Use two (2) fasteners on the bottom, three (3) on the face of the gutter and two (2) on the back tabs (C). Be sure to caulk where the valance meets the gutter (*see illustration 21*). Also use three (3) fasteners (A) through the pan into the back lip of gutter.

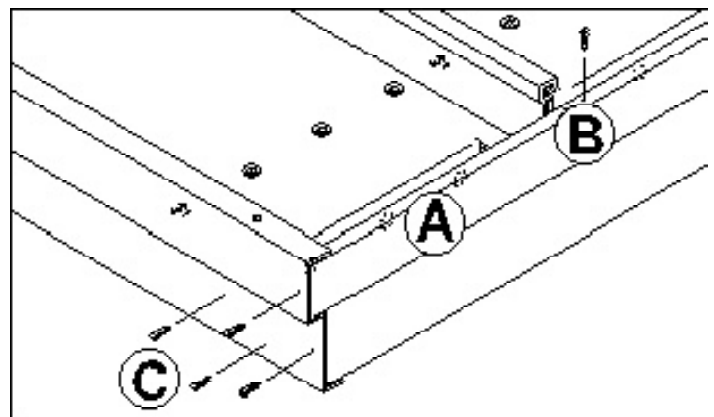


illustration 21

NOTE:

Before installing the second half of the gutter, make sure the downspout outlet is in place. Make sure the hole for the downspout has been cut and the tabs have been folded.

PATIO COVERS **DIY**



Installing The Gutter And Side Valance *continued*

Step 6:

Continue the installation by moving to the other side of the gutter. Apply caulk to the gutter tabs or valance to make them watertight. If you have more than one piece of gutter place two beads of caulk where the two gutter sections nest each other (*see illustration 22*). Fasten the gutter in place using the same procedure described in Step 4. Once the gutter is installed, place one (1) fastener in the gutter for every standing seam and three (3) fasteners to hold the back of the gutter to the panel. (*see illustration 21, fasteners "A"*)

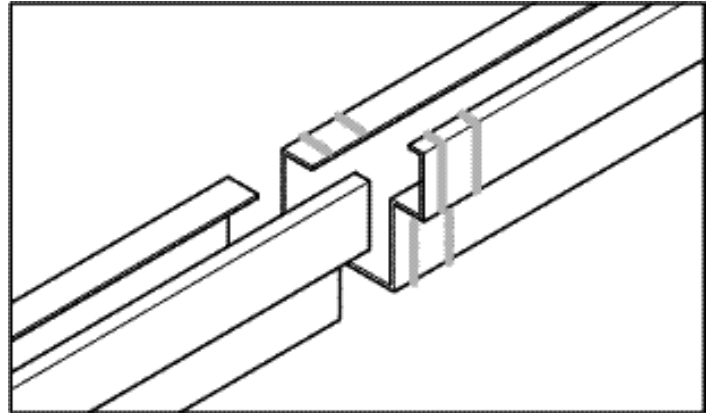


illustration 22

Step 7:

Now install the downspout and elbows. Sections slide together for easy installation. Straps are provided when securing the downspout to the post is necessary. Each strap should receive two (2) 1/2 inch fasteners.

Step 8:

If your posts are in the ground, make any adjustments to level and true them, and then add water to the cement you placed in the holes. Back fill with dirt.

NOTE:

Be sure you pick up all of the pieces of scrap metal and fasteners that may be on the ground from the installation.