



INSTALLATION INSTRUCTIONS

TOOLS NEEDED

- Eye Protection
- Gloves
- 8' Level
- Chalk Line
- Cordless Drill/Screwdriver
- $\frac{5}{16}$ " Hex Bit
- Tape Measure
- Step Ladders/Scaffolding
- Miter Saw with Panel Blade
- Skill Saw
- Tin Snips or Brake for Cutting Flashing

MATERIALS NEEDED

- Make sure ALL materials are compatible to your type of building materials
- Metal Step Flashing and/or Trim Coil
- Standard Gutters and Downspouts
- #6 Edge Trim Screws
- Caulk

UPSIDE COMPONENTS



L-Bracket w/ Screws



Starter Strip



Channel



C-Channel



Glide Clip



Edge Trim

Quantities determined by size of deck.

PRIOR TO INSTALLATION

Inspect the underside of the deck for imperfections in the joists or irregularities in the square of the deck. Correct any imperfections prior to beginning. If the deck is not square, adjust first and last channel accordingly.

IT IS VITAL TO SLOPE UPSIDE AWAY FROM THE MAIN STRUCTURE OF THE HOME.

In addition, considerations must be made to accommodate the installation of a **Gutter System** prior to installing UpSide Deck Ceiling. It is the responsibility of the installer to accommodate for guttering.



Let's Get Started!

INSTALLING FLASHING

- 1) It is **RECOMMENDED** that flashing be installed behind the ledger board, if possible.

Place metal flashing **BETWEEN** joists extending a minimum of 8" from the ledger board to assure proper channeling of any water away from the house and into the channels.

It is recommended that the sides of the flashing along the joists be caulked.



SETTING THE L-BRACKETS (UPSD-LB)

- 2) L-Brackets need to be installed in rows parallel to the ledger board. Attach the first L-Bracket 4" from the ledger board. The flange of the L-Bracket needs to be flush or slightly below the lowest joist. This is to accommodate for uneven joists. Use the #10 x 1" hex head screw supplied with the L-Bracket kit. The system will "fall" from this point towards the drainage end allowing water to flow away from the ledger board. Install an L-Bracket 4" from the ledger board, and level to the ledger board, on all remaining joists. Ensure that this row of L-Brackets is straight, level, and secure.

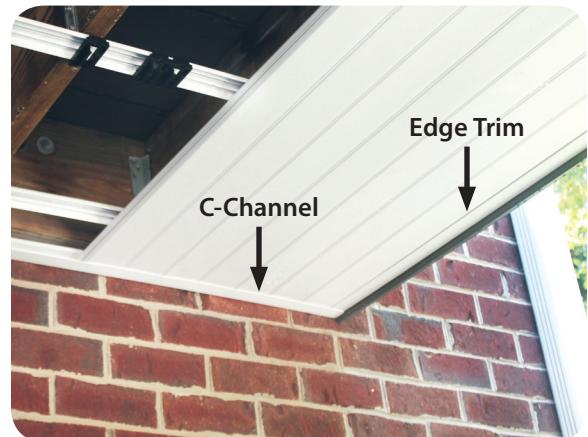
Set the pitch. The pitch is the amount of slope required for the system. There are 2 recommended pitches. If you have a covered deck, the recommended pitch is $\frac{3}{4}$ " for 8', $1\frac{1}{8}$ " for 12', and $1\frac{1}{2}$ " for 16'. If you have an open/exposed deck, the recommended pitch is 1" for 8', $1\frac{1}{2}$ " for 12', and 2" for 16'. Once you determine your pitch, set the L-Brackets closest to the gutter accordingly. Install an L-Bracket 4" from where your channels will drain into your gutter. Attach a string to the first L-Bracket near the ledger board. Use the string to set your desired pitch. Attach the L-Bracket with the #10 x 1" hex head screws. Install the remaining L-Brackets 4" from where your channels will drain into your gutter in the same fashion. Ensure that this row of L-Brackets is straight, level, and secure.

Install remaining rows of L-Brackets. The maximum space between rows of L-Brackets is 20". Measure the distance between the first row and the last row of L-Brackets and add additional rows as needed. Each row needs to be straight and maintain the required pitch. Use a chalk line for the rows and a straight edge or string to maintain pitch. For spaces wider than your straight edge, consider installing a row of L-Brackets in or near the center of the deck.



INSTALLING EDGE TRIM (UPSD-ET-10*)

3) After all L-brackets are installed, use a straight edge to transfer marks onto the side fascia boards. Make a mark for each row of L-Brackets. The marks should be even with the underside of the L-brackets. Next, place a length of Edge Trim against the side fascia board with the top edge even with the marks. NOTE: The top edge of the Edge Trim is the single leg with the slots. The overall length of Edge Trim will be equal to the length of the main Channels, which should extend into your gutter by at least 2". Keep the end of the Edge Trim $\frac{1}{8}$ " away from the main structure, under the ledger board, to leave room for the C-Channel. Attach the Edge Trim with #6 screws (not provided). Next, install Edge Trim on the other end of your deck in the same manor.



