



# Installation Instructions

**RainTight Decks**  
**[www.raintightdecks.com](http://www.raintightdecks.com)**



# Underdeck Installation Instructions

Table of Contents	
Page 3	Tools Required
Page 4	Introduction and How the system works
Page 5	Step 1: Establishing the Height and Slope Step 2: Installing the framing Step 3: Proper Caulking and Flashing
Page 6	Step 4: Gutter Install Step 5: Preparing for the Panels Step 6: Panel Install Step 7: Trim out the Perimeter
Page 7	Step 8: Install Downspouts Step 9: Finish and Enjoy Accessories

## Basic Tools Needed

Hammer  
Tape Measure  
Caulk Line  
Metal Snips  
Hand Brake  
Caulking Gun  
Cordless Drill  
4' or 6' Level  
Safety Glasses  
Electric Circular Saw



While we have tried to address each tool needed, however common sense rules will apply. Do NOT attempt to use the wrong tool for the job and avoid the serious injury. **If you have any questions, please contact us. We are standing by to assist you every way we can.**

## Underdeck Systems Installation Guide

### Introduction

Underdecking systems are a new and innovative product for the home improvement industry. It involves the installation of seamless and watertight panels under your existing deck that help collect the water that fall through the decks slats. Our Rain Tight Deck systems will not only open up these opportunities for you, but it will also add extra living space and re-sale value to your home.

Each deck is unique - And so is yours. Our system is designed to accommodate every style and composition, and can turn that un-used area into a new and exciting living space.



Raintight Underdeck Systems have been specifically designed for every type of deck, and now you have the opportunity to do-it-yourself.

Please take the time to read the entire contents of the Installation Guide before beginning your project. At any time during the install process you have a question, please feel free to contact our in-house professional installers. They can assist you in every step of the way.

## Underdeck Systems Instructions Guide

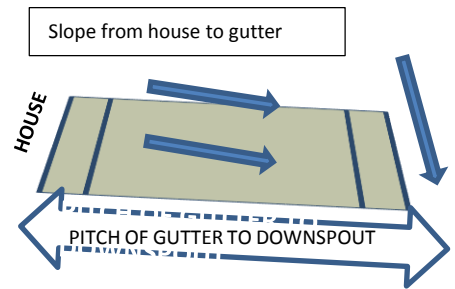
### STEP 1: ESTABLISH THE HEIGHT AND SLOPE OF THE CEILING

Start by determining the drainage and slope. It is normally best to drain away from the house, however, you can drain towards the house and tie into existing drain pipes. Once this step is completed, you will know the direction of the fall and where the downspout will be located when the panels are fully installed.

1. Begin by installing two (2) 2x2x10" long blocks nailed on the two high corners against the house, with 2" of the block showing below the floor joist. Tie a string between these two blocks and pull it tight. Check that the string is level. If not, adjust to make level.
2. If you have determined where the downspout is to be placed, go the opposite low outside end of the deck. Using another 2x2x10" block, pull a string from the high corner, and with another person using a 4' level, make this string drop 1/8 to 1/4 of the bubble, so that the string is lower in that corner. Attach the string and pull it tight.
3. Move to the last corner (where the downspout will be located) and again with another person, pull a string from the low corner to the downspout corner, making the string drop about 1/8 to 1/4 of the bubble. Tie off the string and pull it tight.
4. From the lowest corner (downspout corner) pull another string to the remaining high corner, forming a complete square. You should now have string around the entire perimeter of the deck. The string will drop from high side to low side, and the gutter will drop to the downspout.

### STEP 2: INSTALLATION OF MICROPRO TREATED LUMBER CARRIAGE SYSTEM

1. This is the designed lumber you will use to install your panels. You will need to rip 1 1/2 by 1 1/2 inch boards to be installed as your carriage system.
2. With the perimeter string still in place, attach the 2x2x10" blocks between the floor joists until they are level with the strings. The spacing between the blocks should be every 3 to 4 feet.
3. Once the perimeter blocks have been placed, remove the strings and pull a new string from side to side, perpendicular to the floor joists. Again, about every 3 to 4 feet.
4. Attached a long 2x2 to the blocks or "legs" running perpendicular to the joists. If the 2x2 is not long enough to reach the entire length, join together two with a sister board of about 2 feet long.
5. When completed, you will have a gradual slope from the house to the gutter, and the gutter will have a gradual slope to the downspout. You are now ready to install flashing.