INSTALLING STARTER STRIPS (UPSD-STS-10)

4) Determine the length of a Starter Strip. On the first row of L-Brackets, closest to the ledger board, measure the distance from the Edge Trim to the center of the L-Bracket flange that is less than 10' away. Cut (1) Starter Strip. Place the Starter Strip against the L-Bracket flanges and install with a #10 x $\frac{5}{8}$ " hex head self-drilling screws included with the bracket kit. A groove in the center of the Starter Strip facilitates easier positioning of the screws. Keep the Starter Strips as straight as possible. Measure, cut, and install additional Starter Strips as needed. Butt ends of Starter Strips must be attached to the same L-Bracket and may not "hang in space". Butt ends must also be kept aligned. It is recommended to stagger butt joints between rows of L-Brackets.



INSTALLING GLIDE CLIPS (UPSD-GC)

5) Snap several Glide Clips onto each Starter Strip. Glide Clips hold the main Channels in place. There will be 1 Glide Clip at the intersection of each Starter Strip and each Channel. Glide Clips can be installed as you install Channels.



INSTALLING MAIN CHANNELS (UPSD-CHAN-***) & C-CHANNEL (UPSD-CHAN-10*)

6) Determine width of *first* Channel. To ensure you will be able to fit the *first* and *last* Channels, you will need to determine the partial width of the *first* Channel. See our example calculation at right.

The *first* Channel will need to be cut lengthwise to fit into the Edge Trim. Be sure to leave enough room for the gutter system. The channels should extend into the gutter by at least 2". This is needed to keep water from "wicking" back. The Channel length should also be equal to the total length of the Edge Trim. Mark the width, as determined by your calculations on the *first* Channel from the inner edge of the "U" (See fig "FIRST CHANNEL"). You will be cutting off the "Arrow". Rip cut the *first* Channel and remove any sharp edges or burrs.

Install the *first* Channel. Starting near the ledger board, slide the *first* Channel between the 2 legs on the Edge Trim. Continue to push the *first* Channel into the Edge Trim until it is completely seated in place. Leave about $\frac{1}{8}$ " gap between your main structure, under the ledger board, for the C-Channel. Snap the "U" of the *first* Channel into a Glide Clip on each Starter Strip.

Once the *first* Channel is installed, cut 2 *full* channels to length and install. Start near the ledger board and engage the "Arrow" into the "U" (See fig "FULL CHANNEL"). Snap the "U" into additional Glide Clips. Keep the end of each Channel $\frac{1}{8}$ " away from the main structure, under the ledger board.

Slide a C-Channel between your main structure and your previously installed Channels/Edge Trim. The C-Channel does not attach with fasteners, it is a friction fit on the Channels. Tap all installed Channels toward main structure to fully seat into the C-Channel. Continue cutting Channels to length and installing into the C-Channel. As you near the end, cut the C-Channel $\frac{1}{8}$ " short of the fascia trim board. Once you reach the *last* Channel, measure the distance between the "U" on your *last full* installed Channel and the fascia trim board, subtract $\frac{1}{4}$ ", then cut the *last* Channel to length. Mark the *last* Channel from the "Arrow", you will be removing the "U" part of the Channel. (See fig "LAST CHANNEL"). Rip cut the *last* Channel and remove any sharp edges and burrs. Insert the *last* Channel between the 2 legs on the Edge Trim. Insert the "Arrow" into the *last full* Channel to complete your UpSide installation.

t =Total distance of deck between side fascia boards, in our example $t=167.5"$
 w =the UpSide Channel width (6.05")

First, determine the number of partial Channels needed:

$$t \text{ (167.5")} \div w \text{ (6.05")} = c \text{ (27.7 total Channels required)}$$

Subtract the partial Channel (p) and 1 full Channel (f)

$$c - (.7+1) = f \text{ (26 full channels)} \text{ and } p \text{ (1.7 partial Channels)}$$

Now that you know the number of partial Channels needed, determine the width of the first Channel:

$$[p \text{ (1.7)} \times w \text{ (6.05")}] \div 2 = u \text{ (5.1425")}$$

Round u to the nearest $\frac{1}{8}$ "

$$u \text{ (5.1425")} = 5 \frac{1}{8}"$$

$$u \text{ (5 } \frac{1}{8} \text{"}) - \frac{1}{4}" \text{ (Edge Trim clearance)} = x \text{ (4 } \frac{7}{8} \text{"})$$

x (4 $\frac{7}{8}$ ") is the width of the first Channel in our example.