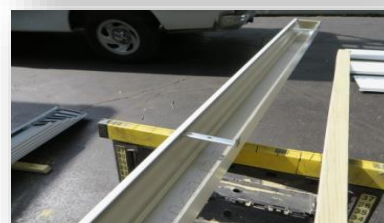




## Underdeck Systems Installation Guide

### STEP 3: PROPER CAULK AND FLASHING SYSTEM

1. Successful installation of your deck is dependent on proper sealing and flashing at the surfaces where the deck meets your home or other structure. Water must be properly diverted to avoid leakage.
2. The trim flashing included will be bent to divert water into the panels around the entire inside perimeter of your deck. You must remain above the 2x2 framing already in place to allow the water to be diverted to the panels.
3. Using the GECEL2300 provided, seal the edges of the flashing for the entire perimeter. Attach Under Deck flashing on all sides of the deck that are connected to the structure. Under Deck water diverters or flashing should be installed at the ledger board between each joist to ensure water run-off at ledger. Place a bead of GEOCEL2300 waterproof caulk along top edge where water diverter meets the joist.
4. If you have a cantilever on your deck, you will want to install flashing that covers the beam, diverting the water to the inside or larger side of the cantilever.
5. Check to make certain that the proper flashing has been installed on the deck when it was built. If not, additional flashing will be necessary.



### STEP 4: GUTTER INSTALLATION

1. The gutter will be mounted against the beam (if there is a cantilever) or against a treated 2x4 nailed to the inside of the outside posts. Level from the framing to the beam and snap a line. If using a 2x4, level to the posts and snap a line. Attach the 2x4 to the posts on the line.
2. Attach the gutter to this line using the enclosed gutter hangers, mounted with 1 ¼ galvanized screws. Space the hangers about 4 feet apart, placing one at each end.



### STEP 5: PREPARING THE PANELS FOR INSTALLATION

1. Measure the distance from the ledger board to the half-way point of the gutter. This will be the panel length.
2. You must make the box end on the house side, and the drain slope on the gutter end.
3. Keep the interlocking panels consistent avoiding errors in bending and cutting the wrong end. The Panel end that will be placed toward the ledger board (for outside gutter install) will be boxed and all bends sealed to prevent leaks. Do this by cutting the frame of the panel ¾" from the end, bend up the wing and caulk in the corners to prevent leaking.
4. The opposite end will drain into the gutter and must be bent down slightly to allow the water to drain. Do this by removing ½" of the frame, bend the wing down using a hand brake.

**Panel end at house**



**Panel end for gutter**

## Underdeck Systems Installation Guide

### STEP 6: PANEL INSTALLATION

1. Begin to install, or hang your under deck panels. You will be interlocking these panels into place against the previous panel.
2. Each panel is screwed using 1 ¼" galvanized screws into the carriage system, making sure that the end of the panel is properly positioned in the gutter. You can make the needed adjustments with your screws to insure the panel rests on the gutter.
3. To repeat the next panel, make sure to push the panel into place so it interlocks with the previous panel. Repeat this process until finished. NOTE: Be sure to open up the ends of the panel channel, as they may have become pinched during the preparation stage.



### STEP 7: TRIM OUT THE PERIMETER OF YOUR NEW SYSTEM

1. Using the provided trim coil, you will now finish the look of your system with trim around the system.
2. Begin with your ledger board and install the trim with a 90° bend that will slide behind your panel and zip screw into your panels.
3. The remaining trim for the sides of your system will be bent using a "stair step" bend to account for your outside deck board, as well as your slope of panels.



### STEP 8: DOWNSPOUT PLACEMENT AND DRAINS

1. At the pre-determined spot, drill a hole in the gutter to install the downspout. Hold your elbow or downspout over the hole, and mark around the outside to make a template. Be careful to center the downspout or elbow on the bottom of the gutter. With your snips, cut an "X" to the corners of the downspout template you previously marked and bend the 4 triangles down to create a flange to screw the elbow to.
2. Install downspout and elbows with provided straps. Always use the color matched zip screws for all exposed surfaces. Make sure you attach each piece of the drainage system with caulking to prevent leaks.



### STEP 9: FINISH AND ENJOY

1. Finish your new Raintight Underdeck System with the enclosed trim package that will cover all the exposed wood beneath the deck. You are now ready to enjoy that new outdoor space, even if it's raining.



## Underdeck Systems Installation Guide

### *Ceiling Fan Installation*



- Consult with a local electrician on local building & electrical codes!
- Having an electrician run electrical feed is a good idea—usually they'll leave the wire coiled and ready for you to run through the rib of the panels and into the junction box.
- Feed wire could also run through system pans in the rib encased in a wire mold
- Caulk the hole the feed wire comes through
- Junction box is fasten to framing above the panel rib to support the fan
- ACQ compatible 4-6 lag bolts should be used to fasten the junction box that supports the fan



## Underdeck Systems Installation Guide

### Accessories

To further customize your new living space, you can install fans or LED lighting. Contact your local electrician for assistance.



**Thank you for choosing  
RainTight Underdecking  
for your underdeck  
project.**

## Underdeck Systems Installation Guide

### Additional Installation Images

These are sequential images that should assist you in the installation process

